

# Series Compatible with Secondary Batteries

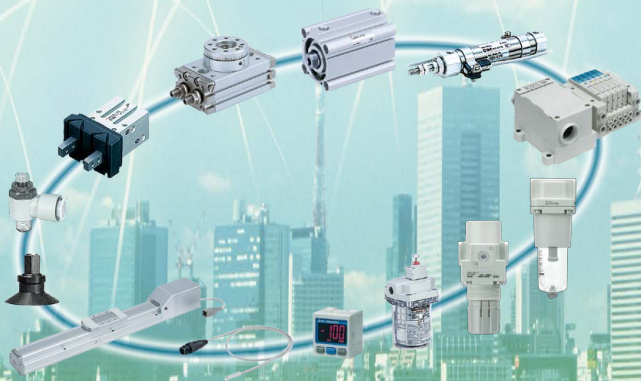
25A-Series

Copper (Cu)  
and Zinc (Zn)  
Restrictions

Compatible with  
dew points as low as  
**-70°C**

Longer life  
due to use of grease  
compatible with  
low dew points

A wide range  
of products!  
Now with a  
greater number  
of models!



**New**

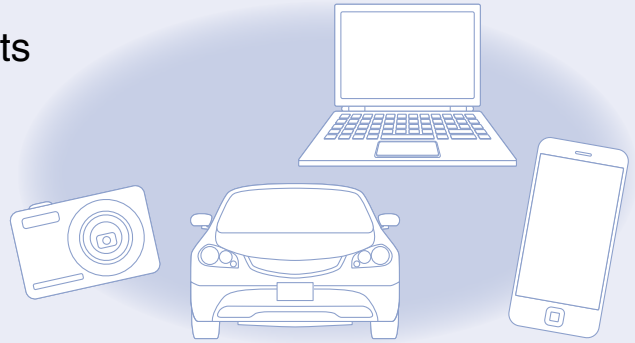
**57** models have been newly added.  
(For details, refer to the "INDEX" pages.)

Compatible with the various environments  
of each manufacturing process



P-E23-13

Products compatible with the environments of the secondary battery manufacturing process are available, contributing to the improvement of productivity and reduced defects.



## Series Compatible with Secondary Batteries 25A- Series

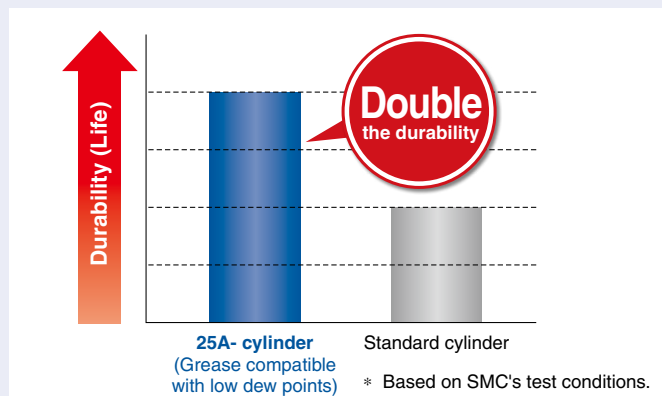


### Improved performance in environments with low dew points

- Uses grease compatible with low dew points

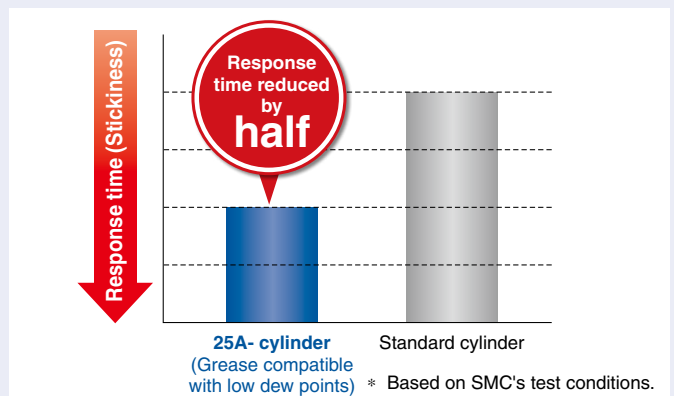
#### Double the durability

Durability comparison (Air cylinder)



#### Response time reduced by half

Comparison of cylinder response times after being pressurized and stored



## Material Restrictions

The following materials are not used in order to reduce the number of defective products produced during the secondary battery manufacturing process:

- **Metal materials whose main component is either copper or zinc are not used.**
  - \* Some of the aluminum alloy and aluminum die-cast materials contain traces of copper or zinc as an additive element. If a product with restrictions on the amounts of these additive elements is required, we can accommodate your needs via a special product. Please contact your local sales representative for further details.
- **Electrolytic nickel plating with a copper layer or zinc plating are not used.**
  - \* Electroless nickel plating is used.
- **Parts of the piston rod, clevis pin, split pin, etc., of the cylinder are made of carbon steel with hard chrome plating. Therefore, as the processed parts aren't coated, an anti-rust oil coating is applied to these parts before shipment.**
  - \* Rust may be generated due to the operating environment. If the generation of rust is a problem, made-to-order options using stainless steel, etc., are available. Please contact your local sales representative for further details.
- **The coils of solenoid valves, the circuit boards of electrical equipment, the motors of electric actuators, etc., use copper materials.**
  - \* Parts whose materials cannot be easily changed to alternative ones and parts whose functions would be compromised by changing to alternative materials use copper and/or zinc materials. Please contact your local sales representative for further details.



# Restrictions

**Material**

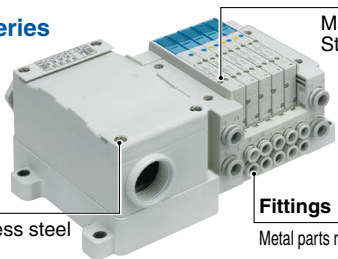
**Copper (Cu)**

**Zinc (Zn)**

**Surface treatment**

- Electrolytic nickel plating with a copper layer
  - Zinc plating
- (Electroless nickel plating is used.)

## Solenoid Valve 25A-SY Series



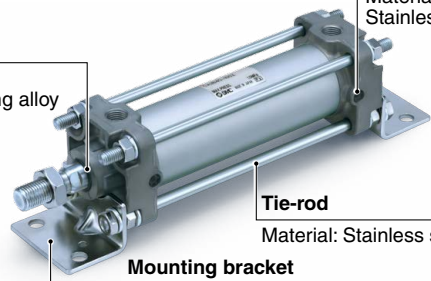
**Mounting bolt**  
Material: Stainless steel

**Cover holding screw**  
Material: Stainless steel

**Fittings**  
Metal parts material: Stainless steel

\* Coils for solenoid valves, connector pins, and lead wires are made of copper.  
\* Manifold terminal block, wiring parts, connector metal parts, and printed circuit board are made of copper.

## Cylinder 25A-CA2 Series



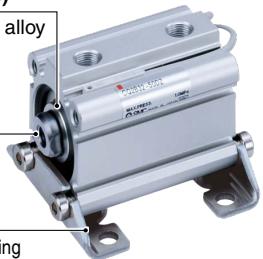
**Bushing**  
Material: Steel bearing alloy

**Cushion valve**  
Material: Stainless steel

**Tie-rod**  
Material: Stainless steel

**Mounting bracket**  
Surface treatment: Electroless nickel plating

## Compact Cylinder 25A-CQ2 Series




**Bushing (ø50 to ø100)**  
Material: Steel bearing alloy

**Piston rod**  
Surface treatment: Hard chrome plating

**Mounting bracket**  
Surface treatment: Electroless nickel plating

\* The auto switch magnet contains copper and/or zinc. (ø12)

## Compact Guide Cylinder 25A-MGPM Series



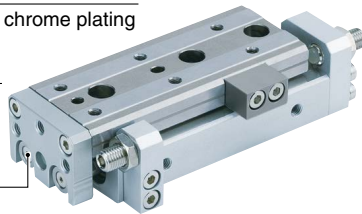
**Bushing (ø50 to ø100)**  
Material: Steel bearing alloy

**Piston rod**  
Surface treatment: Hard chrome plating

**Plate**  
Surface treatment: Electroless nickel plating

\* The auto switch magnet contains copper and/or zinc. (ø12)

## Air Slide Table 25A-MXQ Series




**Piston rod**  
Surface treatment: Hard chrome plating

**Piston**  
Material: Stainless steel  
Aluminum alloy

**Bolts**  
Surface treatment: Electroless nickel plating


## Corrosion-resistant Air Slide Table (Made to Order: 25A-MXQ□-X771, 25A-MXS□-X1949)

The material of the head cap part has been changed to a highly corrosion-resistant material.



|          | After change   | Before change   |
|----------|----------------|-----------------|
| Head cap | Aluminum alloy | Synthetic resin |

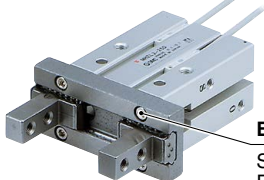
## Dual Rod Cylinder/Compact Type 25A-CXSJ Series



**Bolts**  
Surface treatment: Electroless nickel plating

\* The auto switch magnet contains copper and/or zinc. (ø6, ø10, ø15)

## Air Gripper 25A-MH22 Series



**Bolts**  
Surface treatment: Electroless nickel plating

\* Cylinder mounting brackets made of steel are either electroless nickel plated, treated with RAYDENT®, or coated with electrodeposition paint.

## Air Filter 25A-AF Series

**Rod (AF50 to 60-D)**  
Material: Stainless steel

**Drain plug (AF30 to 60-A, AF30 to 60-D)**  
Material: Stainless steel



## Regulator 25A-AR Series

**Valve, Stem**  
Material: Stainless steel

**Adjusting spring, Screw**  
Surface treatment: Electroless nickel plating



## Precision Regulator 25A-IR□-A Series

**Screw**  
Surface treatment: Electroless nickel plating

**Screws**  
Material: Stainless steel



## Vacuum Regulator 25A-IRV Series

**Stem, Valve, Screws**  
Material: Stainless steel

**Seal, O-ring**  
Material: EPDM

**Fittings**  
Metal material: Stainless steel



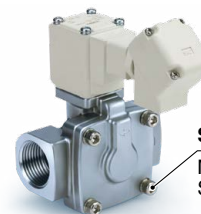
## 3-Color Display High-Precision Digital Pressure Switch ZSE20□(F)/ISE20□ Series



**Port thread**  
Material: Stainless steel

\* A copper material is used for the lead wires.

## Pilot Operated 2-Port Solenoid Valve 25A-VXD Series



**Screw**  
Material: Stainless steel

\* A copper material is used for the solenoid coils and lead wires.

## Solid State Auto Switch D-M9□-900 Series

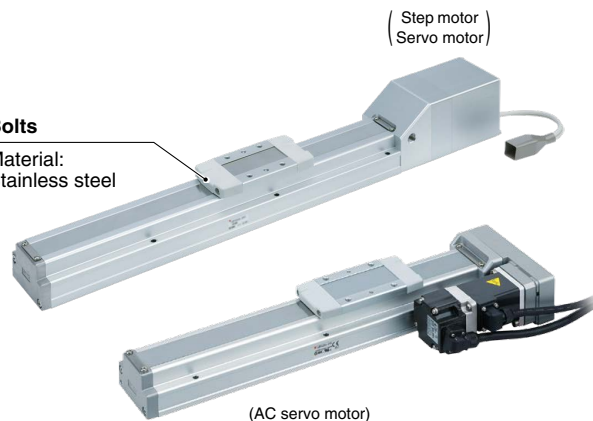
**Mounting screw**  
Material: Stainless steel



\* A copper material is used for the lead wires.

## Electric Actuator/Slider Type Ball Screw Drive 25A-LEFS Series

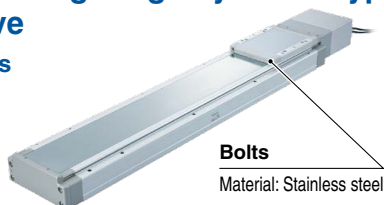
**Bolts**  
Material: Stainless steel



\* Copper and zinc materials are used for the motors, cables, controllers/drivers.  
\* The motor magnet contains copper and/or zinc.

## Electric Actuator/High Rigidity Slider Type Ball Screw Drive 25A-LEJS Series

**Bolts**  
Material: Stainless steel



\* Copper and zinc materials are used for the motors, cables, controllers/drivers.  
\* The motor magnet contains copper and/or zinc.

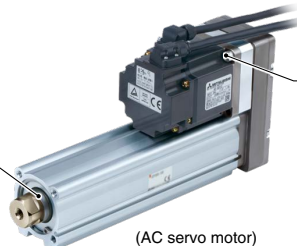
## Electric Actuator/Rod Type 25A-LEY Series

**Bushing**  
Material: Steel bearing alloy

**Bolts**  
Material: Stainless steel

**Bushing**  
Material: Steel bearing alloy

**Bolts**  
Material: Stainless steel



\* Copper and zinc materials are used for the motors, cables, controllers/drivers. \* The motor magnet contains copper and/or zinc.



# Dustproof Products

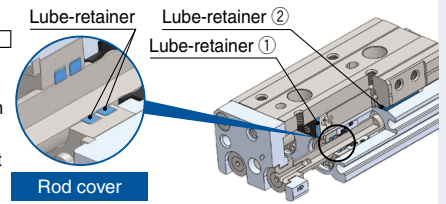
\* Not compatible with the secondary battery specifications

## High Durability Series Dust Resistant Cylinder CM2/CG1/MB/CQ2/MGP/MXQ-XC4□

- Up to **6 times** more durable in dusty environments (-XC4A/-XC4B/-XC4C)
- Applicable powder particle size: 20 to 100 μm
- Suitable for environments with ceramic powder, toner powder, paper powder, and metallic powder
- \* Excludes weld spatter
- Can be selected according to the application

### MXQ-XC4A

- Lube-retainers are installed on the guide unit and rod cover.
- This prevents the entry of dust and foreign matter.



| Description  | Applicable powder particle size | Structure (CQ2) | Durability                       |
|--|---------------------------------|-----------------|----------------------------------|
| With 2 Lube-retainers<br><b>XC4A</b>                   | 20 to 50 μm                     |                 | <b>4 times</b><br>Standard model |
| With heavy-duty scraper + Lube-retainer<br><b>XC4B</b> | 30 to 100 μm                    |                 | <b>6 times</b><br>Standard model |
| With heavy-duty scraper<br><b>XC4C</b>                 | 50 to 100 μm                    |                 | <b>2 times</b><br>Standard model |

## Applicable Cylinders

Air Cylinder  
**CM2-XC4□**  
ø20 to ø40



Air Cylinder  
**CG1-XC4□**  
ø20 to ø100



Air Cylinder  
**MB-XC4□**  
ø32 to ø100



Compact Cylinder  
**CQ2-XC4□**  
ø20 to ø63



Compact Guide Cylinder  
**MGP-XC4□**  
ø12 to ø100



Air Slide Table  
**MXQ-XC4A**  
ø6 to ø25



# Explosion-proof Products

\* Not compatible with the secondary battery specifications

## Explosion-proof Solenoid Valves

### For Japan (TIIS certification)

- Intrinsically Safe Explosion-proof System 5-Port Solenoid Valve
- 51-SY5000/7000/9000 Series

Ex ia IIB T4

- Explosion-proof (Flameproof) 3/5-Port Solenoid Valve
- 50-VFE/VPE Series

d2G4, Ex d IIB T4

### For China (CCC certification)

- Intrinsically Safe Explosion-proof 5-Port Solenoid Valve
- 52-SY5000/7000/9000-X140 Series

Ex ia IIC T4 to T6 Gb

- Explosion-proof (Flameproof) 3/5-Port Solenoid Valve
- 50-VFE/VPE-X140 Series

Ex d IIC T5/T6 Gb  
Ex tD A21 IP6X T85°C/T100°C

### For Taiwan (TS certification)

- Explosion-proof (Flameproof) 3/5-Port Solenoid Valve
- 50-VFE/VPE-X170 Series

Ex db IIC T5/T6 Gb  
Ex tb IIIC T100°C/T85°C Db

### For Europe (CE marking, ATEX directive)

- Intrinsically Safe Explosion-proof System
- 5-Port Solenoid Valve/52-SY5000/7000/9000

II 2G Ex ia IIC T4...T5 Gb Ta: -10°C to +50°C  
II 2G Ex ia IIC T6 Gb Ta: -10°C to +45°C  
[Certification no.: DEKRA 11ATEX0273 X]

- Explosion-proof (Flameproof) 3/5-Port Solenoid Valve
- 50-VFE/VPE-X60 Series

II 2G Ex db IIC T5 Gb Ta: -10°C TO +50°C  
II 2G Ex db IIC T6 Gb Ta: -10°C TO +40°C  
II 2D Ex tb IIIC T100°C Db Ta: -10°C TO +50°C  
II 2D Ex tb IIIC T85°C Db Ta: -10°C TO +40°C  
[Certification no.: KEMA 09ATEX0024X]

### For Korea (KOSHA certification)

- Explosion-proof (Flameproof) 3/5-Port Solenoid Valve
- 50-VFE/VPE-X100 Series

Ex d IIB T4

### For North America (UL 913/CSA C22.2 No. 157)

- Intrinsically Safe Explosion-proof
- Pilot Operated 5-Port Solenoid Valve: 53-SY5000/7000/9000 Series

Electrical Entry TT  
Hazardous Location  
Class I, II, III  
Division 1  
Groups A, B, C, D, E, F, G

Electrical Entry L and LL  
Hazardous Location  
Class I  
Division 1  
Groups A, B, C, D

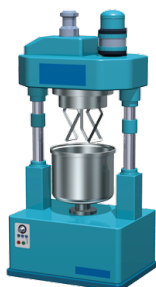
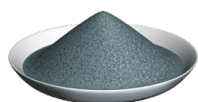
# Secondary Battery Manufacturing Process

## Electrode Production Process

Same for both can types and laminate types

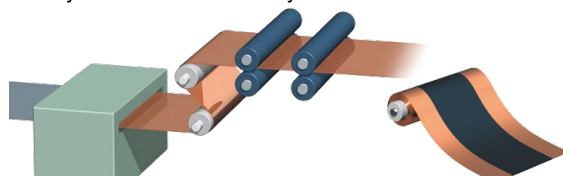
### ① Mixing and kneading machine

The proper amount of raw materials for positive or negative electrodes are mixed to make electrode slurry.



### ② Coating and rolling

Positive or negative electrode slurry is coated with a metallic foil made from aluminum, copper, etc. The coated slurry is then compressed with rollers continuously to enhance the density of the electrode sheet.



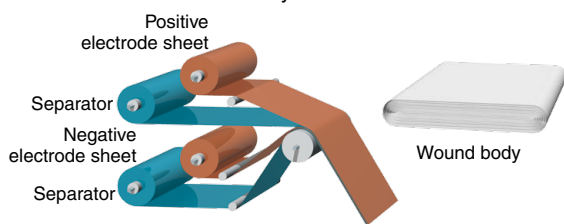
Electrode (Negative)

## Cell Assembly Process

Can type

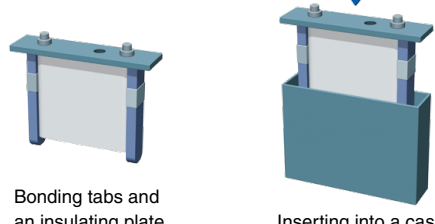
### ④ Winder (Winding)

The positive electrode sheet, negative electrode sheet, and separator sheets are laid on top of each other and wound to form a wound body.



### ⑤ Attaching tabs and an insulating plate and inserting into a case

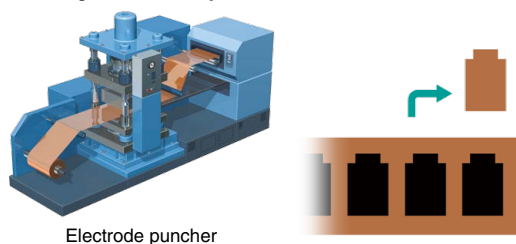
Current collecting tabs and an insulating plate are bonded to the wound body. It is then inserted into a case.



Laminate type

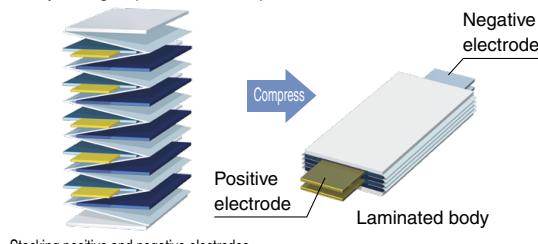
### ④ Punching electrodes

The rolled positive and negative electrodes are punched according to the battery size.



### ⑤ Stacking (Layering)

Positive and negative electrodes are stacked alternately and accurately at high speed with a separator inserted between them.



## Inspection/Packaging Process

Same for both can types and laminate types

### ⑧ Charging/discharging and aging

Standard products are applicable.

Charging and discharging are repeated to activate batteries. Charged battery cells are then left for a certain period of time, and the initial deterioration of batteries is checked to detect defective products.



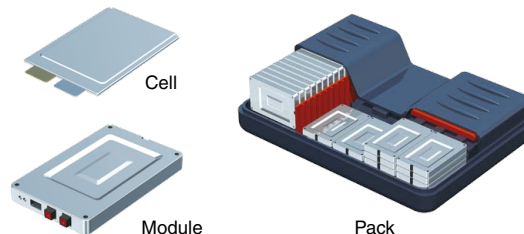
Activation of batteries

Aging

### ⑨ Packaging

Standard products are applicable.

Connected multiple cells are enclosed in a metallic case, and terminals are attached to form a module. Then, the connected multiple modules with a sensor and a controller are enclosed in a case to form a battery pack.



Cell

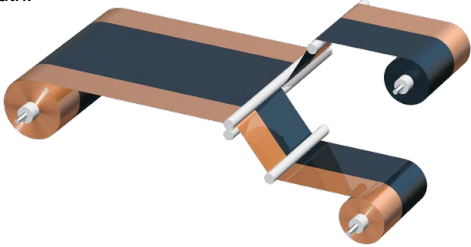
Module

Pack



### 3 Slitting

The electrode sheet and separator are cut to the cell width.

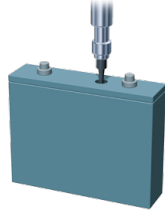


### 6 Welding cell lid and pouring electrolytic solution

The electrode and lid are laser-welded, and then the entire periphery of the cell case and lid is welded. Electrolytic solution is poured into the cell.



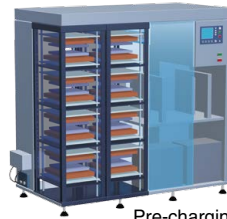
Welding cell lid



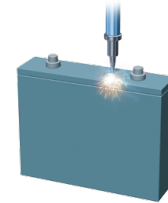
Pouring electrolytic solution

### 7 Pre-charging and welding infusion plug

Pre-charging (formation charging) is performed to remove the gas generated in the initial charging process, and then the infusion plug is welded to seal the cell.



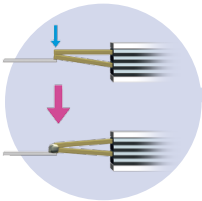
Pre-charging



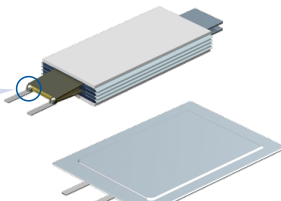
Welding infusion plug

### 6 Tab welding and lamination

Current collecting tabs are welded to the laminated body. The laminated body is wrapped with armoring material.



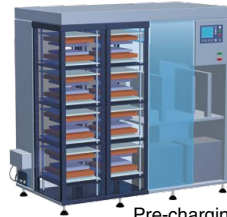
Tab welding



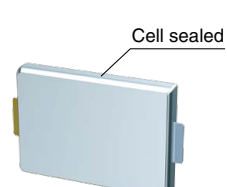
Lamination

### 7 Pre-charging and sealing cell

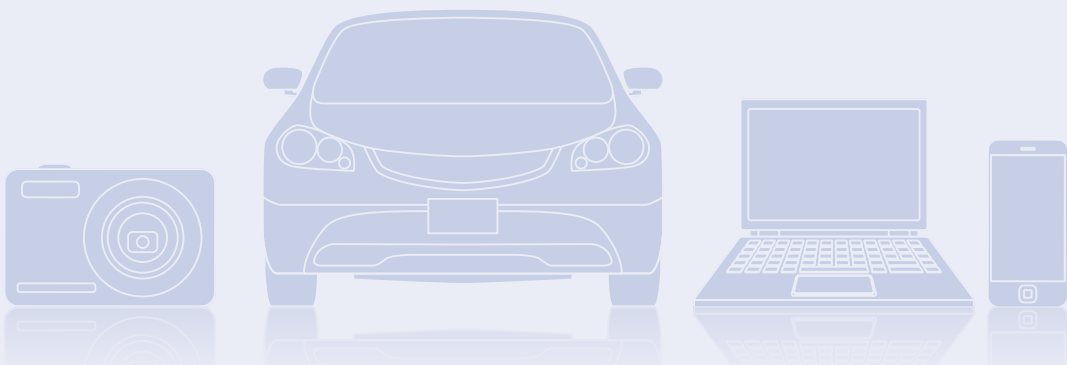
Pre-charging (formation charging) is performed to remove the gas generated in the initial charging process, and then heat is applied to seal the cell.



Pre-charging



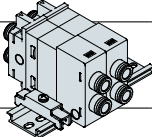






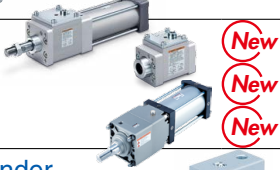




Sealing cell



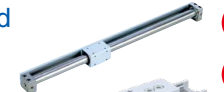
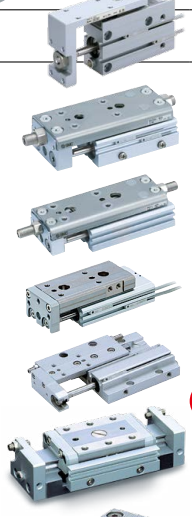



# INDEX

## 25A- Series Applicable Products








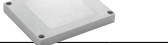



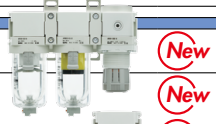


| Description  |  | Series   | Page                |
|--|--|--|---------------------|
| Directional Control Valves   | Air Management System  <b>New</b> | 25A-AMS/20/30/40/60  | 14-1                |
|  | 5-Port Solenoid Valve             | <b>New</b> 25A-JSY1000/3000 (Plug-in connector connecting base)  | 15                  |
|  |  | <b>New</b> 25A-JSY1000/3000 (Non plug-in metal base)   | 29                  |
|  |  | <b>New</b> 25A-SY5000/7000 (Plug-in connector connecting base)   | 33                  |
|  |  | 25A-SY5000/7000 (Single unit, Individual wiring)   | 63                  |
|  |  | 25A-VQ2000/4000 (Single unit, Plug-in unit)  | 73                  |
|  |  | 25A-SQ2000 (Plug-in type, Plug lead type)  | 87                  |
|  |  | 25A-VQZ1000 (Single unit, Plug lead)   | 91                  |
|  |  | 25A-VQ1000/2000-FPG  | 95                  |
|  | Separate Type Double Check Block  |  |                     |
|  | 3-Port Solenoid Valve             | 25A-VP342/542/742 (Body ported)  | 96                  |
|  |  | 25A-VP344/544/744 (Base mounted)   | 97                  |
|  |  | 25A-VP500/700-X536, X538, X555   | 98                  |
|  |  | 25A-VT317  | 99                  |
|  |  | 25A-VG342  | 100                 |
| 5-Port Air Operated Valve    |  | 25A-SYA5000/7000   | 101                 |
| 3-Port Air Operated Valve   | 25A-SYJA500/700  | 102  |                     |
| Finger Valve  <b>New</b>  | 25A-VHK□A  | 104  |                     |
| Conforming to OSHA Standard Pressure Relief 3-Port Valve with Locking Holes  <b>New</b> | 25A-VHS (W)-D (Single action, Double action)   | 105  |                     |
|  | 25A-VHS (Single action)  | 106  |                     |
|  | 25A-VHS□510 (Double action)  | 107  |                     |
| Air Cylinders  | Air Cylinder  <b>New</b>        | 25A-CJP2 (ø4 to ø16)   | 108                 |
|  |  | 25A-CJ2 (ø10/ø16)  | 109                 |
|  |  | <b>New</b> 25A-CJ2K (ø10/ø16)  | 110                 |
|  |  | 25A-CBJ2 (End lock) (ø16)  | 111                 |
|  |  | <b>New</b> 25A-CM2 (ø20 to ø40)  | 112                 |
|  |  | 25A-CG1 (ø20 to ø100)  | 113                 |
|  |  | 25A-CBG1 (End lock) (ø20 to ø63)   | 114                 |
|  |  | 25A-MB (ø32 to ø100)   | 115                 |
|  |  | 25A-CA2 (ø40 to ø100)  | 116                 |
|  |  | 25A-CS2 (ø125 to ø160)   | 117                 |
|  | Lock Cylinder  <b>New</b>       | 25A-MWB (ø32 to ø100)  | 118                 |
|  | <b>New</b> 25A-MWB-UT (ø32 to ø100)  | 119  |                     |
|  | <b>New</b> 25A-CNS (ø125 to ø160)  | 119-1  |                     |
|  | Compact Air Cylinders  | Mini Free Mount Cylinder  | 25A-CUJ (ø6 to ø20) |
| Free Mount Cylinder   |  | 25A-CU (ø10 to ø32)  | 122                 |
|  |  | 25A-CUK (Non-rotating rod) (ø10 to ø32)  | 123                 |



| Description           |   | Series  | Page  |  |     |
|-----------------------|---|---|---|--|-----|
| Compact Air Cylinders | Compact Cylinder<br>   | 25A-CQS (ø12 to ø25)  | 124   |  |     |
|                       |   | 25A-CQSW (Double rod) (ø12 to ø25)  | 125   |  |     |
|                       |   | 25A-CQS□S (Anti-lateral load) (ø12 to ø25)                                  | 126   |  |     |
|                       |   | 25A-CQ2 (ø12 to ø100)   | 127   |  |     |
|                       |   | 25A-CQ2W (Double rod) (ø12 to ø100)   | 128   |  |     |
|                       |   | 25A-CQ2 (Large bore size) (ø125 to ø200)                                    | 129   |  |     |
|                       |   | 25A-CQ2 (Long stroke) (ø32 to ø100)   | 130   |  |     |
|                       |   | 25A-CQ2□S (Anti-lateral load) (ø32 to ø100)                                 | 131   |  |     |
|                       |   | 25A-CBQ2 (End lock) (ø20 to ø100)   | 132   |  |     |
|                       |   | 25A-MU (ø25 to ø63)   | 133   |  |     |
| Rodless Cylinders     | Mechanically Jointed Rodless Cylinder<br>                   | 25A-MY1B (ø16 to ø63)   | 134   |  |     |
|                       |   | 25A-MY1M (Slide bearing guide) (ø16 to ø63)                                 | 135   |  |     |
|                       |   | 25A-MY1C (Cam follower guide) (ø16 to ø63)                                  | 136   |  |     |
|                       |   | 25A-MY1H (Linear guide) (ø16 to ø40)  | 137   |  |     |
|                       |   | 25A-MY2C (Cam follower guide) (ø16 to ø40)                                  | 138   |  |     |
|                       |   | 25A-MY2H/HT (Linear guide) (ø16 to ø40)                                     | 139   |  |     |
|                       |   | 25A-MY3A/B (ø16 to ø63)   | 140   |  |     |
|                       |   | 25A-MY3M (Slide bearing guide) (ø16 to ø63)                                 | 141   |  |     |
|                       |   | Magnetically Coupled Rodless Cylinder                                       |  | 25A-CY3B (ø6 to ø63)                     | 142 |
|                       |   |   |   | 25A-CY3R (Direct mount type) (ø6 to ø63) | 143 |
| Table Cylinders       | Compact Slide<br>Air Slide Table<br>                       | 25A-MXH (ø6 to ø20)   | 144   |  |     |
|                       |   | 25A-MXS (ø6 to ø25)   | 145   |  |     |
|                       |   | 25A-MXQ□A (Double-ported type) (ø6 to ø25)                                  | 146   |  |     |
|                       |   | 25A-MXQ□B (Low thrust with high rigidity type) (ø6 to ø20)                  | 147   |  |     |
|                       |   | 25A-MXQ□C (Single side-ported type) (ø8/ø12)                                | 148   |  |     |
|                       |   | 25A-MXQ□ (Height interchangeable type) (ø6 to ø25)                          | 149   |  |     |
|                       |   | 25A-MXQ (ø6 to ø25)   | 150   |  |     |
|                       |   | 25A-MXF (ø8 to ø20)   | 151   |  |     |
|                       |   | 25A-MXW (ø8 to ø25)   | 152   |  |     |
|                       |   | 25A-MXP (ø6 to ø16)   | 153   |  |     |
| Guide Cylinders       | Miniature Guide Rod Cylinder<br>Compact Guide Cylinder<br> | 25A-MGJ (ø6/ø10)  | 154   |  |     |
|                       |   | 25A-MGP (ø12 to ø100)   | 155   |  |     |
|                       |   | 25A-MGP (With air cushion/Slide bearing/Ball bushing bearing) (ø16 to ø100) | 156   |  |     |
|                       |   | 25A-MGPK (ø12 to ø50)   | 157   |  |     |
| Guide Cylinder        | 25A-MGGL (Ball bushing bearing) (ø20 to ø50)  | 161   |   |  |     |

# INDEX

| Description             |   | Series   | Page |
|-------------------------|---|--|------|
| Guide Cylinders         | Slide Unit  | 25A-CXWM (Slide bearing) ( $\phi 10$ to $\phi 32$ )  | 158  |
|                         | Dual Rod Cylinder   | 25A-CXSJ (Slide bearing/Ball bushing bearing) ( $\phi 6$ to $\phi 32$ )                                  | 159  |
|                         |   | 25A-CXS (Slide bearing/Ball bushing bearing) ( $\phi 6$ to $\phi 32$ )                                   | 160  |
| Clamp/Stopper Cylinders | Rotary Clamp Cylinder   | 25A-MK ( $\phi 12$ to $\phi 63$ )  | 162  |
|                         | Stopper Cylinder  | 25A-RSQ (Fixed mounting height) ( $\phi 12$ to $\phi 50$ )   | 163  |
|                         | Heavy Duty Stopper Cylinder   | 25A-RSH ( $\phi 20/\phi 32$ )  | 164  |
| ISO Cylinders           | (ISO Standards) Air Cylinder  | 25A-C85 (Standard) (ISO Standard (6432)) ( $\phi 8$ to $\phi 25$ )                                       | 165  |
|                         |   | 25A-CP96 (Standard) ISO Standard (15552) ( $\phi 32$ to $\phi 125$ )                                     | 166  |
|                         |   | 25A-C96 (Standard) ISO Standard (15552) ( $\phi 32$ to $\phi 125$ )                                      | 167  |
|                         |   | 25A-C95 (Standard) ISO Standard (15552) ( $\phi 160, \phi 200$ )   | 168  |
|                         | (ISO Standards) Compact Cylinder  | 25A-C55 (Standard) ISO Standard (21287) ( $\phi 20$ to $\phi 100$ )                                      | 169  |
| Related Products        | Shock Absorber  | 25A-RJ (Soft type)   | 170  |
|                         |   | 25A-RJ (Short stroke type)   | 171  |
|                         |   | 25A-RB (C)   | 172  |
|                         | Floating Joint  | 25A-JS (Stainless steel type) (10 to 63)   | 173  |
|                         |   | 25A-JA (80, 100)   | 173  |
|                         |   | 25A-JB (For compact cylinders) (12 to 100)   | 173  |
| Rotary Actuators        | Rotary Table  | 25A-MSUB (Vane type) (1 to 20)   | 174  |
|                         |   | 25A-MSQ (Rack & Pinion type) (10 to 50)  | 174  |
|                         |   | 25A-MSQ (Rack & Pinion type) (10 to 200)   | 178  |
|                         |   | 25A-MSQ-X251 (Rack & Pinion type, With vacuum port) (10 to 200)  | 178  |
|                         | 3-Position Rotary Table   | 25A-MSZ (10 to 50)   | 180  |
| Air Grippers            | Parallel Type Air Gripper   | 25A-JMHZ2 (Compact type) ( $\phi 8$ to $\phi 20$ )   | 181  |
|                         |   | 25A-JMHZ2-X6900 (A, B) (With positioning pins on the lateral mounting surface) ( $\phi 8$ to $\phi 20$ ) | 181  |
|                         |   | 25A-JMHZ2-X7460 (Lateral auto switch mounting) ( $\phi 8$ to $\phi 20$ )                                 | 181  |
|                         |   | 25A-MHZ2 ( $\phi 10$ to $\phi 40$ )  | 182  |
|                         |   | 25A-MHZL2 (Long stroke) ( $\phi 10$ to $\phi 25$ )   | 183  |
|                         |   | 25A-MHZJ2 (With dust cover) ( $\phi 10$ to $\phi 25$ )   | 184  |
|                         |   | 25A-MHZJ2-X6100 (With dust cover) ( $\phi 32/\phi 40$ )  | 184  |
|                         |   | 25A-MHZL2-X5955 (Long stroke, With dust cover) ( $\phi 10$ to $\phi 20$ )                                | 184  |
|                         |   | 25A-MHF2 (Low profile type) ( $\phi 8$ to $\phi 20$ )  | 185  |
|                         |   | 25A-MHL2-Z (Wide type) ( $\phi 10$ to $\phi 40$ )  | 186  |
|                         |   | 25A-MHL2 (Wide type) ( $\phi 10$ to $\phi 40$ )  | 186  |
|                         |   | 25A-MHS□ (3-finger, 4-finger) ( $\phi 16$ to $\phi 32$ )   | 187  |
|                         |   | 25A-MHSJ3 (3-finger, With dust cover) ( $\phi 16$ to $\phi 32$ )   | 188  |
|                         |   | 25A-MHY2 (180° Angular type, Cam type) ( $\phi 10$ to $\phi 25$ )  | 189  |
|                         | 25A-MHW2 (180° Angular type, Rack & Pinion type) ( $\phi 20$ to $\phi 50$ ) | 190  |      |

| Description  |   | Series  | Page   |
|--|---|---|--|
| Vacuum Equipment   | Vacuum Unit  <b>New</b>                                      | 25A-ZK2□A (Ejector system: Single unit)   | 191  |
|  | Compact Vacuum Unit  <b>New</b>                              | 25A-ZQ□A (Ejector system: Single unit/Manifold)   | 197  |
|  |   | 25A-ZQ□A (Vacuum pump system: Single unit/Manifold)   | 200  |
|  |   | ZH□□DA (Body ported) (Only the models without connection threads)   | 206  |
|  |   | ZH□□BA (Box type) (Only the models without connection threads)  | 206  |
|  | In-line Type Vacuum Ejector  <b>New</b>                      | ZU□□A (In-line type) (Only the models without connection threads)   | 207  |
|  | In-line Air Filter  <b>New</b>                               | ZFC (With One-touch fittings)   | *1   |
|  | Vacuum Pad  <b>New</b>                                       | ZP (Only pad units and pads with stainless steel adapters)  | 208  |
|  |   | ZP3□ (Only pad units and pads with aluminum or stainless steel adapters)  | 214  |
| Bernoulli Gripper  <b>New</b> | ZNC□ (Only grippers without a sensor)   | 223   |  |
|  | ZNC□-C (Only grippers without a sensor)   | 224   |  |
| Vacuum Regulator  <b>New</b>  | 25A-IRV   | 225   |  |
| Adsorption Plate  <b>New</b>  | SP  | *1  |  |
| Air Preparation Equipment  | Membrane Air Dryer  <b>New</b>                               | 25A-IDG□A (Single unit/Standard dew point -40°C/-60°C specifications)   | 227  |
|  | Air Preparation Filter  <b>New</b>                          | 25A-AFF-D (Line filter)/AM-D (Mist separator)/AMD-D (Micro mist separator)  | 229  |
|  |   | 25A-AMK-D (Activated carbon filter)   | 230  |
|  |   | 25A-AFF (Main line filter)  | 231  |
|  |   | 25A-AM (Mist separator)   | 232  |
|  |   | 25A-AMD (Micro mist separator)  | 233  |
|  |   | 25A-AMH (Micro mist separator with pre-filter)  | 234  |
|  |   | Clean Air Filters   | Clean Air Filter  |
|  | SFD200  |   | 235  |
|  | 25A-AMP (Exhaust cleaner for clean room)  |   | 236  |
|  | SFE (Clean exhaust filter)  |   | 237  |
| Modular F.R.L.   | Modular Type Air Combination  <b>New</b>                   | AC-D (Available through the Simple Specials System)   | 238  |
|  | Modular Type Air Filter (Micro) Mist Separator  <b>New</b> | 25A-AF-D (Air filter)   | 239  |
|  |   | 25A-AFM-D (Mist separator)  | 241  |
|  |   | 25A-AFD-D (Micro mist separator)  | 241  |
|  |   | 25A-AF-A (Air filter)   | 240  |
|  |   | 25A-AFM-A (Mist separator)  | 242  |
|  |   | 25A-AFD-A (Micro mist separator)  | 242  |
|  |   | Modular Type Regulator Filter Regulator (Micro) Mist Separator Regulator  <b>New</b> | 25A-AR-D (Regulator)   |
|  | 25A-AR□K-D (Regulator with backflow function)   |   | 243  |
|  | 25A-AW-D (Filter regulator)   |   | 245  |
|  | 25A-AW□K-D (Filter regulator with backflow function)  |   | 245  |
|  | 25A-AWM-D (Mist separator regulator)  |   | 247  |
|  | 25A-AWD-D (Micro mist separator regulator)  |   | 247  |
|  | 25A-AR-B (Regulator)  |   | 244  |
| 25A-AR□K-B (Regulator with backflow function)  | 244   |   |  |
| 25A-AW-B (Filter regulator)  | 246   |   |  |
| 25A-AW□K-B (Filter regulator with backflow function)   | 246   |   |  |

\*1 Standard products: For the standard model, copper (Cu) and zinc (Zn) are not used as main components in the metal materials. Refer to the [Web Catalog](#) for details.









| Description   |                                       | Series   | Page            |
|---|---------------------------------------|--|-----------------|
| Pressure Control Equipment  | Soft Start-up Valve                   | 25A-AV-A (Soft start-up valve)   | 247-1           |
|   | Regulator                             | 25A-IR□-A (Precision regulator)  | 248             |
|   |                                       | 25A-ITV (Electro-pneumatic regulator)                                  | 249             |
|   |                                       | 25A-ITV209□ (Electronic Vacuum Regulator)                              | 249-1           |
|   |                                       | 25A-VBA*2  | 250             |
|   | Booster Regulator                     | 25A-VBAT (Air tank)  | 251             |
| Pressure Gauge  |                                       | G43-X300 (Internal/external parts copper-free type)                    | 252             |
|   |                                       | G46-SRB (External metal parts and wetted parts stainless steel type)*3 | 253             |
| Flow Control Equipment/Fittings   | Speed Controller                      | AS-FG (Stainless steel type)   | 254             |
|   |                                       | AS-FSG (With indicator stainless steel type)                           | 255             |
|   |                                       | AS-FPG (Clean/Stainless steel type)                                    | 256             |
|   | Quick Exhaust Valve                   | 25A-AQ240F/340F  | 257             |
|   | Check Valve                           | 25A-AKH (With One-touch fittings)                                      | 258             |
|   | One-touch Fittings                    | KQ2-G (Stainless steel)  | 259             |
|   |                                       | KQ2 (Only the type without a connection thread)                        | *1              |
|   |                                       | KPG (Clean One-touch fittings)   | 260             |
|   |                                       | KQG2 (Stainless steel 316 One-touch fittings)                          | 261             |
|   | Stainless Steel Fittings              | KFG2 (Stainless steel 316 insert fittings)                             | 262             |
| MS (Miniature fittings/Stainless steel 316)                                   |                                       | 263  |                 |
| 25A-KDM (Rectangular multi-connector)   |                                       | 264  |                 |
| Coupler   | KKA (S Couplers stainless steel type) | 265  |                 |
| Tubing  | Tubing                                | T (Nylon)  | 267             |
|   |                                       | TS (Soft nylon)  | 267             |
|   |                                       | TU (Polyurethane)  | 267             |
|   |                                       | TA□ (Antistatic)   | 267             |
|   |                                       | TL (Fluoropolymer)   | 268             |
|   |                                       | TH (FEP)   | 268             |
|   |                                       | TD (Soft fluoropolymer)  | 268             |
|   |                                       | TPS (Soft polyolefin)  | 268             |
|   |                                       | IDK (Moisture control tube)  | 268             |
|   |                                       | Detection Switches   | Pressure Switch |
| 25A-ZSE20A(F)/ISE20A (3-screen display high-precision)                        | 270                                   |  |                 |
| 25A-ZSE20B(F)/ISE20B (3-screen display high-precision)                        | 271                                   |  |                 |
| 25A-ZSE20C(F)/ISE20C(H) (3-screen display high-precision, for general fluids) | 272                                   |  |                 |

\*1 Standard products: For the standard model, copper (Cu) and zinc (Zn) are not used as main components in the metal materials. Refer to the **Web Catalog** for details.

\*2 Pressure gauge mounting: The G43-10-01-X300/G46-SRB pressure gauge cannot be mounted directly to the booster regulator as it will interfere with the booster regulator (25A-VBA10A) handle or the other pressure gauge (for the 25A-VBA20A/40A). In order to mount the pressure gauge, piping which does not cause any interference must be prepared separately.

\*3 Aside from the external parts and wetted parts, copper (Cu) and zinc (Zn) are used as main components in the metal materials.




| Description   |  | Series   | Page   |
|---|--|--|--------|
| Detection Switches  | <p>Flow Switch</p>                              | <b>New</b> 25A-PF2M7 (For air, Integrated display type)  | 273    |
|   |  | <b>New</b> 25A-PF2M7-L (IO-Link)   | 274    |
|   |  | 25A-PFM7 (For air, Integrated display type)  | 275    |
|   |  | 25A-PFM5 (For air, Remote type)  | 276    |
|   |  | 25A-PFM3 (For air, Flow monitor)   | 277    |
|   |  | 25A-PFMB7 (For air, Integrated display type)   | 278    |
|   |  | <b>New</b> 25A-PF3A7□H   | 279    |
|   |  | <b>New</b> 25A-PF3A7□H-L (IO-Link)   | 280    |
|   |  | <b>New</b> 25A-PF3W7-Z (For water, Integrated display type)  | 281    |
|   |  | <b>New</b> 25A-PF3W5-Z (For water, Remote type)  | 282    |
|   |  | 25A-PF3W (For water, Integrated display/Remote type)   | 283    |
|   |  | 25A-PF3W-U (PVC piping, Integrated display/Remote type)  | 284    |
| 25A-PF3W30 (For water, Flow monitor)  | 285  |  |        |
| Fluid Control Equipment   | <p>Direct Operated 2-Port Solenoid Valve</p>   | <b>New</b> 25A-JSX (Stainless steel body: Water/Air/Oil)   | 286    |
|   |  | <b>New</b> 25A-JSX (Aluminum body: Air)  | 287    |
|   |  | <b>New</b> 25A-JSX (High flow/ Power saving type: Stainless steel body: Water/Air/Oil)   | 288    |
|   |  | 25A-VX2 (For air)  | 289    |
|   | <p>Pilot Operated 2-Port Solenoid Valve</p>   | 25A-VX2 (For water/medium vacuum)  | 290    |
|   |  | 25A-VXD (For air)  | 291    |
|   |  | 25A-VXD (For water)  | 292    |
|   |  | 25A-VXZ (For air)  | 293    |
| <p>Zero Differential Pressure Type Pilot Operated 2-Port Solenoid Valve</p>  | 25A-VXZ (For water)  | 294  |        |
|   |  |  |        |
| Process Gas Equipment   | <p>Diaphragm Valve for Ultra High Purity</p>  | <b>New</b> AZ3542 & 4542□25A (Air operated type)   | 295    |
|   |  | <b>New</b> AK3542 & 4542□25A (Air operated type)   | 297    |
| Electric Actuators  | <p>Electric Actuator</p>                      | <b>New</b> 25A-LEKFS (High rigidity and High precision slider type/Battery-less absolute: Applicable to the JXC□)                    | 298-3  |
|   |  | <b>New</b> 25A-LEKFS□G (High performance/High rigidity and High precision slider type/Battery-less absolute: Applicable to the JXC□) | 298-5  |
|   |  | <b>New</b> 25A-LEKFS (High rigidity and High precision slider type/AC servo motor: Applicable to the LECS□)                          | 298-7  |
|   |  | <b>New</b> 25A-LEKFS (High rigidity and High precision slider type/AC servo motor: Applicable to the LECY□)                          | 298-8  |
|   |  | <b>New</b> 25A-LEKFS (High rigidity and High precision slider type/Motorless type)   | 298-9  |
|   |  | <b>New</b> 25A-LEFS (Slider type/Battery-less absolute: Applicable to the JXC□)  | 298-10 |
|   |  | 25A-LEFS (Slider type/Incremental (Step motor/Servo motor): Applicable to the JXC□/LEC□)   | 299    |
|   |  | <b>New</b> 25A-LEFS□G (High performance/Slider type/Battery-less absolute (Step motor): Applicable to the JXC□)                      | 302-1  |
|   |  | <b>New</b> 25A-LEFS□F (High performance/Slider type/Incremental (Step motor): Applicable to the JXC□)                                | 302-3  |
|   |  | 25A-LEFS (Slider type/AC servo motor: Applicable to the LECS□)   | 303    |
|   |  | 25A-LEFS (Slider type/AC servo motor: Applicable to the LECY□)   | 304    |
|   |  | <b>New</b> 25A-LEFS (Slider type/Motorless type)   | 304-1  |

### 25A- series grease pack\*1 applicable models

\*1 Air cylinders (Except guide unit). For other models, please contact your local sales representative.

| Grease pack part no. | Quantity |
|----------------------|----------|
| GR-D-005             | 5 g      |
| GR-D-010             | 10 g     |
| GR-D-100             | 100 g    |

Contained in a plastic container.

| Description  |  | Series  |
|--|--|---|
| Electric Actuators   | <p>Electric Actuator</p>  <p><b>New</b></p>  <p><b>New</b></p>  <p><b>New</b></p> <p><b>New</b></p> <p><b>New</b></p> <p><b>New</b></p> <p><b>New</b></p> <p><b>New</b></p> | 25A-LEJS (High rigidity slider type/AC servo motor: Applicable to the LECS□) <b>305</b>                       |
|  |  | 25A-LEJS (High rigidity slider type/AC servo motor: Applicable to the LECY□) <b>306</b>                       |
|  |  | 25A-LEJS (High rigidity slider type/Motorless type) <b>306-1</b>  |
|  |  | 25A-LEY (Rod type/Battery-less absolute: Applicable to the JXC□) <b>306-2</b>                                 |
|  |  | 25A-LEY□G (High performance/Rod type/Battery-less absolute (Step motor): Applicable to the JXC□) <b>306-4</b> |
|  |  | 25A-LEY□F (High performance/Rod type/Incremental (Step motor): Applicable to the JXC□) <b>306-6</b>           |
|  |  | 25A-LEY (Rod type/Incremental (Step motor/Servo motor): Applicable to the JXC□/LEC□) <b>307</b>               |
|  |  | 25A-LEY (Rod type/AC servo motor: Applicable to the LECS□) <b>311</b>   |
|  |  | 25A-LEY (Rod type/AC servo motor: Applicable to the LECY□) <b>313</b>   |
|  |  | 25A-LEY (Rod type/Motorless type) <b>314-1</b>  |
|  |  | 25A-LEYG (Guide rod type/Incremental (Step motor/Servo motor): Applicable to the JXC□/LEC□) <b>314-2</b>      |
|  |  | 25A-LEYG (Guide rod type/Battery-less absolute: Applicable to the JXC□) <b>314-4</b>                          |
|  |  | 25A-LEYG (Guide rod type/AC servo motor: Applicable to the LECS□) <b>314-6</b>                                |
| 25A-LEYG (Guide rod type/AC servo motor: Applicable to the LECY□) <b>314-8</b> |  |   |
| 25A-LEYG (Guide rod type/Motorless type) <b>314-10</b>                         |  |   |

|               |                             |                   |                |
|---------------|-----------------------------|-------------------|----------------|
| Auto Switches | Solid State Auto Switch     | D-M9□□-900        | 315 and onward |
|               |                             | D-F8□-900         |                |
|               |                             | D-Y□□-900         |                |
|               |                             | D-G59/G5P/K59-900 |                |
|               |                             | D-F79/F7P/J79-900 |                |
|               |                             | D-F7□V-900        |                |
|               | Reed Auto Switch <b>New</b> | D-A90L/A93L-900   |                |
|               | D-Z80L-900                  |                   |                |
|               | D-E73A/E76A/E80A            |                   |                |

### Special Products (Please contact your local sales representative for more details.)

| Description                |   | Series                |
|----------------------------|---|-----------------------|
| Directional Control Valves | 3-Port Solenoid Valve/Residual Pressure Release Valve with Detection of Main Valve Position (Safety Standard ISO 13849-1 Certified) | VG342-X87             |
| Air Cylinders              | Air Cylinder With End Lock  | CBM2                  |
|                            | Compact Cylinder with Lock  | MBB                   |
|                            | Stopper Cylinder  | CLQ                   |
|                            | Heavy Duty Stopper Cylinder   | RSQ                   |
|                            |   | RS2H                  |
| Vacuum Equipment           | Non-contact Gripper   | XT661                 |
| High Vacuum Equipment      | Aluminum High Vacuum Angle Valve  | XLA (Normally closed) |
|                            |   | XLC (Double acting)   |



# Related Products

Consult with SMC for "Copper (Cu) and Zinc (Zn) Restrictions" products.

## 1 Antistatic Equipment

Vacuum

Static electricity

Antistatic performance achieved through conductive measures for a reduction in static-related trouble.

**Actuators** · Antistatic Air Cylinder (Made to Order) ..... *CM2-X1051 Series*

**Vacuum Equipment** · Vacuum Pad ..... *ZP Series*

### Fittings and Tubing

- Antistatic One-touch Fittings ..... *KA Series*
- Miniature Fittings/Stainless Steel 316 ..... *MS Series* (Some types only)
- Miniature Fittings ..... *M Series* (Some types only)
- Antistatic Tubing ..... *TA□ Series*

### Flow Control Equipment

- Antistatic Speed Controller (Made to Order) ..... *AS-X260 Series*



## 2 Static Neutralization Equipment

Static electricity

Ions generated by corona discharge neutralize static electricity.

- Ionizer/Bar Type ..... *IZS4□ Series*
- Bar Type Ionizer **Separate Controller** ..... *IZT4□ Series*
- Ionizer ..... *IZS31 Series*
- Nozzle Type Ionizer ..... *IZN10E Series*
- Fan Type Ionizer ..... *IZF□ Series*

**Measurement Equipment** Measures the electrostatic potential.

- Electrostatic Sensor ..... *IZD10/IZE11 Series*
- Handheld Electrostatic Meter ..... *IZH10 Series*



## 3 Temperature Control Equipment

- Thermo-chiller/Standard Type ..... *HRS Series*



## 4 Electric Actuators

- Electric Actuator/Slider Type ..... *LEFB Series*
- Electric Actuator/Low Profile Slider Type ..... *LEM Series*
- Electric Actuator/Guide Rod Slider ..... *LEL Series*
- Electric Slide Table ..... *LES Series*
- Electric Actuator/Miniature Rod Type /Miniature Slide Table Type ..... *LEPY/LEPS Series*
- Electric Rotary Table ..... *LER Series*
- Electric Gripper ..... *LEH□ Series*
- Motorless Type Electric Actuator ..... *LE□ Series*



## 5 High Purity Chemical Liquid Valves

- High Purity Chemical Liquid Valve/Air Operated Type ..... *LVC/LVA/LVH Series*





# Air Management System

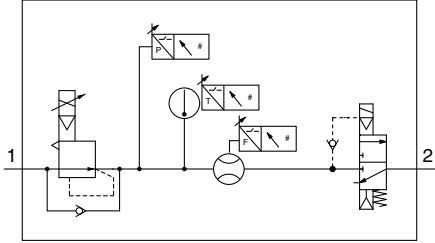
## Electro-Pneumatic Regulator Type

# 25A-AMS20A/30A/40A/60A Series

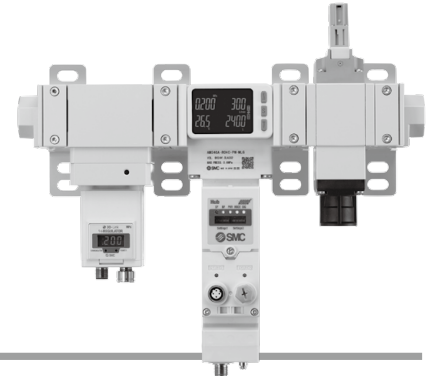
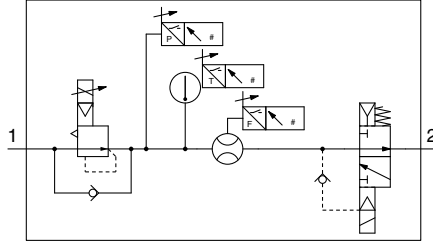


RoHS

Symbol  
N.C.



N.O.



### How to Order

**25A-AMS 40 A-F 04 C-PN-MLG**

Series compatible with secondary batteries

- 1
- 2
- 3
- 4
- 5
- 6
- 7

|   |   | Symbol          | Description         | 1  |    |    |    |   |
|---|---|-----------------|---------------------|--|----|----|----|---|
|   |   |                 |                     | Body size  |    |    |    |   |
|   |   |                 |                     | 20   | 30 | 40 | 60 |   |
| 2 | Pipe thread type  | R               | Rc                  | ●  | ●  | ●  | ●  |   |
|   |   | N               | NPT                 | ●  | ●  | ●  | ●  |   |
|   |   | F               | G                   | ●  | ●  | ●  | ●  |   |
|   |   | H               | Without attachments | ●  | ●  | ●  | ●  |   |
|   |   | +               |                     |  |    |    |    |   |
| 3 | Port size   | 01              | 1/8                 | ●  | —  | —  | —  |   |
|   |   | 02              | 1/4                 | ●  | ●  | —  | —  |   |
|   |   | 03              | 3/8                 | —  | —  | ●  | —  |   |
|   |   | 04              | 1/2                 | —  | —  | ●  | —  |   |
|   |   | 06              | 3/4                 | —  | —  | —  | ●  |   |
|   |   | 10              | 1                   | —  | —  | —  | ●  |   |
|   |   | 00              | Without attachments | ●  | ●  | ●  | ●  |   |
|   |   | +               |                     |  |    |    |    |   |
| 4 | Electro-Pneumatic regulator, Residual pressure relief 3-port solenoid valve | N.O./N.C.       | C                   | N.C. (Normally closed)   | ●  | ●  | ●  | ● |
|   |   |                 | D                   | N.O. (Normally open)   | ●  | ●  | ●  | ● |
|   |   | +               |                     |  |    |    |    |   |
| 5 | Air management hub  | Protocol        | SA                  | Standalone (When wireless adapter is connected*3: Wireless remote)         | ●  | ●  | ●  | ● |
|   |   |                 | PN                  | PROFINET, OPC UA (When wireless adapter is connected*3: Wireless base)     | ●  | ●  | ●  | ● |
|   |   |                 | EN                  | EtherNet/IP™, OPC UA (When wireless adapter is connected*3: Wireless base) | ●  | ●  | ●  | ● |
|   |   |                 | EC                  | EtherCAT*4 (When wireless adapter is connected*3: Wireless base)           | ●  | ●  | ●  | ● |
|   |   | +               |                     |  |    |    |    |   |
| 6 | Electro-Pneumatic regulator, Air management hub                             | Unit            | K*1                 | EXA1/ITV: Units selection function   | ●  | ●  | ●  | ● |
|   |   |                 | M*2                 | EXA1/ITV: SI units only  | ●  | ●  | ●  | ● |
|   |   | +               |                     |  |    |    |    |   |
| 7 | Residual pressure relief 3-port solenoid valve                              | Manual override | G                   | Non-locking push type  | ●  | ●  | ●  | ● |
|   |   |                 | E                   | Push-turn locking type (Manual)  | ●  | ●  | ●  | ● |

\*1 Applies to overseas destinations only

\*2 Fixed units Instantaneous flow: L/min  
Accumulated flow : L  
Pressure : kPa, MPa  
Temperature : °C

\*3 The wireless adapter is sold separately. (Refer to page 14-8.)

\*4 EtherCAT is not compatible with OPC UA. In addition, the PLC (Programmable Logic Controller)/controller must support EoE (Ethernet over EtherCAT).

\* The connection cable for the standby electro-pneumatic regulator/residual pressure relief valve is connected.

\* The 25A- series specifications and dimensions are the same as those of the standard model.

For details, refer to the [Web Catalog](#).



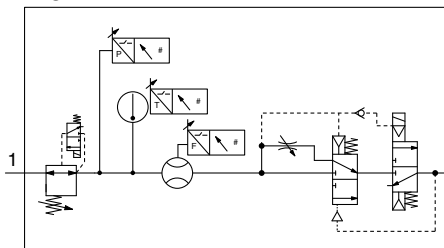
# Air Management System Regulator Type



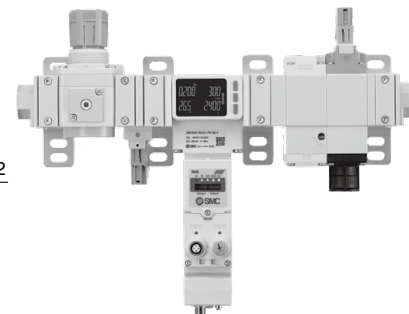
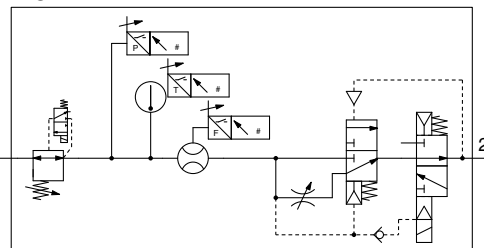
RoHS

# 25A-AMS20B/30B/40B/60B Series

Symbol  
N.C.



N.O.



## How to Order

**25A-AMS 40 B-F 04 C-PN-MLG**

Series compatible with secondary batteries

- ①
- ②
- ③
- ④
- ⑤
- ⑥
- ⑦

|    |  | Symbol          | Description  | ①<br>Body size   |    |    |    |   |
|----|--|-----------------|--|--|----|----|----|---|
|    |  |                 |  | 20   | 30 | 40 | 60 |   |
| ②  | Pipe thread type*1                                       | R               | Rc   | ●  | ●  | ●  | ●  |   |
|    |  | N               | NPT  | ●  | ●  | ●  | ●  |   |
|    |  | F               | G  | ●  | ●  | ●  | ●  |   |
| ③  | Port size  | +               |  |  |    |    |    |   |
|    |  | 01              | 1/8  | ●  | —  | —  | —  |   |
|    |  | 02              | 1/4  | ●  | ●  | —  | —  |   |
|    |  | 03              | 3/8  | —  | ●  | ●  | —  |   |
|    |  | 04              | 1/2  | —  | —  | ●  | —  |   |
|    |  | 06              | 3/4  | —  | —  | —  | ●  |   |
|    |  | 10              | 1  | —  | —  | —  | ●  |   |
| 00 | Without attachments                                      | ●               | ●  | ●  | ●  |    |    |   |
| ④  | Residual pressure relief 3-port solenoid valve           | N.O./N.C.       |  |  |    |    |    |   |
|    |  | C               | N.C. (Normally closed)   | ●  | ●  | ●  | ●  |   |
|    |  | D               | N.O. (Normally open)   | ●  | ●  | ●  | ●  |   |
| ⑤  | Air management hub                                       | Protocol        | +  |  |    |    |    |   |
|    |  |                 | SA   | Standalone (When wireless adapter is connected*4: Wireless remote)         | ●  | ●  | ●  | ● |
|    |  |                 | PN   | PROFINET, OPC UA (When wireless adapter is connected*4: Wireless base)     | ●  | ●  | ●  | ● |
|    |  |                 | EN   | EtherNet/IP™, OPC UA (When wireless adapter is connected*4: Wireless base) | ●  | ●  | ●  | ● |
|    |  | EC              | EtherCAT*5 (When wireless adapter is connected*4: Wireless base) | ●  | ●  | ●  | ●  |   |
| ⑥  | Air management hub                                       | Unit            | +  |  |    |    |    |   |
|    |  |                 | K*2  | EXA1: Units selection function   | ●  | ●  | ●  | ● |
|    |  | M               | EXA1: SI units only*3  | ●  | ●  | ●  | ●  |   |
| ⑦  | Regulator/Residual pressure relief 3-port solenoid valve | Manual override | +  |  |    |    |    |   |
|    |  |                 | G  | Non-locking push type  | ●  | ●  | ●  | ● |
|    |  | E               | Push-turn locking type (Manual)                                  | ●  | ●  | ●  | ●  |   |

\*1 For port size "00", specify thread type of the standby regulator (ARS).

\*2 Applies to overseas destinations only

\*3 Fixed units  
Instantaneous flow: L/min  
Accumulated flow : L  
Pressure : kPa, MPa  
Temperature : °C

\*4 The wireless adapter is sold separately. (Refer to page 14-8.)

\*5 EtherCAT is not compatible with OPC UA. In addition, the PLC (Programmable Logic Controller)/controller must support EoE (Ethernet over EtherCAT).

\* The connection cable for the standby electro-pneumatic regulator/residual pressure relief valve is connected.

\* The 25A- series specifications and dimensions are the same as those of the standard model.

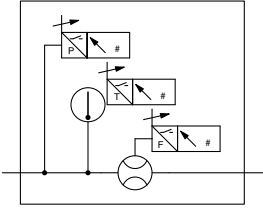
For details, refer to the [Web Catalog](#).



# Air Management Hub

# 25A-EXA1 Series

Symbol



## How to Order

**25A-EXA1-40-SA-ML**

Series compatible with secondary batteries

① ② ③

|            | Symbol | Description  | ①                   |                     |                     |                     |
|------------|--------|--|---------------------|---------------------|---------------------|---------------------|
|            |        |  | Body size           |                     |                     |                     |
|            |        |  | 20<br>For 25A-AMS20 | 30<br>For 25A-AMS30 | 40<br>For 25A-AMS40 | 60<br>For 25A-AMS60 |
| ② Protocol | SA     | Standalone (When wireless adapter is connected*3: Wireless remote)         | ●                   | ●                   | ●                   | ●                   |
|            | PN     | PROFINET, OPC UA (When wireless adapter is connected*3: Wireless base)     | ●                   | ●                   | ●                   | ●                   |
|            | EN     | EtherNet/IP™, OPC UA (When wireless adapter is connected*3: Wireless base) | ●                   | ●                   | ●                   | ●                   |
|            | EC     | EtherCAT*4 (When wireless adapter is connected*3: Wireless base)           | ●                   | ●                   | ●                   | ●                   |
| ③ Unit     | +      |  |                     |                     |                     |                     |
|            | K*1    | Units selection function   | ●                   | ●                   | ●                   | ●                   |
|            | M*2    | SI units only  | ●                   | ●                   | ●                   | ●                   |

\*1 Applies to overseas destinations only

\*2 Fixed units Instantaneous flow: L/min, Accumulated flow: L, Pressure: kPa/MPa, Temperature: °C

\*3 The wireless adapter is sold separately. (Refer to page 14-8.)

\*4 EtherCAT is not compatible with OPC UA. In addition, the PLC (Programmable Logic Controller)/controller must support EoE (Ethernet over EtherCAT).

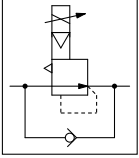
\* The 25A- series specifications and dimensions are the same as those of the standard model.

For details, refer to the [Web Catalog](#).

# Standby Electro-Pneumatic Regulator

## 25A-ITV2050 to 3050-X399

Symbol  
N.C./N.O.



### How to Order

|                |  |
|----------------|--|
| For 25A-AMS20A | <b>25A</b> - ITV2050 - IL <b>20</b> - <b>1</b> - <b>K</b> - X399 |
| For 25A-AMS30A | <b>25A</b> - ITV2050 - IL <b>30</b> - <b>1</b> - <b>K</b> - X399 |
| For 25A-AMS40A | <b>25A</b> - ITV3050 - IL <b>40</b> - <b>1</b> - <b>K</b> - X399 |
| For 25A-AMS60A | <b>25A</b> - ITV3050 - IL <b>60</b> - <b>1</b> - <b>K</b> - X399 |

Series compatible with secondary batteries
 ①
②
③

**① Applicable AMS□A size**

|           |                |
|-----------|----------------|
| <b>20</b> | For 25A-AMS20A |
| <b>30</b> | For 25A-AMS30A |
| <b>40</b> | For 25A-AMS40A |
| <b>60</b> | For 25A-AMS60A |

**② Type of actuation**

|          |                 |
|----------|-----------------|
| <b>1</b> | Normally closed |
| <b>2</b> | Normally open   |

**③ Pressure display unit**

|          |                          |
|----------|--------------------------|
| <b>K</b> | Units selection function |
| <b>M</b> | SI units only            |

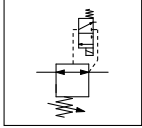
\* The 25A- series specifications and dimensions are the same as those of the standard model.



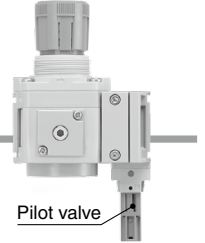
# Standby Regulator 25A-AR20S to 50S Series



## Symbol



## How to Order



25A-AR **30** S- **03** -Y-15V **4**

Series compatible with secondary batteries

1

2

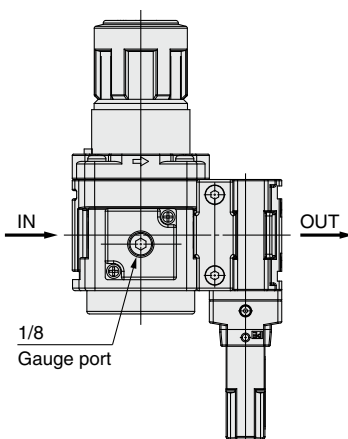
3

4

|   | Symbol                                  | Description     | 1                    |                                 |                      |                      |   |   |
|---|---|-----------------|----------------------|---------------------------------|----------------------|----------------------|---|---|
|   |   |                 | Body size            |                                 |                      |                      |   |   |
|   |   |                 | 20<br>For 25A-AMS20B | 30<br>For 25A-AMS30B            | 40<br>For 25A-AMS40B | 50<br>For 25A-AMS50B |   |   |
| 2 | Pipe thread type                        | Nil             | Rc                   | ●                               | ●                    | ●                    | ● |   |
|   |   | N               | NPT                  | ●                               | ●                    | ●                    | ● |   |
|   |   | F               | G                    | ●                               | ●                    | ●                    | ● |   |
| 3 | Port size<br>(Screws are IN side only.) | +               |                      |                                 |                      |                      |   |   |
|   |   | 02              | 1/4                  | ●                               | —                    | —                    | — |   |
|   |   | 03              | 3/8                  | —                               | ●                    | —                    | — |   |
|   |   | 04              | 1/2                  | —                               | —                    | ●                    | — |   |
|   |   | 10              | 1                    | —                               | —                    | —                    | ● |   |
| 4 | Pilot valve                             | Manual override | Nil                  | Non-locking push type           | ●                    | ●                    | ● | ● |
|   |   |                 | E                    | Push-turn locking type (Manual) | ●                    | ●                    | ● | ● |
|   |   |                 |                      |                                 |                      |                      |   |   |

## Gauge port view

\* Same for all sizes

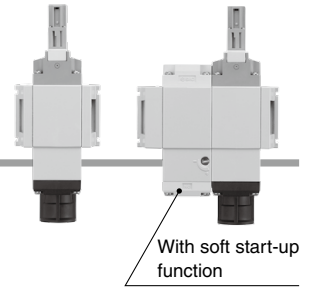
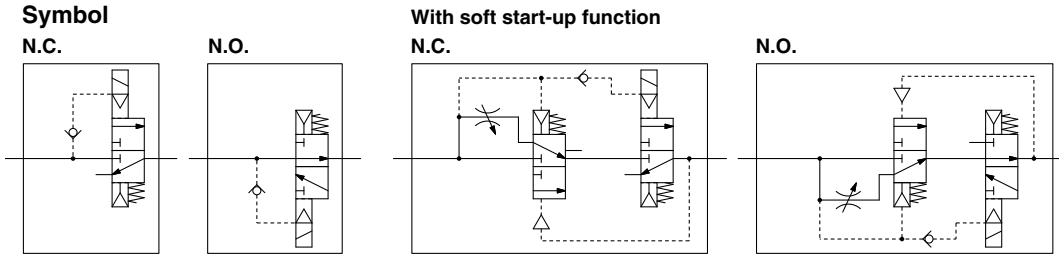


\* The 25A- series specifications and dimensions are the same as those of the standard model.

For details, refer to the [Web Catalog](#).

# Residual Pressure Relief 3-Port Solenoid Valve

## 25A-VP346E/546E/746E/946E-X660/X661



### How to Order

**25A-VP** **3** **46E-5** **KVO** **Z** **1** - **X660**

• Series compatible with secondary batteries

#### 1 Series

|   |               |       |
|---|---------------|-------|
| 3 | For 25A-AMS20 | VP300 |
| 5 | For 25A-AMS30 | VP500 |
| 7 | For 25A-AMS40 | VP700 |
| 9 | For 25A-AMS60 | VP900 |

#### 2 M12 connector

|     |                   | Pin assignment | Series |       |       |       |
|-----|-------------------|----------------|--------|-------|-------|-------|
|     |                   |                | VP300  | VP500 | VP700 | VP900 |
| KO  | Without connector |                | —      | —     | —     | •     |
| KVO | Without connector |                | •      | •     | •     | —     |

#### 3 Manual override

|     |                                 |
|-----|---------------------------------|
| Nil | Non-locking push type           |
| E   | Push-turn locking type (Manual) |

#### 4 Soft start-up function

|     |                             |
|-----|-----------------------------|
| Nil | None                        |
| S   | With soft start-up function |

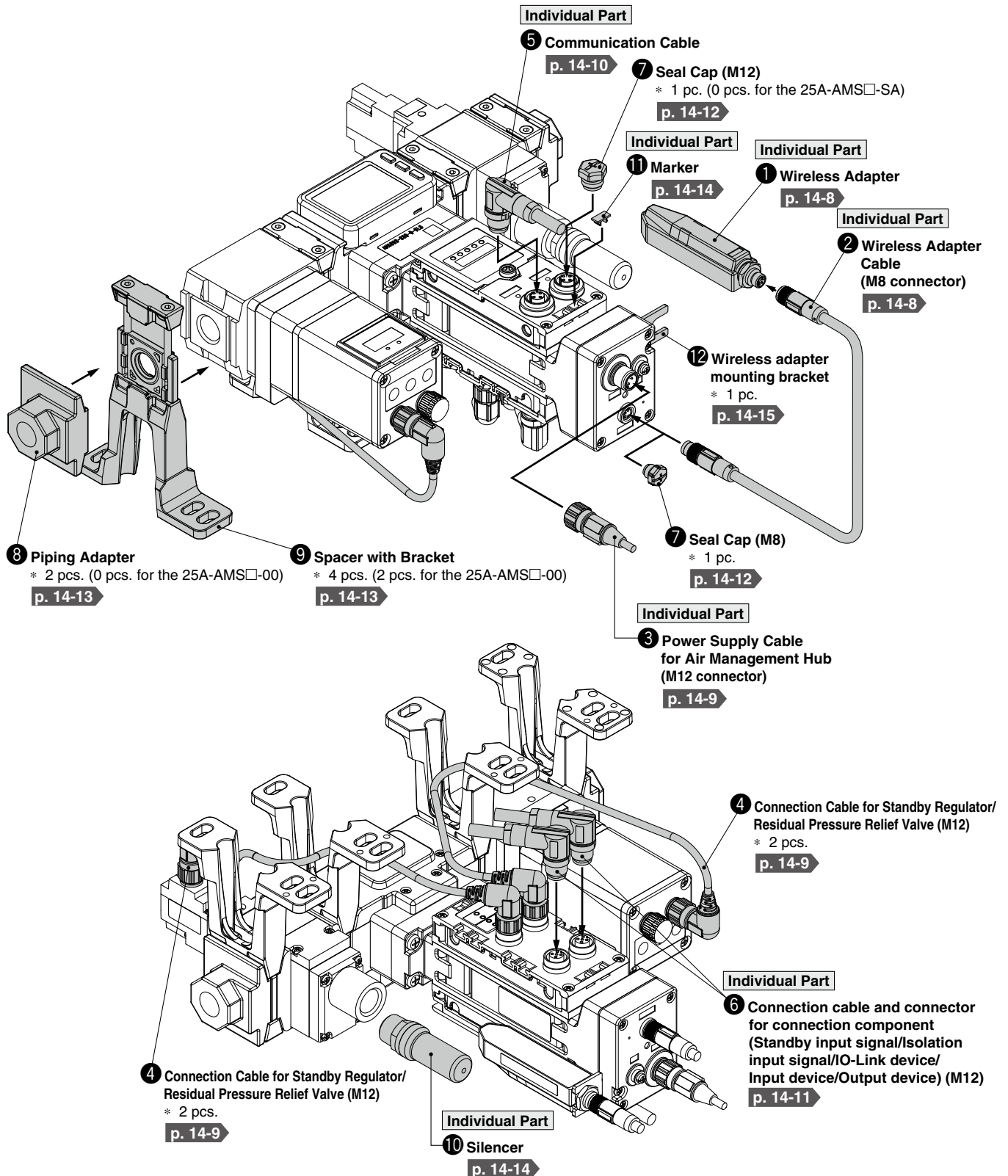
#### 5 Type of actuation

|      |                        |
|------|------------------------|
| X660 | N.C. (Normally closed) |
| X661 | N.O. (Normally open)   |

\* The 25A- series specifications and dimensions are the same as those of the standard model.

# 25A-AMS20/30/40/60 Series Accessories

## List of Accessories



\* The number of pieces included for the 25A-AMS

## ① Wireless Adapter

Wireless adapter for air management hub EXA1

A wireless adapter needs to be connected to both the wireless base and the wireless remote.

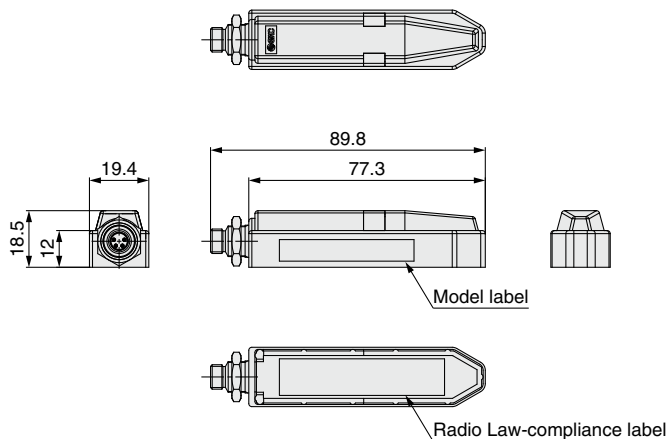
### EXW1-A11N

#### Specifications

| Item                   | Specifications                                     |  |
|------------------------|--|--|
| Wireless communication | <b>Protocol</b>                                    | SMC original protocol (SMC encryption)   |
|                        | <b>Radio wave type (spread)</b>                    | Frequency Hopping Spread Spectrum (FHSS)   |
|                        | <b>Frequency</b>                                   | 2.4 GHz (2403 to 2481 MHz)   |
|                        | <b>Number of frequency channels</b>                | 79 ch  |
|                        | <b>Channel bandwidth</b>                           | 1.0 MHz  |
|                        | <b>Communication speed</b>                         | 1 Mbps   |
|                        | <b>Communication distance</b>                      | Approx. 100 m<br>(Depending on the operating environment)                                  |
| Electrical             | <b>Power supply voltage range</b>                  | 24 VDC +10%  |
|                        | <b>Current consumption</b>                         | 50 mA or less  |
| General                | <b>Enclosure</b>                                   | IP67   |
|                        | <b>Ambient temperature (Operating temperature)</b> | 0 to 50°C  |
|                        | <b>Ambient temperature (Storage temperature)</b>   | -10 to 60°C  |
|                        | <b>Ambient humidity</b>                            | 35 to 85%RH (No condensation)  |
|                        | <b>Withstand voltage</b>                           | 500 VAC, 1 min   |
|                        | <b>Insulation resistance</b>                       | 500 VDC, 10 MΩ or more   |
|                        | <b>Vibration resistance</b>                        | Conforms to EN 61131-2<br>5 <= f < 8.4 Hz 3.5 mm<br>8.4 <= f < 150 Hz 9.8 m/s <sup>2</sup> |
|                        | <b>Impact resistance</b>                           | Conforms to EN 61131-2<br>147 m/s <sup>2</sup> , 11 ms                                     |
|                        | <b>Standards</b>                                   | CE/UKCA marking, UL (CSA)*1  |
|                        | <b>Weight</b>                                      | 40 g   |

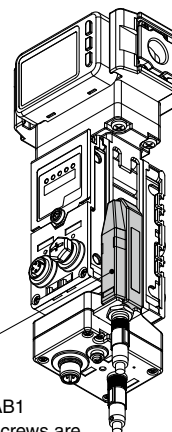
\*1 UL (CSA) compliance applies only when connected to an EXA1 air management hub.

\*2 Order the wireless adapter cable separately.



#### Connector

| M8, 4-pin, plug | Terminal no. | Description    |
|-----------------|--------------|----------------|
|                 | 1            | 24V (US1)      |
|                 | 2            | Internal bus B |
|                 | 3            | 0V (US1)       |
|                 | 4            | Internal bus A |



#### Wireless adapter

\* Included parts: Fixing bracket

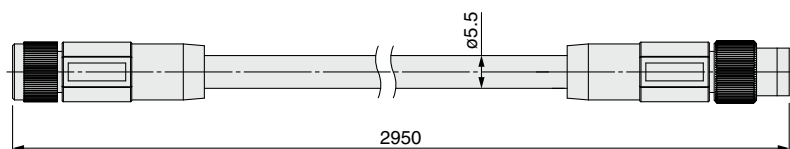
\* Fixing bracket part no.: 25A-EXA1-AB1

\* Only the screws are stainless steel.

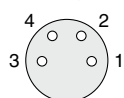
## ② Wireless Adapter Cable [M8 connector, For EXW1-A11N, With connectors on both sides (socket/plug)]

### EXW1-AC030-SSPS Straight 2950 mm

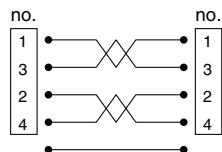
\* This product must be used in a fixed position.



#### Socket connector pin arrangement

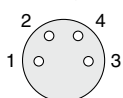


#### Terminal no.



#### Connections

#### Plug connector pin arrangement



| Item                            | Specifications |
|---------------------------------|----------------|
| Cable O.D.                      | ø5.5 mm        |
| Conductor nominal cross section | AWG24          |
| Wire O.D. (Including insulator) | 1.12 mm        |
| Min. bending radius             | 22 mm          |



# 25A-AMS20/30/40/60 Series

## ③ Power Supply Cable (M12 connector, For EXA1)

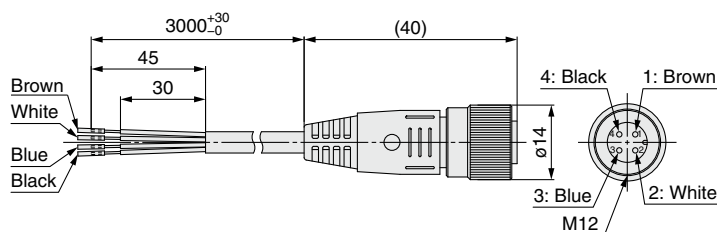
\* The shape of the M12 connector is A-coded (Normal key).

### 90-ZS-37-A-X258

Lead wire with M12 connector

#### Cable Specifications

| Item      | Specifications            |                           |
|-----------|---------------------------|---------------------------|
| Conductor | Nominal cross section     | AWG23                     |
|           | Outside diameter          | Approx. 1.1 mm            |
| Insulator | Color                     | Brown, Blue, Black, White |
|           | Finished outside diameter | ø4                        |



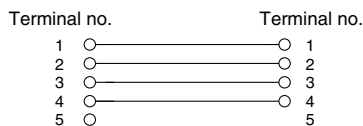
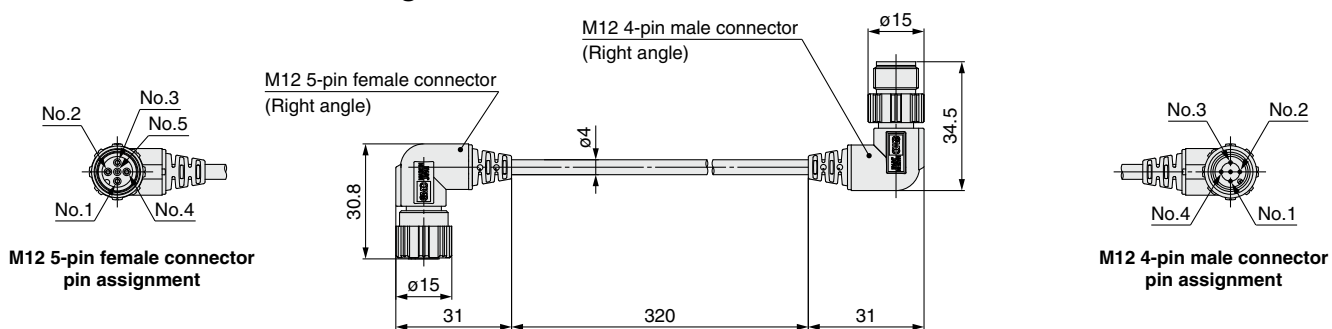
| Pin no. | Pin name | Wire color |
|---------|----------|------------|
| 1       | DC(+)    | Brown      |
| 2       | N.C.     | White      |
| 3       | DC(-)    | Blue       |
| 4       | N.C.     | Black      |

## ④ Connection Cable for Standby Regulator/Residual Pressure Relief Valve [With M12 angle connectors on both sides (male/female)]

25A-EXA1-AC1 Cable length L: 320 mm

\* Included with 25A-AMS□A/B air management systems

25A-EXA1-AC2 Cable length L: 220 mm



Connections

#### Component and Connection Cable Suitable Table

| Body size | Standby electro-pneumatic regulator | Standby regulator | Residual pressure relief 3-port solenoid valve |
|-----------|-------------------------------------|-------------------|--|
| 20        |                                     |                   |  |
| 30        | 25A-EXA1-AC1                        | 25A-EXA1-AC2      | 25A-EXA1-AC2                                   |
| 40        |                                     |                   |  |
| 60        |                                     |                   |  |
|           |                                     |                   | 25A-EXA1-AC1                                   |

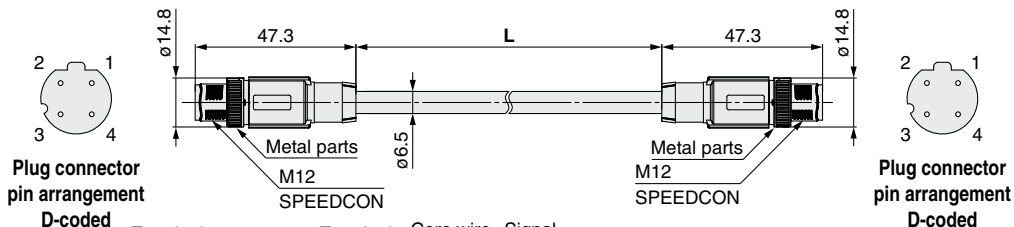
## ⑤ Communication Cable

For EtherCAT® For PROFINET For EtherNet/IP™

### EX9-AC 005 EN-PSPS (With connector on both sides (Plug/Plug))

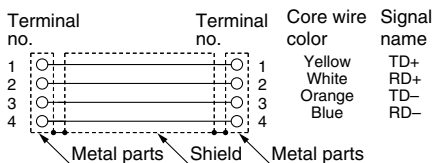
● Cable length (L)

|     |          |
|-----|----------|
| 005 | 500 mm   |
| 010 | 1000 mm  |
| 020 | 2000 mm  |
| 030 | 3000 mm  |
| 050 | 5000 mm  |
| 100 | 10000 mm |



Plug connector pin arrangement D-coded

Plug connector pin arrangement D-coded



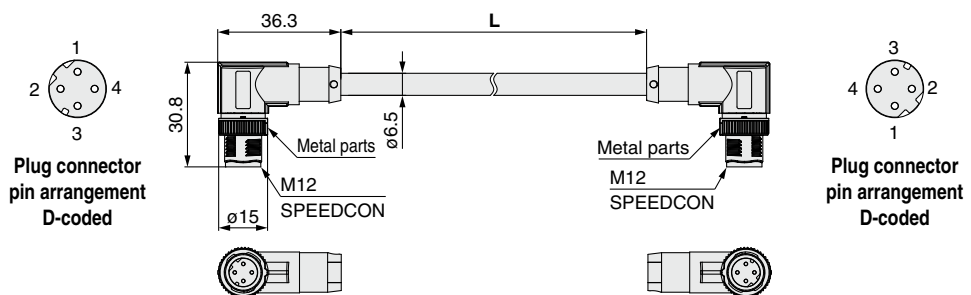
| Item                                   | Specifications              |
|--|-----------------------------|
| <b>Cable O.D.</b>                      | ø6.5 mm                     |
| <b>Conductor nominal cross section</b> | 0.34 mm <sup>2</sup> /AWG22 |
| <b>Wire O.D. (Including insulator)</b> | 1.55 mm                     |
| <b>Min. bending radius (Fixed)</b>     | 19.5 mm                     |

Connections (Straight cable)

### EX9-AC 005 EN-PAPA (With angled connector on both sides (Plug/Plug))

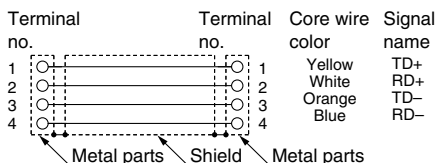
● Cable length (L)

|     |          |
|-----|----------|
| 005 | 500 mm   |
| 010 | 1000 mm  |
| 020 | 2000 mm  |
| 030 | 3000 mm  |
| 050 | 5000 mm  |
| 100 | 10000 mm |



Plug connector pin arrangement D-coded

Plug connector pin arrangement D-coded



| Item                                   | Specifications              |
|--|-----------------------------|
| <b>Cable O.D.</b>                      | ø6.5 mm                     |
| <b>Conductor nominal cross section</b> | 0.34 mm <sup>2</sup> /AWG22 |
| <b>Wire O.D. (Including insulator)</b> | 1.55 mm                     |
| <b>Min. bending radius (Fixed)</b>     | 19.5 mm                     |

Connections (Straight cable)

# 25A-AMS20/30/40/60 Series

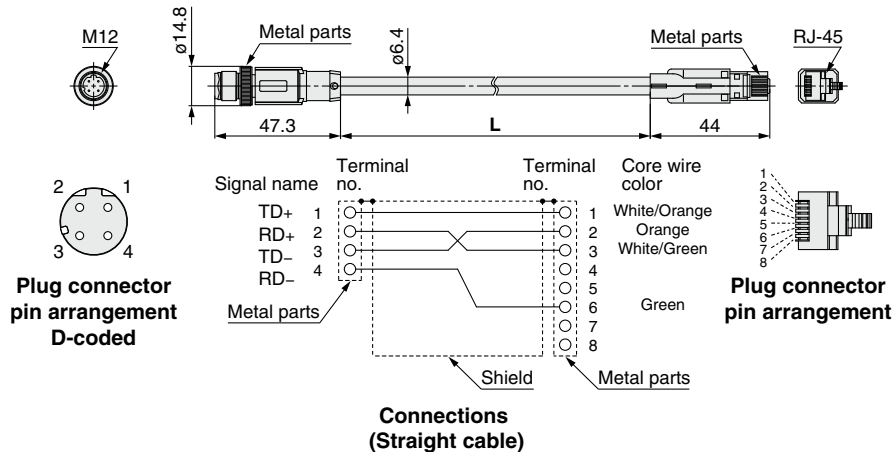
## ⑤ Communication Cable

For EtherCAT® For PROFINET For EtherNet/IP™

EX9-AC 020 EN-PSRJ (Plug/RJ-45 connector)

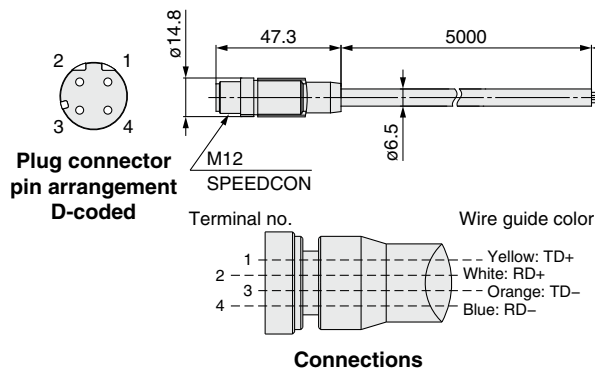
● Cable length (L)

|     |          |
|-----|----------|
| 010 | 1000 mm  |
| 020 | 2000 mm  |
| 030 | 3000 mm  |
| 050 | 5000 mm  |
| 100 | 10000 mm |



| Item                                   | Specifications              |
|--|-----------------------------|
| <b>Cable O.D.</b>                      | ø6.4 mm                     |
| <b>Conductor nominal cross section</b> | 0.14 mm <sup>2</sup> /AWG26 |
| <b>Wire O.D. (Including insulator)</b> | 0.98 mm                     |
| <b>Min. bending radius (Fixed)</b>     | 26 mm                       |

PCA-1446566 (Plug)



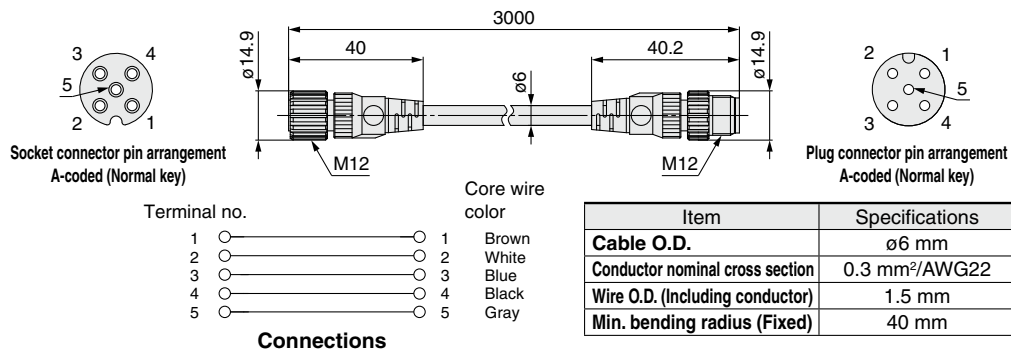
| Item                                   | Specifications |
|--|----------------|
| <b>Cable O.D.</b>                      | ø6.5 mm        |
| <b>Conductor nominal cross section</b> | AWG22          |
| <b>Wire O.D. (Including insulator)</b> | 1.55 mm        |
| <b>Min. bending radius (Fixed)</b>     | 45.5 mm        |

## ⑥ Connection cable and connector for connection component

(Standby input signal/Isolation input signal/IO-Link device/Input device/Output device) (M12)

IO-Link Device Cable

90-ZS-37-A-X547



| Item                                   | Specifications             |
|--|----------------------------|
| <b>Cable O.D.</b>                      | ø6 mm                      |
| <b>Conductor nominal cross section</b> | 0.3 mm <sup>2</sup> /AWG22 |
| <b>Wire O.D. (Including conductor)</b> | 1.5 mm                     |
| <b>Min. bending radius (Fixed)</b>     | 40 mm                      |

**⑦ Seal Cap (10 pcs.)**

---

Be sure to mount a seal cap on any unused I/O connectors.  
Otherwise, the specified enclosure cannot be maintained.



**EX9-AWES**  
For M8

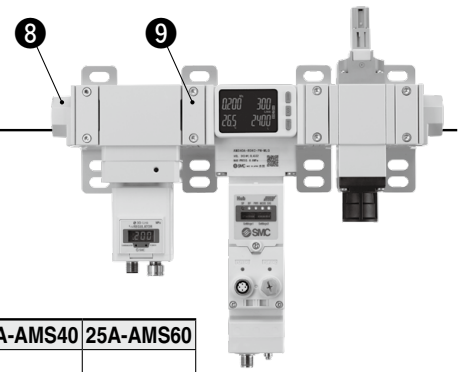


**EX9-AWTS**  
For M12

# 25A-AMS20/30/40/60 Series

## ⑧ Piping Adapter

A piping adapter allows for the installation/removal of the component without removing the piping and thus makes maintenance easier.



E 200 - □ 01 - D

### Applicable size

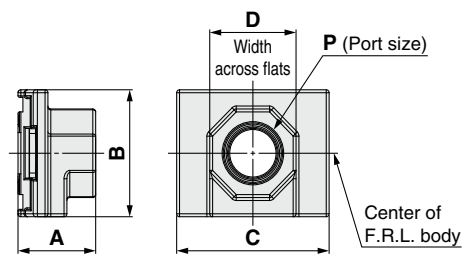
|     |           |
|-----|-----------|
| 200 | 25A-AMS20 |
| 300 | 25A-AMS30 |
| 400 | 25A-AMS40 |
| 600 | 25A-AMS60 |

### Thread type

| Symbol | Thread type |
|--------|-------------|
| Nil    | Rc          |
| F      | G           |
| N      | NPT         |

### Port size

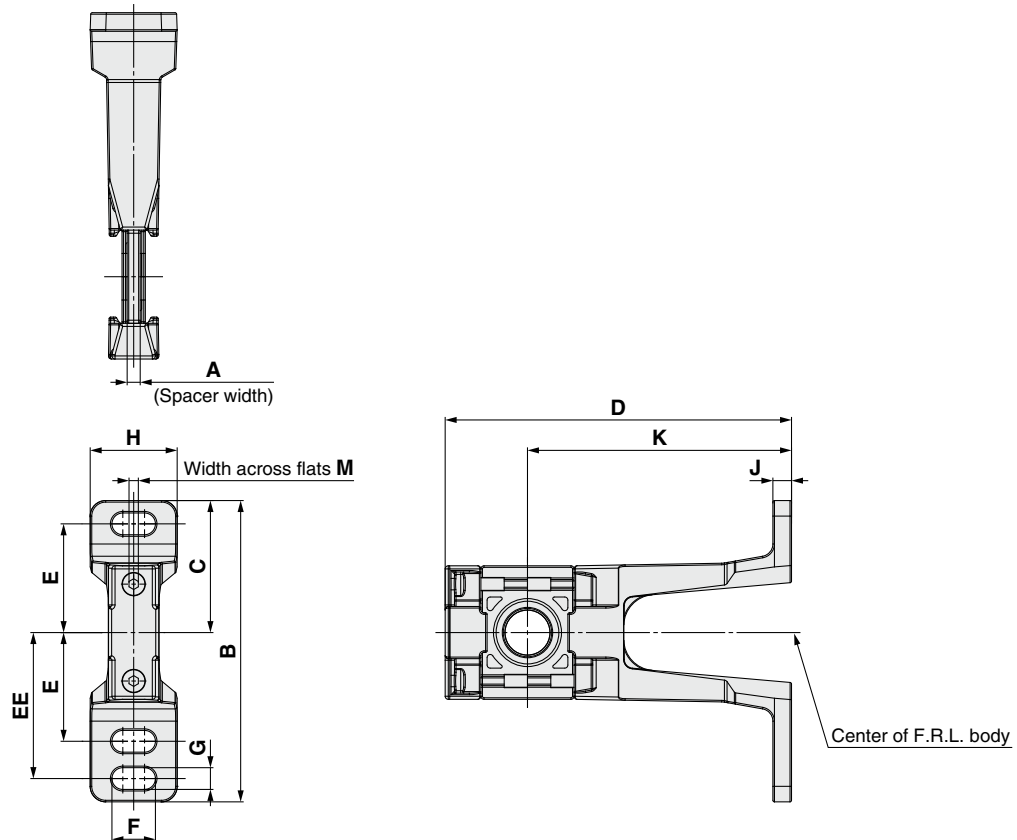
| Symbol | Port size | 25A-AMS20 | 25A-AMS30 | 25A-AMS40 | 25A-AMS60 |
|--------|-----------|-----------|-----------|-----------|-----------|
| 01     | 1/8       | ●         |           |           |           |
| 02     | 1/4       | ●         | ●         |           |           |
| 03     | 3/8       |           | ●         | ●         |           |
| 04     | 1/2       |           |           | ●         |           |
| 06     | 3/4       |           |           |           | ●         |
| 10     | 1         |           |           |           | ●         |



| Model      | P   | A  | B  | C  | D  |
|------------|-----|----|----|----|----|
| E200-□01-D | 1/8 | 24 | 35 | 42 | 24 |
| E200-□02-D | 1/4 | 24 | 35 | 42 | 24 |
| E300-□02-D | 1/4 | 27 | 43 | 53 | 30 |
| E300-□03-D | 3/8 | 27 | 43 | 53 | 30 |
| E400-□03-D | 3/8 | 30 | 51 | 71 | 36 |
| E400-□04-D | 1/2 | 30 | 51 | 71 | 36 |
| E600-□06-D | 3/4 | 39 | 64 | 90 | 46 |
| E600-□10-D | 1   | 39 | 64 | 90 | 46 |

\* A spacer with bracket is required for modular unit.

## ⑨ Spacer with Bracket



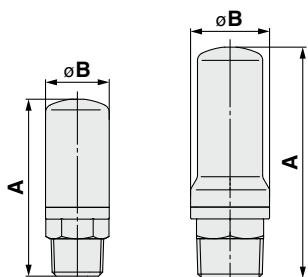
| Model         | A   | B   | C    | D     | E  | EE | F  | G  | H  | J | K   | M | Applicable size |
|---------------|-----|-----|------|-------|----|----|----|----|----|---|-----|---|-----------------|
| 25A-Y200T-2-D | 3.2 | 97  | 42.5 | 106   | 35 | 47 | 14 | 7  | 28 | 6 | 85  | 2 | 25A-AMS20       |
| 25A-Y300T-2-D | 4.2 | 97  | 42.5 | 111.5 | 35 | 47 | 14 | 7  | 28 | 6 | 85  | 3 | 25A-AMS30       |
| 25A-Y400T-1-D | 5.2 | 115 | 50   | 120.5 | 40 | 55 | 18 | 9  | 32 | 7 | 85  | 3 | 25A-AMS40       |
| 25A-Y600T-2-D | 6.2 | 140 | 60   | 145   | 50 | 70 | 20 | 11 | 37 | 8 | 100 | 4 | 25A-AMS60       |



## ⑩ Silencer

### Compact Resin Type

AN20 AN30, AN40

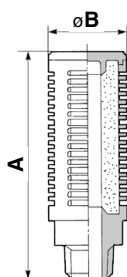


### Dimensions [mm]

| Model   | Port size R | A    | B    |
|---------|-------------|------|------|
| AN20-02 | 1/4         | 45   | 16.5 |
| AN30-03 | 3/8         | 58.5 | 20   |
| AN40-04 | 1/2         | 68   | 24   |

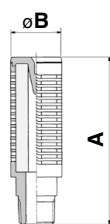
### High Noise Reduction Type

AN202 to 402



### High Noise Reduction Type

ANA1-06



### Dimensions [mm]

| Model    | Port size R | A  | B  |
|----------|-------------|----|----|
| AN202-02 | 1/4         | 64 | 22 |
| AN302-03 | 3/8         | 84 | 28 |
| AN402-04 | 1/2         | 95 | 34 |

### Dimensions [mm]

| Model   | Port size R | A   | B  |
|---------|-------------|-----|----|
| ANA1-06 | 3/4         | 111 | 46 |

### Compatibility Chart for Residual Pressure Relief Valve and Silencers

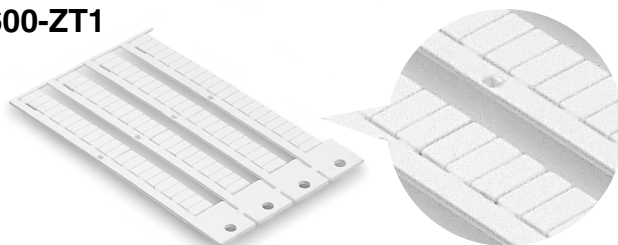
|            | Silencer<br>Model | Compact resin type |         |         | High noise reduction type |          |          |         |
|------------|-------------------|--------------------|---------|---------|---------------------------|----------|----------|---------|
|            |                   | AN20-02            | AN30-03 | AN40-04 | AN202-02                  | AN302-03 | AN402-04 | ANA1-06 |
|            |                   | Port size          | 1/4     | 3/8     | 1/2                       | 1/4      | 3/8      | 1/2     |
| 25A-VP346E | X660 (N.C.)       | ○                  | —       | —       | ○                         | —        | —        | —       |
|            | X661 (N.O.)       | ○                  | —       | —       | —                         | —        | —        | —       |
| 25A-VP546E | X660 (N.C.)       | —                  | ○       | —       | —                         | ○        | —        | —       |
|            | X661 (N.O.)       | —                  | ○       | —       | —                         | —        | —        | —       |
| 25A-VP746E | X660 (N.C.)       | —                  | —       | ○       | —                         | —        | ○        | —       |
|            | X661 (N.O.)       | —                  | ○       | —       | —                         | —        | —        | —       |
| 25A-VP946E | X660 (N.C.)       | —                  | —       | —       | —                         | —        | —        | ○*1     |
|            | X661 (N.O.)       | —                  | —       | —       | —                         | —        | —        | ○       |

\*1 Combined with silencer bushing:  
25A-AMS-AB1

## ⑪ Marker (1 sheet, 88 pcs.)

The signal name of I/O device and each unit address can be entered and mounted on each unit.

EX600-ZT1



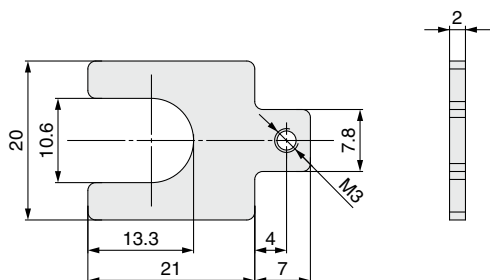
# 25A-AMS20/30/40/60 Series

## ⑫ Wireless Adapter Mounting Bracket

---

1 round head combination screw (M3 x 10) is included.

### 25A-EXA1-AB1

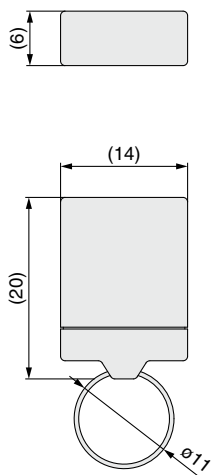


## ⑬ IO-Link Device Tool License Key

---

USB dongle

### EX9-ZSW-LDT1



\* The IO-Link Device Tool V5-PE (V5 or later only) manufactured by TMG Technologie und Engineering GmbH (hereinafter referred to as TMG) is required for setting IO-Link devices. The IO-Link Device Tool can be downloaded for free from TMG's website. However, to use it for more than 30 days, a license key for the IO-Link Device Tool is required.

# Plug-in Connector Connecting Base

## D-sub Connector

Type 10  
Side Ported

# 25A-JSY1000/3000 Series



Internal Pilot

### How to Order Manifolds

**25A-JJ5SY** **3** - **10** **F** **1** - **05** **D** **□** - **C6** **□**

①
②
③
④
⑤
⑥
⑦
⑧
⑨

Series compatible with secondary batteries

#### ① Series

|   |         |
|---|---------|
| 1 | JSY1000 |
| 3 | JSY3000 |

#### ③ Connector type

**F:** D-sub connector  
Connector entry direction adjustable

<IP40>  
(25 pins)

#### ② Type

|    |             |
|----|-------------|
| 10 | Side ported |
|----|-------------|

#### ④ Connector entry direction

|           |            |
|-----------|------------|
| 1: Upward | 2: Lateral |
|-----------|------------|

#### ⑤ Valve stations

**F:** D-sub connector (25 pins)

| Symbol | Stations    | Note   |
|--------|-------------|--|
| 02     | 2 stations  | Double wiring*1                                      |
| ⋮      | ⋮           |  |
| 12     | 12 stations |  |
| 02     | 2 stations  | Specified layout*2<br>(Up to 16 solenoids available) |
| ⋮      | ⋮           |  |
| 16     | 16 stations |  |

- \*1 Double wiring: 2-position single, 2-position double, 3-position, and 4-position valves can be used on all manifold stations. The use of a 2-position single solenoid will result in an unused control signal. If this is not desired, order with a specified layout.
- \*2 Specified layout: Indicate the wiring specifications on the manifold specification sheet. (Note that 2-position double, 3-position, and 4-position valves cannot be used where single wiring has been specified.)
- \* This also includes the number of blanking plates.

#### ⑥ P, E port entry

|   |                               |
|---|-------------------------------|
| U | U side (2 to 10 stations)     |
| D | D side (2 to 10 stations)     |
| B | Both sides (2 to 16 stations) |

#### ⑦ SUP/EXH block assembly

|     |                                   |
|-----|-----------------------------------|
| Nil | Internal pilot                    |
| S   | Internal pilot, Built-in silencer |

\* The 3/5(E) port is plugged for the built-in silencer type.

#### ⑧ A, B port size (Metric/One-touch fitting)

| Symbol                              | A, B port | JSY1000 | JSY3000 |
|-------------------------------------|-----------|---------|---------|
| C4                                  | Straight  | ø4      | ●       |
|                                     |           | ø6      | ●       |
|                                     |           | ø8      | —       |
|                                     |           | CM*1    | ●       |
| P, E port size (One-touch fittings) |           | ø8      | ø10     |

- \*1 Indicate the sizes on the manifold specification sheet for "CM."
- \* The JSY1000 manifold pitch for C4 is 6.5 mm, and 9 mm for C6. When CM is selected, the manifold pitch is different depending on the selected fitting.

#### ⑨ Mounting and Option

| Symbol | Mounting          |
|--------|-------------------|
| Nil    | Direct mounting   |
| D□     | DIN rail mounting |

##### DIN Rail Option

| Symbol | Mounting                             | Note  |
|--------|--------------------------------------|---|
| Nil    | DIN rail mounting (With DIN rail)    |   |
| 0      | DIN rail mounting (Without DIN rail) |   |
| 3      | For 3 stations                       | Specify a length longer than that of the standard rail. |
| ⋮      | ⋮                                    |   |
| 16     | For 16 stations                      |   |

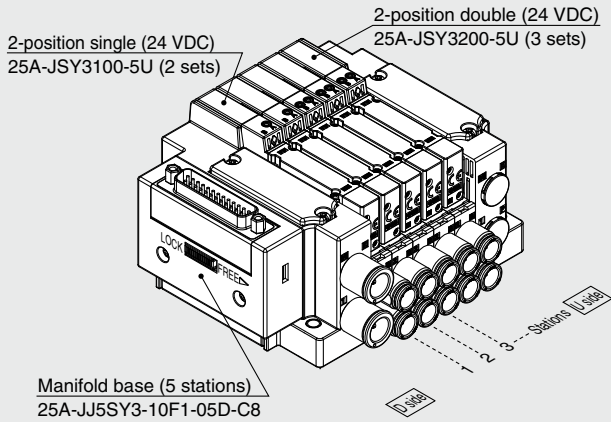
- \* Enter the number of stations inside □ when it is larger than the number of valve stations. (Refer to "DIN Rail Option" shown above.)
- \* Refer to the **Web Catalog** for details on securing the DIN rail mounting type manifold.

\* The 25A-series specifications and dimensions are the same as those of the standard model.

For details, refer to the **Web Catalog**.

## How to Order Manifold Assembly

### Example (25A-JJ5SY3-10F1-□)



25A-JJ5SY3-10F1-05D-C8 ...1 set (Type 10 5-station manifold base part no.)  
 \* 25A-JSY3100-5U .....2 sets (2-position single part no.)  
 \* 25A-JSY3200-5U .....3 sets (2-position double part no.)  
 ↳ The asterisk denotes the symbol for the assembly.  
 Prefix it to the part numbers of the valve, etc.

- For the valve arrangement, the valve closest to the D side is considered the 1st station.
- Under the manifold part number, state the valves to be mounted in order starting with the 1st station as shown in the figure. If the arrangement becomes too complicated, specify the details on a manifold specification sheet.

### Internal Pilot

## How to Order Valves (With mounting screw)

Refer to the **Web Catalog** for valve specifications.

### 25A-JSY1000 Series

25A-JSY 1 1 0 0 T-5 Z □

### 25A-JSY3000 Series

25A-JSY 3 1 0 0 -5 Z □

Series compatible with secondary batteries

Base mounted

With power-saving circuit



Made to Order

Specification

With power-saving circuit  
(Continuous duty type):  
0.1 W (JSY3000)

#### 1 Series

|   |         |
|---|---------|
| 1 | JSY1000 |
| 3 | JSY3000 |

#### 3 Pilot valve exhaust method

|   |                                |
|---|--------------------------------|
| 0 | Pilot valve individual exhaust |
|---|--------------------------------|

#### 4 Rated voltage

|   |        |
|---|--------|
| 5 | 24 VDC |
|---|--------|

#### 2 Type of actuation

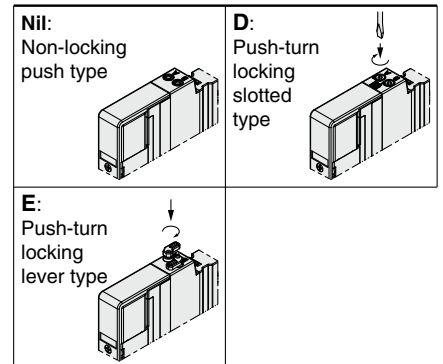
|   |                        |                 |
|---|------------------------|-----------------|
| 1 | 2-position             | Single          |
| 2 |                        | Double          |
| 3 | 3-position             | Closed center   |
| 4 |                        | Exhaust center  |
| 5 |                        | Pressure center |
| A | 4-position dual 3-port | N.C./N.C.       |
| B |                        | N.O./N.O.       |
| C |                        | N.C./N.O.       |

#### 5 Light/surge voltage suppressor and common specification

| Symbol | With light | Surge voltage suppressor | Common specification |
|--------|------------|--------------------------|----------------------|
| U      | ●          | ●                        | Non-polar            |
| Z      | ●          | ●                        | Positive common      |
| NZ     | ●          | ●                        | Negative common      |

- \* Only "Z" and "NZ" types are available for the JSY1000 series.
- \* When the non-polar common specification type is selected, take measures to prevent surge voltage. For details, refer to the **Web Catalog**.

#### 6 Manual override



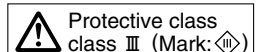
\* Push-turn locking lever type "E" is not available for the JSY1000.

\* **When ordering a valve individually, the base gasket is not included.**

Since the base gasket is attached to the manifold, please order the base gasket separately if it is needed for maintenance. Refer to the **Web Catalog** for base gasket part numbers. Refer to page 24 for mounting screw part numbers.

\* The 25A- series specifications and dimensions are the same as those of the standard model.

For details, refer to the **Web Catalog**.



### ⚠ Caution

If the JSY3000 series is to be continuously energized, please be sure to select the power-saving circuit (continuous duty type) specification. Refer to "Made to Order."

For the JSY1000 series, only the power-saving circuit specification is available.

# Plug-in Connector Connecting Base

## Terminal Block Box

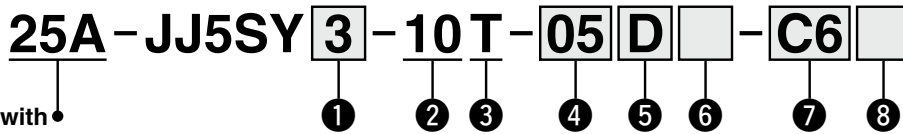
Type 10  
Side Ported

# 25A-JSY1000/3000 Series



Internal Pilot

### How to Order Manifolds



Series compatible with secondary batteries

#### 1 Series

|   |         |
|---|---------|
| 1 | JSY1000 |
| 3 | JSY3000 |

#### 2 Type

|    |             |
|----|-------------|
| 10 | Side ported |
|----|-------------|

#### 3 Wiring

|   |                    |
|---|--------------------|
| T | Terminal block box |
|---|--------------------|

#### 4 Valve stations

T: Terminal block box

| Symbol | Stations    | Note   |
|--------|-------------|--|
| 02     | 2 stations  | Double wiring*1                                      |
| ⋮      | ⋮           |  |
| 10     | 10 stations |  |
| 02     | 2 stations  | Specified layout*2<br>(Up to 16 solenoids available) |
| ⋮      | ⋮           |  |
| 16     | 16 stations |  |

\*1 Double wiring: 2-position single, 2-position double, 3-position, and 4-position valves can be used on all manifold stations. The use of a 2-position single solenoid will result in an unused control signal. If this is not desired, order with a specified layout.

\*2 Specified layout: Indicate the wiring specifications on the manifold specification sheet. (Note that 2-position double, 3-position, and 4-position valves cannot be used where single wiring has been specified.)

\*3 This also includes the number of blanking plates.

#### 5 P, E port entry

|   |                               |
|---|-------------------------------|
| U | U side (2 to 10 stations)     |
| D | D side (2 to 10 stations)     |
| B | Both sides (2 to 16 stations) |

#### 6 SUP/EXH block assembly

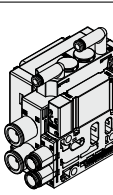
|     |                                   |
|-----|-----------------------------------|
| Nil | Internal pilot                    |
| S   | Internal pilot, Built-in silencer |

\* The 3/5(E) port is plugged for the built-in silencer type.

\* When the built-in silencer type is used, keep the exhaust port from coming into direct contact with water or other liquids.

#### 7 A, B port size (Metric/One-touch fitting)

| Symbol                              | A, B port | JSY1000 | JSY3000 |
|-------------------------------------|-----------|---------|---------|
| C4                                  | Straight  | ●       | —       |
| C6                                  |           | ●       | ●       |
| C8                                  |           | —       | ●       |
| CM*1                                |           | ●       | ●       |
| P, E port size (One-touch fittings) |           | ●       | ●       |
|                                     |           | ø8      | ø10     |



\*1 Indicate the sizes on the manifold specification sheet for "CM."

\* The JSY1000 manifold pitch for C4 is 6.5 mm, and 9 mm for C6. When CM is selected, the manifold pitch is different depending on the selected fitting.

#### 8 Mounting and Option

| Symbol | Mounting          |
|--------|-------------------|
| Nil    | Direct mounting   |
| D□     | DIN rail mounting |

\* Enter the number of stations inside □ when it is larger than the number of valve stations. (Refer to "DIN Rail Option" shown below.)

\* Refer to the **Web Catalog** for details on securing the DIN rail mounting type manifold.

##### DIN Rail Option

|     |                                      |   |
|-----|--------------------------------------|---|
| Nil | DIN rail mounting (With DIN rail)    |   |
| 0   | DIN rail mounting (Without DIN rail) |   |
| 3   | For 3 stations                       | Specify a length longer than that of the standard rail. |
| ⋮   | ⋮                                    |   |
| 16  | For 16 stations                      |   |

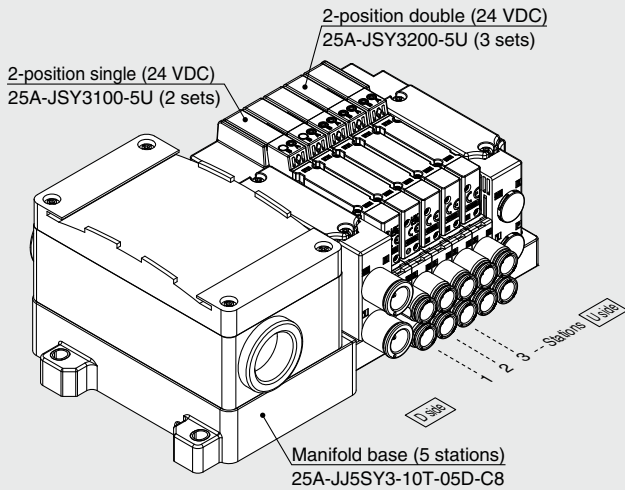
\* The 25A- series specifications and dimensions are the same as those of the standard model.

For details, refer to the **Web Catalog**.



## How to Order Manifold Assembly

### Example (25A-JJ5SY3-10T-□)



- 25A-JJ5SY3-10T-05D-C8 ..... 1 set (Type 10 5-station manifold base part no.)
- \* 25A-JSY3100-5U ..... 2 sets (2-position single part no.)
- \* 25A-JSY3200-5U ..... 3 sets (2-position double part no.)

→ The asterisk denotes the symbol for the assembly. Prefix it to the part numbers of the valve, etc.

- For the valve arrangement, the valve closest to the D side is considered the 1st station.
- Under the manifold part number, state the valves to be mounted in order starting with the 1st station as shown in the figure. If the arrangement becomes too complicated, specify the details on a manifold specification sheet.

### Internal Pilot

## How to Order Valves (With mounting screw)

Refer to the **Web Catalog** for valve specifications.

**25A-JSY1000 Series**

**25A-JSY 1 1 0 0 T - 5 Z □**

**25A-JSY3000 Series**

**25A-JSY 3 1 0 0 - 5 Z □**

Series compatible with secondary batteries

Base mounted

With power-saving circuit



Made to Order

Specification

With power-saving circuit (Continuous duty type): 0.1 W (JSY3000)

### 1 Series

|   |         |
|---|---------|
| 1 | JSY1000 |
| 3 | JSY3000 |

### 3 Pilot valve exhaust method

|   |                                |
|---|--------------------------------|
| 0 | Pilot valve individual exhaust |
|---|--------------------------------|

### 4 Rated voltage

|   |        |
|---|--------|
| 5 | 24 VDC |
|---|--------|

### 2 Type of actuation

|   |                           |
|---|---------------------------|
| 1 | Single                    |
| 2 | 2-position Double         |
| 3 | Closed center             |
| 4 | 3-position Exhaust center |
| 5 | Pressure center           |
| A | 4-position N.C./N.C.      |
| B | dual 3-port N.O./N.O.     |
| C | N.C./N.O.                 |

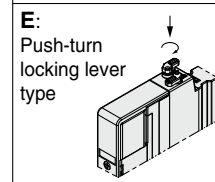
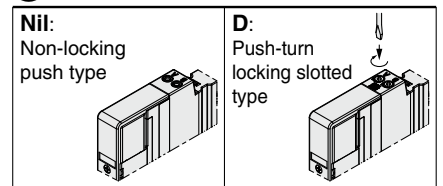
### 5 Light/surge voltage suppressor and common specification

| Symbol | With light | Surge voltage suppressor | Common specification |
|--------|------------|--------------------------|----------------------|
| U      |            |                          | Non-polar            |
| Z      | ●          | ●                        | Positive common      |
| NZ     |            |                          | Negative common      |

\* Only "Z" and "NZ" types are available for the JSY1000 series.

\* When the non-polar common specification type is selected, take measures to prevent surge voltage. For details, refer to the **Web Catalog**.

### 6 Manual override



\* Push-turn locking lever type "E" is not available for the JSY1000.

\* **When ordering a valve individually, the base gasket is not included.**

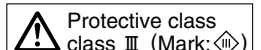
Since the base gasket is attached to the manifold, please order the base gasket separately if it is needed for maintenance.

Refer to the **Web Catalog** for base gasket part numbers.

Refer to page 24 for mounting screw part numbers.

\* The 25A- series specifications and dimensions are the same as those of the standard model.

For details, refer to the **Web Catalog**.



## ⚠ Caution

If the JSY3000 series is to be continuously energized, please be sure to select the power-saving circuit (continuous duty type) specification. Refer to "Made to Order."

For the JSY1000 series, only the power-saving circuit specification is available.

# Plug-in Connector Connecting Base

EX260

Type 10  
Side Ported

# 25A-JSY1000/3000 Series



Internal Pilot

## How to Order Manifolds

25A-JJ5SY 3-10S QA-05D □ -C6 □

Series compatible with secondary batteries

### 1 Series

|   |         |
|---|---------|
| 1 | JSY1000 |
| 3 | JSY3000 |

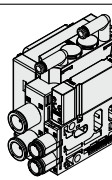
### 3 SI unit (Output polarity, Protocol, Number of outputs, Communication connector)

| Symbol (Output polarity) |                       | Protocol     | Number of outputs | Communication connector |
|--------------------------|-----------------------|--------------|-------------------|-------------------------|
| Positive common (NPN)    | Negative common (PNP) |              |                   |                         |
| 0*1 Without SI unit      |                       |              |                   |                         |
| QA                       | QAN                   | DeviceNet™   | 32                | M12                     |
| QB                       | QBN                   |              | 16                |                         |
| NA                       | NAN                   | PROFIBUS DP  | 32                | M12                     |
| NB                       | NBN                   |              | 16                |                         |
| VA                       | VAN                   | CC-Link      | 32                | M12                     |
| VB                       | VBN                   |              | 16                |                         |
| DA                       | DAN                   | EtherCAT     | 32                | M12                     |
| DB                       | DBN                   |              | 16                |                         |
| FA                       | FAN                   | PROFINET     | 32                | M12                     |
| FB                       | FBN                   |              | 16                |                         |
| EA                       | EAN                   | EtherNet/IP™ | 32                | M12                     |
| EB                       | EBN                   |              | 16                |                         |

- \*1 Without SI unit, the output polarity is decided by the SI unit used. Ensure a match with the common specification of the valves to be used.
- \* DIN rail cannot be mounted without SI unit.

### 7 A, B port size (Metric/One-touch fitting)

| Symbol                              | A, B port | JSY1000 | JSY3000 |
|-------------------------------------|-----------|---------|---------|
| C4                                  | Straight  | ●       | —       |
| C6                                  |           | ●       | ●       |
| C8                                  |           | —       | ●       |
| CM*1                                |           | ●       | ●       |
| P, E port size (One-touch fittings) |           | ●       | ●       |



- \*1 Indicate the sizes on the manifold specification sheet for "CM."
- \* The JSY1000 manifold pitch for C4 is 6.5 mm, and 9 mm for C6. When CM is selected, the manifold pitch is different depending on the selected fitting.

### 2 Type

|    |             |
|----|-------------|
| 10 | Side ported |
|----|-------------|

### 5 P, E port entry

|   |                               |
|---|-------------------------------|
| U | U side (2 to 10 stations)     |
| D | D side (2 to 10 stations)     |
| B | Both sides (2 to 16 stations) |

### 6 SUP/EXH block assembly

|     |                                   |
|-----|-----------------------------------|
| Nil | Internal pilot                    |
| S   | Internal pilot, Built-in silencer |

- \* The 3/5(E) port is plugged for the built-in silencer type.
- \* When the built-in silencer type is used, keep the exhaust port from coming into direct contact with water or other liquids.

### 4 Valve stations

In the case of the 32-output SI unit

| Symbol | Stations    | Note            |
|--------|-------------|-----------------|
| 02     | 2 stations  | Double wiring*1 |
| ⋮      | ⋮           |                 |
| 16     | 16 stations |                 |

In the case of the 16-output SI unit

| Symbol | Stations    | Note   |
|--------|-------------|--|
| 02     | 2 stations  | Double wiring*1                                      |
| ⋮      | ⋮           |  |
| 08     | 8 stations  |  |
| 02     | 2 stations  | Specified layout*2<br>(Up to 16 solenoids available) |
| ⋮      | ⋮           |  |
| 16     | 16 stations |  |

- \*1 Double wiring: 2-position single, 2-position double, 3-position, and 4-position valves can be used on all manifold stations. The use of a 2-position single solenoid will result in an unused control signal. If this is not desired, order with a specified layout.
- \*2 Specified layout: Indicate the wiring specifications on the manifold specification sheet. (Note that 2-position double, 3-position, and 4-position valves cannot be used where single wiring has been specified.)
- \* This also includes the number of blanking plates.
- \* For the product without the SI unit (S0), note the maximum number of solenoids of the SI unit that will be mounted. If the layout is specified, indicate it on the manifold specification sheet.

### 8 Mounting and Option

| Symbol | Mounting          |
|--------|-------------------|
| Nil    | Direct mounting   |
| D□     | DIN rail mounting |

- \* Enter the number of stations inside □ when it is larger than the number of valve stations. (Refer to "DIN Rail Option" shown below.)
- \* Refer to the **Web Catalog** for details on securing the DIN rail mounting type manifold.
- \* DIN rail mounting (D□) is not available for the product without the SI unit (S0).

#### DIN Rail Option

| Nil | DIN rail mounting (With DIN rail)    |   |
|-----|--------------------------------------|---|
| 0   | DIN rail mounting (Without DIN rail) |   |
| 3   | For 3 stations                       | Specify a length longer than that of the standard rail. |
| ⋮   | ⋮                                    |   |
| 16  | For 16 stations                      |   |

- \* Refer to L3 of the dimensions for the DIN rail length and order separately. (Refer to the **Web Catalog** for the DIN rail part number.)

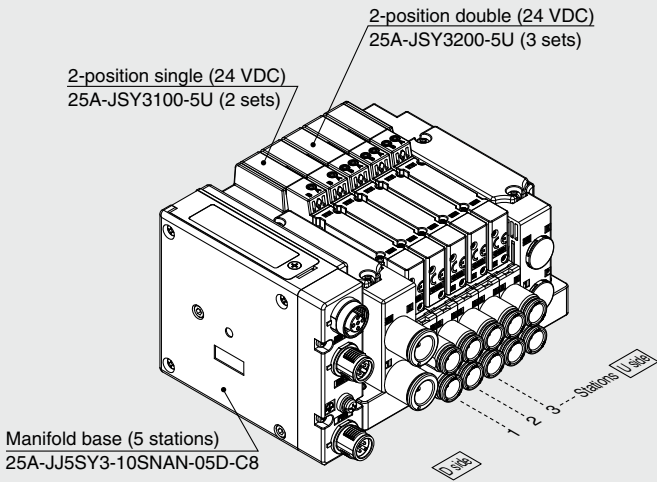
- \* The 25A-series specifications and dimensions are the same as those of the standard model.

For details, refer to the **Web Catalog**.

For details on the EX260 Integrated Type (For Output) Serial Transmission System, refer to the **Web Catalog** and the Operation Manual. For the part numbers of the SI units to be mounted, refer to the **Web Catalog**. Please download the Operation Manual via the SMC website: <https://www.smcworld.com>

## How to Order Manifold Assembly

### Example (25A-JJ5SY3-10SNAN-□)



25A-JJ5SY3-10SNAN-05D-C8...1 set (Type 10 5-station manifold base part no.)  
 \* 25A-JSY3100-5U .....2 sets (2-position single part no.)  
 \* 25A-JSY3200-5U .....3 sets (2-position double part no.)  
 ↳ The asterisk denotes the symbol for the assembly.  
 Prefix it to the part numbers of the valve, etc.

- For the valve arrangement, the valve closest to the D side is considered the 1st station.
- Under the manifold part number, state the valves to be mounted in order starting with the 1st station as shown in the figure. If the arrangement becomes too complicated, specify the details on a manifold specification sheet.

**Internal Pilot** **How to Order Valves (With mounting screw)** Refer to the **Web Catalog** for valve specifications.

25A-JSY1000 Series **25A-JSY 1 1 0 0 T - 5 Z □**  
 25A-JSY3000 Series **25A-JSY 3 1 0 0 - 5 Z □**

Series compatible with secondary batteries

With power-saving circuit

Made to Order

Specification  
 With power-saving circuit (Continuous duty type):  
 0.1 W (JSY3000)

1 2 3 4 5 6

Base mounted

**1 Series**

|   |         |
|---|---------|
| 1 | JSY1000 |
| 3 | JSY3000 |

**3 Pilot valve exhaust method**

|   |                                |
|---|--------------------------------|
| 0 | Pilot valve individual exhaust |
|---|--------------------------------|

**4 Rated voltage**

|   |        |
|---|--------|
| 5 | 24 VDC |
|---|--------|

**2 Type of actuation**

|   |                        |                 |
|---|------------------------|-----------------|
| 1 | 2-position             | Single          |
| 2 |                        | Double          |
| 3 | 3-position             | Closed center   |
| 4 |                        | Exhaust center  |
| 5 |                        | Pressure center |
| A | 4-position dual 3-port | N.C./N.C.       |
| B |                        | N.O./N.O.       |
| C |                        | N.C./N.O.       |

**5 Light/surge voltage suppressor and common specification**

| Symbol | With light | Surge voltage suppressor | Common specification |
|--------|------------|--------------------------|----------------------|
| U      | ●          | ●                        | Non-polar            |
| Z      | ●          | ●                        | Positive common      |
| NZ     | ●          | ●                        | Negative common      |

**6 Manual override**

**Nil:** Non-locking push type

**D:** Push-turn locking slotted type

**E:** Push-turn locking lever type

\* Push-turn locking lever type "E" is not available for the JSY1000.

\* **When ordering a valve individually, the base gasket is not included.** Since the base gasket is attached to the manifold, please order the base gasket separately if it is needed for maintenance. Refer to the **Web Catalog** for base gasket part numbers. Refer to page 24 for mounting screw part numbers.

**Caution**  
 If the JSY3000 series is to be continuously energized, please be sure to select the power-saving circuit (continuous duty type) specification. Refer to "Made to Order."  
 For the JSY1000 series, only the power-saving circuit specification is available.

\* The 25A- series specifications and dimensions are the same as those of the standard model.

For details, refer to the **Web Catalog**.

Protective class class III (Mark: ⚡)

# Plug-in Connector Connecting Base

EX120

Type 10  
Side Ported

# 25A-JSY1000/3000 Series



Internal Pilot

## How to Order Manifolds

25A-JJ5SY 3 - 10 S3 Q - 05 D   -    

1   
 2   
 3   
 4   
 5   
 6   
 7   
 8

Series compatible with secondary batteries

### 1 Series

|          |         |
|----------|---------|
| <b>1</b> | JSY1000 |
| <b>3</b> | JSY3000 |

### 2 Type

|           |             |
|-----------|-------------|
| <b>10</b> | Side ported |
|-----------|-------------|

### 3 SI unit

|          |                                  |
|----------|----------------------------------|
| <b>0</b> | Without SI unit                  |
| <b>Q</b> | DeviceNet™ (Positive common NPN) |
| <b>V</b> | CC-Link (Positive common NPN)    |

\* Ensure a match with the common specification of the valve to be used.

### 4 Valve stations

| Symbol    | Stations    | Note   |
|-----------|-------------|--|
| <b>02</b> | 2 stations  | Double wiring*1                                      |
| ⋮         | ⋮           |  |
| <b>08</b> | 8 stations  | Specified layout*2<br>(Up to 16 solenoids available) |
| <b>02</b> | 2 stations  |  |
| ⋮         | ⋮           |  |
| <b>16</b> | 16 stations |  |

- \*1 Double wiring: 2-position single, 2-position double, 3-position, and 4-position valves can be used on all manifold stations. The use of a 2-position single solenoid will result in an unused control signal. If this is not desired, order with a specified layout.
- \*2 Specified layout: Indicate the wiring specifications on the manifold specification sheet. (Note that 2-position double, 3-position, and 4-position valves cannot be used where single wiring has been specified.)
- \* This also includes the number of blanking plates.

### 5 P, E port entry

|          |                               |
|----------|-------------------------------|
| <b>U</b> | U side (2 to 10 stations)     |
| <b>D</b> | D side (2 to 10 stations)     |
| <b>B</b> | Both sides (2 to 16 stations) |

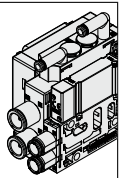
### 6 SUP/EXH block

|            |                                   |
|------------|-----------------------------------|
| <b>Nil</b> | Internal pilot                    |
| <b>S</b>   | Internal pilot, Built-in silencer |

\* The 3/5(E) port is plugged for the built-in silencer type.

### 7 A, B port size (Metric/One-touch fitting)

| Symbol                              | A, B port                  | JSY1000 | JSY3000 |
|-------------------------------------|----------------------------|---------|---------|
| <b>C4</b>                           | Straight                   | ●       | —       |
| <b>C6</b>                           |                            | ●       | ●       |
| <b>C8</b>                           |                            | —       | ●       |
| <b>CM</b> *1                        | Straight port, mixed sizes | ●       | ●       |
| P, E port size (One-touch fittings) |                            | ø8      | ø10     |



\*1 Indicate the sizes on the manifold specification sheet for "CM."

\* The JSY1000 manifold pitch for C4 is 6.5 mm, and 9 mm for C6. When CM is selected, the manifold pitch is different depending on the selected fitting.

### 8 Mounting and Option

| Symbol     | Mounting          |
|------------|-------------------|
| <b>Nil</b> | Direct mounting   |
| <b>D</b> □ | DIN rail mounting |

- \* Enter the number of stations inside □ when it is larger than the number of valve stations. (Refer to "DIN Rail Option" shown below.)
- \* Refer to the **Web Catalog** for details on securing the DIN rail mounting type manifold.

#### DIN Rail Option

|            |                                      |   |
|------------|--------------------------------------|---|
| <b>Nil</b> | DIN rail mounting (With DIN rail)    |   |
| <b>0</b>   | DIN rail mounting (Without DIN rail) |   |
| <b>3</b>   | For 3 stations                       | Specify a length longer than that of the standard rail. |
| ⋮          | ⋮                                    |   |
| <b>16</b>  | For 16 stations                      |   |

- \* If the DIN rail must be mounted without an SI unit, select D0. Refer to L3 of the dimensions for the DIN rail length and order separately. (Refer to the **Web Catalog** for the DIN rail part number.)

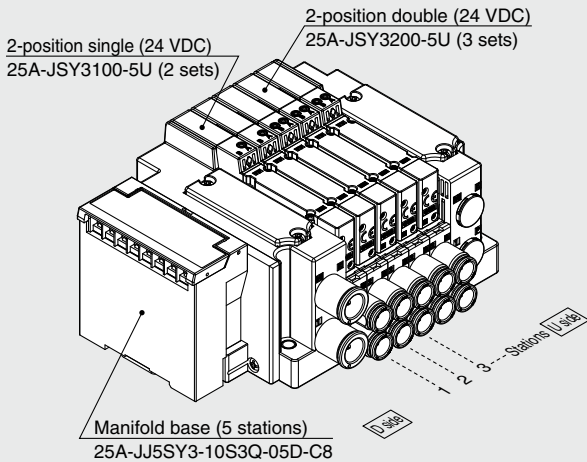
\* The 25A-series specifications and dimensions are the same as those of the standard model.

For details, refer to the **Web Catalog**.

For details on the EX120 Integrated Type (For Output) Serial Transmission System, refer to the **Web Catalog** and the Operation Manual. For the part numbers of the SI units to be mounted, refer to the **Web Catalog**. Please download the Operation Manual via the SMC website: <https://www.smcworld.com>

## How to Order Manifold Assembly

### Example (25A-JJ5SY3-10S3Q-□)



25A-JJ5SY3-10S3Q-05D-C8 ..1 set (Type 10 5-station manifold base part no.)  
 \* 25A-JSY3100-5U .....2 sets (2-position single part no.)  
 \* 25A-JSY3200-5U .....3 sets (2-position double part no.)  
 ↳ The asterisk denotes the symbol for the assembly.  
 Prefix it to the part numbers of the valve, etc.

- For the valve arrangement, the valve closest to the D side is considered the 1st station.
- Under the manifold part number, state the valves to be mounted in order starting with the 1st station as shown in the figure. If the arrangement becomes too complicated, specify the details on a manifold specification sheet.

**Internal Pilot** **How to Order Valves (With mounting screw)** Refer to the Web Catalog for valve specifications.

**25A-JSY1000 Series**

**25A-JSY3000 Series**

25A - JSY 1 1 0 0 T - 5 Z □

25A - JSY 3 1 0 0 - 5 Z □

Series compatible with secondary batteries

1 2 3 4 5 6

Base mounted

With power-saving circuit

**Made to Order**

Specification

With power-saving circuit (Continuous duty type): 0.1 W (JSY3000)

**1 Series**

|   |         |
|---|---------|
| 1 | JSY1000 |
| 3 | JSY3000 |

**2 Type of actuation**

|   |                           |
|---|---------------------------|
| 1 | Single                    |
| 2 | 2-position Double         |
| 3 | Closed center             |
| 4 | 3-position Exhaust center |
| 5 | Pressure center           |
| A | 4-position N.C./N.C.      |
| B | dual 3-port N.O./N.O.     |
| C | N.C./N.O.                 |

**6 Manual override**

|                                      |   |
|--------------------------------------|---|
| <b>Nil:</b><br>Non-locking push type | <b>D:</b><br>Push-turn locking slotted type |
|                                      |   |

**3 Pilot valve exhaust method**

|   |                                |
|---|--------------------------------|
| 0 | Pilot valve individual exhaust |
|---|--------------------------------|

**4 Rated voltage**

|   |        |
|---|--------|
| 5 | 24 VDC |
|---|--------|

**5 Light/surge voltage suppressor and common specification**

| Symbol | With light | Surge voltage suppressor | Common specification |
|--------|------------|--------------------------|----------------------|
| U      | ●          | ●                        | Non-polar            |
| Z      | ●          | ●                        | Positive common      |

**E:**  
Push-turn locking lever type

**Caution**  
 If the JSY3000 series is to be continuously energized, please be sure to select the power-saving circuit (continuous duty type) specification.  
 For the JSY1000 series, only the power-saving circuit specification is available.

- \* Only "Z" and "NZ" types are available for the JSY1000 series.
- \* When the non-polar common specification type is selected, take measures to prevent surge voltage. For details, refer to the Web Catalog.

\* Push-turn locking lever type "E" is not available for the JSY1000.

\* **When ordering a valve individually, the base gasket is not included.**  
 Since the base gasket is attached to the manifold, please order the base gasket separately if it is needed for maintenance.  
 Refer to the Web Catalog for base gasket part numbers.  
 Refer to page 24 for mounting screw part numbers.

\* The 25A- series specifications and dimensions are the same as those of the standard model.

For details, refer to the **Web Catalog**.

Protective class class III (Mark: ⚡)

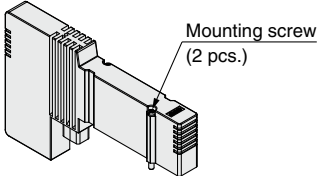


# 25A-JSY1000/3000 Series Manifold Options

## Blanking plate assembly

(With two mounting screws)

Used when valve additions are expected or for maintenance. A structure is in place on the blanking plate to prevent the mounting screws from sliding.



## How to Order Blanking Plate Assembly

25A - JSY **3** 1M - 26P - 1A

Series

|   |         |
|---|---------|
| 1 | JSY1000 |
| 3 | JSY3000 |

## SI Unit Part Nos.

| Description   | SI unit part no.       | Note   |
|---------------|------------------------|--|
| EX260 SI unit | <b>EX260-SPR1-X117</b> | PROFIBUS DP M12 connector, 32 outputs, Negative common (PNP)   |
|               | <b>EX260-SPR2-X117</b> | PROFIBUS DP M12 connector, 32 outputs, Positive common (NPN)   |
|               | <b>EX260-SPR3-X117</b> | PROFIBUS DP M12 connector, 16 outputs, Negative common (PNP)   |
|               | <b>EX260-SPR4-X117</b> | PROFIBUS DP M12 connector, 16 outputs, Positive common (NPN)   |
|               | <b>EX260-SDN1-X117</b> | DeviceNet® M12 connector, 32 outputs, Negative common (PNP)    |
|               | <b>EX260-SDN2-X117</b> | DeviceNet® M12 connector, 32 outputs, Positive common (NPN)    |
|               | <b>EX260-SDN3-X117</b> | DeviceNet® M12 connector, 16 outputs, Negative common (PNP)    |
|               | <b>EX260-SDN4-X117</b> | DeviceNet® M12 connector, 16 outputs, Positive common (NPN)    |
|               | <b>EX260-SEC1-X117</b> | EtherCAT M12 connector, 32 outputs, Negative common (PNP)      |
|               | <b>EX260-SEC2-X117</b> | EtherCAT M12 connector, 32 outputs, Positive common (NPN)      |
|               | <b>EX260-SEC3-X117</b> | EtherCAT M12 connector, 16 outputs, Negative common (PNP)      |
|               | <b>EX260-SEC4-X117</b> | EtherCAT M12 connector, 16 outputs, Positive common (NPN)      |
|               | <b>EX260-SMJ1-X117</b> | CC-Link M12 connector, 32 outputs, Negative common (PNP)       |
|               | <b>EX260-SMJ2-X117</b> | CC-Link M12 connector, 32 outputs, Positive common (NPN)       |
|               | <b>EX260-SMJ3-X117</b> | CC-Link M12 connector, 16 outputs, Negative common (PNP)       |
|               | <b>EX260-SMJ4-X117</b> | CC-Link M12 connector, 16 outputs, Positive common (NPN)       |
|               | <b>EX260-SPN1-X117</b> | PROFINET M12 connector, 32 outputs, Negative common (PNP)      |
|               | <b>EX260-SPN2-X117</b> | PROFINET M12 connector, 32 outputs, Positive common (NPN)      |
|               | <b>EX260-SPN3-X117</b> | PROFINET M12 connector, 16 outputs, Negative common (PNP)      |
|               | <b>EX260-SPN4-X117</b> | PROFINET M12 connector, 16 outputs, Positive common (NPN)      |
| EX120 SI unit | <b>EX120-SEN1-X117</b> | EtherNet/IP™ M12 connector, 32 outputs, Negative common (PNP)  |
|               | <b>EX120-SEN2-X117</b> | EtherNet/IP™ M12 connector, 32 outputs, Positive common (NPN)  |
|               | <b>EX120-SEN3-X117</b> | EtherNet/IP™ M12 connector, 16 outputs, Negative common (PNP)  |
|               | <b>EX120-SEN4-X117</b> | EtherNet/IP™ M12 connector, 16 outputs, Positive common (NPN)  |
|               | <b>EX120-SMJ1-X220</b> | CC-Link (Terminal block, 16 outputs, Positive common (NPN))    |
|               | <b>EX120-SDN1-X220</b> | DeviceNet® (Terminal block, 16 outputs, Positive common (NPN)) |

## One-touch Fittings Part Nos.

| Port size | Series | 25A-JSY1000         |                     | 25A-JSY3000          | Note   |
|-----------|--------|---------------------|---------------------|----------------------|--|
|           |        | 6.5 mm pitch        | 9 mm pitch          |                      |  |
| A, B port | ø4     | 25A-KQSY10-C4-X1336 | —                   | —                    | The part number is for 1 piece.<br>(Sales unit: 10 pcs.) |
|           | ø6     | —                   | 25A-KQSY11-C6-X1336 | 25A-KQSY30-C6        |  |
|           | ø8     | —                   | —                   | 25A-KQSY30-C8-X1336  |  |
| P, E port | ø8     | 25A-KQSY30-C8-X1336 |                     | —                    |  |
|           | ø10    | —                   | —                   | 25A-KQSY31-C10-X1336 |  |

## How to Order Individual SUP/EXH Spacer Assembly

One-touch fitting  
Straight type

25A - JSY **3** 1M - **38** P - 1A - **C6**

Series

|   |         |
|---|---------|
| 1 | JSY1000 |
| 3 | JSY3000 |

Spacer type

|    |                       |
|----|-----------------------|
| 38 | Individual SUP spacer |
| 39 | Individual EXH spacer |

Port size (Metric)

| Symbol    | P, E port            | JSY1000 | JSY3000 |
|-----------|----------------------|---------|---------|
| <b>C4</b> | ø4 One-touch fitting | ●       | —       |
| <b>C6</b> | ø6 One-touch fitting | —       | ●       |

Part numbers of mounting screw  
(2 pcs. of each)

JSY1000: 25A-JSY11V-23-5A  
JSY3000: 25A-JSY31V-23-2A

## Manifold Parts Nos./For the 25A-JJ5SY1-10, 25A-JJ5SY3-10

| Description                                      | 25A-JSY1000  |   | 25A-JSY3000                                |
|--|--|---|--|
|  | 6.5 mm pitch   | 9 mm pitch                              |  |
| Tie-rod for additional stations                  | <b>JSY11M-49P-4-1-A</b><br>(6.5 mm pitch)  | <b>JSY11M-49P-3-1-A</b><br>(9 mm pitch) | <b>JSY31M-49P-2-1-A</b><br>(11.5 mm pitch) |
| Tie-rod  | <b>JSY11M-49P-4-□-A</b><br>(6.5 mm pitch)  | <b>JSY11M-49P-3-□-A</b><br>(9 mm pitch) | <b>JSY31M-49P-2-□-A</b><br>(11.5 mm pitch) |
| Valve mounting screw                             | <b>25A-JSY11V-23-4A</b><br>(M1.4 x 21.5)   |   | <b>25A-JSY31V-23-1A</b><br>(M2 x 25)       |
| Clamp bracket<br>(for connector connecting base) | <b>25A-JSY11M-15P-1A</b> (Refer to the table below.)<br><b>25A-JSY11M-15P-2A</b> (Refer to the table below.) |   | <b>25A-SY30M-15-1A</b>                     |

Table. 25A-JSY1000 series clamp bracket

| Wiring<br>(JSY1000 series) |                    | 25A-JSY11M-15P-1A | 25A-JSY11M-15P-2A |
|----------------------------|--------------------|-------------------|-------------------|
| <b>F</b>                   | D-sub connector    | ●                 | —                 |
| <b>T</b>                   | Terminal block box | —                 | ●                 |
| <b>S□□</b>                 | EX260              | ●                 | —                 |
| <b>S3</b>                  | EX120              | ●                 | —                 |

## Manifold Parts Nos.

### Ⓐ Manifold block assembly

**25A – JSY 3 1M – 2P – 1 D A – C8**

| <p>● <b>Series</b></p> <table border="1" style="margin-left: 20px;"> <tr><td style="width: 20px; text-align: center;">1</td><td>JSY1000</td></tr> <tr><td style="text-align: center;">3</td><td>JSY3000</td></tr> </table><br><p>● <b>Manifold pitch</b></p> <table border="1" style="margin-left: 20px;"> <tr><td style="width: 20px; text-align: center;">1</td><td>JSY1000 (6.5 mm pitch)<br/>JSY3000 (11.5 mm pitch)</td></tr> <tr><td style="text-align: center;">2</td><td>JSY1000 (9 mm pitch)</td></tr> </table> | 1   | JSY1000      | 3          | JSY3000 | 1 | JSY1000 (6.5 mm pitch)<br>JSY3000 (11.5 mm pitch) | 2 | JSY1000 (9 mm pitch) | <p>● <b>A, B port size (One-touch fittings)</b></p> <table border="1" style="margin-left: 20px;"> <thead> <tr> <th rowspan="2">Symbol</th> <th rowspan="2">A, B port</th> <th colspan="2">JSY1000</th> <th rowspan="2">JSY3000</th> </tr> <tr> <th>6.5 mm pitch</th> <th>9 mm pitch</th> </tr> </thead> <tbody> <tr> <td><b>C4</b></td> <td>ø4 One-touch fitting</td> <td style="text-align: center;">●</td> <td style="text-align: center;">—</td> <td style="text-align: center;">—</td> </tr> <tr> <td><b>C6</b></td> <td>ø6 One-touch fitting</td> <td style="text-align: center;">—</td> <td style="text-align: center;">●</td> <td style="text-align: center;">●</td> </tr> <tr> <td><b>C8</b></td> <td>ø8 One-touch fitting</td> <td style="text-align: center;">—</td> <td style="text-align: center;">—</td> <td style="text-align: center;">●</td> </tr> </tbody> </table> | Symbol | A, B port | JSY1000 |  | JSY3000 | 6.5 mm pitch | 9 mm pitch | <b>C4</b> | ø4 One-touch fitting | ● | — | — | <b>C6</b> | ø6 One-touch fitting | — | ● | ● | <b>C8</b> | ø8 One-touch fitting | — | — | ● | <p>● <b>Wiring type</b></p> <table border="1" style="margin-left: 20px;"> <tr><td style="width: 20px; text-align: center;"><b>S</b></td><td>Single wiring</td></tr> <tr><td style="text-align: center;"><b>D</b></td><td>Double wiring</td></tr> </table> | <b>S</b> | Single wiring | <b>D</b> | Double wiring |
|--|---|--------------|------------|---------|---|---|---|----------------------|--|--------|-----------|---------|--|---------|--------------|------------|-----------|----------------------|---|---|---|-----------|----------------------|---|---|---|-----------|----------------------|---|---|---|---|----------|---------------|----------|---------------|
| 1  | JSY1000   |              |            |         |   |   |   |                      |  |        |           |         |  |         |              |            |           |                      |   |   |   |           |                      |   |   |   |           |                      |   |   |   |   |          |               |          |               |
| 3  | JSY3000   |              |            |         |   |   |   |                      |  |        |           |         |  |         |              |            |           |                      |   |   |   |           |                      |   |   |   |           |                      |   |   |   |   |          |               |          |               |
| 1  | JSY1000 (6.5 mm pitch)<br>JSY3000 (11.5 mm pitch) |              |            |         |   |   |   |                      |  |        |           |         |  |         |              |            |           |                      |   |   |   |           |                      |   |   |   |           |                      |   |   |   |   |          |               |          |               |
| 2  | JSY1000 (9 mm pitch)                              |              |            |         |   |   |   |                      |  |        |           |         |  |         |              |            |           |                      |   |   |   |           |                      |   |   |   |           |                      |   |   |   |   |          |               |          |               |
| Symbol   | A, B port   | JSY1000      |            | JSY3000 |   |   |   |                      |  |        |           |         |  |         |              |            |           |                      |   |   |   |           |                      |   |   |   |           |                      |   |   |   |   |          |               |          |               |
|  |   | 6.5 mm pitch | 9 mm pitch |         |   |   |   |                      |  |        |           |         |  |         |              |            |           |                      |   |   |   |           |                      |   |   |   |           |                      |   |   |   |   |          |               |          |               |
| <b>C4</b>  | ø4 One-touch fitting                              | ●            | —          | —       |   |   |   |                      |  |        |           |         |  |         |              |            |           |                      |   |   |   |           |                      |   |   |   |           |                      |   |   |   |   |          |               |          |               |
| <b>C6</b>  | ø6 One-touch fitting                              | —            | ●          | ●       |   |   |   |                      |  |        |           |         |  |         |              |            |           |                      |   |   |   |           |                      |   |   |   |           |                      |   |   |   |   |          |               |          |               |
| <b>C8</b>  | ø8 One-touch fitting                              | —            | —          | ●       |   |   |   |                      |  |        |           |         |  |         |              |            |           |                      |   |   |   |           |                      |   |   |   |           |                      |   |   |   |   |          |               |          |               |
| <b>S</b>   | Single wiring                                     |              |            |         |   |   |   |                      |  |        |           |         |  |         |              |            |           |                      |   |   |   |           |                      |   |   |   |           |                      |   |   |   |   |          |               |          |               |
| <b>D</b>   | Double wiring                                     |              |            |         |   |   |   |                      |  |        |           |         |  |         |              |            |           |                      |   |   |   |           |                      |   |   |   |           |                      |   |   |   |   |          |               |          |               |

# 25A-JSY1000/3000 Series

## Manifold Parts Nos.

### ② SUP/EXH end block assembly

25A – JSY **3** 1M – 3P – 1A    – C10   

● **Series**

|   |         |
|---|---------|
| 1 | JSY1000 |
| 3 | JSY3000 |

● **Pilot, Silencer type**

| Symbol | Pilot type |                   |
|--------|------------|-------------------|
|        | Internal   | Built-in silencer |
| Nil    | ●          | —                 |
| S      | ●          | ●                 |

● **P, E port size (One-touch fittings)**

| Symbol | P, E port             | JSY1000 | JSY3000 |
|--------|-----------------------|---------|---------|
| C8     | ø8 One-touch fitting  | ●       | —       |
| C10    | ø10 One-touch fitting | —       | ●       |
| 00     | Plug                  | ●       | ●       |

● **Mounting**

|       |                                      |
|-------|--------------------------------------|
| Nil   | Direct mounting                      |
| D0    | DIN rail mounting (Without DIN rail) |
| D00*1 | DIN rail mounting (Without DIN rail) |

\*1 Part number only for the 25A-JSY1000  
Part number is different depending on the wiring.  
Refer to Table 1.

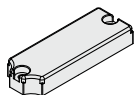
**Table 1. JSY1000 series DIN rail mounting**

| Symbol | Wiring  |
|--------|---|
| D0     | D-sub connector (F type)<br>EX260 (S□□ type)<br>EX120 (S3 type) |
| D00    | Terminal block box (T type)                                     |

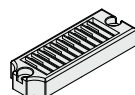
### Clamp bracket

| Series      |         | Part no.          |
|-------------|---------|-------------------|
| 25A-JSY1000 | For D0  | 25A-JSY11M-15P-1A |
|             | For D00 | 25A-JSY11M-15P-2A |
| 25A-JSY3000 |         | 25A-SY30M-15-1A   |

### ■ Cover, Silencer cover for SUP/EXH (end) block assembly



**Cover**  
(Internal pilot)



**Silencer cover**  
(Internal pilot, Built-in silencer)

25A – JSY **3** 1M – 4P – 1A

25A – JSY **3** 1M – 5P – 1A

● **Series**

|   |         |
|---|---------|
| 1 | JSY1000 |
| 3 | JSY3000 |

## Manifold Parts Nos.

### © SUP/EXH block assembly

For D-sub connector

**25A-JSY** 3 **1M-1P-3A**   **1** - **C10**  

**Series**

|   |         |
|---|---------|
| 1 | JSY1000 |
| 3 | JSY3000 |

**Pilot, Silencer type**

| Symbol | Pilot type |                   |
|--------|------------|-------------------|
|        | Internal   | Built-in silencer |
| Nil    | ●          | —                 |
| S      | ●          | ●                 |

**Mounting**

|     |                                      |
|-----|--------------------------------------|
| Nil | Direct mounting                      |
| D0  | DIN rail mounting (Without DIN rail) |

**P, E port size (One-touch fittings)**

| Symbol | P, E port             | JSY1000 | JSY3000 |
|--------|-----------------------|---------|---------|
| C8     | ø8 One-touch fitting  | ●       | —       |
| C10    | ø10 One-touch fitting | —       | ●       |
| 00     | Plug                  | ●       | ●       |

**Connector entry direction**

|   |         |
|---|---------|
| 1 | Upward  |
| 2 | Lateral |

For the terminal block box or EX260

**25A-JSY** 3 **1M-1P-1A**   - **C10**  

**Series**

|   |         |
|---|---------|
| 1 | JSY1000 |
| 3 | JSY3000 |

**Pilot, Silencer type**

| Symbol | Pilot type |                   |
|--------|------------|-------------------|
|        | Internal   | Built-in silencer |
| Nil    | ●          | —                 |
| S      | ●          | ●                 |

**Mounting**

| Symbol | Mounting                             | JSY1000        |       | JSY3000 |
|--------|--------------------------------------|----------------|-------|---------|
|        |                                      | Terminal block | EX260 |         |
| Nil    | Mounting                             | ●              | ●     | ●       |
| D00    | Direct mounting                      | ●              | —     | —       |
| D0     | DIN rail mounting (Without DIN rail) | —              | ●     | ●       |

**P, E port size (One-touch fittings)**

| Symbol | P, E port             | JSY1000 | JSY3000 |
|--------|-----------------------|---------|---------|
| C8     | ø8 One-touch fitting  | ●       | —       |
| C10    | ø10 One-touch fitting | —       | ●       |
| 00     | Plug                  | ●       | ●       |

For EX120

**25A-JSY** 3 **1M-1P-14A**   - **C10**  

**Series**

|   |         |
|---|---------|
| 1 | JSY1000 |
| 3 | JSY3000 |

**Pilot, Silencer type**

| Symbol | Pilot type |                   |
|--------|------------|-------------------|
|        | Internal   | Built-in silencer |
| Nil    | ●          | —                 |
| S      | ●          | ●                 |

**Mounting**

|     |                                      |
|-----|--------------------------------------|
| Nil | Direct mounting                      |
| D0  | DIN rail mounting (Without DIN rail) |

**P, E port size (One-touch fittings)**

| Symbol | P, E port             | JSY1000 | JSY3000 |
|--------|-----------------------|---------|---------|
| C8     | ø8 One-touch fitting  | ●       | —       |
| C10    | ø10 One-touch fitting | —       | ●       |
| 00     | Plug                  | ●       | ●       |

\* Refer to page 25 for clamp bracket part numbers.

# 25A-JSY1000/3000 Series

## How to Order Pilot Valves

---

25A - V112  - 5 A

• **Rated voltage**

|   |        |
|---|--------|
| 5 | 24 VDC |
|---|--------|

• **Coil type**

|     |  |
|-----|--|
| Nil | Standard                                     |
| T   | With power-saving circuit<br>(Made to Order) |

### Pilot cover

**25A - SY30V - 25AS** (For 25A-JSY3000)

\* The pilot valve of the 25A-JSY1000 series cannot be replaced.





Type 40  
Side Ported

Non Plug-in Metal Base

# 25A-JSY1000/3000 Series



Internal Pilot

## How to Order Manifolds

25A - JJ5SY **3** - 40 - 05 **D** - C6   

1    2    3    4    5    6

Series compatible with secondary batteries

### 1 Series

|   |         |
|---|---------|
| 1 | JSY1000 |
| 3 | JSY3000 |

### 2 Type

|    |             |
|----|-------------|
| 40 | Side ported |
|----|-------------|

### 3 Valve stations

| Symbol | Stations    |
|--------|-------------|
| 02     | 2 stations  |
| ⋮      | ⋮           |
| 20     | 20 stations |

### 4 P, E port entry

|   |            |
|---|------------|
| U | U side*1   |
| D | D side*1   |
| B | Both sides |

\*1 Plugs are mounted on the opposite side of the selected ports.

### 5 A, B port size

#### Thread piping

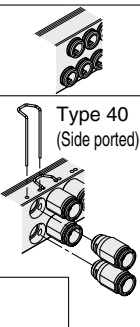
| Symbol | A, B port | JSY1000 | JSY3000 |
|--------|-----------|---------|---------|
| M3     | M3 x 0.5  | ●       | —       |
| M5     | M5 x 0.8  | ●       | ●       |
| 01     | 1/8       | —       | ●       |

### 6 Thread type

|     |    |
|-----|----|
| Nil | Rc |
|-----|----|

### One-touch fitting (Metric)

| Symbol                         | A, B port | JSY1000          | JSY3000 |
|--------------------------------|-----------|------------------|---------|
| Fixed                          | C4        | ●                | —       |
|                                | C6        | —                | ●       |
| Replaceable                    | KC4       | ●                | —       |
|                                | KC6       | ●                | ●       |
|                                | KC8       | —                | ●       |
|                                | M*1       | A, B ports mixed | —       |
| P, E port size (Thread piping) |           | 1/8              | 1/4     |



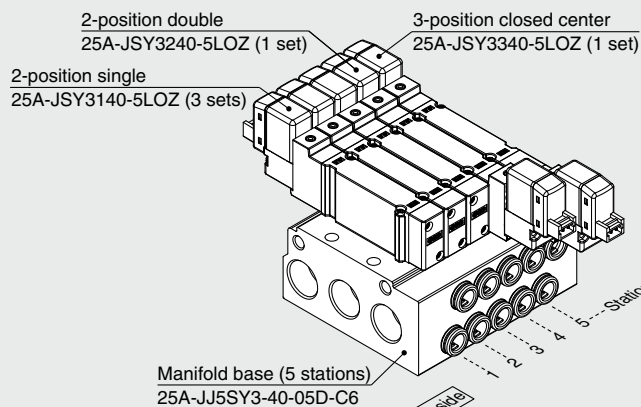
\*1 When ports are mixed sizes, indicate the piping specifications on the manifold specification sheet.

\* The 25A-series specifications and dimensions are the same as those of the standard model.

For details, refer to the [Web Catalog](#).

## How to Order Manifold Assembly

### Example (25A-JJ5SY3-40-□)



25A-JJ5SY3-40-05D-C6 .. 1 set (Type 40 5-station manifold base part no.)  
 \* 25A-JSY3140-5LOZ ..... 3 sets (2-position single part no.)  
 \* 25A-JSY3240-5LOZ ..... 1 set (2-position double part no.)  
 \* 25A-JSY3340-5LOZ ..... 1 set (3-position closed center part no.)

→ The asterisk denotes the symbol for the assembly. Prefix it to the part numbers of the valve, etc.

· For the valve arrangement, the valve closest to the D side is considered the 1st station.

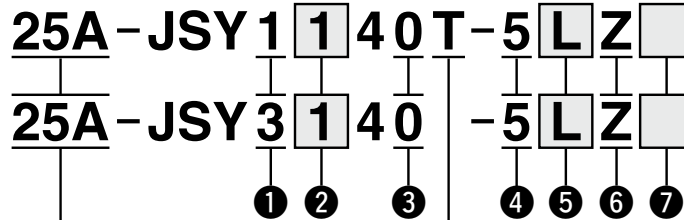
· Under the manifold part number, state the valves to be mounted in order starting with the 1st station as shown in the figure. If the arrangement becomes too complicated, specify the details on a manifold specification sheet.

Internal Pilot

**How to Order Valves (With two mounting screws)**

**25A-JSY1000 Series**

**25A-JSY3000 Series**



• Series compatible with secondary batteries

• With power-saving circuit



**Made to Order**

| Specification   |
|---|
| With power-saving circuit (Continuous duty type): 0.1 W (JSY3000) |

**1 Series**

|   |         |
|---|---------|
| 1 | JSY1000 |
| 3 | JSY3000 |

**2 Type of actuation**

|   |                            |
|---|----------------------------|
| 1 | 2-position single          |
| 2 | 2-position double          |
| 3 | 3-position closed center   |
| 4 | 3-position exhaust center  |
| 5 | 3-position pressure center |
| A | Dual 3-port (N.C./N.C.)    |
| B | Dual 3-port (N.O./N.O.)    |
| C | Dual 3-port (N.C./N.O.)    |

**3 Pilot valve exhaust method**

|   |                                |
|---|--------------------------------|
| 0 | Pilot valve individual exhaust |
|---|--------------------------------|

**4 Rated voltage**

|   |        |
|---|--------|
| 5 | 24 VDC |
|---|--------|

**6 Light/surge voltage suppressor**

|   |                                     |
|---|-------------------------------------|
| Z | With light/surge voltage suppressor |
|---|-------------------------------------|

**5 Electrical entry**

|         | L plug connector               |                           | M plug connector               |                           |
|---------|--------------------------------|---------------------------|--------------------------------|---------------------------|
|         | L                              | LO                        | M                              | MO                        |
| JSY1000 | L: With lead wire (300 mm)<br> | LO: Without connector<br> | M: With lead wire (300 mm)<br> | MO: Without connector<br> |
| JSY3000 | L: With lead wire (300 mm)<br> | LO: Without connector<br> | M: With lead wire (300 mm)<br> | MO: Without connector<br> |

\* Refer to the **Web Catalog** for the lead wire length of L and M plug connectors.

**7 Manual override**

|         |                                |                                       |                                     |
|---------|--------------------------------|---------------------------------------|-------------------------------------|
| JSY1000 | Nil: Non-locking push type<br> | D: Push-turn locking slotted type<br> | E: Push-turn locking lever type<br> |
| JSY3000 | Nil: Non-locking push type<br> | D: Push-turn locking slotted type<br> | E: Push-turn locking lever type<br> |

\* The 25A- series specifications and dimensions are the same as those of the standard model.

For details, refer to the **Web Catalog**.

**⚠ Caution**

If the JSY3000 series is to be continuously energized, please be sure to select the power-saving circuit (continuous duty type) specification. Refer to "Made to Order."

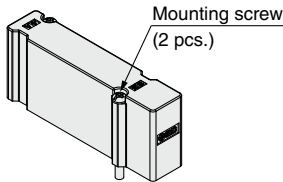
For the JSY1000 series, only the power-saving circuit specification is available.

# 25A-JSY1000/3000 Series Manifold Options

## Blanking plate assembly

(With two mounting screws)

Used when valve additions are expected or for maintenance. A structure is in place on the blanking plate to prevent the mounting screws from sliding.



## How to Order Blanking Plate Assembly

25A-JSY **3** 1M-26-1A

Series

|   |         |
|---|---------|
| 1 | JSY1000 |
| 3 | JSY3000 |

## Valve Mounting Screw Part No.

| Description                  | Part no.         |                  | Note  |
|------------------------------|------------------|------------------|---|
|                              | 25A-JJ5SY1       | 25A-JJ5SY3       |   |
| Round head combination screw | 25A-JSY11V-23-4A | 25A-JSY31V-23-4A | Part numbers shown on the left are for 10 valves. (20 pcs.) |

## One-touch Fittings Part Nos.

|           |             | Port size                            | 25A-JSY1000         | 25A-JSY3000         |
|-----------|-------------|--------------------------------------|---------------------|---------------------|
| A, B port | Metric size | ø4 One-touch fitting (Straight type) | 25A-KQSY10-C4-X1336 | —                   |
|           |             | ø6 One-touch fitting (Straight type) | 25A-KQSY11-C6-X1336 | 25A-KQSY30-C6       |
|           |             | ø8 One-touch fitting (Straight type) | —                   | 25A-KQSY30-C8-X1336 |

## How to Order Individual SUP/EXH Spacer Assembly

One-touch fitting Straight type 25A-JSY **3** 1M-**38**-1A-**C6**

Series

|   |         |
|---|---------|
| 1 | JSY1000 |
| 3 | JSY3000 |

Spacer type

|    |                       |
|----|-----------------------|
| 38 | Individual SUP spacer |
| 39 | Individual EXH spacer |

Port size (Metric)

| Symbol | P, E port            | JSY1000 | JSY3000 |
|--------|----------------------|---------|---------|
| C4     | ø4 One-touch fitting | ●       | —       |
| C6     | ø6 One-touch fitting | —       | ●       |

Part numbers of mounting screw (2 pcs. of each)

JSY1000: 25A-JSY11V-23-5A  
JSY3000: 25A-JSY31V-23-5A

## How to Order Pilot Valves

For 25A-JSY3000

25A-V111 **□** -5 **L** **Z**

Coil type

|     |   |
|-----|---|
| Nil | Standard                                  |
| T   | With power-saving circuit (Made to Order) |

Light/surge voltage suppressor

|   |                                     |
|---|-------------------------------------|
| Z | With light/surge voltage suppressor |
|---|-------------------------------------|

Electrical entry

| L  | L plug connector | With lead wire    |
|----|------------------|-------------------|
| LO |                  | Without connector |
| M  | M plug connector | With lead wire    |
| MO |                  | Without connector |

|               |        |
|---------------|--------|
| Rated voltage |        |
| 5             | 24 VDC |

\* For the 25A-JSY1000, the pilot valve is the same as that of the standard model.





Type 10  
Side Ported

Type 11  
Bottom Ported

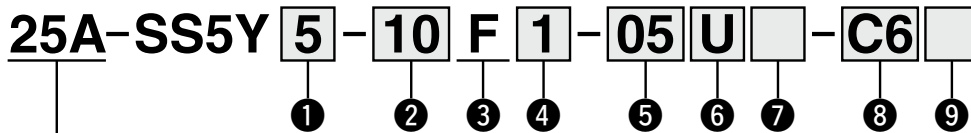
# Plug-in Connector Connecting Base

D-sub Connector

## 25A-SY5000/7000 Series



### How to Order Manifolds



Series compatible with secondary batteries

#### 1 Series

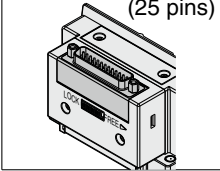
|   |        |
|---|--------|
| 5 | SY5000 |
| 7 | SY7000 |

#### 2 Type

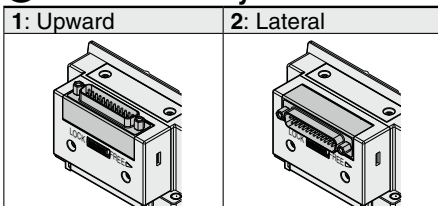
|    |               |
|----|---------------|
| 10 | Side ported   |
| 11 | Bottom ported |

#### 3 Connector type

F: D-sub connector (25 pins)



#### 4 Connector entry direction



#### 5 Valve stations

F: D-sub connector (25 pins)

| Symbol | Stations    | Note  |
|--------|-------------|---|
| 02     | 2 stations  | Double wiring*1                                   |
| ⋮      | ⋮           |   |
| 12     | 12 stations |   |
| 02     | 2 stations  | Specified layout*2 (Up to 24 solenoids available) |
| ⋮      | ⋮           |   |
| 24     | 24 stations |   |

\*1 Double wiring: 2-position single, 2-position double, 3-position, and 4-position valves can be used on all manifold stations.

The use of a 2-position single solenoid will result in an unused control signal. If this is not desired, order with a specified layout.

\*2 Specified layout: Indicate the wiring specifications on the manifold specification sheet. (Note that 2-position double, 3-position, and 4-position valves cannot be used where single wiring has been specified.)

\* The blanking plate assembly is included in this number.

#### 6 P, E port entry

|   |                               |
|---|-------------------------------|
| U | U side (2 to 10 stations)     |
| D | D side (2 to 10 stations)     |
| B | Both sides (2 to 24 stations) |

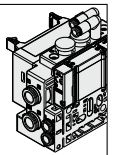
#### 7 SUP/EXH block assembly

|     |                                   |
|-----|-----------------------------------|
| Nil | Internal pilot                    |
| S   | Internal pilot, Built-in silencer |
| R   | External pilot                    |

\* The 3/5(E) port is plugged for the built-in silencer type.

#### 8 A, B port size (Metric)

| Symbol                              | A, B port                  | Type 10/<br>Side ported |        | Type 11/<br>Bottom ported |        |
|-------------------------------------|----------------------------|-------------------------|--------|---------------------------|--------|
|                                     |                            | SY5000                  | SY7000 | SY5000                    | SY7000 |
| C4                                  | Straight                   | ●                       | —      | ●                         | —      |
| C6                                  |                            | ●                       | ●      | ●                         | ●      |
| C8                                  |                            | ●                       | ●      | ●                         | ●      |
| C10                                 |                            | —                       | ●      | —                         | ●      |
| C12                                 |                            | —                       | ●      | —                         | ●      |
| CM*1                                | Straight port, mixed sizes | ●                       | ●      | ●                         | ●      |
| P, E port size (One-touch fittings) |                            | ø10                     | ø12    | ø10                       | ø12    |



\*1 Indicate the sizes on the manifold specification sheet for "CM."

\* The direction of P, E port fittings is the same as for the A, B port.

#### 9 Mounting

| Symbol | Mounting          | Option     |                |
|--------|-------------------|------------|----------------|
|        |                   | Name plate | Station number |
| Nil    | Direct mounting   | —          | —              |
| AA     |                   | ●          | ●              |
| BA     |                   | ●          | —              |
| D□     | DIN rail mounting | —          | —              |
| A□     |                   | ●          | ●              |
| B□     |                   | ●          | —              |

#### DIN Rail Option

| Nil | Direct mounting   |
|-----|---|
| 0   | Without DIN rail (with bracket)   |
| 3   | For 3 stations Specify a longer rail than the total length of specified stations. |
| ⋮   | ⋮   |
| 24  | For 24 stations   |

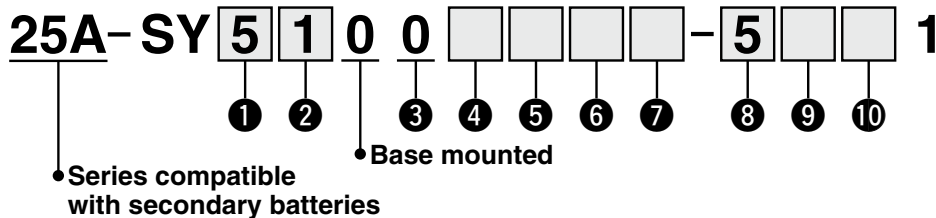
\* Enter the number of stations inside □ when it is larger than the number of valve stations. (Refer to "DIN Rail Option" above.)

\* Only direct mounting is available for the type 11 bottom ported type.

\* The 25A-series specifications and dimensions are the same as those of the standard model.

For details, refer to the [Web Catalog](#).

### How to Order Valves (With mounting screw)



#### ① Series

|   |        |
|---|--------|
| 5 | SY5000 |
| 7 | SY7000 |

#### ② Type of actuation

|   |  |
|---|--|
| 1 | 2-position single                        |
| 2 | 2-position double                        |
| 3 | 3-position closed center                 |
| 4 | 3-position exhaust center                |
| 5 | 3-position pressure center               |
| A | 4-position dual 3-port valve (N.C./N.C.) |
| B | 4-position dual 3-port valve (N.O./N.O.) |
| C | 4-position dual 3-port valve (N.C./N.O.) |

#### ③ Seal type

|   |             |
|---|-------------|
| 0 | Rubber seal |
|---|-------------|

#### ④ Pilot type

|     |                |
|-----|----------------|
| Nil | Internal pilot |
| R   | External pilot |

\* When selecting the external pilot specification for the 4-position dual 3-port valve, pay attention to the pilot pressure. For details, refer to the valve specifications of the standard SY series product in the **Web Catalog**.

#### ⑤ Back pressure check valve (Built-in valve type)

|     |          |
|-----|----------|
| Nil | None     |
| H   | Built-in |

\* The built-in valve type back pressure check valve is not available for the 3-position type or the SY7000.

#### ⑥ Pilot valve option

|     |                               |
|-----|-------------------------------|
| Nil | Standard (0.7 MPa)            |
| B   | Quick response type (0.7 MPa) |

#### ⑦ Coil type

|     |  |
|-----|--|
| Nil | Standard   |
| T   | With power-saving circuit (Continuous duty type) |

\* Be sure to select the power-saving circuit type if the valve is to be continuously energized for long periods of time.  
\* Be careful of the energizing time when the power-saving circuit is selected. For details, refer to the standard product catalog.

#### ⑧ Rated voltage

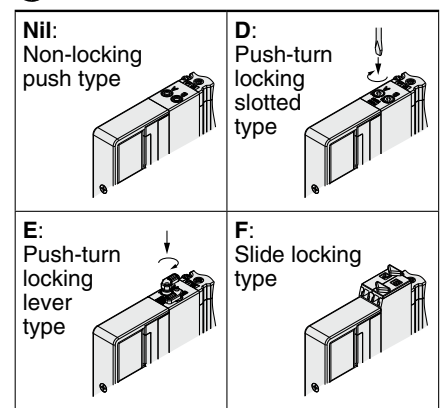
|   |        |
|---|--------|
| 5 | 24 VDC |
| 6 | 12 VDC |

#### ⑨ Light/surge voltage suppressor and common specification

|     |   |
|-----|---|
| Nil | Without light/surge voltage suppressor (Non-polar)    |
| R   | With surge voltage suppressor (Non-polar)             |
| U   | With light/surge voltage suppressor (Non-polar)       |
| S   | With surge voltage suppressor (Positive common)       |
| Z   | With light/surge voltage suppressor (Positive common) |
| NS  | With surge voltage suppressor (Negative common)       |
| NZ  | With light/surge voltage suppressor (Negative common) |

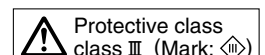
\* Only "Z" and "NZ" types are available with a power-saving circuit.

#### ⑩ Manual override



\* The 25A- series specifications and dimensions are the same as those of the standard model.

For details, refer to the **Web Catalog**.



# Plug-in Connector Connecting Base

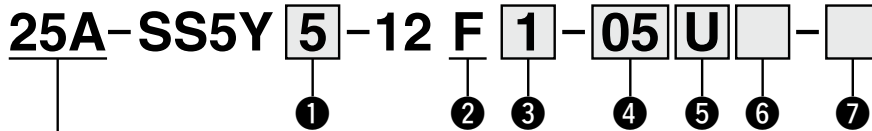
D-sub Connector



Type 12  
Top Ported

# 25A-SY5000/7000 Series

## How to Order Manifolds



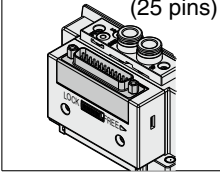
• Series compatible with secondary batteries

### 1 Series

|   |        |
|---|--------|
| 5 | SY5000 |
| 7 | SY7000 |

### 2 Connector type

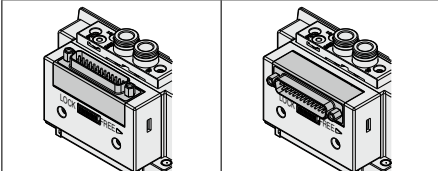
F: D-sub connector (25 pins)



### 3 Connector entry direction

1: Upward

2: Lateral



### 4 Valve stations

F: D-sub connector (25 pins)

| Symbol | Stations    | Note   |
|--------|-------------|--|
| 02     | 2 stations  | Double wiring*1                                      |
| ⋮      | ⋮           |  |
| 12     | 12 stations | Specified layout*2<br>(Up to 24 solenoids available) |
| 02     | 2 stations  |  |
| ⋮      | ⋮           |  |
| 24     | 24 stations |  |

\*1 Double wiring: 2-position single, 2-position double, 3-position, and 4-position valves can be used on all manifold stations. The use of a 2-position single solenoid will result in an unused control signal. If this is not

desired, order with a specified layout.

\*2 Specified layout: Indicate the wiring specifications on the manifold specification sheet. (Note that 2-position double, 3-position, and 4-position valves cannot be used where single wiring has been specified.)

\* The blanking plate assembly is included in this number.

### 5 P, E port entry

|     |                               |
|-----|-------------------------------|
| U*1 | U side (2 to 10 stations)     |
| D*1 | D side (2 to 10 stations)     |
| B   | Both sides (2 to 24 stations) |

\*1 \*2 For type "S," SUP/EXH block assembly with a built-in silencer, choose "U" or "D" for P port entry.

### 6 SUP/EXH block assembly

|     |                                   |
|-----|-----------------------------------|
| Nil | Internal pilot                    |
| S   | Internal pilot, Built-in silencer |

\* The P and E ports are only available on the U and D sides for the built-in silencer type. The 3/5(E) port is plugged. The silencer exhaust port is located on the opposite side of the P and E port entry. (Example: When the P and E port entry is on the D side, the silencer exhaust port is on the U side.)

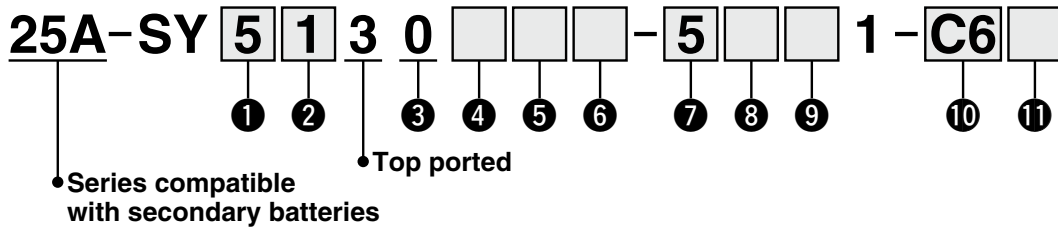
### 7 Mounting

|     |                                      |   |
|-----|--------------------------------------|---|
| Nil | Direct mounting                      |   |
| D   | DIN rail mounting (With DIN rail)    |   |
| D0  | DIN rail mounting (Without DIN rail) |   |
| D3  | For 3 stations                       | Specify a length longer than that of the standard rail. |
| ⋮   | ⋮                                    |   |
| D24 | For 24 stations                      |   |

\* The 25A- series specifications and dimensions are the same as those of the standard model.

For details, refer to the [Web Catalog](#).

How to Order Valves (With mounting screw)



1 Series

|   |        |
|---|--------|
| 5 | SY5000 |
| 7 | SY7000 |

2 Type of actuation

|   |  |
|---|--|
| 1 | 2-position single                        |
| 2 | 2-position double                        |
| 3 | 3-position closed center                 |
| 4 | 3-position exhaust center                |
| 5 | 3-position pressure center               |
| A | 4-position dual 3-port valve (N.C./N.C.) |
| B | 4-position dual 3-port valve (N.O./N.O.) |
| C | 4-position dual 3-port valve (N.C./N.O.) |

3 Seal type

|   |             |
|---|-------------|
| 0 | Rubber seal |
|---|-------------|

4 Back pressure check valve (Built-in valve type)

|     |          |
|-----|----------|
| Nil | None     |
| H   | Built-in |

\* The built-in valve type back pressure check valve is not available for the 3-position type or the SY7000.

5 Pilot valve option

|     |                               |
|-----|-------------------------------|
| Nil | Standard (0.7 MPa)            |
| B   | Quick response type (0.7 MPa) |

6 Coil type

|     |  |
|-----|--|
| Nil | Standard   |
| T   | With power-saving circuit (Continuous duty type) |

\* Be sure to select the power-saving circuit type if the valve is to be continuously energized for long periods of time.  
\* Be careful of the energizing time when the power-saving circuit is selected. For details, refer to the standard product catalog.

7 Rated voltage

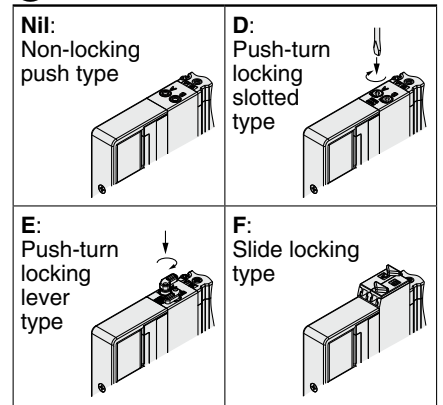
|   |        |
|---|--------|
| 5 | 24 VDC |
| 6 | 12 VDC |

8 Light/surge voltage suppressor and common specification

|     |   |
|-----|---|
| Nil | Without light/surge voltage suppressor (Non-polar)    |
| R   | With surge voltage suppressor (Non-polar)             |
| U   | With light/surge voltage suppressor (Non-polar)       |
| S   | With surge voltage suppressor (Positive common)       |
| Z   | With light/surge voltage suppressor (Positive common) |
| NS  | With surge voltage suppressor (Negative common)       |
| NZ  | With light/surge voltage suppressor (Negative common) |

\* Only "Z" and "NZ" types are available with a power-saving circuit.

9 Manual override



10 A, B port size

| Symbol | Port size | Applicable series |
|--------|-----------|-------------------|
| 02     | 1/4       | SY7000            |

One-touch fitting (Metric)

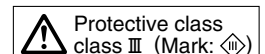
| Symbol | A, B port | SY5000 | SY7000 |
|--------|-----------|--------|--------|
| C4     | ø4        | ●      | —      |
| C6     | ø6        | ●      | ●      |
| C8     | ø8        | ●      | ●      |
| C10    | ø10       | —      | ●      |
| C12    | ø12       | —      | ●      |

11 Thread type

|     |      |
|-----|------|
| Nil | Rc   |
| F   | G    |
| N   | NPT  |
| T   | NPTF |

\* The 25A- series specifications and dimensions are the same as those of the standard model.

For details, refer to the [Web Catalog](#).



Type 10  
Side Ported

Type 11  
Bottom Ported

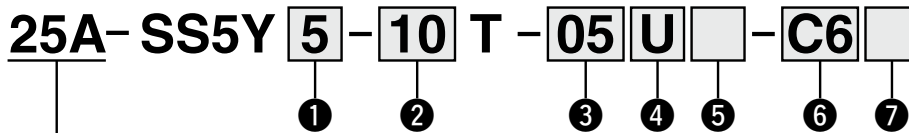
# Plug-in Connector Connecting Base

Terminal Block Box

## 25A-SY5000/7000 Series



### How to Order Manifolds



• Series compatible with secondary batteries

#### ① Series

|   |        |
|---|--------|
| 5 | SY5000 |
| 7 | SY7000 |

#### ② Type

|    |               |
|----|---------------|
| 10 | Side ported   |
| 11 | Bottom ported |

#### ③ Valve stations

| Symbol | Stations    | Note   |
|--------|-------------|--|
| 02     | 2 stations  | Double wiring*1                                      |
| ⋮      | ⋮           |  |
| 10     | 10 stations |  |
| 02     | 2 stations  | Specified layout*2<br>(Up to 20 solenoids available) |
| ⋮      | ⋮           |  |
| 20     | 20 stations |  |

\*1 Double wiring: 2-position single, 2-position double, 3-position, and 4-position valves can be used on all manifold stations. The use of a 2-position single solenoid will result in an unused control signal. If this is not desired, order with a specified layout.

\*2 Specified layout: Indicate the wiring specifications on the manifold specification sheet. (Note that 2-position double, 3-position, and 4-position valves cannot be used where single wiring has been specified.)

\* The blanking plate assembly is included in this number.

#### ④ P, E port entry

|   |                               |
|---|-------------------------------|
| U | U side (2 to 10 stations)     |
| D | D side (2 to 10 stations)     |
| B | Both sides (2 to 20 stations) |

#### ⑤ SUP/EXH block assembly

|     |                                   |
|-----|-----------------------------------|
| Nil | Internal pilot                    |
| S   | Internal pilot, Built-in silencer |
| R   | External pilot                    |

\* The 3/5(E) port is plugged for the built-in silencer type.

\* When the built-in silencer type is used, keep the exhaust port from coming into direct contact with water or other liquids.

#### ⑦ Mounting

| Symbol | Mounting          | Option     |                |
|--------|-------------------|------------|----------------|
|        |                   | Name plate | Station number |
| Nil    | Direct mounting   | —          | —              |
| AA     |                   | ●          | ●              |
| BA     |                   | ●          | —              |
| D      | DIN rail mounting | —          | —              |
| A      |                   | ●          | ●              |
| B      |                   | ●          | —              |

\* Enter the number of stations inside  when it is larger than the number of valve stations. (Refer to "DIN Rail Option" below.)

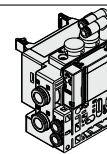
\* Only direct mounting is available for the type 11 bottom-porting type.

#### DIN Rail Option

| Nil | Direct mounting                 |  |
|-----|---------------------------------|--|
| 0   | Without DIN rail (with bracket) |  |
| 3   | For 3 stations                  | Specify a longer rail than the total length of specified stations. |
| ⋮   | ⋮                               |  |
| 20  | For 20 stations                 |  |

#### ⑥ A, B port size (Metric)

| Symbol                              | A, B port                  | Type 10/<br>Side ported |        | Type 11/<br>Bottom ported |        |
|-------------------------------------|----------------------------|-------------------------|--------|---------------------------|--------|
|                                     |                            | SY5000                  | SY7000 | SY5000                    | SY7000 |
| C4                                  | Straight                   | ●                       | —      | ●                         | —      |
| C6                                  |                            | ●                       | ●      | ●                         | ●      |
| C8                                  |                            | ●                       | ●      | ●                         | ●      |
| C10                                 |                            | —                       | ●      | —                         | ●      |
| C12                                 |                            | —                       | ●      | —                         | ●      |
| CM*1                                | Straight port, mixed sizes | ●                       | ●      | ●                         | ●      |
| P, E port size (One-touch fittings) |                            | ø10                     | ø12    | ø10                       | ø12    |



\*1 Indicate the sizes on the manifold specification sheet for "CM."

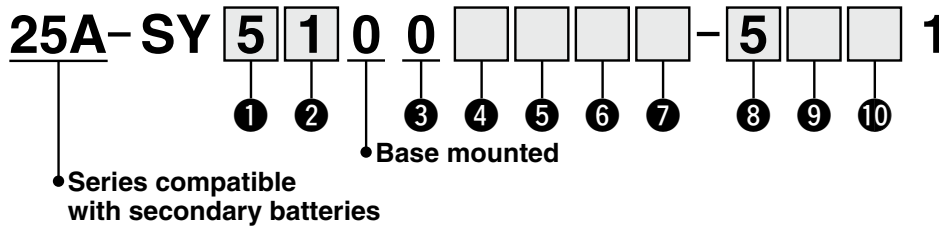
\* The direction of P, E port fittings is the same as for the A, B port.

\* The 25A- series specifications and dimensions are the same as those of the standard model.

For details, refer to the [Web Catalog](#).



### How to Order Valves (With mounting screw)



#### ① Series

|   |        |
|---|--------|
| 5 | SY5000 |
| 7 | SY7000 |

#### ② Type of actuation

|   |  |
|---|--|
| 1 | 2-position single                        |
| 2 | 2-position double                        |
| 3 | 3-position closed center                 |
| 4 | 3-position exhaust center                |
| 5 | 3-position pressure center               |
| A | 4-position dual 3-port valve (N.C./N.C.) |
| B | 4-position dual 3-port valve (N.O./N.O.) |
| C | 4-position dual 3-port valve (N.C./N.O.) |

#### ③ Seal type

|   |             |
|---|-------------|
| 0 | Rubber seal |
|---|-------------|

#### ④ Pilot type

|     |                |
|-----|----------------|
| Nil | Internal pilot |
| R   | External pilot |

\* When selecting the external pilot specification for the 4-position dual 3-port valve, pay attention to the pilot pressure. For details, refer to the valve specifications of the standard SY series product in the **Web Catalog**.

#### ⑤ Back pressure check valve (Built-in valve type)

|     |          |
|-----|----------|
| Nil | None     |
| H   | Built-in |

\* The built-in valve type back pressure check valve is not available for the 3-position type or the SY7000.

#### ⑥ Pilot valve option

|     |                               |
|-----|-------------------------------|
| Nil | Standard (0.7 MPa)            |
| B   | Quick response type (0.7 MPa) |

#### ⑦ Coil type

|     |  |
|-----|--|
| Nil | Standard   |
| T   | With power-saving circuit (Continuous duty type) |

\* Be sure to select the power-saving circuit type if the valve is to be continuously energized for long periods of time.  
\* Be careful of the energizing time when the power-saving circuit is selected. For details, refer to the standard product catalog.

#### ⑧ Rated voltage

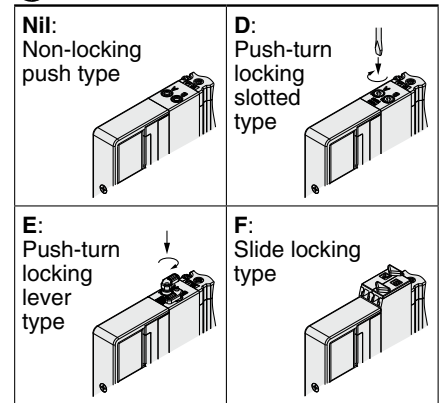
|   |        |
|---|--------|
| 5 | 24 VDC |
| 6 | 12 VDC |

#### ⑨ Light/surge voltage suppressor and common specification

|     |   |
|-----|---|
| Nil | Without light/surge voltage suppressor (Non-polar)    |
| R   | With surge voltage suppressor (Non-polar)             |
| U   | With light/surge voltage suppressor (Non-polar)       |
| S   | With surge voltage suppressor (Positive common)       |
| Z   | With light/surge voltage suppressor (Positive common) |
| NS  | With surge voltage suppressor (Negative common)       |
| NZ  | With light/surge voltage suppressor (Negative common) |

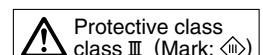
\* Only "Z" and "NZ" types are available with a power-saving circuit.

#### ⑩ Manual override



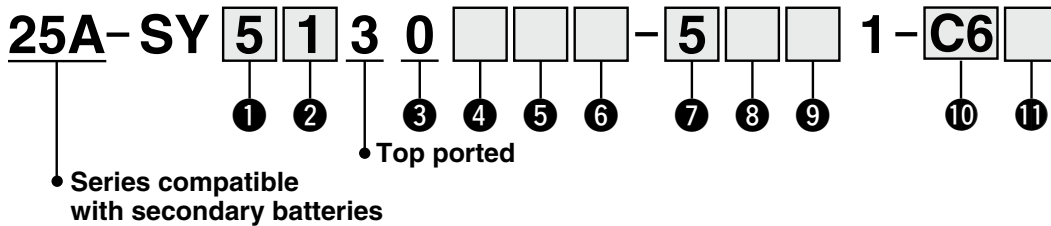
\* The 25A- series specifications and dimensions are the same as those of the standard model.

For details, refer to the **Web Catalog**.





**How to Order Valves (With mounting screw)**



**1 Series**

|   |        |
|---|--------|
| 5 | SY5000 |
| 7 | SY7000 |

**2 Type of actuation**

|   |  |
|---|--|
| 1 | 2-position single                        |
| 2 | 2-position double                        |
| 3 | 3-position closed center                 |
| 4 | 3-position exhaust center                |
| 5 | 3-position pressure center               |
| A | 4-position dual 3-port valve (N.C./N.C.) |
| B | 4-position dual 3-port valve (N.O./N.O.) |
| C | 4-position dual 3-port valve (N.C./N.O.) |

**3 Seal type**

|   |             |
|---|-------------|
| 0 | Rubber seal |
|---|-------------|

**4 Back pressure check valve (Built-in valve type)**

|     |          |
|-----|----------|
| Nil | None     |
| H   | Built-in |

\* The built-in valve type back pressure check valve is not available for the 3-position type or the SY7000.

**5 Pilot valve option**

|     |                               |
|-----|-------------------------------|
| Nil | Standard (0.7 MPa)            |
| B   | Quick response type (0.7 MPa) |

**6 Coil type**

|     |  |
|-----|--|
| Nil | Standard   |
| T   | With power-saving circuit (Continuous duty type) |

\* Be sure to select the power-saving circuit type if the valve is to be continuously energized for long periods of time.  
\* Be careful of the energizing time when the power-saving circuit is selected. For details, refer to the standard product catalog.

**7 Rated voltage**

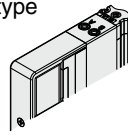
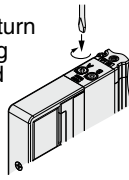
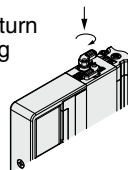
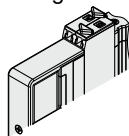
|   |        |
|---|--------|
| 5 | 24 VDC |
| 6 | 12 VDC |

**8 Light/surge voltage suppressor and common specification**

|     |   |
|-----|---|
| Nil | Without light/surge voltage suppressor (Non-polar)    |
| R   | With surge voltage suppressor (Non-polar)             |
| U   | With light/surge voltage suppressor (Non-polar)       |
| S   | With surge voltage suppressor (Positive common)       |
| Z   | With light/surge voltage suppressor (Positive common) |
| NS  | With surge voltage suppressor (Negative common)       |
| NZ  | With light/surge voltage suppressor (Negative common) |

\* Only "Z" and "NZ" types are available with a power-saving circuit.

**9 Manual override**

|   |  |
|---|--|
| <p><b>Nil:</b> Non-locking push type</p>        | <p><b>D:</b> Push-turn locking slotted type</p>  |
| <p><b>E:</b> Push-turn locking lever type</p>  | <p><b>F:</b> Slide locking type</p>             |

**10 A, B port size Thread piping**

| Symbol | Port size | Applicable series |
|--------|-----------|-------------------|
| 02     | 1/4       | SY7000            |

**One-touch fitting (Metric)**

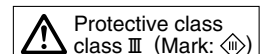
| Symbol | A, B port | SY5000 | SY7000 |
|--------|-----------|--------|--------|
| C4     | ø4        | ●      | —      |
| C6     | ø6        | ●      | ●      |
| C8     | ø8        | ●      | ●      |
| C10    | ø10       | —      | ●      |
| C12    | ø12       | —      | ●      |

**11 Thread type**

|     |      |
|-----|------|
| Nil | Rc   |
| F   | G    |
| N   | NPT  |
| T   | NPTF |

\* The 25A- series specifications and dimensions are the same as those of the standard model.

For details, refer to the [Web Catalog](#).



Type 10  
Side Ported

Type 11  
Bottom Ported

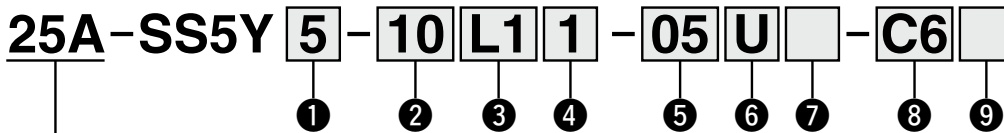
# Plug-in Connector Connecting Base

Lead Wire

## 25A-SY5000/7000 Series



### How to Order Manifolds



• Series compatible with secondary batteries

#### ① Series

|   |        |
|---|--------|
| 5 | SY5000 |
| 7 | SY7000 |

#### ② Type

|    |               |
|----|---------------|
| 10 | Side ported   |
| 11 | Bottom ported |

#### ③ Number of cores (Lead wire)

|    |          |
|----|----------|
| L1 | 34 cores |
| L2 | 17 cores |
| L3 | 9 cores  |

#### ④ Lead wire length

|   |       |
|---|-------|
| 1 | 0.6 m |
| 2 | 1.5 m |
| 3 | 3 m   |

#### ⑥ P, E port entry

|   |                               |
|---|-------------------------------|
| U | U side (2 to 10 stations)     |
| D | D side (2 to 10 stations)     |
| B | Both sides (2 to 24 stations) |

#### ⑦ SUP/EXH block assembly

|     |                                   |
|-----|-----------------------------------|
| Nil | Internal pilot                    |
| S   | Internal pilot, Built-in silencer |
| R   | External pilot                    |

\* The 3/5(E) port is plugged for the built-in silencer type.  
\* When the built-in silencer type is used, keep the exhaust port from coming into direct contact with water or other liquids.

#### ⑤ Valve stations

##### (L1□)

| Symbol | Stations    | Note   |
|--------|-------------|--|
| 02     | 2 stations  | Double wiring*1                                      |
| ⋮      | ⋮           |  |
| 16     | 16 stations | Specified layout*2<br>(Up to 32 solenoids available) |
| 02     | 2 stations  |  |
| ⋮      | ⋮           |  |
| 24     | 24 stations |  |

##### (L3□)

| Symbol | Stations   | Note  |
|--------|------------|---|
| 02     | 2 stations | Double wiring*1                                     |
| ⋮      | ⋮          |   |
| 04     | 4 stations | Specified layout*2<br>(Up to 8 solenoids available) |
| 02     | 2 stations |   |
| ⋮      | ⋮          |   |
| 08     | 8 stations |   |

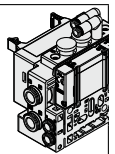
##### (L2□)

| Symbol | Stations    | Note   |
|--------|-------------|--|
| 02     | 2 stations  | Double wiring*1                                      |
| ⋮      | ⋮           |  |
| 08     | 8 stations  | Specified layout*2<br>(Up to 16 solenoids available) |
| 02     | 2 stations  |  |
| ⋮      | ⋮           |  |
| 16     | 16 stations |  |

- \*1 Double wiring: 2-position single, 2-position double, 3-position, and 4-position valves can be used on all manifold stations. The use of a 2-position single solenoid will result in an unused control signal. If this is not desired, order with a specified layout.
- \*2 Specified layout: Indicate the wiring specifications on the manifold specification sheet. (Note that 2-position double, 3-position, and 4-position valves cannot be used where single wiring has been specified.)
- \* The blanking plate assembly is included in this number.

#### ⑧ A, B port size (Metric)

| Symbol                              | A, B port                  | Type 10/Side ported |        | Type 11/Bottom ported |        |
|-------------------------------------|----------------------------|---------------------|--------|-----------------------|--------|
|                                     |                            | SY5000              | SY7000 | SY5000                | SY7000 |
| C4<br>C6<br>C8<br>C10<br>C12        | Straight                   | ø4                  | ●      | —                     | ●      |
|                                     |                            | ø6                  | ●      | ●                     | ●      |
|                                     |                            | ø8                  | ●      | ●                     | ●      |
|                                     |                            | ø10                 | —      | ●                     | —      |
|                                     |                            | ø12                 | —      | ●                     | —      |
| CM*1                                | Straight port, mixed sizes | ●                   | ●      | ●                     | ●      |
| P, E port size (One-touch fittings) |                            | ø10                 | ø12    | ø10                   | ø12    |



- \*1 Indicate the sizes on the manifold specification sheet for "CM."
- \* The direction of P, E port fittings is the same as for the A, B port.

#### ⑨ Mounting

| Symbol | Mounting          | Option     |                |
|--------|-------------------|------------|----------------|
|        |                   | Name plate | Station number |
| Nil    | Direct mounting   | —          | —              |
| AA     |                   | ●          | ●              |
| BA     |                   | ●          | —              |
| D□     | DIN rail mounting | —          | —              |
| A□     |                   | ●          | ●              |
| B□     |                   | ●          | —              |

- \* Enter the number of stations inside □ when it is larger than the number of valve stations. (Refer to "DIN Rail Option" below.)
- \* Only direct mounting is available for the type 11 bottom ported type.

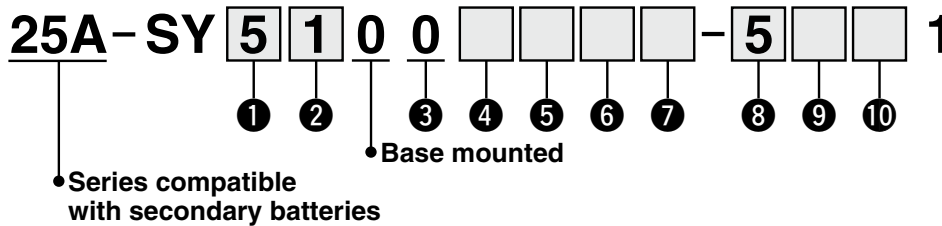
##### DIN Rail Option

| Symbol | Mounting                        | Option   |
|--------|---------------------------------|--|
| Nil    | Direct mounting                 |  |
| 0      | Without DIN rail (with bracket) |  |
| 3      | For 3 stations                  | Specify a longer rail than the total length of specified stations. |
| ⋮      | ⋮                               |  |
| 24     | For 24 stations                 |  |

- \* The 25A- series specifications and dimensions are the same as those of the standard model.

For details, refer to the [Web Catalog](#).

**How to Order Valves (With mounting screw)**



**1 Series**

|   |        |
|---|--------|
| 5 | SY5000 |
| 7 | SY7000 |

**2 Type of actuation**

|   |  |
|---|--|
| 1 | 2-position single                        |
| 2 | 2-position double                        |
| 3 | 3-position closed center                 |
| 4 | 3-position exhaust center                |
| 5 | 3-position pressure center               |
| A | 4-position dual 3-port valve (N.C./N.C.) |
| B | 4-position dual 3-port valve (N.O./N.O.) |
| C | 4-position dual 3-port valve (N.C./N.O.) |

**3 Seal type**

|   |             |
|---|-------------|
| 0 | Rubber seal |
|---|-------------|

**4 Pilot type**

|     |                |
|-----|----------------|
| Nil | Internal pilot |
| R   | External pilot |

\* When selecting the external pilot specification for the 4-position dual 3-port valve, pay attention to the pilot pressure. For details, refer to the valve specifications of the standard SY series product in the **Web Catalog**.

**5 Back pressure check valve (Built-in valve type)**

|     |          |
|-----|----------|
| Nil | None     |
| H   | Built-in |

\* The built-in valve type back pressure check valve is not available for the 3-position type or the SY7000.

**6 Pilot valve option**

|     |                               |
|-----|-------------------------------|
| Nil | Standard (0.7 MPa)            |
| B   | Quick response type (0.7 MPa) |

**7 Coil type**

|     |  |
|-----|--|
| Nil | Standard   |
| T   | With power-saving circuit (Continuous duty type) |

\* Be sure to select the power-saving circuit type if the valve is to be continuously energized for long periods of time.  
\* Be careful of the energizing time when the power-saving circuit is selected. For details, refer to the standard product catalog.

**8 Rated voltage**

|   |        |
|---|--------|
| 5 | 24 VDC |
| 6 | 12 VDC |

**9 Light/surge voltage suppressor and common specification**

|     |   |
|-----|---|
| Nil | Without light/surge voltage suppressor (Non-polar)    |
| R   | With surge voltage suppressor (Non-polar)             |
| U   | With light/surge voltage suppressor (Non-polar)       |
| S   | With surge voltage suppressor (Positive common)       |
| Z   | With light/surge voltage suppressor (Positive common) |
| NS  | With surge voltage suppressor (Negative common)       |
| NZ  | With light/surge voltage suppressor (Negative common) |

\* Only "Z" and "NZ" types are available with a power-saving circuit.

**10 Manual override**

|   |   |
|---|---|
| <p><b>Nil:</b> Non-locking push type</p>      | <p><b>D:</b> Push-turn locking slotted type</p> |
| <p><b>E:</b> Push-turn locking lever type</p> | <p><b>F:</b> Slide locking type</p>             |

\* The 25A- series specifications and dimensions are the same as those of the standard model.

For details, refer to the **Web Catalog**.

# Plug-in Connector Connecting Base

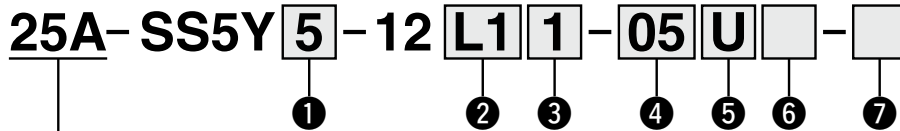
Lead Wire



Type 12  
Top Ported

# 25A-SY5000/7000 Series

## How to Order Manifolds



• Series compatible with secondary batteries

### 1 Series

|   |        |
|---|--------|
| 5 | SY5000 |
| 7 | SY7000 |

### 2 Number of cores (Lead wire)

|    |          |
|----|----------|
| L1 | 34 cores |
| L2 | 17 cores |
| L3 | 9 cores  |

### 3 Lead wire length

|   |       |
|---|-------|
| 1 | 0.6 m |
| 2 | 1.5 m |
| 3 | 3 m   |

### 4 Valve stations

(L1□)

| Symbol | Stations    | Note   |
|--------|-------------|--|
| 02     | 2 stations  | Double wiring*1                                      |
| ⋮      | ⋮           |  |
| 16     | 16 stations | Specified layout*2<br>(Up to 32 solenoids available) |
| 02     | 2 stations  |  |
| ⋮      | ⋮           |  |
| 24     | 24 stations |  |

(L3□)

| Symbol | Stations   | Note  |
|--------|------------|---|
| 02     | 2 stations | Double wiring*1                                     |
| ⋮      | ⋮          |   |
| 04     | 4 stations | Specified layout*2<br>(Up to 8 solenoids available) |
| 02     | 2 stations |   |
| ⋮      | ⋮          |   |
| 08     | 8 stations |   |

(L2□)

| Symbol | Stations    | Note   |
|--------|-------------|--|
| 02     | 2 stations  | Double wiring*1                                      |
| ⋮      | ⋮           |  |
| 08     | 8 stations  | Specified layout*2<br>(Up to 16 solenoids available) |
| 02     | 2 stations  |  |
| ⋮      | ⋮           |  |
| 16     | 16 stations |  |

- \*1 Double wiring: 2-position single, 2-position double, 3-position, and 4-position valves can be used on all manifold stations. The use of a 2-position single solenoid will result in an unused control signal. If this is not desired, order with a specified layout.
- \*2 Specified layout: Indicate the wiring specifications on the manifold specification sheet. (Note that 2-position double, 3-position, and 4-position valves cannot be used where single wiring has been specified.)
- \* The blanking plate assembly is included in this number.

### 5 P, E port entry

|     |                               |
|-----|-------------------------------|
| U*1 | U side (2 to 10 stations)     |
| D*1 | D side (2 to 10 stations)     |
| B   | Both sides (2 to 24 stations) |

\*1 6 For type "S," SUP/EXH block assembly with a built-in silencer, choose "U" or "D" for P port entry.

### 6 SUP/EXH block assembly

|     |                                   |
|-----|-----------------------------------|
| Nil | Internal pilot                    |
| S   | Internal pilot, Built-in silencer |

- \* The P and E ports are only available on the U and D sides for the built-in silencer type. The 3/5(E) port is plugged. The silencer exhaust port is located on the opposite side of the P and E port entry. (Example: When the P and E port entry is on the D side, the silencer exhaust port is on the U side.)
- \* When the built-in silencer type is used, keep the exhaust port from coming into direct contact with water or other liquids.

### 7 Mounting

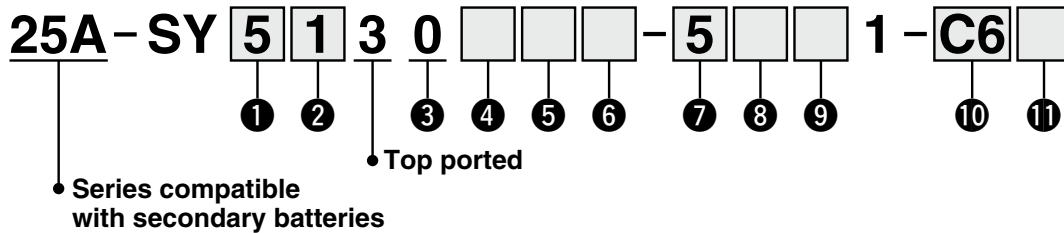
|     |                                      |   |
|-----|--------------------------------------|---|
| Nil | Direct mounting                      |   |
| D   | DIN rail mounting (With DIN rail)    |   |
| D0  | DIN rail mounting (Without DIN rail) |   |
| D3  | For 3 stations                       | Specify a length longer than that of the standard rail. |
| ⋮   | ⋮                                    |   |
| D24 | For 24 stations                      |   |

\* The 25A- series specifications and dimensions are the same as those of the standard model.

For details, refer to the [Web Catalog](#).



How to Order Valves (With mounting screw)



**1 Series**

|   |        |
|---|--------|
| 5 | SY5000 |
| 7 | SY7000 |

**2 Type of actuation**

|   |  |
|---|--|
| 1 | 2-position single                        |
| 2 | 2-position double                        |
| 3 | 3-position closed center                 |
| 4 | 3-position exhaust center                |
| 5 | 3-position pressure center               |
| A | 4-position dual 3-port valve (N.C./N.C.) |
| B | 4-position dual 3-port valve (N.O./N.O.) |
| C | 4-position dual 3-port valve (N.C./N.O.) |

**3 Seal type**

|   |             |
|---|-------------|
| 0 | Rubber seal |
|---|-------------|

**4 Back pressure check valve (Built-in valve type)**

|     |          |
|-----|----------|
| Nil | None     |
| H   | Built-in |

\* The built-in valve type back pressure check valve is not available for the 3-position type or the SY7000.

**5 Pilot valve option**

|     |                               |
|-----|-------------------------------|
| Nil | Standard (0.7 MPa)            |
| B   | Quick response type (0.7 MPa) |

**6 Coil type**

|     |  |
|-----|--|
| Nil | Standard   |
| T   | With power-saving circuit (Continuous duty type) |

\* Be sure to select the power-saving circuit type if the valve is to be continuously energized for long periods of time.  
 \* Be careful of the energizing time when the power-saving circuit is selected. For details, refer to the standard product catalog.

**7 Rated voltage**

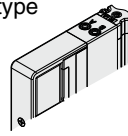
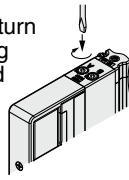
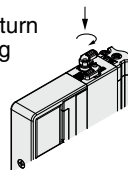
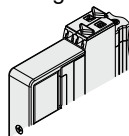
|   |        |
|---|--------|
| 5 | 24 VDC |
| 6 | 12 VDC |

**8 Light/surge voltage suppressor and common specification**

|     |   |
|-----|---|
| Nil | Without light/surge voltage suppressor (Non-polar)    |
| R   | With surge voltage suppressor (Non-polar)             |
| U   | With light/surge voltage suppressor (Non-polar)       |
| S   | With surge voltage suppressor (Positive common)       |
| Z   | With light/surge voltage suppressor (Positive common) |
| NS  | With surge voltage suppressor (Negative common)       |
| NZ  | With light/surge voltage suppressor (Negative common) |

\* Only "Z" and "NZ" types are available with a power-saving circuit.

**9 Manual override**

|   |  |
|---|--|
| <p><b>Nil:</b><br/>Non-locking push type</p>        | <p><b>D:</b><br/>Push-turn locking slotted type</p>  |
| <p><b>E:</b><br/>Push-turn locking lever type</p>  | <p><b>F:</b><br/>Slide locking type</p>             |

**10 A, B port size Thread piping**

| Symbol | Port size | Applicable series |
|--------|-----------|-------------------|
| 02     | 1/4       | SY7000            |

**One-touch fitting (Metric)**

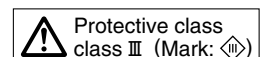
| Symbol | A, B port | SY5000 | SY7000 |
|--------|-----------|--------|--------|
| C4     | ø4        | ●      | —      |
| C6     | ø6        | ●      | ●      |
| C8     | ø8        | ●      | ●      |
| C10    | ø10       | —      | ●      |
| C12    | ø12       | —      | ●      |

**11 Thread type**

|     |      |
|-----|------|
| Nil | Rc   |
| F   | G    |
| N   | NPT  |
| T   | NPTF |

\* The 25A- series specifications and dimensions are the same as those of the standard model.

For details, refer to the [Web Catalog](#).



Type 10  
Side Ported

Type 11  
Bottom Ported

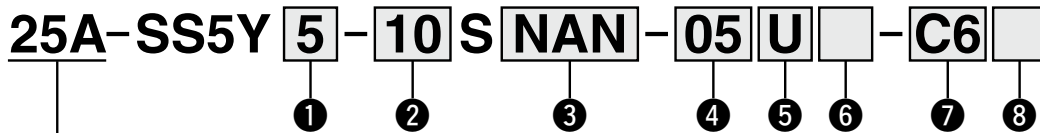
# Plug-in Connector Connecting Base

EX260

# 25A-SY5000/7000 Series



## How to Order Manifolds



• Series compatible with secondary batteries

### ① Series

|   |        |
|---|--------|
| 5 | SY5000 |
| 7 | SY7000 |

### ② Type

|    |               |
|----|---------------|
| 10 | Side ported   |
| 11 | Bottom ported |

### ③ SI unit specifications

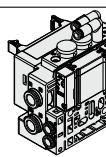
(Output polarity, Protocol, Number of outputs, Communication connector)

| Symbol (Output polarity) |                       | Protocol        | Number of outputs | Communication connector |
|--------------------------|-----------------------|-----------------|-------------------|-------------------------|
| Positive common (NPN)    | Negative common (PNP) |                 |                   |                         |
| 0                        |                       | Without SI unit |                   |                         |
| QA                       | QAN                   | DeviceNet®      | 32                | M12                     |
| QB                       | QBN                   |                 | 16                |                         |
| NA                       | NAN                   | PROFIBUS DP     | 32                | M12                     |
| NB                       | NBN                   |                 | 16                |                         |
| VA                       | VAN                   | CC-Link         | 32                | M12                     |
| VB                       | VBN                   |                 | 16                |                         |
| DA                       | DAN                   | EtherCAT        | 32                | M12                     |
| DB                       | DBN                   |                 | 16                |                         |
| FA                       | FAN                   | PROFINET        | 32                | M12                     |
| FB                       | FBN                   |                 | 16                |                         |
| EA                       | EAN                   | EtherNet/IP™    | 32                | M12                     |
| EB                       | EBN                   |                 | 16                |                         |
| —                        | KAN                   | IO-Link         | 32                | M12                     |

- \* Without SI unit, the output polarity is decided by the SI unit used. Ensure a match with the common specification of the valves to be used.
- \* DIN rail cannot be mounted without SI unit.
- \* For IO-Link, only the negative common (PNP) type and the 32 outputs type are available.

### ⑦ A, B port size (Metric)

| Symbol                              | A, B port                  | Type 10/Side ported |        | Type 11/Bottom ported |        |
|-------------------------------------|----------------------------|---------------------|--------|-----------------------|--------|
|                                     |                            | SY5000              | SY7000 | SY5000                | SY7000 |
| C4                                  | ∅4                         | ●                   | —      | ●                     | —      |
| C6                                  | ∅6                         | ●                   | ●      | ●                     | ●      |
| C8                                  | ∅8                         | ●                   | ●      | ●                     | ●      |
| C10                                 | ∅10                        | —                   | ●      | —                     | ●      |
| C12                                 | ∅12                        | —                   | ●      | —                     | ●      |
| CM <sup>1</sup>                     | Straight port, mixed sizes | ●                   | ●      | ●                     | ●      |
| P, E port size (One-touch fittings) |                            | ∅10                 | ∅12    | ∅10                   | ∅12    |



\*1 Indicate the sizes on the manifold specification sheet for "CM."

### ④ Valve stations

In the case of the 32-output SI unit

| Symbol | Stations    | Note  |
|--------|-------------|---|
| 02     | 2 stations  | Double wiring*1                                   |
| ⋮      | ⋮           |   |
| 16     | 16 stations | Specified layout*2 (Up to 32 solenoids available) |
| 02     | 2 stations  |   |
| ⋮      | ⋮           |   |
| 24     | 24 stations |   |

In the case of the 16-output SI unit

| Symbol | Stations    | Note  |
|--------|-------------|---|
| 02     | 2 stations  | Double wiring*1                                   |
| ⋮      | ⋮           |   |
| 08     | 8 stations  | Specified layout*2 (Up to 16 solenoids available) |
| 02     | 2 stations  |   |
| ⋮      | ⋮           |   |
| 16     | 16 stations |   |

- \*1 Double wiring: 2-position single, 2-position double, 3-position, and 4-position valves can be used on all manifold stations. The use of a 2-position single solenoid will result in an unused control signal. If this is not desired, order with a specified layout.
- \*2 Specified layout: Indicate the wiring specifications on the manifold specification sheet. (Note that 2-position double, 3-position, and 4-position valves cannot be used where single wiring has been specified.)

- \* The blanking plate assembly is included in this number.
- \* For the model without the SI unit (S0), note the maximum number of solenoids of the SI unit that will be mounted. If the layout is specified, indicate it on the manifold specification sheet.

### ⑤ P, E port entry

|   |                               |
|---|-------------------------------|
| U | U side (2 to 10 stations)     |
| D | D side (2 to 10 stations)     |
| B | Both sides (2 to 24 stations) |

### ⑥ SUP/EXH block assembly

|     |                                   |
|-----|-----------------------------------|
| Nil | Internal pilot                    |
| S   | Internal pilot, Built-in silencer |
| R   | External pilot                    |

- \* The 3/5(E) port is plugged for the built-in silencer type.
- \* When the built-in silencer type is used, keep the exhaust port from coming into direct contact with water or other liquids.

### ⑧ Mounting

| Symbol | Mounting          | Option     |                |
|--------|-------------------|------------|----------------|
|        |                   | Name plate | Station number |
| Nil    | Direct mounting   | —          | —              |
| AA     |                   | ●          | ●              |
| BA     |                   | ●          | —              |
| D□     | DIN rail mounting | —          | —              |
| A□     |                   | ●          | ●              |
| B□     |                   | ●          | —              |

- \* Enter the number of stations inside □ when it is larger than the number of valve stations. (Refer to "DIN Rail Option" below.)
- \* Only direct mounting is available for the type 11 bottom ported type.

#### DIN Rail Option

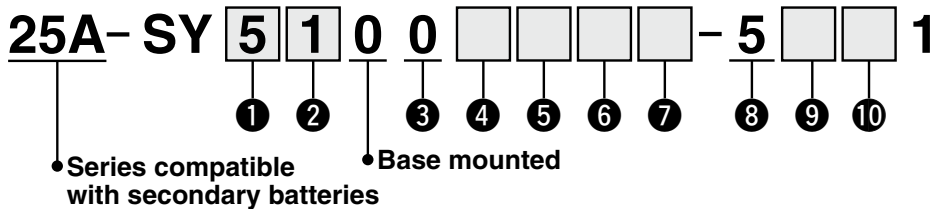
|     |                                 |
|-----|---------------------------------|
| Nil | Direct mounting                 |
| 0   | Without DIN rail (with bracket) |
| 3   | For 3 stations                  |
| ⋮   | ⋮                               |
| 24  | For 24 stations                 |

- \* The 25A-series specifications and dimensions are the same as those of the standard model.

For details, refer to the [Web Catalog](#).

For details on the EX260 Integrated Type (For Output) Serial Transmission System, refer to the [Web Catalog](#) and the Operation Manual. For the part numbers of the SI units to be mounted, refer to page 53 in this catalog. Please download the Operation Manual via the SMC website: <https://www.smcworld.com>

How to Order Valves (With mounting screw)



1 Series

|   |        |
|---|--------|
| 5 | SY5000 |
| 7 | SY7000 |

2 Type of actuation

|   |  |
|---|--|
| 1 | 2-position single                        |
| 2 | 2-position double                        |
| 3 | 3-position closed center                 |
| 4 | 3-position exhaust center                |
| 5 | 3-position pressure center               |
| A | 4-position dual 3-port valve (N.C./N.C.) |
| B | 4-position dual 3-port valve (N.O./N.O.) |
| C | 4-position dual 3-port valve (N.C./N.O.) |

3 Seal type

|   |             |
|---|-------------|
| 0 | Rubber seal |
|---|-------------|

4 Pilot type

|     |                |
|-----|----------------|
| Nil | Internal pilot |
| R   | External pilot |

\* When selecting the external pilot specification for the 4-position dual 3-port valve, pay attention to the pilot pressure. For details, refer to the valve specifications of the standard SY series product in the **Web Catalog**.

5 Back pressure check valve (Built-in valve type)

|     |          |
|-----|----------|
| Nil | None     |
| H   | Built-in |

\* The built-in valve type back pressure check valve is not available for the 3-position type or the SY7000.

6 Pilot valve option

|     |                               |
|-----|-------------------------------|
| Nil | Standard (0.7 MPa)            |
| B   | Quick response type (0.7 MPa) |

7 Coil type

|     |  |
|-----|--|
| Nil | Standard   |
| T   | With power-saving circuit (Continuous duty type) |

\* Be sure to select the power-saving circuit type if the valve is to be continuously energized for long periods of time.  
\* Be careful of the energizing time when the power-saving circuit is selected. For details, refer to the standard product catalog.

8 Rated voltage

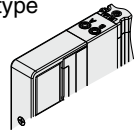
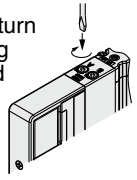
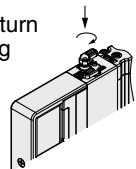
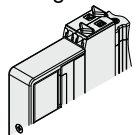
|   |        |
|---|--------|
| 5 | 24 VDC |
|---|--------|

9 Light/surge voltage suppressor and common specification

|    |   |
|----|---|
| R  | With surge voltage suppressor (Non-polar)             |
| U  | With light/surge voltage suppressor (Non-polar)       |
| S  | With surge voltage suppressor (Positive common)       |
| Z  | With light/surge voltage suppressor (Positive common) |
| NS | With surge voltage suppressor (Negative common)       |
| NZ | With light/surge voltage suppressor (Negative common) |

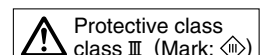
\* Select "R," "U," "S," or "Z" for the valve when the SI unit output polarity is Nil (positive common). Select "R," "U," "NS," or "NZ" for the valve when the SI unit output polarity is N (negative common).  
\* Only "Z" and "NZ" types are available with a power-saving circuit.

10 Manual override

|  |   |
|--|---|
| <p>Nil: Non-locking push type</p>        | <p>D: Push-turn locking slotted type</p>  |
| <p>E: Push-turn locking lever type</p>  | <p>F: Slide locking type</p>             |

\* The 25A- series specifications and dimensions are the same as those of the standard model.

For details, refer to the **Web Catalog**.



# Plug-in Connector Connecting Base

EX260



Type 12  
Top Ported

# 25A-SY5000/7000 Series

## How to Order Manifolds



• Series compatible with secondary batteries

### ① Series

|   |        |
|---|--------|
| 5 | SY5000 |
| 7 | SY7000 |

### ② SI unit specifications

(Output polarity, Protocol, Number of outputs, Communication connector)

| Symbol (Output polarity) |                       | Protocol        | Number of outputs | Communication connector |
|--------------------------|-----------------------|-----------------|-------------------|-------------------------|
| Positive common (NPN)    | Negative common (PNP) |                 |                   |                         |
| 0                        |                       | Without SI unit |                   |                         |
| QA                       | QAN                   | DeviceNet®      | 32                | M12                     |
| QB                       | QBN                   |                 | 16                |                         |
| NA                       | NAN                   | PROFIBUS DP     | 32                | M12                     |
| NB                       | NBN                   |                 | 16                |                         |
| VA                       | VAN                   | CC-Link         | 32                | M12                     |
| VB                       | VBN                   |                 | 16                |                         |
| DA                       | DAN                   | EtherCAT        | 32                | M12                     |
| DB                       | DBN                   |                 | 16                |                         |
| FA                       | FAN                   | PROFINET        | 32                | M12                     |
| FB                       | FBN                   |                 | 16                |                         |
| EA                       | EAN                   | EtherNet/IP™    | 32                | M12                     |
| EB                       | EBN                   |                 | 16                |                         |
| —                        | KAN                   | IO-Link         | 32                | M12                     |

- \* Without SI unit, the output polarity is decided by the SI unit used. Ensure a match with the common specification of the valves to be used.
- \* DIN rail cannot be mounted without SI unit.
- \* For IO-Link, only the negative common (PNP) type and the 32 outputs type are available.

### ③ Valve stations

In the case of the 32-output SI unit

| Symbol | Stations    | Note   |
|--------|-------------|--|
| 02     | 2 stations  | Double wiring*1                                      |
| ⋮      | ⋮           |  |
| 16     | 16 stations | Specified layout*2<br>(Up to 32 solenoids available) |
| 02     | 2 stations  |  |
| ⋮      | ⋮           |  |
| 24     | 24 stations |  |

In the case of the 16-output SI unit

| Symbol | Stations    | Note   |
|--------|-------------|--|
| 02     | 2 stations  | Double wiring*1                                      |
| ⋮      | ⋮           |  |
| 08     | 8 stations  | Specified layout*2<br>(Up to 16 solenoids available) |
| 02     | 2 stations  |  |
| ⋮      | ⋮           |  |
| 16     | 16 stations |  |

- \*1 Double wiring: 2-position single, 2-position double, 3-position, and 4-position valves can be used on all manifold stations. The use of a 2-position single solenoid will result in an unused control signal. If this is not desired, order with a specified layout.
- \*2 Specified layout: Indicate the wiring specifications on the manifold specification sheet. (Note that 2-position double, 3-position, and 4-position valves cannot be used where single wiring has been specified.)
- \* The blanking plate assembly is included in this number.
- \* For the model without the SI unit (S0), note the maximum number of solenoids of the SI unit that will be mounted. If the layout is specified, indicate it on the manifold specification sheet.

### ④ P, E port entry

|     |                               |
|-----|-------------------------------|
| U*1 | U side (2 to 10 stations)     |
| D*1 | D side (2 to 10 stations)     |
| B   | Both sides (2 to 24 stations) |

- \*1 ⑤ For type “S,” SUP/EXH block assembly with a built-in silencer, choose “U” or “D” for P port entry.

### ⑤ SUP/EXH block assembly

|     |                                   |
|-----|-----------------------------------|
| Nil | Internal pilot                    |
| S   | Internal pilot, Built-in silencer |

- \* The P and E ports are only available on the U and D sides for the built-in silencer type. The 3/5(E) port is plugged. The silencer exhaust port is located on the opposite side of the P and E port entry. (Example: When the P and E port entry is on the D side, the silencer exhaust port is on the U side.)
- \* When the built-in silencer type is used, keep the exhaust port from coming into direct contact with water or other liquids.

### ⑥ Mounting

| Nil | Direct mounting                      |   |
|-----|--------------------------------------|---|
| D   | DIN rail mounting (With DIN rail)    |   |
| D0  | DIN rail mounting (Without DIN rail) |   |
| D3  | For 3 stations                       | Specify a length longer than that of the standard rail. |
| ⋮   | ⋮                                    |   |
| D24 | For 24 stations                      |   |

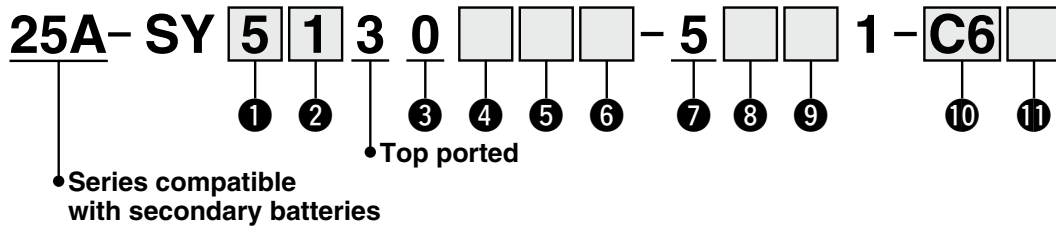
- \* If the DIN rail must be mounted without an SI unit, select D0. Then, refer to L3 of the dimensions for the DIN rail length and order separately.

- \* The 25A- series specifications and dimensions are the same as those of the standard model.

For details, refer to the [Web Catalog](#).

For details on the EX260 Integrated Type (For Output) Serial Transmission System, refer to the [Web Catalog](#) and the [Operation Manual](#). For the part numbers of the SI units to be mounted, refer to page 53 in this catalog. Please download the [Operation Manual](#) via the SMC website: <https://www.smcworld.com>

### How to Order Valves (With mounting screw)



#### 1 Series

|   |        |
|---|--------|
| 5 | SY5000 |
| 7 | SY7000 |

#### 2 Type of actuation

|   |  |
|---|--|
| 1 | 2-position single                        |
| 2 | 2-position double                        |
| 3 | 3-position closed center                 |
| 4 | 3-position exhaust center                |
| 5 | 3-position pressure center               |
| A | 4-position dual 3-port valve (N.C./N.C.) |
| B | 4-position dual 3-port valve (N.O./N.O.) |
| C | 4-position dual 3-port valve (N.C./N.O.) |

#### 3 Seal type

|   |             |
|---|-------------|
| 0 | Rubber seal |
|---|-------------|

#### 4 Back pressure check valve (Built-in valve type)

|     |          |
|-----|----------|
| Nil | None     |
| H   | Built-in |

\* The built-in valve type back pressure check valve is not available for the 3-position type or the SY7000.

#### 5 Pilot valve option

|     |                               |
|-----|-------------------------------|
| Nil | Standard (0.7 MPa)            |
| B   | Quick response type (0.7 MPa) |

#### 6 Coil type

|     |  |
|-----|--|
| Nil | Standard   |
| T   | With power-saving circuit (Continuous duty type) |

\* Be sure to select the power-saving circuit type if the valve is to be continuously energized for long periods of time.  
\* Be careful of the energizing time when the power-saving circuit is selected. For details, refer to the standard product catalog.

#### 7 Rated voltage

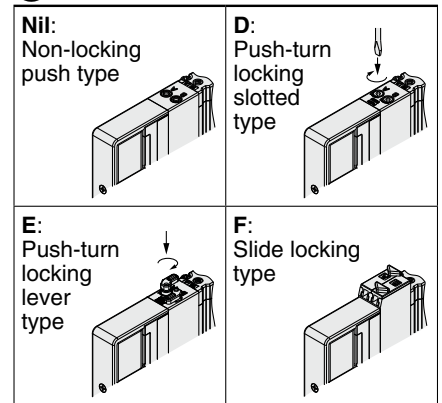
|   |        |
|---|--------|
| 5 | 24 VDC |
|---|--------|

#### 8 Light/surge voltage suppressor and common specification

|    |   |
|----|---|
| R  | With surge voltage suppressor (Non-polar)             |
| U  | With light/surge voltage suppressor (Non-polar)       |
| S  | With surge voltage suppressor (Positive common)       |
| Z  | With light/surge voltage suppressor (Positive common) |
| NS | With surge voltage suppressor (Negative common)       |
| NZ | With light/surge voltage suppressor (Negative common) |

\* Select "R," "U," "S," or "Z" for the valve when the SI unit output polarity is Nil (positive common). Select "R," "U," "NS," or "NZ" for the valve when the SI unit output polarity is N (negative common).  
\* Only "Z" and "NZ" types are available with a power-saving circuit.

#### 9 Manual override



#### 10 A, B port size

##### Thread piping

| Symbol | Port size | Applicable series |
|--------|-----------|-------------------|
| 02     | 1/4       | SY7000            |

##### One-touch fitting (Metric)

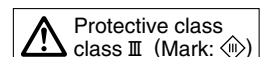
| Symbol | A, B port | SY5000 | SY7000 |
|--------|-----------|--------|--------|
| C4     | ø4        | ●      | —      |
| C6     | ø6        | ●      | ●      |
| C8     | ø8        | ●      | ●      |
| C10    | ø10       | —      | ●      |
| C12    | ø12       | —      | ●      |

#### 11 Thread type

|     |      |
|-----|------|
| Nil | Rc   |
| F   | G    |
| N   | NPT  |
| T   | NPTF |

\* The 25A- series specifications and dimensions are the same as those of the standard model.

For details, refer to the [Web Catalog](#).



Type 10  
Side Ported

Type 11  
Bottom Ported

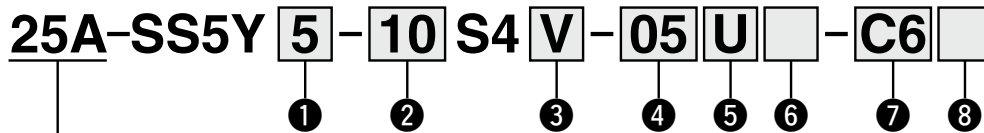
# Plug-in Connector Connecting Base

EX126

# 25A-SY5000/7000 Series



## How to Order Manifolds



• Series compatible with secondary batteries

### ① Series

|   |        |
|---|--------|
| 5 | SY5000 |
| 7 | SY7000 |

### ② Type

|    |               |
|----|---------------|
| 10 | Side ported   |
| 11 | Bottom ported |

### ③ SI unit

|   |                               |
|---|-------------------------------|
| 0 | Without SI unit               |
| V | CC-Link (Positive common NPN) |

\* Only a terminal block plate is mounted for the valve without SI unit.  
For SI unit part numbers, refer to page 53.

### ④ Valve stations

| Symbol | Stations    | Note   |
|--------|-------------|--|
| 02     | 2 stations  | Double wiring*1                                      |
| ⋮      | ⋮           |  |
| 08     | 8 stations  |  |
| 02     | 2 stations  | Specified layout*2<br>(Up to 16 solenoids available) |
| ⋮      | ⋮           |  |
| 16     | 16 stations |  |

\*1 Double wiring: 2-position single, 2-position double, 3-position, and 4-position valves can be used on all manifold stations.  
The use of a 2-position single solenoid will result in an unused control signal. If this is not desired, order with a specified layout.

\*2 Specified layout: Indicate the wiring specifications on the manifold specification sheet. (Note that 2-position double, 3-position, and 4-position valves cannot be used where single wiring has been specified.)

\* The blanking plate assembly is included in this number.

### ⑤ P, E port entry

|   |                               |
|---|-------------------------------|
| U | U side (2 to 10 stations)     |
| D | D side (2 to 10 stations)     |
| B | Both sides (2 to 16 stations) |

### ⑥ SUP/EXH block assembly

|     |                                   |
|-----|-----------------------------------|
| Nil | Internal pilot                    |
| S   | Internal pilot, Built-in silencer |
| R   | External pilot                    |

\* The 3/5(E) port is plugged for the built-in silencer type.

\* When the built-in silencer type is used, keep the exhaust port from coming into direct contact with water or other liquids.

### ⑧ Mounting

| Symbol | Mounting          | Option     |                |
|--------|-------------------|------------|----------------|
|        |                   | Name plate | Station number |
| Nil    | Direct mounting   | —          | —              |
| AA     |                   | ●          | ●              |
| BA     |                   | ●          | —              |
| D□     | DIN rail mounting | —          | —              |
| A□     |                   | ●          | ●              |
| B□     |                   | ●          | —              |

\* Enter the number of stations inside □ when it is larger than the number of valve stations. (Refer to "DIN Rail Option" below.)  
\* Only direct mounting is available for the type 11 bottom-ported type.

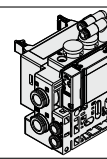
### DIN Rail Option

|     |                                 |
|-----|---------------------------------|
| Nil | Direct mounting                 |
| 0   | Without DIN rail (with bracket) |
| 3   | For 3 stations                  |
| ⋮   | ⋮                               |
| 16  | For 16 stations                 |

Specify a longer rail than the total length of specified stations.

### ⑦ A, B port (Metric)

| Symbol                              | A, B port                  | Type 10/<br>Side ported |        | Type 11/<br>Bottom ported |        |
|-------------------------------------|----------------------------|-------------------------|--------|---------------------------|--------|
|                                     |                            | SY5000                  | SY7000 | SY5000                    | SY7000 |
| C4                                  | Straight                   | ●                       | —      | ●                         | —      |
| C6                                  |                            | ●                       | ●      | ●                         | ●      |
| C8                                  |                            | ●                       | ●      | ●                         | ●      |
| C10                                 |                            | —                       | ●      | —                         | ●      |
| C12                                 |                            | —                       | ●      | —                         | ●      |
| CM*1                                | Straight port, mixed sizes | ●                       | ●      | ●                         | ●      |
| P, E port size (One-touch fittings) |                            | ø10                     | ø12    | ø10                       | ø12    |



\*1 Indicate the sizes on the manifold specification sheet for "CM."

\* The direction of P, E port fittings is the same as for the A, B port.

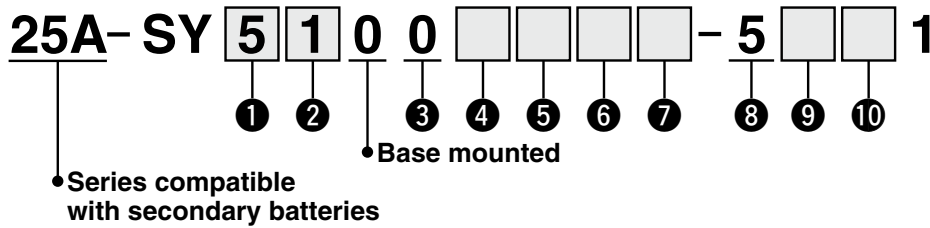
\* The 25A-series specifications and dimensions are the same as those of the standard model.

For details, refer to the [Web Catalog](#).

For details on the EX126 Integrated Type (For Output) Serial Transmission System, refer to the [Web Catalog](#) and the Operation Manual. For the part numbers of the SI units to be mounted, refer to page 53 in this catalog. Please download the Operation Manual via the SMC website: <https://www.smcworld.com>



**How to Order Valves (With mounting screw)**



**1 Series**

|   |        |
|---|--------|
| 5 | SY5000 |
| 7 | SY7000 |

**2 Type of actuation**

|   |  |
|---|--|
| 1 | 2-position single                        |
| 2 | 2-position double                        |
| 3 | 3-position closed center                 |
| 4 | 3-position exhaust center                |
| 5 | 3-position pressure center               |
| A | 4-position dual 3-port valve (N.C./N.C.) |
| B | 4-position dual 3-port valve (N.O./N.O.) |
| C | 4-position dual 3-port valve (N.C./N.O.) |

**3 Seal type**

|   |             |
|---|-------------|
| 0 | Rubber seal |
|---|-------------|

**4 Pilot type**

|     |                |
|-----|----------------|
| Nil | Internal pilot |
| R   | External pilot |

\* When selecting the external pilot specification for the 4-position dual 3-port valve, pay attention to the pilot pressure. For details, refer to the valve specifications of the standard SY series product in the **Web Catalog**.

**5 Back pressure check valve (Built-in valve type)**

|     |          |
|-----|----------|
| Nil | None     |
| H   | Built-in |

\* The built-in valve type back pressure check valve is not available for the 3-position type or the SY7000.

**6 Pilot valve option**

|     |                               |
|-----|-------------------------------|
| Nil | Standard (0.7 MPa)            |
| B   | Quick response type (0.7 MPa) |

**7 Coil type**

|     |  |
|-----|--|
| Nil | Standard   |
| T   | With power-saving circuit (Continuous duty type) |

\* Be sure to select the power-saving circuit type if the valve is to be continuously energized for long periods of time.  
 \* Be careful of the energizing time when the power-saving circuit is selected. For details, refer to the standard product catalog.

**8 Rated voltage**

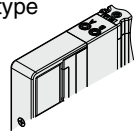
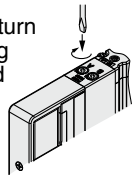
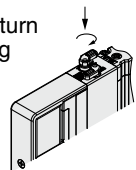
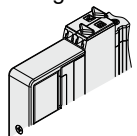
|   |        |
|---|--------|
| 5 | 24 VDC |
|---|--------|

**9 Light/surge voltage suppressor and common specification**

|   |   |
|---|---|
| R | With surge voltage suppressor (Non-polar)             |
| U | With light/surge voltage suppressor (Non-polar)       |
| S | With surge voltage suppressor (Positive common)       |
| Z | With light/surge voltage suppressor (Positive common) |

\* Only "Z" type is available with a power-saving circuit.

**10 Manual override**

|   |  |
|---|--|
| <p><b>Nil:</b> Non-locking push type</p>        | <p><b>D:</b> Push-turn locking slotted type</p>  |
| <p><b>E:</b> Push-turn locking lever type</p>  | <p><b>F:</b> Slide locking type</p>             |

\* The 25A- series specifications and dimensions are the same as those of the standard model.

For details, refer to the **Web Catalog**.

# Plug-in Connector Connecting Base

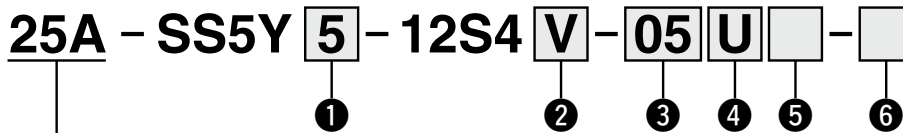
EX126



Type 12  
Top Ported

# 25A-SY5000/7000 Series

## How to Order Manifolds



• Series compatible with secondary batteries

### 1 Series

|   |        |
|---|--------|
| 5 | SY5000 |
| 7 | SY7000 |

### 2 SI unit

|   |                               |
|---|-------------------------------|
| 0 | Without SI unit               |
| V | CC-Link (Positive common NPN) |

\* Only a terminal block plate is mounted for the valve without SI unit. For SI unit part numbers, refer to page 53.

### 3 Valve stations

| Symbol | Stations    | Note   |
|--------|-------------|--|
| 02     | 2 stations  | Double wiring*1                                      |
| ⋮      | ⋮           |  |
| 08     | 8 stations  |  |
| 02     | 2 stations  | Specified layout*2<br>(Up to 16 solenoids available) |
| ⋮      | ⋮           |  |
| 16     | 16 stations |  |

- \*1 Double wiring: 2-position single, 2-position double, 3-position, and 4-position valves can be used on all manifold stations. The use of a 2-position single solenoid will result in an unused control signal. If this is not desired, order with a specified layout.
- \*2 Specified layout: Indicate the wiring specifications on the manifold specification sheet. (Note that 2-position double, 3-position, and 4-position valves cannot be used where single wiring has been specified.)
- \* The blanking plate assembly is included in this number.

### 4 P, E port entry

|     |                               |
|-----|-------------------------------|
| U*1 | U side (2 to 10 stations)     |
| D*1 | D side (2 to 10 stations)     |
| B   | Both sides (2 to 16 stations) |

\*1 For type "S," SUP/EXH block assembly with a built-in silencer, choose "U" or "D" for P port entry.

### 5 SUP/EXH block assembly

|     |                                   |
|-----|-----------------------------------|
| Nil | Internal pilot                    |
| S   | Internal pilot, Built-in silencer |

- \* The P and E ports are only available on the U and D sides for the built-in silencer type. The 3/5(E) port is plugged. The silencer exhaust port is located on the opposite side of the P and E port entry. (Example: When the P and E port entry is on the D side, the silencer exhaust port is on the U side.)
- \* When the built-in silencer type is used, keep the exhaust port from coming into direct contact with water or other liquids.

### 6 Mounting

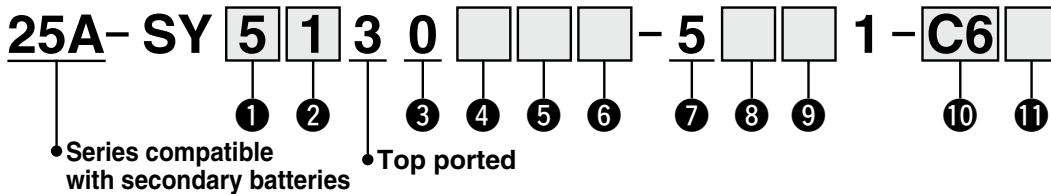
|     |                                      |   |
|-----|--------------------------------------|---|
| Nil | Direct mounting                      |   |
| D   | DIN rail mounting (With DIN rail)    |   |
| D0  | DIN rail mounting (Without DIN rail) |   |
| D3  | For 3 stations                       | Specify a length longer than that of the standard rail. |
| ⋮   | ⋮                                    |   |
| D16 | For 16 stations                      |   |

\* The 25A-series specifications and dimensions are the same as those of the standard model.

For details, refer to the [Web Catalog](#).

For details on the EX126 Integrated Type (For Output) Serial Transmission System, refer to the [Web Catalog](#) and the Operation Manual. For the part numbers of the SI units to be mounted, refer to page 53 in this catalog. Please download the Operation Manual via the SMC website: <https://www.smcworld.com>

How to Order Valves (With mounting screw)



**1** Series

|   |        |
|---|--------|
| 5 | SY5000 |
| 7 | SY7000 |

**2** Type of actuation

|   |  |
|---|--|
| 1 | 2-position single                        |
| 2 | 2-position double                        |
| 3 | 3-position closed center                 |
| 4 | 3-position exhaust center                |
| 5 | 3-position pressure center               |
| A | 4-position dual 3-port valve (N.C./N.C.) |
| B | 4-position dual 3-port valve (N.O./N.O.) |
| C | 4-position dual 3-port valve (N.C./N.O.) |

**3** Seal type

|   |             |
|---|-------------|
| 0 | Rubber seal |
|---|-------------|

**4** Back pressure check valve (Built-in valve type)

|     |          |
|-----|----------|
| Nil | None     |
| H   | Built-in |

\* The built-in valve type back pressure check valve is not available for the 3-position type or the SY7000.

**5** Pilot valve option

|     |                               |
|-----|-------------------------------|
| Nil | Standard (0.7 MPa)            |
| B   | Quick response type (0.7 MPa) |

**6** Coil type

|     |  |
|-----|--|
| Nil | Standard   |
| T   | With power-saving circuit (Continuous duty type) |

\* Be sure to select the power-saving circuit type if the valve is to be continuously energized for long periods of time.  
\* Be careful of the energizing time when the power-saving circuit is selected. For details, refer to the standard product catalog.

**7** Rated voltage

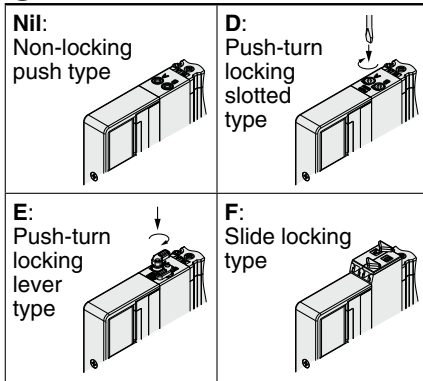
|   |        |
|---|--------|
| 5 | 24 VDC |
|---|--------|

**8** Light/surge voltage suppressor and common specification

|   |   |
|---|---|
| R | With surge voltage suppressor (Non-polar)             |
| U | With light/surge voltage suppressor (Non-polar)       |
| S | With surge voltage suppressor (Positive common)       |
| Z | With light/surge voltage suppressor (Positive common) |

\* Only "Z" type is available with a power-saving circuit.

**9** Manual override



**10** A, B port size

Thread piping

| Symbol | Port size | Applicable series |
|--------|-----------|-------------------|
| 02     | 1/4       | SY7000            |

One-touch fitting (Metric)

| Symbol | A, B port | SY5000 | SY7000 |
|--------|-----------|--------|--------|
| C4     | ø4        | ●      | —      |
| C6     | ø6        | ●      | ●      |
| C8     | ø8        | ●      | ●      |
| C10    | ø10       | —      | ●      |
| C12    | ø12       | —      | ●      |

**11** Thread type

|     |      |
|-----|------|
| Nil | Rc   |
| F   | G    |
| N   | NPT  |
| T   | NPTF |

\* The 25A- series specifications and dimensions are the same as those of the standard model.  
For details, refer to the [Web Catalog](#).

**⚠ Caution**

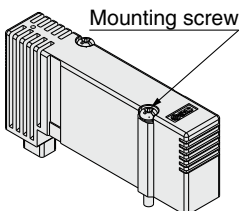
|                                      |
|--------------------------------------|
| Tightening torque for mounting screw |
| M3: 0.8 N·m                          |

Manifold Options

**■** Blanking plate assembly

(With mounting screw)

Used when valve additions are expected or for maintenance. A structure is in place on the blanking plate to prevent the mounting screws from sliding.



25A-SY50M-26-1A

How to Order Blanking Plate Assembly

25A-SY **5** 0M-26- 1 A

|        |        |
|--------|--------|
| Series |        |
| 5      | SY5000 |
| 7      | SY7000 |

• Base type

|   |                                       |
|---|---------------------------------------|
| 1 | For plug-in connector connecting base |
|---|---------------------------------------|

\* The 25A- series specifications and dimensions are the same as those of the standard model.

For details, refer to the [Web Catalog](#).

# 25A-SY5000/7000 Series

## SI Unit Part Nos.

| Description   | SI unit part no.        | Note  |
|---------------|-------------------------|---|
| EX260 SI unit | <b>EX260-SPR1-X117</b>  | PROFIBUS DP M12 connector, 32 outputs, Negative common (PNP)  |
|               | <b>EX260-SPR2-X117</b>  | PROFIBUS DP M12 connector, 32 outputs, Positive common (NPN)  |
|               | <b>EX260-SPR3-X117</b>  | PROFIBUS DP M12 connector, 16 outputs, Negative common (PNP)  |
|               | <b>EX260-SPR4-X117</b>  | PROFIBUS DP M12 connector, 16 outputs, Positive common (NPN)  |
|               | <b>EX260-SDN1-X117</b>  | DeviceNet® M12 connector, 32 outputs, Negative common (PNP)   |
|               | <b>EX260-SDN2-X117</b>  | DeviceNet® M12 connector, 32 outputs, Positive common (NPN)   |
|               | <b>EX260-SDN3-X117</b>  | DeviceNet® M12 connector, 16 outputs, Negative common (PNP)   |
|               | <b>EX260-SDN4-X117</b>  | DeviceNet® M12 connector, 16 outputs, Positive common (NPN)   |
|               | <b>EX260-SEC1-X117</b>  | EtherCAT M12 connector, 32 outputs, Negative common (PNP)     |
|               | <b>EX260-SEC2-X117</b>  | EtherCAT M12 connector, 32 outputs, Positive common (NPN)     |
|               | <b>EX260-SEC3-X117</b>  | EtherCAT M12 connector, 16 outputs, Negative common (PNP)     |
|               | <b>EX260-SEC4-X117</b>  | EtherCAT M12 connector, 16 outputs, Positive common (NPN)     |
|               | <b>EX260-SMJ1-X117</b>  | CC-Link M12 connector, 32 outputs, Negative common (PNP)      |
|               | <b>EX260-SMJ2-X117</b>  | CC-Link M12 connector, 32 outputs, Positive common (NPN)      |
|               | <b>EX260-SMJ3-X117</b>  | CC-Link M12 connector, 16 outputs, Negative common (PNP)      |
|               | <b>EX260-SMJ4-X117</b>  | CC-Link M12 connector, 16 outputs, Positive common (NPN)      |
|               | <b>EX260-SPN1-X117</b>  | PROFINET M12 connector, 32 outputs, Negative common (PNP)     |
|               | <b>EX260-SPN2-X117</b>  | PROFINET M12 connector, 32 outputs, Positive common (NPN)     |
|               | <b>EX260-SPN3-X117</b>  | PROFINET M12 connector, 16 outputs, Negative common (PNP)     |
|               | <b>EX260-SPN4-X117</b>  | PROFINET M12 connector, 16 outputs, Positive common (NPN)     |
| EX126 SI unit | <b>EX260-SEN1-X117</b>  | EtherNet/IP™ M12 connector, 32 outputs, Negative common (PNP) |
|               | <b>EX260-SEN2-X117</b>  | EtherNet/IP™ M12 connector, 32 outputs, Positive common (NPN) |
|               | <b>EX260-SEN3-X117</b>  | EtherNet/IP™ M12 connector, 16 outputs, Negative common (PNP) |
|               | <b>EX260-SEN4-X117</b>  | EtherNet/IP™ M12 connector, 16 outputs, Positive common (NPN) |
|               | <b>EX260-SIL1-X117</b>  | IO-Link M12 connector, 32 outputs, Negative common (PNP)      |
|               | <b>EX126D-SMJ1-X220</b> | CC-Link (Terminal block, 16 outputs, Positive common (NPN))   |

## Valve Mounting Screw Part No.

| Description                  | Part no.             |                      | Note  |
|------------------------------|----------------------|----------------------|---|
|                              | SY5000               | SY7000               |   |
| Round head combination screw | <b>SY5000-223-1A</b> | <b>SY7000-224-1A</b> | Part numbers shown on the left are for 10 valves. (SY5000: 20 pcs./SY7000: 30 pcs.) |

## One-touch Fittings Part Nos.

| Port size |                                       | 25A-SY5000                | 25A-SY7000                |
|-----------|---------------------------------------|---------------------------|---------------------------|
| A, B port | Metric size                           |                           |                           |
|           | ø4 One-touch fitting (Straight type)  | <b>90-VVQ1000-51A-C4</b>  | —                         |
|           | ø6 One-touch fitting (Straight type)  | <b>90-VVQ1000-51A-C6</b>  | <b>25A-KJH06-17-X1607</b> |
|           | ø8 One-touch fitting (Straight type)  | <b>90-VVQ1000-51A-C8</b>  | <b>90-VVQ2000-51A-C8</b>  |
|           | ø10 One-touch fitting (Straight type) | —                         | <b>90-VVQ2000-51A-C10</b> |
| P, E port | Metric size                           |                           |                           |
|           | ø10 One-touch fitting (Straight type) | <b>90-VVQ2000-51A-C10</b> | —                         |
|           | ø12 One-touch fitting (Straight type) | —                         | <b>90-VVQ4000-50B-C12</b> |

## Manifold Options

### How to Order Individual SUP/EXH Spacer Assembly

One-touch fitting  
Straight type

**25A-SY 5 0M-38-1 A-C6**

Series

|   |        |
|---|--------|
| 5 | SY5000 |
| 7 | SY7000 |

Spacer type

|    |                       |
|----|-----------------------|
| 38 | Individual SUP spacer |
| 39 | Individual EXH spacer |

Port size (Metric)

| Symbol     | P, E port | SY5000 | SY7000 |
|------------|-----------|--------|--------|
| <b>C4</b>  | ø4        | ●      | —      |
| <b>C6</b>  | ø6        | ●      | ●      |
| <b>C8</b>  | ø8        | ●      | ●      |
| <b>C10</b> | ø10       | —      | ●      |
| <b>C12</b> | ø12       | —      | ●      |

Part numbers of mounting screw

SY5000: SY5000-223-2A (2 pcs. of each)

SY7000: SV1000-136-12A (3 pcs. of each)

### How to Order Individual SUP/EXH Block Assembly

One-touch fitting  
Straight type

**25A-SY 5 0M-78-1 A-C6**

Series

|   |        |
|---|--------|
| 5 | SY5000 |
| 7 | SY7000 |

Block type

|    |                      |
|----|----------------------|
| 78 | Individual SUP block |
| 79 | Individual EXH block |

Port size (Metric)

| Symbol     | P, E port | SY5000 | SY7000 |
|------------|-----------|--------|--------|
| <b>C4</b>  | ø4        | ●      | —      |
| <b>C6</b>  | ø6        | ●      | ●      |
| <b>C8</b>  | ø8        | ●      | ●      |
| <b>C10</b> | ø10       | —      | ●      |
| <b>C12</b> | ø12       | —      | ●      |

## Manifold Parts Nos.

### ① Manifold block assembly

**25A – SY 5 0M – 2 – 1 D A – C6**

Series

|   |        |
|---|--------|
| 5 | SY5000 |
| 7 | SY7000 |

Piping direction

|   |                 |
|---|-----------------|
| 1 | Side/Top ported |
| 2 | Bottom ported   |

Wiring type

|   |               |
|---|---------------|
| S | Single wiring |
| D | Double wiring |

#### A, B port size (One-touch fittings)

| Symbol | A, B port | SY5000 | SY7000 | Note                              |
|--------|-----------|--------|--------|-----------------------------------|
| C4     | ø4        | ●      | —      | Side/Bottom ported<br>Metric size |
| C6     | ø6        | ●      | ●      |                                   |
| C8     | ø8        | ●      | ●      |                                   |
| C10    | ø10       | —      | ●      |                                   |
| C12    | ø12       | —      | ●      |                                   |
| 00     | Plug      | ●      | ●      | Top ported                        |

### ② SUP/EXH block assembly

#### ① D-sub connector <IP40>

**25A – SY 5 0M – 1 – 11 A [ ] 1 – C10 – [ ]**

Series

|   |        |
|---|--------|
| 5 | SY5000 |
| 7 | SY7000 |

SUP/EXH block assembly

|    |                        |
|----|------------------------|
| 11 | D-sub connector <IP40> |
|----|------------------------|

#### Pilot, Silencer/Piping type

| Symbol | Pilot type |          | Built-in silencer | Piping direction |
|--------|------------|----------|-------------------|------------------|
|        | Internal   | External |                   |                  |
| Nil    | ●          | —        | —                 | Side             |
| S      | ●          | —        | ●                 |                  |
| R      | —          | ●        | —                 |                  |
| V      | ●          | —        | —                 | Top              |
| VP     | ●          | —        | ●*1               |                  |
| B      | ●          | —        | —                 | Bottom           |
| BS     | ●          | —        | ●                 |                  |
| BR     | —          | ●        | —                 |                  |

\*1 For silencer (supply side)  
E port is plugged.

#### Mounting

|     |                                      |
|-----|--------------------------------------|
| Nil | Direct mounting                      |
| D0  | DIN rail mounting (Without DIN rail) |

\* For the bottom-porting type, the symbol is nil.

#### P, E port size (One-touch fittings)

| Symbol | P, E port | SY5000 | SY7000 | Note  |
|--------|-----------|--------|--------|---|
| C10    | ø10       | ●      | —      | Side/Bottom/Top ported<br>Metric size       |
| C12    | ø12       | —      | ●      |   |
| 00*2   | Plug      | ●      | ●      | P/E port entry on one side<br>or Top ported |

\*2 It can be selected only if no symbol or "S" or "V" or "B" is selected for the pilot and the piping.

#### Connector entry direction

|   |         |
|---|---------|
| 1 | Upward  |
| 2 | Lateral |

#### Clamp bracket assembly

| Series                 | Part no.        |
|------------------------|-----------------|
| <b>25A-SY5000/7000</b> | 25A-SY50M-15-3A |

\* Part number is for one assembly.

### ② Terminal block box

**25A – SY 5 0M – 1 – 1A [ ] – C10 – [ ]**

Series

|   |        |
|---|--------|
| 5 | SY5000 |
| 7 | SY7000 |

#### Pilot, Silencer/Piping type

| Symbol | Pilot type |          | Built-in silencer | Piping direction |
|--------|------------|----------|-------------------|------------------|
|        | Internal   | External |                   |                  |
| Nil    | ●          | —        | —                 | Side             |
| S      | ●          | —        | ●                 |                  |
| R      | —          | ●        | —                 |                  |
| V      | ●          | —        | —                 | Top              |
| VP     | ●          | —        | ●*3               |                  |
| B      | ●          | —        | —                 | Bottom           |
| BS     | ●          | —        | ●                 |                  |
| BR     | —          | ●        | —                 |                  |

\*3 For silencer (supply side)  
E port is plugged.

#### Mounting

|     |                                      |
|-----|--------------------------------------|
| Nil | Direct mounting                      |
| D0  | DIN rail mounting (Without DIN rail) |

\* For the bottom-porting type, the symbol is nil.

#### P, E port size (One-touch fittings)

| Symbol | P, E port | SY5000 | SY7000 | Note  |
|--------|-----------|--------|--------|---|
| C10    | ø10       | ●      | —      | Side/Bottom/Top ported<br>Metric size       |
| C12    | ø12       | —      | ●      |   |
| 00*4   | Plug      | ●      | ●      | P/E port entry on one side<br>or Top ported |

\*4 It can be selected only if no symbol or "S" or "V" or "B" is selected for the pilot and the piping.

### Terminal block box housing assembly

**25A – VVQC1000 – T0 – 1**

### Clamp bracket assembly for terminal block box

**25A – SY30M – 15 – 6A**

\* Part number is for one assembly.

#### Clamp bracket assembly

| Series                 | Part no.        |
|------------------------|-----------------|
| <b>25A-SY5000/7000</b> | 25A-SY50M-15-3A |

\* Part number is for one assembly.

# 25A-SY5000/7000 Series

## Manifold Parts Nos.

### ③ Lead wire

25A-SY 5 0M-1-1A - C10 -

Series

|   |        |
|---|--------|
| 5 | SY5000 |
| 7 | SY7000 |

#### Mounting

|     |                                      |
|-----|--------------------------------------|
| Nil | Direct mounting                      |
| D0  | DIN rail mounting (Without DIN rail) |

\* For the bottom-ported type, the symbol is nil.

#### Pilot, Silencer/Piping type

| Symbol | Pilot type |          | Built-in silencer | Piping direction |
|--------|------------|----------|-------------------|------------------|
|        | Internal   | External |                   |                  |
| Nil    | ●          | —        | —                 | Side             |
| S      | ●          | —        | ●                 |                  |
| R      | —          | ●        | —                 |                  |
| V      | ●          | —        | —                 | Top              |
| VP     | ●          | —        | ●*1               |                  |
| B      | ●          | —        | —                 | Bottom           |
| BS     | ●          | —        | ●                 |                  |
| BR     | —          | ●        | —                 |                  |

\*1 For silencer (supply side) E port is plugged.

#### P, E port size (One-touch fittings)

| Symbol | P, E port | SY5000 | SY7000 | Note  |
|--------|-----------|--------|--------|---|
| C10    | ø10       | ●      | —      | Side/Bottom/Top ported<br>Metric size       |
| C12    | ø12       | —      | ●      |   |
| 00*2   | Plug      | ●      | ●      | P/E port entry on one side<br>or Top ported |

\*2 It can be selected only if no symbol or "S" or "V" or "B" is selected for the pilot and the piping.

### Lead wire connector block assembly

25A-SY30M-14-4A -

#### Number of cores

|   |    |
|---|----|
| 1 | 34 |
| 2 | 17 |
| 3 | 9  |

#### Lead wire length [m]

|   |     |
|---|-----|
| 1 | 0.6 |
| 2 | 1.5 |
| 3 | 3   |

### Clamp bracket assembly

| Series          | Part no.        |
|-----------------|-----------------|
| 25A-SY5000/7000 | 25A-SY50M-15-3A |

\* Part number is for one assembly.

### ④ EX126

25A-SY 5 0M-1-1A - C10 -

Series

|   |        |
|---|--------|
| 5 | SY5000 |
| 7 | SY7000 |

#### Mounting

|     |                                      |
|-----|--------------------------------------|
| Nil | Direct mounting                      |
| D0  | DIN rail mounting (Without DIN rail) |

\* For the bottom-ported type, the symbol is nil.

#### Pilot, Silencer/Piping type

| Symbol | Pilot type |          | Built-in silencer | Piping direction |
|--------|------------|----------|-------------------|------------------|
|        | Internal   | External |                   |                  |
| Nil    | ●          | —        | —                 | Side             |
| S      | ●          | —        | ●                 |                  |
| R      | —          | ●        | —                 |                  |
| V      | ●          | —        | —                 | Top              |
| VP     | ●          | —        | ●*3               |                  |
| B      | ●          | —        | —                 | Bottom           |
| BS     | ●          | —        | ●                 |                  |
| BR     | —          | ●        | —                 |                  |

\*3 For silencer (supply side) E port is plugged.

#### P, E port size (One-touch fittings)

| Symbol | P, E port | SY5000 | SY7000 | Note  |
|--------|-----------|--------|--------|---|
| C10    | ø10       | ●      | —      | Side/Bottom/Top ported<br>Metric size       |
| C12    | ø12       | —      | ●      |   |
| 00*4   | Plug      | ●      | ●      | P/E port entry on one side<br>or Top ported |

\*4 It can be selected only if no symbol or "S" or "V" or "B" is selected for the pilot and the piping.

### Terminal block plate assembly

25A-VVQC1000-74A-2

### Clamp bracket assembly for EX126 SI unit

25A-SY30M-15-6A

\* Part number is for one assembly.

### Clamp bracket assembly

| Series          | Part no.        |
|-----------------|-----------------|
| 25A-SY5000/7000 | 25A-SY50M-15-3A |

\* Part number is for one assembly.



## Manifold Parts Nos.

⑤ EX260

**25A-SY** 5 **0M-1-1A**   - **C10** -  

Series

|   |        |
|---|--------|
| 5 | SY5000 |
| 7 | SY7000 |

Pilot, Silencer/Piping type

| Symbol | Pilot type |          | Built-in silencer | Piping direction |
|--------|------------|----------|-------------------|------------------|
|        | Internal   | External |                   |                  |
| Nil    | ●          | —        | —                 | Side             |
| S      | ●          | —        | ●                 |                  |
| R      | —          | ●        | —                 |                  |
| V      | ●          | —        | —                 | Top              |
| VP     | ●          | —        | ●*5               |                  |
| B      | ●          | —        | —                 | Bottom           |
| BS     | ●          | —        | ●                 |                  |
| BR     | —          | ●        | —                 |                  |

\*5 For silencer (supply side) E port is plugged.

Mounting

|     |                                      |
|-----|--------------------------------------|
| Nil | Direct mounting                      |
| D0  | DIN rail mounting (Without DIN rail) |

\* For the bottom-ported type, the symbol is nil.

P, E port size (One-touch fittings)

| Symbol | P, E port | SY5000 | SY7000 | Note  |
|--------|-----------|--------|--------|---|
| C10    | ø10       | ●      | —      | Side/Bottom/Top ported<br>Metric size       |
| C12    | ø12       | —      | ●      |   |
| 00*6   | Plug      | ●      | ●      | P/E port entry on one side<br>or Top ported |

\*6 It can be selected only if no symbol or "S" or "V" or "B" is selected for the pilot and the piping.

Clamp bracket assembly

| Series          | Part no.        |
|-----------------|-----------------|
| 25A-SY5000/7000 | 25A-SY50M-15-3A |

\* Part number is for one assembly.



## Manifold Parts Nos.

### ◎ SUP/EXH block assembly

**25A – SY 5 0M – 3 – 1A**    – **C10** –   

Series ●

|   |        |
|---|--------|
| 5 | SY5000 |
| 7 | SY7000 |

Pilot, Silencer/Piping type ●

| Symbol | Pilot type |          | Built-in silencer | Piping direction |
|--------|------------|----------|-------------------|------------------|
|        | Internal   | External |                   |                  |
| Nil    | ●          | —        | —                 | Side             |
| S      | ●          | —        | ●                 |                  |
| R      | —          | ●        | —                 |                  |
| V      | ●          | —        | —                 | Top              |
| VP     | ●          | —        | ●*1               |                  |
| B      | ●          | —        | —                 | Bottom           |
| BS     | ●          | —        | ●                 |                  |
| BR     | —          | ●        | —                 |                  |

\*1 For silencer (supply side) E port is plugged.

\* "B" for the bottom-ported type can be selected for the SY5000/7000 series.

Mounting ●

|     |                                      |
|-----|--------------------------------------|
| Nil | Direct mounting                      |
| D0  | DIN rail mounting (Without DIN rail) |

\* For the bottom-ported type, the symbol is nil.

P, E port size (One-touch fittings) ●

| Symbol | P, E port | SY5000 | SY7000 | Note                                     |
|--------|-----------|--------|--------|--|
| C10    | ø10       | ●      | —      | Side/Bottom/Top ported<br>Metric size    |
| C12    | ø12       | —      | ●      |  |
| 00*2   | Plug      | ●      | ●      | P/E port entry on one side or Top ported |

\*2 It can be selected only if no symbol or "S" or "V" or "B" is selected for the pilot and the piping.

### ■ Cover assembly/Silencer cover assembly/Port block assembly for SUP/EXH (end) block assembly

**Cover assembly**  
(Internal pilot)

**25A – SY 5 0M – 4 – 1 A**

**Silencer cover assembly**  
(Internal pilot, Built-in silencer)

**25A – SY 5 0M – 5 – 1 A**

**Port block assembly**  
(Side ported, External pilot)

**25A – SY 5 0M – 6 – 1 AR**    – 00   

A, B port  
One-touch fittings piping direction ●

|     |                        |
|-----|------------------------|
| Nil | Straight (Side ported) |
|-----|------------------------|

X, PE port One-touch fitting type ●

| Symbol | X, PE port  | Metric size |    |
|--------|-------------|-------------|----|
|        |             | ø4          | ø6 |
| Nil    | Metric size | ●           | —  |
|        |             | —           | ●  |

**Port block assembly**  
(Top ported, Internal pilot, for silencer (supply side))

**25A – SY 5 0M – 6 – 3 AV – C10**

**Port block assembly**  
(Top ported, Internal pilot)

**25A – SY 5 0M – 6 – 1 A**    V – **C10**

Series ●

|   |        |
|---|--------|
| 5 | SY5000 |
| 7 | SY7000 |

Pilot type ●

|     |                |
|-----|----------------|
| Nil | Internal pilot |
|-----|----------------|

P, E port size (One-touch fittings) ●

| Symbol | P, E port | SY5000 | SY7000 |
|--------|-----------|--------|--------|
| C10    | ø10       | ●      | —      |
| C12    | ø12       | —      | ●      |

### ■ Name plate bracket assembly (For SY5000 only)

**25A – SY50M – 85 – 1A**

# 25A-SY5000/7000 Series Valve Replacement Parts

## How to Order Pilot Valves

Pilot cover  
**25A-SY50V-25A**

**25A-V112**   - **5** **A**

**Pilot valve option**

|            |                               |
|------------|-------------------------------|
| <b>Nil</b> | Standard (0.7 MPa)            |
| <b>B</b>   | Quick response type (0.7 MPa) |

**Rated voltage**

|          |        |
|----------|--------|
| <b>5</b> | 24 VDC |
| <b>6</b> | 12 VDC |

**Coil type**

|            |   |
|------------|---|
| <b>Nil</b> | Standard                                  |
| <b>T</b>   | With power-saving circuit (Made to Order) |

## How to Order Port Block Assembly

**25A-SY**  **0V-6A**  -  -

**Series**

|          |      |
|----------|------|
| <b>5</b> | 5000 |
| <b>7</b> | 7000 |

**Pilot type**

|            |                |
|------------|----------------|
| <b>Nil</b> | Internal pilot |
|------------|----------------|

**Option for mounting**

|            |   |
|------------|---|
| <b>Nil</b> | Standard (Valve mounting screw without drop prevention) |
| <b>1</b>   | Drop prevention type valve mounting screw               |

**Thread type**

|            |      |
|------------|------|
| <b>Nil</b> | Rc   |
| <b>F</b>   | G    |
| <b>N</b>   | NPT  |
| <b>T</b>   | NPTF |

**A, B port size**

**Thread piping**

| Symbol    | Port size | Applicable series |
|-----------|-----------|-------------------|
| <b>02</b> | 1/4       | <b>SY7000</b>     |

**Metric size (One-touch fitting)**

| Symbol     | Port size | Applicable series |               |
|------------|-----------|-------------------|---------------|
|            |           | <b>SY5000</b>     | <b>SY7000</b> |
| <b>C4</b>  | ø4        | ●                 | —             |
| <b>C6</b>  | ø6        | ●                 | ●             |
| <b>C8</b>  | ø8        | ●                 | ●             |
| <b>C10</b> | ø10       | —                 | ●             |
| <b>C12</b> | ø12       | —                 | ●             |

## Body Cover Assembly

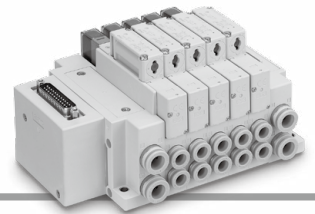
\* Used when the top-ported type is changed to the side or bottom-ported type

| Series        |                | Part no.  |   |
|---------------|----------------|---|---|
|               |                | Standard (Valve mounting screw without drop prevention) | Drop prevention type valve mounting screw |
| <b>SY5000</b> | Internal pilot | 25A-SY50V-16A   | 25A-SY50V-16A-1                           |
|               | External pilot | 25A-SY50V-16AR  | 25A-SY50V-16AR-1                          |
| <b>SY7000</b> | Internal pilot | 25A-SY70V-16A   | 25A-SY70V-16A-1                           |
|               | External pilot | 25A-SY70V-16AR  | 25A-SY70V-16AR-1                          |

\* The part number is not indicated on the product.

# 25A-SY5000/7000 Series

## With Residual Pressure Release Valve



### How to Order (With mounting screw)

25A-SY **5** **3** **0** **0**     - **5**     **1** - **E**

|   |        |
|---|--------|
| 5 | SY5000 |
| 7 | SY7000 |

|          |                            |
|----------|----------------------------|
| <b>3</b> | 3-position closed center*1 |
|----------|----------------------------|

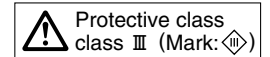
\*1 Only the closed center type is available.

• **Base mounted**  
(The top-ported type is not available.)

• **With residual pressure release valve**

|          |  |
|----------|--|
| <b>E</b> | With residual pressure release valve*2 |
|----------|--|

\*2 Mounting screw types, hexagon socket head cap screw B and drop prevention type K, H are not available.



#### 1 Seal type

|          |             |
|----------|-------------|
| <b>0</b> | Rubber seal |
|----------|-------------|

#### 2 Pilot valve option

|            |                               |
|------------|-------------------------------|
| <b>Nil</b> | Standard (0.7 MPa)            |
| <b>B</b>   | Quick response type (0.7 MPa) |

#### 3 Coil type

|            |  |
|------------|--|
| <b>Nil</b> | Standard   |
| <b>T</b>   | With power saving circuit (Continuous duty type) |

\* Be sure to select the power saving circuit type if the valve is to be continuously energized for long periods of time.

\* Be careful of the energizing time when the power saving circuit is selected. Refer to the **Web Catalog** for details.

#### 4 Rated voltage

|          |        |
|----------|--------|
| <b>5</b> | 24 VDC |
| <b>6</b> | 12 VDC |

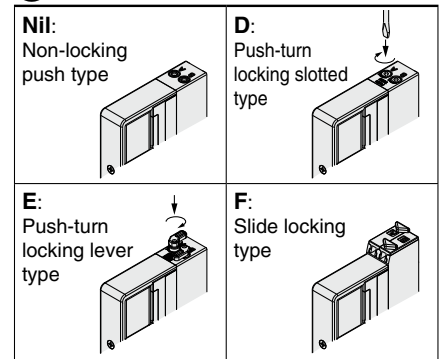
\* The applicable rated voltage varies depending on the manifold wiring type. Refer to the "How to Order Manifolds" pages.

#### 5 Light/surge voltage suppressor and common specification

| Symbol     | With light | Surge voltage suppressor | Common specification |
|------------|------------|--------------------------|----------------------|
| <b>Nil</b> | —          | —                        | Non-polar            |
| <b>R</b>   | —          | ●                        |                      |
| <b>U</b>   | ●          |                          |                      |
| <b>S</b>   | —          |                          | Positive common      |
| <b>Z</b>   | ●          |                          |                      |
| <b>NS</b>  | —          |                          |                      |
| <b>NZ</b>  | ●          |                          |                      |

\* Only "Z" and "NZ" types are available with a power saving circuit.

#### 6 Manual override



**Table 1. Valve mounting screw**

| SY5000                           | SY7000                            |
|----------------------------------|-----------------------------------|
| <b>SY5000-221-9A</b><br>(2 pcs.) | <b>SY7000-221-14A</b><br>(3 pcs.) |

# 25A-SY5000/7000 Series

## Made to Order

Please contact SMC for detailed dimensions, specifications, and lead times.

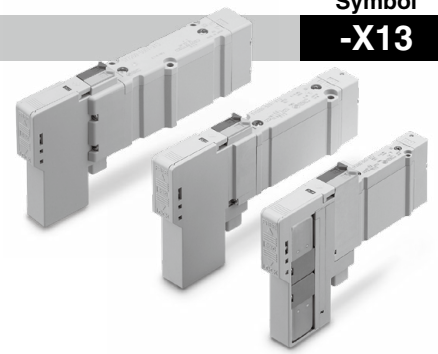


### 1 With Safety Slide Locking Manual Override

Symbol  
**-X13**

A safety lock is added to the slide locking manual override.

25A-SY  $\frac{5}{7}$    $\frac{00}{3}$      -   **G1-X13**



- Entry is the same as 25A-standard products. Specifications and performance are the same as standard products.

### 2 2-Position Single Solenoid Valve with Built-in Return Spring

Symbol  
**-X350**

A 2-position single solenoid valve with a spring built into the main valve

The main valve returns to origin (the OFF position) via the spring when it is not pressurized.

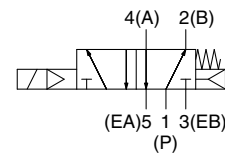
25A-SY  $\frac{5}{7}$   $\frac{1}{3}$   $\frac{0}{0}$      -   **1-X350**

- Entry is the same as 25A-standard products. Specifications and performance are the same as standard products.

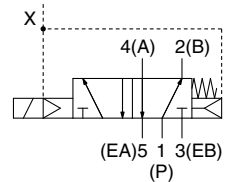
\* For the external pilot type, exhaust the external pilot (X) port and the main pressure simultaneously.  
If the main pressure cannot be exhausted due to the system specifications, please contact SMC separately.

\* The manual option is only applicable to the non-locking push type.

Internal pilot type



External pilot type

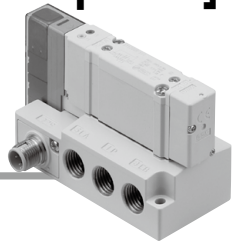




# 25A-SY5000/7000 Series

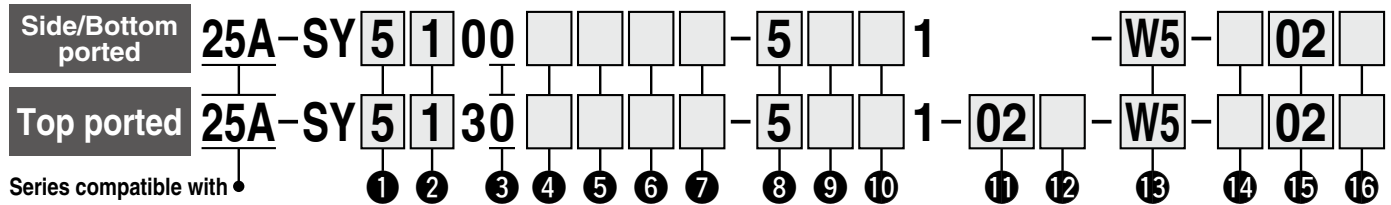
## Plug-in Single Unit/Sub-plate Type [IP67 Compliant]

(Side ported, Bottom ported, Top ported)



### How to Order

In the case of (Valve) + (Sub-plate) (Built-in valve type part no.)



#### 1 Series

|   |        |
|---|--------|
| 5 | SY5000 |
| 7 | SY7000 |

#### 2 Type of actuation

|   |                        |                 |
|---|------------------------|-----------------|
| 1 | 2-position             | Single          |
| 2 |                        | Double          |
| 3 | 3-position             | Closed center   |
| 4 |                        | Exhaust center  |
| 5 |                        | Pressure center |
| A | 4-position dual 3-port | N.C./N.C.       |
| B |                        | N.O./N.O.       |
| C |                        | N.C./N.O.       |

#### 3 Seal type

|   |             |
|---|-------------|
| 0 | Rubber seal |
|---|-------------|

#### 4 Pilot type

|     |                |
|-----|----------------|
| Nil | Internal pilot |
| R   | External pilot |

#### 5 Back pressure check valve (Built-in valve type)

|     |          |
|-----|----------|
| Nil | None     |
| H   | Built-in |

\* The built-in valve type back pressure check valve is not available for the 3-position type or the SY7000.

#### 6 Pilot valve option

|     |                               |
|-----|-------------------------------|
| Nil | Standard (0.7 MPa)            |
| B   | Quick response type (0.7 MPa) |

#### 7 Coil type

|     |  |
|-----|--|
| Nil | Standard   |
| T   | With power saving circuit (Continuous duty type) |

\* Be sure to select the power saving circuit type if the valve is to be continuously energized for long periods of time.

\* Be careful of the energizing time when the power saving circuit is selected. For details, refer to the standard product catalog.

#### 8 Rated voltage

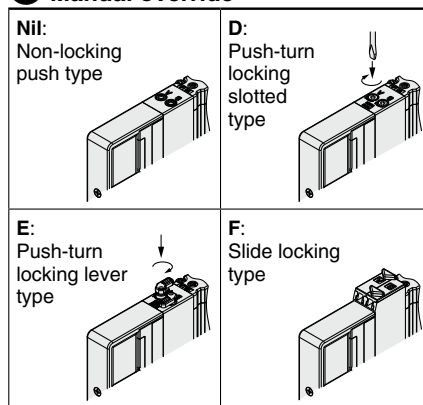
|   |        |
|---|--------|
| 5 | 24 VDC |
| 6 | 12 VDC |

#### 9 Light/surge voltage suppressor and common specification

| Symbol | With light | Surge voltage suppressor | Common specification |
|--------|------------|--------------------------|----------------------|
| Nil    | —          | —                        | Non-polar            |
| R      | —          | ●                        |                      |
| U      | ●          |                          |                      |
| S      | —          | ●                        | Positive common      |
| Z      | ●          |                          | Negative common      |
| NS     | —          |                          |                      |
| NZ     | ●          |                          |                      |

\* Only "Z" and "NZ" types are available with a power saving circuit.

#### 10 Manual override



#### 11 A, B port size (\* Top-ported valve only)

##### Thread piping

| Symbol | Port size | Applicable series |
|--------|-----------|-------------------|
| 02     | 1/4       | SY7000            |

##### Metric size (One-touch fitting)

| Symbol | A, B port | SY5000 | SY7000 |
|--------|-----------|--------|--------|
| C4     | ø4        | ●      | —      |
| C6     | ø6        | ●      | ●      |
| C8     | ø8        | ●      | ●      |
| C10    | ø10       | —      | ●      |
| C12    | ø12       | —      | ●      |

#### 12 A, B port thread type (Thread piping)

|     |    |
|-----|----|
| Nil | Rc |
| F   | G  |

#### 13 Wiring specifications (Sub-plate)

|    |                                    |
|----|------------------------------------|
| WO | Without M12 connector cable        |
| W5 | With M12 connector cable (3000 mm) |

\* When ordering a product with M12 connector cable, the connector cable is included.

#### 14 Port location (Sub-plate)

|     |   |
|-----|---|
| Nil | Side ported                                 |
| B   | Bottom ported                               |
| V*1 | Top ported (1P, 5EA, 3EB port: Side ported) |

\*1 Only available for the valve piping type "3" top ported

#### 15 Port size (Sub-plate)

| Symbol | Port size | Applicable series |
|--------|-----------|-------------------|
| 02     | 1/4       | SY5000            |
| 03     | 3/8       | SY7000            |

#### 16 Thread type (Sub-plate)

|     |    |
|-----|----|
| Nil | Rc |
| F   | G  |

\* The 25A- series specifications and dimensions are the same as those of the standard model.

\* When mounting a special order (including Made-to-Order specification) valve or manifold option (spacer, etc.) on the sub-plate, add the valve part number or spacer part number under the sub-plate part number to place an order. For details, refer to the ordering example on page 61.

# 25A-SY5000/7000 Series

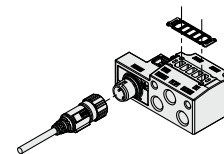
## How to Order

In the case of **Sub-plate** (Sub-plate single unit part no.)

\* Without valve

**25A-SY** **5** **0M-27-1-** **W5** - **02**

Series compatible with secondary batteries



\* Base gasket is included.  
\* Valve mounting screws are not included.

### 1 Series

|          |        |
|----------|--------|
| <b>5</b> | SY5000 |
| <b>7</b> | SY7000 |

### 3 Port location (Sub-plate)

|            |   |
|------------|---|
| <b>Nil</b> | Side ported                                       |
| <b>B</b>   | Bottom ported                                     |
| <b>V</b>   | Top ported [1(P), 5(EA), 3(EB) port: Side ported] |

### 5 Sub-plate thread type

|            |    |
|------------|----|
| <b>Nil</b> | Rc |
| <b>F</b>   | G  |

### 2 Wiring specifications

|           |                                    |
|-----------|------------------------------------|
| <b>WO</b> | Without M12 connector cable        |
| <b>W5</b> | With M12 connector cable (3000 mm) |

\* Refer to the table below for connector cable part numbers.  
\* When ordering a product with M12 connector cable, the connector cable is included.

### 4 Port size (Sub-plate)

| Symbol    | Port size | Applicable series |
|-----------|-----------|-------------------|
| <b>02</b> | 1/4       | SY5000            |
| <b>03</b> | 3/8       | SY7000            |

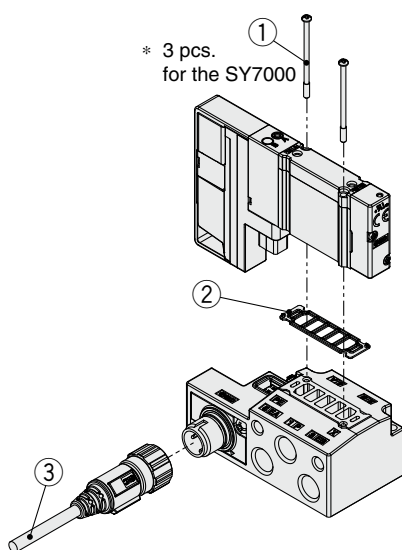
How to Order when mounting a special order (including Made-to-Order specification) valve on the sub-plate (Ordering example: X350)

**25A-SY50M-27-1-W5-02** ..... 1 set (Sub-plate single unit part no.)  
\***25A-SY5100-5U1-X350** ..... 1 set (Built-in return spring specification)

Ordering example when mounting a manifold option (spacer, etc.)

**25A-SY50M-27-1-W5-02** ..... 1 set (Sub-plate single unit part no.)  
\***25A-SY5400-5U1** ..... 1 set (3-position exhaust center part no.)  
\***25A-SY50M-39-1A-C6** ..... 1 set (Individual EXH spacer part no.)

## Sub-plate Parts Nos.



\* 3 pcs. for the SY7000

| No. | Description                    | Part no.                     |                              | Note   |
|-----|--------------------------------|------------------------------|------------------------------|--|
|     |                                | SY5000                       | SY7000                       |  |
| ①   | Round head combination screw   | SY5000-223-1A<br>(M3 x 32.5) | SY7000-224-1A<br>(M3 x 36.5) | Part numbers shown on the left are for 10 valves (20 pcs.). (30 pcs. for the SY7000) |
| ②   | Base gasket (for sub-plate)    | SY50M-11-1A                  | SY70M-11-1A                  | Part numbers shown on the left are for 10 valves (10 pcs.).                          |
| ③   | M12 waterproof connector cable | 90-ZS-37-A-X258              |                              | Cable length: 3000 mm  |



# 5-Port Solenoid Valve Body Ported/Single Unit



# 25A-SY5000/7000 Series

## How to Order



25A - SY 5 1 20 [ ] - 5 L [ ] [ ] - 01 [ ] - [ ] - [ ]

Series compatible with secondary batteries

Series

|   |        |
|---|--------|
| 5 | SY5000 |
| 7 | SY7000 |

Type of actuation

|   |                            |
|---|----------------------------|
| 1 | 2-position single          |
| 2 | 2-position double          |
| 3 | 3-position closed center   |
| 4 | 3-position exhaust center  |
| 5 | 3-position pressure center |

Coil specifications

|     |   |
|-----|---|
| Nil | Standard                                    |
| T   | With power-saving circuit (24, 12 VDC only) |

\* Power-saving circuit is not available in the case of "D" or "Y" type.

For DC

|   |        |
|---|--------|
| 5 | 24 VDC |
| 6 | 12 VDC |
| V | 6 VDC  |
| S | 5 VDC  |
| R | 3 VDC  |

Rated voltage

For AC (50/60Hz)

|   |                   |
|---|-------------------|
| 1 | 100 VAC           |
| 2 | 200 VAC           |
| 3 | 110 VAC [115 VAC] |
| 4 | 220 VAC [230 VAC] |

\* DC specifications of type "D" and "Y" are only available with 12 and 24 VDC.

\* AC-type models that are CE/UKCA-compliant have DIN terminals only.

Electrical entry

|  |                                   |                                   |                       |                                   |
|--|-----------------------------------|-----------------------------------|-----------------------|-----------------------------------|
| 24, 12, 6, 5, 3 VDC/100, 110, 200, 220 VAC |                                   |                                   |                       | 24, 12 VDC/100, 110, 200, 220 VAC |
| Grommet                                    | L plug connector                  | M plug connector                  | DIN terminal          |                                   |
| G: With lead wire (Length 300 mm)          | L: With lead wire (Length 300 mm) | M: With lead wire (Length 300 mm) | MN: Without lead wire | D, Y: With connector              |
|  |                                   |                                   |                       |                                   |
| H: With lead wire (Length 600 mm)          | LN: Without lead wire             | LO: Without connector             | MO: Without connector |                                   |
|  |                                   |                                   |                       |                                   |

- \* "LN," "MN" type: with 2 sockets.
- \* "Y" type is a DIN terminal conforming to EN-175301-803C (former DIN43650C).
- \* Refer to the standard products for the lead wire length of L and M plug connectors and the connector assembly with cover for L and M plug connector.

CE/UKCA-compliant

|     |                   |
|-----|-------------------|
| Nil | —                 |
| Q   | CE/UKCA-compliant |

\* AC-type models that are CE/UKCA-compliant have DIN terminals only.

Bracket

|     |  |
|-----|--|
| Nil | Without bracket                            |
| F1  | With foot bracket (2-position single only) |
| F2  | With side bracket                          |

Thread type

|     |    |
|-----|----|
| Nil | Rc |
| F   | G  |

A, B port size Thread piping

| Symbol | Port size | Applicable series |
|--------|-----------|-------------------|
| 01     | 1/8       | SY5000            |
| 02     | 1/4       | SY7000            |

One-touch fitting (Metric size)

| Symbol | Port size                 | Applicable series |
|--------|---------------------------|-------------------|
| C4     | One-touch fitting for ø4  | SY5000            |
| C6     | One-touch fitting for ø6  |                   |
| C8     | One-touch fitting for ø8  |                   |
| C8     | One-touch fitting for ø8  | SY7000            |
| C10    | One-touch fitting for ø10 |                   |

Manual override

|                                   |  |  |
|-----------------------------------|--|--|
| <p>Nil: Non-locking push type</p> | <p>D: Push-turn locking slotted type</p> | <p>E: Push-turn locking lever type</p> |
|-----------------------------------|--|--|

Light/surge voltage suppressor

Electrical entry for G, H, L, M

|     |  |
|-----|--|
| Nil | Without light/surge voltage suppressor               |
| S   | With surge voltage suppressor                        |
| Z   | With light/surge voltage suppressor                  |
| R   | With surge voltage suppressor (Non-polar type)       |
| U   | With light/surge voltage suppressor (Non-polar type) |

Electrical entry for D, Y

|     |  |
|-----|--|
| Nil | Without light/surge voltage suppressor |
| S   | With surge voltage suppressor          |
| Z   | With light/surge voltage suppressor    |

\* There is no "S" type for AC mode, since a rectifier prevents surge voltage generation.

- \* There is no "S" type for AC mode, since a rectifier prevents surge voltage generation.
- \* For "R" and "U," DC voltage is only available.
- \* Power-saving circuit is only available in the "Z" type.

\* When placing an order for body ported solenoid valve as a single unit, mounting screw for manifold and gasket are not attached. Order them separately, if necessary.

\* The 25A-series specifications and dimensions are the same as those of the standard model.

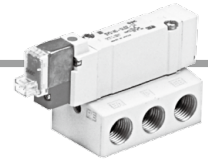
For details, refer to the [Web Catalog](#).

# 5-Port Solenoid Valve Base Mounted/Single Unit



# 25A-SY5000/7000 Series

## How to Order



25A - SY 5 2 40 [ ] [ ] - 5 L [ ] [ ] - [ ] [ ] - [ ]

Series compatible with secondary batteries

Series

|   |        |
|---|--------|
| 5 | SY5000 |
| 7 | SY7000 |

Type of actuation

|   |                            |
|---|----------------------------|
| 1 | 2-position single          |
| 2 | 2-position double          |
| 3 | 3-position closed center   |
| 4 | 3-position exhaust center  |
| 5 | 3-position pressure center |

Pilot type

|     |                |
|-----|----------------|
| Nil | Internal pilot |
| R   | External pilot |

Coil specifications

|     |   |
|-----|---|
| Nil | Standard                                    |
| T   | With power-saving circuit (24, 12 VDC only) |

\* Power-saving circuit is not available in the case of "D" or "Y" type.

Rated voltage

For DC

|   |        |
|---|--------|
| 5 | 24 VDC |
| 6 | 12 VDC |
| V | 6 VDC  |
| S | 5 VDC  |
| R | 3 VDC  |

For AC (50/60Hz)

|   |                   |
|---|-------------------|
| 1 | 100 VAC           |
| 2 | 200 VAC           |
| 3 | 110 VAC [115 VAC] |
| 4 | 220 VAC [230 VAC] |

\* DC specifications of type "D" and "Y" are only available with 12 and 24 VDC.

\* AC-type models that are CE/UKCA-compliant have DIN terminals only.

CE/UKCA-compliant

|     |                   |
|-----|-------------------|
| Nil | —                 |
| Q   | CE/UKCA-compliant |

\* AC-type models that are CE/UKCA-compliant have DIN terminals only.

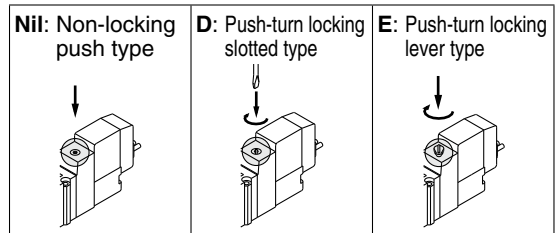
Thread type

|     |    |
|-----|----|
| Nil | Rc |
| F   | G  |

Port size

| Symbol | Port size          | Applicable series |
|--------|--------------------|-------------------|
| Nil    | Without sub-plate  |                   |
| 02     | 1/4 With sub-plate | SY5000<br>SY7000  |
| 03     | 3/8 With sub-plate | SY7000            |

Manual override



Light/surge voltage suppressor

Electrical entry for G, H, L, M

|     |  |
|-----|--|
| Nil | Without light/surge voltage suppressor               |
| S   | With surge voltage suppressor                        |
| Z   | With light/surge voltage suppressor                  |
| R   | With surge voltage suppressor (Non-polar type)       |
| U   | With light/surge voltage suppressor (Non-polar type) |

\* There is no "S" type for AC mode, since a rectifier prevents surge voltage generation.  
\* For "R" and "U," DC voltage is only available.  
\* Power-saving circuit is only available in the "Z" type.

Electrical entry for D, Y

|     |  |
|-----|--|
| Nil | Without light/surge voltage suppressor               |
| S   | With surge voltage suppressor (Non-polar type)       |
| Z   | With light/surge voltage suppressor (Non-polar type) |

\* There is no "S" type for AC mode, since a rectifier prevents surge voltage generation.

Electrical entry

| 24, 12, 6, 5, 3 VDC / 100, 110, 200, 220 VAC |                                   |                                   |                       | 24, 12 VDC / 100, 110, 200, 220 VAC |
|--|-----------------------------------|-----------------------------------|-----------------------|-------------------------------------|
| Grommet                                      | L plug connector                  | M plug connector                  | MN: Without lead wire | D, Y: With connector                |
| G: With lead wire (Length 300 mm)            | L: With lead wire (Length 300 mm) | M: With lead wire (Length 300 mm) | MN: Without lead wire | D, Y: With connector                |
| H: With lead wire (Length 600 mm)            | LN: Without lead wire             | LO: Without connector             | MO: Without connector |                                     |

\* "LN," "MN" type: with 2 sockets.

\* "Y" type is a DIN terminal conforming to EN-175301-803C (former DIN43650C).

\* Refer to the standard products for the lead wire length of L and M plug connectors and the connector assembly with cover for L and M plug connector.

\* The 25A- series specifications and dimensions are the same as those of the standard model.

For details, refer to the [Web Catalog](#).

# 5-Port Solenoid Valve Body Ported Manifold

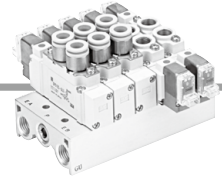


## Bar Stock Type/Individual Wiring

Type **20**

# 25A-SY5000/7000 Series

### How to Order Manifolds



25A – SS5Y **5** – 20 – **05** – [ ] – [ ]

• Series compatible with secondary batteries

Manifold series

|   |        |
|---|--------|
| 5 | SY5000 |
| 7 | SY7000 |

• CE/UKCA-compliant

|     |                   |
|-----|-------------------|
| Nil | —                 |
| Q   | CE/UKCA-compliant |

\* AC-type models that are CE/UKCA-compliant have DIN terminals only.

• Thread type

|     |    |
|-----|----|
| Nil | Rc |
| 00F | G  |

• Stations

|    |             |
|----|-------------|
| 02 | 2 stations  |
| ⋮  | ⋮           |
| 20 | 20 stations |

\* The blanking plate assembly is included in this number.

\* The 25A- series specifications and dimensions are the same as those of the standard model. However, the blanking plate assembly has different dimensions. Refer to page 71.

For details, refer to the [Web Catalog](#).





## How to Order Valves

25A – SY 5 1 20 [ ] – 5 L [ ] [ ] – 01 [ ] – [ ]

• Series compatible with secondary batteries

Series

|   |        |
|---|--------|
| 5 | SY5000 |
| 7 | SY7000 |

• Type of actuation

|   |                            |
|---|----------------------------|
| 1 | 2-position single          |
| 2 | 2-position double          |
| 3 | 3-position closed center   |
| 4 | 3-position exhaust center  |
| 5 | 3-position pressure center |

• Coil specifications

|     |   |
|-----|---|
| Nil | Standard  |
| T   | With power-saving circuit (24 VDC, 12 VDC only) |

\* Power-saving circuit is not available in the case of “D” or “Y” type.

• Rated voltage

| For DC |        | For AC (50/60Hz) |                   |
|--------|--------|------------------|-------------------|
| 5      | 24 VDC | 1                | 100 VAC           |
| 6      | 12 VDC | 2                | 200 VAC           |
| V      | 6 VDC  | 3                | 110 VAC [115 VAC] |
| S      | 5 VDC  | 4                | 220 VAC [230 VAC] |
| R      | 3 VDC  |                  |                   |

\* DC specifications of type “D” and “Y” are only available with 12 and 24 VDC.  
\* AC-type models that are CE/UKCA-compliant have DIN terminals only.

• CE/UKCA-compliant

|     |                   |
|-----|-------------------|
| Nil | —                 |
| Q   | CE/UKCA-compliant |

\* AC-type models that are CE/UKCA-compliant have DIN terminals only.

• Thread type

|     |    |
|-----|----|
| Nil | Rc |
| F   | G  |

• A, B port size  
Thread piping

| Symbol | Port size | Applicable series |
|--------|-----------|-------------------|
| 01     | 1/8       | SY5000            |
| 02     | 1/4       | SY7000            |

• One-touch fitting (Metric size)

| Symbol | Port size                 | Applicable series |
|--------|---------------------------|-------------------|
| C4     | One-touch fitting for ø4  | SY5000            |
| C6     | One-touch fitting for ø6  |                   |
| C8     | One-touch fitting for ø8  |                   |
| C8     | One-touch fitting for ø8  | SY7000            |
| C10    | One-touch fitting for ø10 |                   |

• Manual override

|     |                                |
|-----|--------------------------------|
| Nil | Non-locking push type          |
| D   | Push-turn locking slotted type |
| E   | Push-turn locking lever type   |

• Light/surge voltage suppressor

Electrical entry for G, H, L, M

|     |  |
|-----|--|
| Nil | Without light/surge voltage suppressor               |
| S   | With surge voltage suppressor                        |
| Z   | With light/surge voltage suppressor                  |
| R   | With surge voltage suppressor (Non-polar type)       |
| U   | With light/surge voltage suppressor (Non-polar type) |

\* There is no “S” type for AC mode, since a rectifier prevents surge voltage generation.  
\* For “R” and “U,” DC voltage is only available.  
\* Power-saving circuit is only available in the “Z” type.

Electrical entry for D, Y

|     |  |
|-----|--|
| Nil | Without light/surge voltage suppressor               |
| S   | With surge voltage suppressor (Non-polar type)       |
| Z   | With light/surge voltage suppressor (Non-polar type) |

\* There is no “S” type for AC mode, since a rectifier prevents surge voltage generation.

• Electrical entry

|  |   |   |  |
|--|---|---|--|
| 24, 12, 6, 5, 3 VDC/100, 110, 200, 220 VAC                             |   |   | 24, 12 VDC/<br>100, 110, 200,<br>220 VAC |
| Grommet  | L plug connector  | M plug connector  | DIN terminal                             |
| G: With lead wire (Length 300 mm)<br>H: With lead wire (Length 600 mm) | L: With lead wire (Length 300 mm)<br>LN: Without lead wire<br>LO: Without connector | M: With lead wire (Length 300 mm)<br>MN: Without lead wire<br>MO: Without connector | D: With connector<br>Y: With connector   |

\* “LN,” “MN” type: with 2 sockets.  
\* “Y” type is a DIN terminal conforming to EN-175301-803C (former DIN43650C).  
\* Refer to the standard products for the lead wire length of L and M plug connectors and the connector assembly with cover for L and M plug connector.

\* The 25A- series specifications and dimensions are the same as those of the standard model.

For details, refer to the [Web Catalog](#).

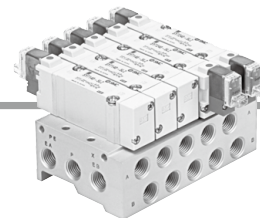
Type **41**  
Type **42**

# 5-Port Solenoid Valve Base Mounted Manifold Bar Stock Type/Individual Wiring

## 25A-SY5000/7000 Series



### How to Order Manifolds



#### Type 41/Compact type

**25A – SS5Y 5 – 41 – 05 – C8** [ ] – [ ]

• Series compatible with secondary batteries

Manifold series

|   |        |
|---|--------|
| 5 | SY5000 |
|---|--------|

Stations

|    |             |
|----|-------------|
| 02 | 2 stations  |
| ⋮  | ⋮           |
| 20 | 20 stations |

\* The blanking plate assembly is included in this number.

• Thread type

|     |    |
|-----|----|
| Nil | Rc |
| F   | G  |

• A, B port size  
Thread piping

| Symbol | Port size | Applicable series |
|--------|-----------|-------------------|
| 01     | 1/8       | SY5000            |

One-touch fitting (Metric size)

| Symbol | Port size                      | Applicable series |
|--------|--------------------------------|-------------------|
| C6     | One-touch fitting for $\phi 6$ | SY5000            |
| C8     | One-touch fitting for $\phi 8$ | SY5000            |

One-touch fitting (Inch size)

| Symbol | Port size                           | Applicable series |
|--------|-------------------------------------|-------------------|
| N7     | One-touch fitting for $\phi 1/4$ "  | SY5000            |
| N9     | One-touch fitting for $\phi 5/16$ " | SY5000            |

• CE/UKCA-compliant

|     |                   |
|-----|-------------------|
| Nil | —                 |
| Q   | CE/UKCA-compliant |

\* AC-type models that are CE/UKCA-compliant have DIN terminals only.

#### Type 42/External pilot capable

**25A – SS5Y 5 – 42 – 05 – C8** [ ] – [ ]

• Series compatible with secondary batteries

Manifold series

|   |        |
|---|--------|
| 5 | SY5000 |
| 7 | SY7000 |

Stations

|    |             |
|----|-------------|
| 02 | 2 stations  |
| ⋮  | ⋮           |
| 20 | 20 stations |

\* The blanking plate assembly is included in this number.

• Thread type

|     |    |
|-----|----|
| Nil | Rc |
| F   | G  |

• A, B port size  
Thread piping

| Symbol | Port size | Applicable series |
|--------|-----------|-------------------|
| 02     | 1/4       | SY5000            |
| 02     | 1/4       | SY7000            |

One-touch fitting (Metric size)

| Symbol | Port size                       | Applicable series |
|--------|---------------------------------|-------------------|
| C6     | One-touch fitting for $\phi 6$  | SY5000            |
| C8     | One-touch fitting for $\phi 8$  | SY5000            |
| C10    | One-touch fitting for $\phi 10$ | SY7000            |

One-touch fitting (Inch size)

| Symbol | Port size                           | Applicable series |
|--------|-------------------------------------|-------------------|
| N7     | One-touch fitting for $\phi 1/4$ "  | SY5000            |
| N9     | One-touch fitting for $\phi 5/16$ " | SY5000            |
| N11    | One-touch fitting for $\phi 3/8$ "  | SY7000            |

• CE/UKCA-compliant

|     |                   |
|-----|-------------------|
| Nil | —                 |
| Q   | CE/UKCA-compliant |

\* AC-type models that are CE/UKCA-compliant have DIN terminals only.

\* The 25A- series specifications and dimensions are the same as those of the standard model. However, the blanking plate assembly has different dimensions. Refer to page 71.

For details, refer to the [Web Catalog](#).

**How to Order Valves**

**25A – SY 5 2 40**     **– 5 L**     **–**  

• **Series compatible with secondary batteries**

**Series**

|   |        |
|---|--------|
| 5 | SY5000 |
| 7 | SY7000 |

**Type of actuation**

|   |                            |
|---|----------------------------|
| 1 | 2-position single          |
| 2 | 2-position double          |
| 3 | 3-position closed center   |
| 4 | 3-position exhaust center  |
| 5 | 3-position pressure center |

**Pilot type**

|     |                |
|-----|----------------|
| Nil | Internal pilot |
| R   | External pilot |

**Coil specifications**

|     |   |
|-----|---|
| Nil | Standard  |
| T   | With power-saving circuit (24 VDC, 12 VDC only) |

\* Power-saving circuit is not available in the case of "D" or "Y" type.

**Rated voltage**

| For DC |        |
|--------|--------|
| 5      | 24 VDC |
| 6      | 12 VDC |
| V      | 6 VDC  |
| S      | 5 VDC  |
| R      | 3 VDC  |

| For AC (50/60Hz) |                   |
|------------------|-------------------|
| 1                | 100 VAC           |
| 2                | 200 VAC           |
| 3                | 110 VAC [115 VAC] |
| 4                | 220 VAC [230 VAC] |

\* DC specifications of type "D" and "Y" are only available with 12 and 24 VDC.

\* AC-type models that are CE/UKCA-compliant have DIN terminals only.

• **CE/UKCA-compliant**

|     |                   |
|-----|-------------------|
| Nil | —                 |
| Q   | CE/UKCA-compliant |

\* AC-type models that are CE/UKCA-compliant have DIN terminals only.

• **Manual override**

|     |                                |
|-----|--------------------------------|
| Nil | Non-locking push type          |
| D   | Push-turn locking slotted type |
| E   | Push-turn locking lever type   |

• **Light/surge voltage suppressor**

**Electrical entry for G, H, L, M**

|     |  |
|-----|--|
| Nil | Without light/surge voltage suppressor               |
| S   | With surge voltage suppressor                        |
| Z   | With light/surge voltage suppressor                  |
| R   | With surge voltage suppressor (Non-polar type)       |
| U   | With light/surge voltage suppressor (Non-polar type) |

\* There is no "S" type for AC mode, since a rectifier prevents surge voltage generation.

\* For "R" and "U," DC voltage is only available.

\* Power-saving circuit is only available in the "Z" type.

**Electrical entry for D, Y**

|     |  |
|-----|--|
| Nil | Without light/surge voltage suppressor               |
| S   | With surge voltage suppressor (Non-polar type)       |
| Z   | With light/surge voltage suppressor (Non-polar type) |

\* There is no "S" type for AC mode, since a rectifier prevents surge voltage generation.

• **Electrical entry**

|  |  |  |  |
|--|--|--|--|
| 24, 12, 6, 5, 3 VDC/100, 110, 200, 220 VAC |  |  | 24, 12 VDC/<br>100, 110, 200,<br>220 VAC |
| Grommet                                    | L plug connector                         | M plug connector                         | DIN terminal                             |
| <b>G:</b> With lead wire (Length 300 mm)   | <b>L:</b> With lead wire (Length 300 mm) | <b>M:</b> With lead wire (Length 300 mm) | <b>D:</b> With connector                 |
| <b>H:</b> With lead wire (Length 600 mm)   | <b>LN:</b> Without lead wire             | <b>MN:</b> Without lead wire             | <b>Y:</b> With connector                 |
|  | <b>LO:</b> Without connector             | <b>MO:</b> Without connector             |  |

\* "LN," "MN" type: with 2 sockets.

\* "Y" type is a DIN terminal conforming to EN-175301-803C (former DIN43650C).

\* Refer to the standard products for the lead wire length of L and M plug connectors and the connector assembly with cover for L and M plug connector.

\* The 25A- series specifications and dimensions are the same as those of the standard model.

For details, refer to the [Web Catalog](#).

# 25A-SY5000/7000 Series

## How to Order Pilot Valve Assembly (With two mounting screws)

25A - V111 - 5 G

### Coil specifications

|     |   |
|-----|---|
| Nil | Standard  |
| T   | With power-saving circuit (24 VDC, 12 VDC only) |

\* Power-saving circuit is not available in the case of D or Y type.

### Rated voltage

|   |  |
|---|--|
| 5 | 24 VDC   |
| 6 | 12 VDC   |
| V | 6 VDC  |
| S | 5 VDC  |
| R | 3 VDC  |
| 1 | 100 VAC <sup>50/60</sup> Hz                                  |
| 2 | 200 VAC <sup>50/60</sup> Hz                                  |
| 3 | 110 VAC <sup>50/60</sup> Hz<br>[115 VAC <sup>50/60</sup> Hz] |
| 4 | 220 VAC <sup>50/60</sup> Hz<br>[230 VAC <sup>50/60</sup> Hz] |

\* CE/UKCA-compliant:  
For DC only.

### Light/Surge voltage suppressor

|     |  |
|-----|--|
| Nil | Without light/surge voltage suppressor               |
| S   | With surge voltage suppressor                        |
| Z   | With light/surge voltage suppressor                  |
| R   | With surge voltage suppressor (Non-polar type)       |
| U   | With light/surge voltage suppressor (Non-polar type) |

\* For AC voltage valves there is no "S" option. It is already built-in to the rectifier circuit.

\* For "R" and "U", DC voltage is only available.

\* Power-saving circuit is only available in the "Z" type.

### Electrical entry

|    |                           |
|----|---------------------------|
| G  | Grommet, 300 mm lead wire |
| H  | Grommet, 600 mm lead wire |
| L  | L plug connector          |
| LN | With lead wire            |
| LO | Without lead wire         |
| M  | M plug connector          |
| MN | With lead wire            |
| MO | Without lead wire         |

## DIN terminal type

25A - V115 - 5 D

### Rated voltage

|   |  |
|---|--|
| 5 | 24 VDC   |
| 6 | 12 VDC   |
| 1 | 100 VAC <sup>50/60</sup> Hz                                  |
| 2 | 200 VAC <sup>50/60</sup> Hz                                  |
| 3 | 110 VAC <sup>50/60</sup> Hz<br>[115 VAC <sup>50/60</sup> Hz] |
| 4 | 220 VAC <sup>50/60</sup> Hz<br>[230 VAC <sup>50/60</sup> Hz] |

\* DC specifications of type D and Y is only available with 12 and 24 VDC.

### Light/Surge voltage suppressor

|     |  |
|-----|--|
| Nil | Without light/surge voltage suppressor               |
| S   | With surge voltage suppressor (Non-polar type)       |
| Z   | With light/surge voltage suppressor (Non-polar type) |

\* DOZ and YOZ are not available.

\* For AC voltage valves there is no "S" option. It is already built-in to the rectifier circuit.

### Electrical entry

|    |              |                   |
|----|--------------|-------------------|
| D  | DIN terminal | With connector    |
| DO | (Type D)     | Without connector |
| Y  | DIN terminal | With connector    |
| YO | (Type Y)     | Without connector |

\* Do not replace V111 (G, H, L, M) to V115 (DIN terminal) and vice versa when replacing pilot valve assembly only.

\* Since V111 and V115 are CE/UKCA-compliant as standard, the suffix "-Q" is not necessary.

# Bar Stock Type/Individual Wiring **25A-SY5000/7000 Series**

## One-touch Fittings Part Nos. for Body Ported

|               |             | Port size                             | 25A-SY5000        | 25A-SY7000         |
|---------------|-------------|---------------------------------------|-------------------|--------------------|
| Cylinder port | Metric size | ø4 One-touch fitting (Straight type)  | 90-VVQ1000-51A-C4 |                    |
|               |             | ø6 One-touch fitting (Straight type)  | 90-VVQ1000-51A-C6 |                    |
|               |             | ø8 One-touch fitting (Straight type)  | 90-VVQ1000-51A-C8 | 90-VVQ2000-51A-C8  |
|               |             | ø10 One-touch fitting (Straight type) |                   | 90-VVQ2000-51A-C10 |

## Gasket Assembly Part Nos.

| Valve model  | Manifold type | 25A-SY5000       | 25A-SY7000       |
|--------------|---------------|------------------|------------------|
| Body ported  | Type 20       | SY5000-GS-3      | SY7000-GS-3      |
| Base mounted | Type 41/42    | SY5000-GS-4 (-Q) | SY7000-GS-4 (-Q) |

\* The gasket assembly includes 10 sets of a gasket and mounting screws.

## Bracket Assembly Part Nos.

| Description      | Part no.  |
|------------------|---|
| Bracket (For F1) | 25A-SX <sup>5</sup> 000-16-2A (With mounting screw) |
| Bracket (For F2) | 25A-SX <sup>5</sup> 000-16-1A (With mounting screw) |

## Port Block Assembly Part Nos.

25A-SY **5** 000-6A-**01**  

Series ●

|   |        |
|---|--------|
| 5 | SY5000 |
| 7 | SY7000 |

● Thread type

|     |    |
|-----|----|
| Nil | Rc |
| F   | G  |

● A, B port size

Thread piping

| Symbol | Port size | Applicable series |
|--------|-----------|-------------------|
| 01     | 1/8       | 25A-SY5000        |
| 02     | 1/4       | 25A-SY7000        |

One-touch fitting (Metric size)

| Symbol | Port size                 | Applicable series |
|--------|---------------------------|-------------------|
| C4     | One-touch fitting for ø4  | 25A-SY5000        |
| C6     | One-touch fitting for ø6  |                   |
| C8     | One-touch fitting for ø8  |                   |
| C8     | One-touch fitting for ø8  | 25A-SY7000        |
| C10    | One-touch fitting for ø10 |                   |

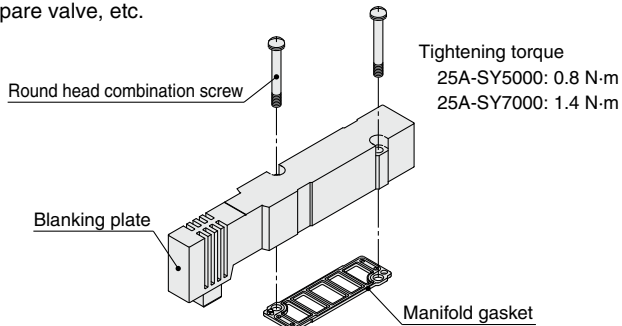
# 25A-SY5000/7000 Series

## Manifold Options

### Blanking plate assembly

(Mounting screw: 2 pcs., with gasket)

It is used by attaching on the manifold block for being prepared for removing a valve for maintenance reasons or planning to mount a spare valve, etc.



### How to Order

25A-SY **5** 000-26-1A

#### Series

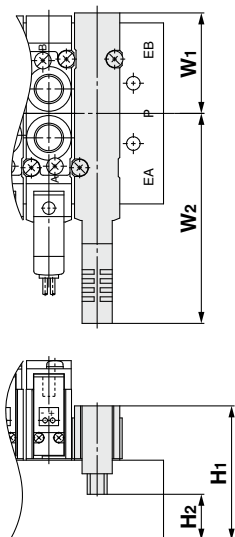
|   |        |
|---|--------|
| 5 | SY5000 |
| 7 | SY7000 |

### Caution

When mounted on a type 20 manifold, only the P port is plugged. In addition, it cannot be used for the type 20 CE/UKCA-compliant manifold.

## Dimensions

### Manifold type/For type 20

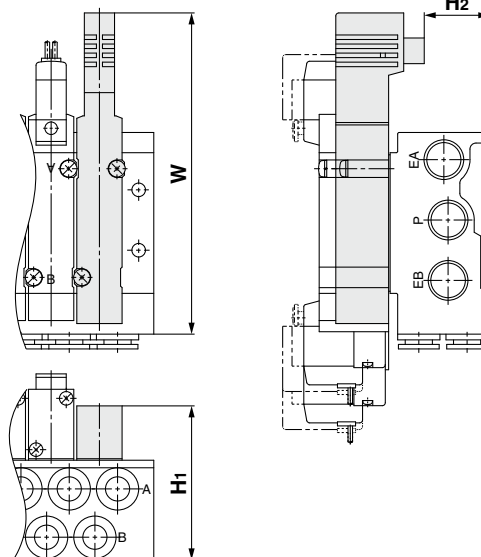


### Dimensions

[mm]

| Series     | Manifold type | W1   | W2   | H1   | H2   |
|------------|---------------|------|------|------|------|
| 25A-SY5000 | Type 20       | 33.3 | 69.6 | 44.5 | 15.2 |
| 25A-SY7000 | Type 20       | 39.4 | 76.4 | 41.1 | 18.3 |

### Manifold type/For type 41/42



### Dimensions

[mm]

| Series     | Manifold type | W     | H1   | H2   |
|------------|---------------|-------|------|------|
| 25A-SY5000 | Type 41       | 106.4 | 51   | 21.7 |
|            | Type 42       | 107.6 | 56   | 26.7 |
| 25A-SY7000 | Type 42       | 118.1 | 55.6 | 32.8 |





# Plug-in Unit/Base Mounted F Kit (D-sub connector kit) 25A-VQ2000 Series



## How to Order Manifolds

\* For CE/UKCA-compliant models, DC-type only.

**25A-VV5Q 2 1-08 C6 F U 1 - -**

- Series compatible with secondary batteries**
- Series**: 2 VQ2000
- Manifold**: 1 Plug-in unit
- Stations**: 02 2 stations, 24 24 stations
- Cylinder port**:
 

| Symbol | Port size                                  |
|--------|--|
| C4     | With ø4 One-touch fitting                  |
| C6     | With ø6 One-touch fitting                  |
| C8     | With ø8 One-touch fitting                  |
| L4     | Top ported elbow with ø4 One-touch fitting |
| L6     | Top ported elbow with ø6 One-touch fitting |
| L8     | Top ported elbow with ø8 One-touch fitting |
- Connector entry direction**:
 

|   |            |
|---|------------|
| U | Top entry  |
| S | Side entry |
- Cable (Length)**:
 

|   |                    |
|---|--------------------|
| 0 | Without cable      |
| 1 | With cable (1.5 m) |
| 2 | With cable (3 m)   |
| 3 | With cable (5 m)   |
- Option**:
 

| Symbol | Option   |
|--------|--|
| Nil    | None   |
| 2      | 200/220 VAC models                                   |
| B*1    | With back pressure check valve                       |
| D      | DIN rail mounting                                    |
| D0     | With DIN rail bracket (Without DIN rail)             |
| D□*2   | DIN rail length specified (□: Stations 02 to 24)     |
| K*3    | Special wiring specifications (Except double wiring) |
| N      | With name plate                                      |
| R*4    | External pilot                                       |
| S      | Direct EXH outlet with built-in silencer             |
- CE/UKCA-compliant**:
 

|     |                   |
|-----|-------------------|
| Nil | —                 |
| Q   | CE/UKCA-compliant |

\*1 Models with a suffix "-B" have check valves for prevention of back pressure at all manifold stations. When a back pressure check valve is desired, and is to be installed only in certain manifold stations, specify the mounting position by means of the manifold specification sheet.  
 \*2 The number of stations that may be displayed is longer than the manifold number of stations.  
 \*3 Specify the wiring specifications by means of the manifold specification sheet.  
 \*4 Indicate "R" for the valve with external pilot.  
 \* When two or more symbols are specified, indicate them alphabetically. Example) -BRS

## How to Order Valves

\* For CE/UKCA-compliant models, DC-type only.



**25A-VQ 2 1 0 1 - 5 - - 1 - -**

- Series compatible with secondary batteries**
- Series**: 2 VQ2000
- Seal type**: 1 Rubber seal
- Type of actuation**:
 

|   |                                  |
|---|----------------------------------|
| 1 | 2-position single                |
| 2 | 2-position double                |
| 3 | 3-position closed center         |
| 4 | 3-position exhaust center        |
| 5 | 3-position pressure center       |
| A | 4-position dual port (N.C./N.C.) |
| B | 4-position dual port (N.O./N.O.) |
| C | 4-position dual port (N.C./N.O.) |
- Function**:
 

| Symbol | Specifications           | DC            | AC |
|--------|--------------------------|---------------|----|
| Nil    | Standard                 | (0.4 W)<br>○  | ○  |
| B      | High speed response type | (0.95 W)<br>○ | —  |
| N      | Negative common          | ○             | —  |
| R      | External pilot           | ○             | ○  |
- CE/UKCA-compliant**:
 

|     |                   |
|-----|-------------------|
| Nil | —                 |
| Q   | CE/UKCA-compliant |
- Manual override**:
 

|     |                                       |
|-----|---------------------------------------|
| Nil | Non-locking push type (Tool required) |
| B   | Locking type (Tool required)          |
| C   | Locking type (Manual)                 |
| D   | Slide locking type (Manual)           |
- Light/surge voltage suppressor**:
 

|     |      |
|-----|------|
| Nil | Yes  |
| E   | None |
- Coil voltage**:
 

|   | CE/UKCA-compliant  |
|---|--------------------|
| 1 | 100 VAC (50/60 Hz) |
| 2 | 200 VAC (50/60 Hz) |
| 3 | 110 VAC (50/60 Hz) |
| 4 | 220 VAC (50/60 Hz) |
| 5 | 24 VDC             |
| 6 | 12 VDC             |

\* When two or more symbols are specified, indicate them alphabetically.

### ⚠ Caution

Use the standard (DC) specification when continuously energizing for long periods of time.

\* The 25A- series specifications and dimensions are the same as those of the standard model.

For details, refer to the [Web Catalog](#).

# Plug-in Unit/Base Mounted T Kit (Terminal block box kit) 25A-VQ2000 Series



## How to Order Manifolds

\* For CE/UKCA-compliant models, DC-type only.

**25A-VV5Q 2 1-08 C6 T 0- -**

- Series compatible with secondary batteries**
- Series**  
2 VQ2000
- Manifold**  
1 Plug-in unit
- Stations**  
02 2 stations  
: :  
20 20 stations
- Cylinder port**

| Symbol | Port size                                  |
|--------|--|
| C4     | With ø4 One-touch fitting                  |
| C6     | With ø6 One-touch fitting                  |
| C8     | With ø8 One-touch fitting                  |
| L4     | Top ported elbow with ø4 One-touch fitting |
| L6     | Top ported elbow with ø6 One-touch fitting |
| L8     | Top ported elbow with ø8 One-touch fitting |

| Symbol | Option   |
|--------|--|
| Nil    | None   |
| B*1    | With back pressure check valve                   |
| D      | DIN rail mounting                                |
| D0     | With DIN rail bracket (Without DIN rail)         |
| D□*2   | DIN rail length specified (□: Stations 02 to 20) |
| K*3    | Special wiring spec. (Except double wiring)      |
| N      | With name plate                                  |
| R*4    | External pilot                                   |
| S      | Direct EXH outlet with built-in silencer         |
| W      | Enclosure: Dust-tight, Water-jet-proof (IP65)    |

**CE/UKCA-compliant**

|     |                   |
|-----|-------------------|
| Nil | —                 |
| Q   | CE/UKCA-compliant |

\* For CE/UKCA-compliant models, DC-type only.

**Option**

\*1 Models with a suffix “-B” have check valves for prevention of back pressure at all manifold stations. When a back pressure check valve is desired, and is to be installed only in certain manifold stations, specify the mounting position by means of the manifold specification sheet.

\*2 The number of stations that may be displayed is longer than the manifold number of stations.

\*3 Specify the wiring specifications by means of the manifold specification sheet.

\*4 Indicate “R” for the valve with external pilot.

\* When two or more symbols are specified, indicate them alphabetically.  
Example) -BRS

\* Specify the mounting position by means of the manifold specification sheet.

## How to Order Valves

\* For CE/UKCA-compliant models, DC-type only.



**25A-VQ 2 1 0 1 - 5 - - - 1 -**

- Series compatible with secondary batteries**
- Series**  
2 VQ2000
- Type of actuation**
- Seal type**  
1 Rubber seal
- Function**
- CE/UKCA-compliant**
- Enclosure**
- Manual override**
- Light/surge voltage suppressor**
- Coil voltage**

| 1                 | 2                 | 3                        | 4                         | 5                          | A                                | B                                | C                                |
|-------------------|-------------------|--------------------------|---------------------------|----------------------------|----------------------------------|----------------------------------|----------------------------------|
| 2-position single | 2-position double | 3-position closed center | 3-position exhaust center | 3-position pressure center | 4-position dual port (N.C./N.C.) | 4-position dual port (N.O./N.O.) | 4-position dual port (N.C./N.O.) |

| Symbol | Specifications           | DC            | AC |
|--------|--------------------------|---------------|----|
| Nil    | Standard                 | (0.4 W)<br>○  | ○  |
| B      | High speed response type | (0.95 W)<br>○ | —  |
| N      | Negative common          | ○             | —  |
| R      | External pilot           | ○             | ○  |

**CE/UKCA-compliant**

|     |                   |
|-----|-------------------|
| Nil | —                 |
| Q   | CE/UKCA-compliant |

\* For CE/UKCA-compliant models, DC-type only.

**Enclosure**

|     |  |
|-----|--|
| Nil | Dustproof                              |
| W   | Dust-tight/Water-jet-proof type (IP65) |

**Manual override**

|     |                                       |
|-----|---------------------------------------|
| Nil | Non-locking push type (Tool required) |
| B   | Locking type (Tool required)          |
| C   | Locking type (Manual)                 |
| D   | Slide locking type (Manual)           |

**Light/surge voltage suppressor**

|     |      |
|-----|------|
| Nil | Yes  |
| E   | None |

**Coil voltage**

|                      | CE/UKCA-compliant |
|----------------------|-------------------|
| 1 100 VAC (50/60 Hz) | —                 |
| 3 110 VAC (50/60 Hz) | —                 |
| 5 24 VDC             | ●                 |
| 6 12 VDC             | ●                 |

**Caution**  
Use the standard (DC) specification when continuously energizing for long periods of time.

\* When two or more symbols are specified, indicate them alphabetically. Combination of “B” and “K” is not possible.

\* The 25A- series specifications and dimensions are the same as those of the standard model.

For details, refer to the [Web Catalog](#).

# Plug-in Unit/Base Mounted L Kit (Lead wire) 25A-VQ2000 Series



## How to Order Manifolds

\* For CE/UKCA-compliant models, DC-type only.

**25A-VV5Q 2 1-06 C6 L 1 - -**

- Series compatible with secondary batteries**
- Series**  
2 VQ2000
- Manifold**  
1 Plug-in unit
- Stations**  
01 1 station  
: :  
08 8 stations
- Cylinder port**

| Symbol | Port size                                  |
|--------|--|
| C4     | With ø4 One-touch fitting                  |
| C6     | With ø6 One-touch fitting                  |
| C8     | With ø8 One-touch fitting                  |
| L4     | Top ported elbow with ø4 One-touch fitting |
| L6     | Top ported elbow with ø6 One-touch fitting |
| L8     | Top ported elbow with ø8 One-touch fitting |

**Cable (Length)**

|   |                    |
|---|--------------------|
| 0 | Cable length 0.6 m |
| 1 | Cable length 1.5 m |
| 2 | Cable length 3 m   |

**CE/UKCA-compliant**

|     |                   |
|-----|-------------------|
| Nil | —                 |
| Q   | CE/UKCA-compliant |

\* For CE/UKCA-compliant models, DC-type only.

**Option**

| Symbol | Option   |
|--------|--|
| Nil    | None   |
| 2      | 200/220 VAC models                               |
| B*1    | With back pressure check valve                   |
| D      | DIN rail mounting                                |
| D0     | With DIN rail bracket (Without DIN rail)         |
| D□*2   | DIN rail length specified (□: Stations 02 to 08) |
| N      | With name plate                                  |
| R*3    | External pilot                                   |
| S      | Direct EXH outlet with built-in silencer         |
| W      | Enclosure: Dust-tight, Water-jet-proof (IP65)    |

\*1 Models with a suffix “-B” have check valves for prevention of back pressure at all manifold stations. When a back pressure check valve is desired, and is to be installed only in certain manifold stations, specify the mounting position by means of the manifold specification sheet.  
\*2 The number of stations that may be displayed is longer than the manifold a number of stations.  
\*3 Indicate “R” for the valve with external pilot.  
\* When two or more symbols are specified, indicate them alphabetically.  
Example) -BRS

## How to Order Valves

\* For CE/UKCA-compliant models, DC-type only.



**25A-VQ 2 1 0 1 - 5 - - - 1 -**

- Series compatible with secondary batteries**
- Series**  
2 VQ2000
- Type of actuation**
- Seal type**  
1 Rubber seal
- Function**
- CE/UKCA-compliant**
- Enclosure**
- Manual override**
- Light/surge voltage suppressor**
- Coil voltage**

| Symbol | Specifications           | DC (0.4 W) | AC |
|--------|--------------------------|------------|----|
| Nil    | Standard                 | ○          | ○  |
| B      | High speed response type | ○          | —  |
| N      | Negative common          | ○          | —  |
| R      | External pilot           | ○          | ○  |

\* When two or more symbols are specified, indicate them alphabetically.

|     |                   |
|-----|-------------------|
| Nil | —                 |
| Q   | CE/UKCA-compliant |

\* For CE/UKCA-compliant models, DC-type only.

|     |  |
|-----|--|
| Nil | Dustproof                              |
| W   | Dust-tight/Water-jet-proof type (IP65) |


|     |                                       |
|-----|---------------------------------------|
| Nil | Non-locking push type (Tool required) |
| B   | Locking type (Tool required)          |
| C   | Locking type (Manual)                 |
| D   | Slide locking type (Manual)           |

|     |      |
|-----|------|
| Nil | Yes  |
| E   | None |

|   | CE/UKCA-compliant  |
|---|--------------------|
| 1 | 100 VAC (50/60 Hz) |
| 2 | 200 VAC (50/60 Hz) |
| 3 | 110 VAC (50/60 Hz) |
| 4 | 220 VAC (50/60 Hz) |
| 5 | 24 VDC             |
| 6 | 12 VDC             |

\* The 25A- series specifications and dimensions are the same as those of the standard model. For details, refer to the [Web Catalog](#).

# Plug-in Unit/Base Mounted S Kit (Serial transmission) 25A-VQ2000 Series

\* Refer to "SI Unit Part Nos." when ordering the CE/UKCA-compliant SI unit. 

## How to Order Manifolds

**25A-VV5Q 2 1 - 08 C6 S V - -**

• Series compatible with secondary batteries

**Series**  
2 | VQ2000

**Manifold**  
1 | Plug-in unit

**Stations**

|      |             |
|------|-------------|
| 02   | 2 stations  |
| ⋮    | ⋮           |
| 16*1 | 16 stations |

\*1 Max. 16 stations. (Specify a model with 9 to 16 stations by means of the manifold specification sheet.)

**Cylinder port**

| Symbol | Port size                                  |
|--------|--|
| C4     | With ø4 One-touch fitting                  |
| C6     | With ø6 One-touch fitting                  |
| C8     | With ø8 One-touch fitting                  |
| L4     | Top ported elbow with ø4 One-touch fitting |
| L6     | Top ported elbow with ø6 One-touch fitting |
| L8     | Top ported elbow with ø8 One-touch fitting |

**SI unit specifications**

| Symbol | Protocol        | Stations        |
|--------|-----------------|-----------------|
| 0      | Without SI unit | —               |
| Q      | DeviceNet®      | Max.16 stations |
| V      | CC-Link         | Max.16 stations |

**Option**

| Symbol | Option   |
|--------|--|
| Nil    | None   |
| B*1    | With back pressure check valve                       |
| D      | DIN rail mounting                                    |
| D□*2   | DIN rail length specified (□: Stations 02 to 16)     |
| K*3    | Special wiring specifications (Except double wiring) |
| N      | With name plate                                      |
| R*4    | With external pilot                                  |
| S      | Direct EXH outlet with built-in silencer             |
| W*5    | Enclosure: Dust-tight, Water-jet-proof (IP65)        |

\*1 Models with a suffix "-B" have check valves for prevention of back pressure at all manifold stations. When a back pressure check valve is desired, and is to be installed only in certain manifold stations, specify the mounting position by means of the manifold specification sheet.  
\*2 The number of stations that may be displayed is longer than the manifold number of stations.  
\*3 Specify the wiring specifications by means of the manifold specification sheet.  
\*4 Indicate "R" for the valve with external pilot.  
\*5 Refer to "Dimensions" of the standard products for SI unit and valve, in case of "W" (Dust-tight, Water-jet-proof).  
\* When two or more symbols are specified, indicate them alphabetically.  
Example) -BRS.

**SI Unit Part Nos.**

| Symbol | Protocol   | SI unit part no. |
|--------|------------|------------------|
| Q      | DeviceNet® | EX120-SDN1-X220  |
| V      | CC-Link    | EX120-SMJ1-X220  |

**SI Unit Part Nos. (With option W)**

| Symbol | Protocol   | SI unit part no. |
|--------|------------|------------------|
| Q      | DeviceNet® | EX124D-SDN1-X220 |
| V      | CC-Link    | EX124D-SMJ1-X220 |



## How to Order Valves

**25A-VQ 2 1 0 1 - 5 - - 1 - -**

• Series compatible with secondary batteries

**Series**  
2 | VQ2000

**Type of actuation**

|   |                                  |
|---|----------------------------------|
| 1 | 2-position single                |
| 2 | 2-position double                |
| 3 | 3-position closed center         |
| 4 | 3-position exhaust center        |
| 5 | 3-position pressure center       |
| A | 4-position dual port (N.C./N.C.) |
| B | 4-position dual port (N.O./N.O.) |
| C | 4-position dual port (N.C./N.O.) |

**Seal type**  
1 | Rubber seal

**CE/UKCA-compliant**

|     |                   |
|-----|-------------------|
| Nil | —                 |
| Q   | CE/UKCA-compliant |

**Enclosure**

|     |  |
|-----|--|
| Nil | Dustproof                              |
| W   | Dust-tight/Water-jet-proof type (IP65) |

**Manual override**

|     |                                       |
|-----|---------------------------------------|
| Nil | Non-locking push type (Tool required) |
| B   | Locking type (Tool required)          |
| C   | Locking type (Manual)                 |
| D   | Slide locking type (Manual)           |

**Coil voltage**

|   |   |
|---|---|
| 5 | 24 VDC; With indicator light/surge voltage suppressor |
|---|---|

**Function**

| Symbol | Specifications           | DC            |
|--------|--------------------------|---------------|
| Nil    | Standard                 | (0.4 W)<br>○  |
| B      | High speed response type | (0.95 W)<br>○ |
| N*1    | Negative common          | ○             |
| R*1    | External pilot           | ○             |

\*1 External pilot and negative common specifications are the same as standard products.  
\* When two or more symbols are specified, indicate them alphabetically.

\* The 25A- series specifications and dimensions are the same as those of the standard model. For details, refer to the [Web Catalog](#).

# Sub-plate Single Unit

# 25A-VQ2000 Series

## How to Order

\* For CE/UKCA-compliant models, DC-type only.



In the case of **Valve** + **Sub-plate**

25A-VQ2 **1** **0** **1**-**5** **W** 1-02 **□**-**□**

Series compatible with secondary batteries

The entry is the same as that of the standard model.

Enclosure

|     |  |
|-----|--|
| Nil | Dustproof                              |
| W*1 | Dust-tight/Water-jet-proof type (IP65) |

\*1 Valves are IP65 specifications.

\* When the valve is a standard (dust-protected) specification, it is not compatible with 200 or 220 VAC.

CE/UKCA-compliant

|     |                   |
|-----|-------------------|
| Nil | —                 |
| Q   | CE/UKCA-compliant |

\* For CE/UKCA-compliant models, DC-type only.

Thread type

|     |      |
|-----|------|
| Nil | Rc   |
| N   | NPT  |
| T   | NPTF |
| F   | G    |

Port size

|    |     |
|----|-----|
| 02 | 1/4 |
|----|-----|

In the case of **Sub-plate** alone

25A-VQ2000-PW-02

\* The 25A- series specifications and dimensions are the same as those of the standard model.

For details, refer to the [Web Catalog](#).

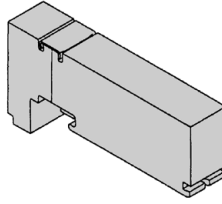


## Manifold Options

### Blanking plate assembly

#### 25A-VVQ2000V-10A-1

It is used by attaching on the manifold block for being prepared for removing a valve for maintenance reasons or planning to mount a spare valve, etc.



\* The 25A- series specifications and dimensions are the same as those of the standard model.

For details, refer to the [Web Catalog](#).

### SI Unit Part Nos.

| Description   | SI unit part no.        | Note                                   |
|---------------|-------------------------|--|
| EX124 SI unit | <b>EX124D-SMJ1-X220</b> | CC-Link                                |
|               | <b>EX124D-SDN1-X220</b> | DeviceNet®                             |
| EX120 SI unit | <b>EX120-SMJ1-X220</b>  | CC-Link (VQ2000/Without option "W")    |
|               | <b>EX120-SDN1-X220</b>  | DeviceNet® (VQ2000/Without option "W") |

### One-touch Fittings Part Nos.

| Port size         |             | One-touch fitting part no.            |                           |
|-------------------|-------------|---------------------------------------|---------------------------|
| Cylinder port     | Metric size | ø4 One-touch fitting (Straight type)  | <b>90-VVQ1000-51A-C4</b>  |
|                   |             | ø6 One-touch fitting (Straight type)  | <b>90-VVQ1000-51A-C6</b>  |
|                   |             | ø8 One-touch fitting (Straight type)  | <b>90-VVQ1000-51A-C8</b>  |
| 1 (P), 3 (R) port | Metric size | ø10 One-touch fitting (Straight type) | <b>90-VVQ2000-51A-C10</b> |

# Plug-in/Plug Lead: Single Unit Base Mounted 25A-VQ4000 Series



## How to Order Valves

**0: Plug-in sub-plate**

**Body**

**Porting specifications**

|     |               |
|-----|---------------|
| Nil | Side ported   |
| B   | Bottom ported |

**Port size**

|     |                                  |
|-----|----------------------------------|
| Nil | Without sub-plate (For manifold) |
| 02  | Rc 1/4                           |
| 03  | Rc 3/8                           |

\* Thread standard is the same as standard products.

**Plug-in** 25A-VQ4 1 0 1

**Plug lead** 25A-VQ4 2 5 1

**Series compatible with secondary batteries**

**Type of actuation**

|     |                            |
|-----|----------------------------|
| 1   | 2-position single          |
| 2   | Rubber/2-position double   |
| 3   | 3-position closed center   |
| 4   | 3-position exhaust center  |
| 5   | 3-position pressure center |
| 6*1 | 3-position double check    |

\*1 For double check type, refer to the **Web Catalog**.

**5: Plug lead sub-plate**

**Body**

**Seal type**

|   |             |
|---|-------------|
| 1 | Rubber seal |
|---|-------------|

**Function**

|       |                          |
|-------|--------------------------|
| Nil*1 | Standard type (0.95 W)   |
| Y*2   | Low wattage type (0.4 W) |
| R*3   | External pilot           |

\*1 When the unit is energized continuously, refer to "Specific Product Precautions 1" in the **Web Catalog** (VQ4000 series).  
 \*2 Only DC is available with Y.  
 \*3 External pilot specifications are the same as standard products. Combination of external pilot and perfect interface is not possible.  
 \* When two or more symbols are specified, indicate them alphabetically.

**Enclosure**

|     |  |
|-----|--|
| Nil | Dustproof                              |
| W   | Dust-tight/Water-jet-proof type (IP65) |

**CE/UKCA-compliant**

|     |                   |
|-----|-------------------|
| Nil | —                 |
| Q   | CE/UKCA-compliant |

\* CE/UKCA-compliant: For DC only.

**Manual override**

Nil: Non-locking push type (Tool required)    B: Slotted locking type (Tool required)    C: Locking type (Manual)

**Light/Surge voltage suppressor**

|     |  |
|-----|--|
| Nil | Yes  |
| E   | Without light, with surge voltage suppressor |

**Electrical entry**

|         |   |                        |
|---------|---|------------------------|
| Grommet | G | Lead wire length 0.6 m |
|         | H | Lead wire length 1.5 m |

**Coil voltage**

|   |                    |
|---|--------------------|
| 1 | 100 VAC (50/60 Hz) |
| 2 | 200 VAC (50/60 Hz) |
| 3 | 110 VAC (50/60 Hz) |
| 4 | 220 VAC (50/60 Hz) |
| 5 | 24 VDC             |
| 6 | 12 VDC             |

## How to Order Sub-plates



**25A-VQ4000** - [ ] - [ ] - [ ] - [ ]

**Series compatible with secondary batteries**

**Electrical entry**

|   |                          |
|---|--------------------------|
| P | Plug-in conduit terminal |
| S | Plug lead                |

**Enclosure**

|     |                                 |
|-----|---------------------------------|
| Nil | Dustproof                       |
| W*1 | Dust-tight/Water-jet-proof type |

\*1 It is not necessary for plug lead type.

**CE/UKCA-compliant**

|     |                   |
|-----|-------------------|
| Nil | —                 |
| Q   | CE/UKCA-compliant |

**Porting specifications**

|     |                 |
|-----|-----------------|
| Nil | Side ported     |
| B   | Bottom ported*1 |

\*1 For bottom ported port size is Rc 1/4 only.  
 \* Thread standard is the same as standard products.

**Port size**

|    |       |
|----|-------|
| 02 | Rc1/4 |
| 03 | Rc3/8 |

\* The 25A- series specifications and dimensions are the same as those of the standard model. For details, refer to the **Web Catalog**.

# Plug-in Unit/Base Mounted F Kit (D-sub connector kit) 25A-VQ4000 Series



## How to Order Manifolds

**25A – VV5Q 4 1 – 08 C8 F U 1 – [ ] – [ ]**

- Series compatible with secondary batteries**
- Series**

|   |        |
|---|--------|
| 4 | VQ4000 |
|---|--------|
- Manifold**

|   |              |
|---|--------------|
| 1 | Plug-in unit |
|---|--------------|
- Stations**

|    |             |
|----|-------------|
| 01 | 1 station   |
| ⋮  | ⋮           |
| 18 | 18 stations |
- Cylinder port**

|     |                                |
|-----|--------------------------------|
| C6  | With One-touch fitting for ø6  |
| C8  | With One-touch fitting for ø8  |
| C10 | With One-touch fitting for ø10 |
| C12 | With One-touch fitting for ø12 |
| 02  | Rc 1/4                         |
| 03  | Rc 3/8                         |
| B   | Bottom ported Rc 1/4           |
| CM  | Mixed                          |

\* As a semi-standard specification, the maximum number of stations can be increased by special wiring specifications.
- CE/UKCA-compliant**

|     |                   |
|-----|-------------------|
| Nil | —                 |
| Q   | CE/UKCA-compliant |
- Option**

| Symbol | Option   |
|--------|--|
| Nil    | None   |
| K*1    | Special wiring specifications (Except double wiring) |

\*1 Specify the wiring specifications on the manifold specification sheet.
- Cable (Length)**

|   |                    |
|---|--------------------|
| 0 | Without cable      |
| 1 | Cable length 1.5 m |
| 2 | Cable length 3 m   |
| 3 | Cable length 5 m   |
- Connector entry direction**

|   |              |
|---|--------------|
| D | D side entry |
| U | U side entry |



## How to Order Valves

**25A – VQ 4 1 0 1 [ ] – 5 [ ] [ ] 1 – [ ]**

- Series compatible with secondary batteries**
- Series**

|   |        |
|---|--------|
| 4 | VQ4000 |
|---|--------|
- Type of actuation**

|   |                            |
|---|----------------------------|
| 1 | 2-position single          |
| 2 | 2-position double          |
| 3 | 3-position closed center   |
| 4 | 3-position exhaust center  |
| 5 | 3-position pressure center |
| 6 | 3-position double check    |
- Seal type**

|   |             |
|---|-------------|
| 1 | Rubber seal |
|---|-------------|
- Function**

|       |                          |
|-------|--------------------------|
| Nil*1 | Standard (0.95 W)        |
| Y*2   | Low wattage type (0.4 W) |
| R*3   | External pilot           |

\*1 When the unit is energized continuously, refer to "Specific Product Precautions 1" in the **Web Catalog** (VQ4000 series).  
\*2 Only DC is available with Y.  
\*3 External pilot specifications are the same as standard products. Combination of external pilot and perfect interface is not possible.  
\* When two or more symbols are specified, indicate them alphabetically.
- CE/UKCA-compliant**

|     |                   |
|-----|-------------------|
| Nil | —                 |
| Q   | CE/UKCA-compliant |

\* CE/UKCA-compliant: For DC only.
- Manual override**

|     |                                       |
|-----|---------------------------------------|
| Nil | Non-locking push type (Tool required) |
| B   | Locking type (Tool required)          |
| C   | Locking type (Manual)                 |
- Light/Surge voltage suppressor**

|     |  |
|-----|--|
| Nil | Yes  |
| E   | Without light, with surge voltage suppressor |
- Coil voltage**

|   |                    |
|---|--------------------|
| 1 | 100 VAC (50/60 Hz) |
| 2 | 200 VAC (50/60 Hz) |
| 3 | 110 VAC (50/60 Hz) |
| 4 | 220 VAC (50/60 Hz) |
| 5 | 24 VDC             |
| 6 | 12 VDC             |

\* The 25A- series specifications and dimensions are the same as those of the standard model.

For details, refer to the [Web Catalog](#).

# Plug-in Unit/Base Mounted T Kit (Terminal block box kit) 25A-VQ4000 Series



## How to Order Manifolds

**25A – VV5Q 4 1 – 08 C8 T O –**

• Series compatible with secondary batteries

• Series

|   |        |
|---|--------|
| 4 | VQ4000 |
|---|--------|

• Manifold

|   |              |
|---|--------------|
| 1 | Plug-in unit |
|---|--------------|

• Stations

|    |             |
|----|-------------|
| 03 | 3 stations  |
| :  | :           |
| 18 | 18 stations |

\* 2 stations are used for mounting the terminal block box. The number of stations is the number of manifold valves plus 2 stations for the terminal block box. For 13 stations or more, specify the wiring specifications by means of the manifold specification sheet.

• CE/UKCA-compliant

|     |                   |
|-----|-------------------|
| Nil | —                 |
| Q   | CE/UKCA-compliant |

• Option

| Symbol | Option  |
|--------|---|
| Nil    | None  |
| K*1    | Special wiring specifications (Except double wiring, for 13 stations or more) |
| N*2    | Name plate  |
| W      | IP65 enclosure  |

\*1 Specify the wiring specifications on the manifold specification sheet.  
\*2 Name plate is inlaid in the terminal block cover.  
\* When two or more symbols are specified, indicate them alphabetically. Example) -KM

• Box mounting position

|   |                 |
|---|-----------------|
| O | U side mounting |
| D | D side mounting |

• Cylinder port

|     |                                |
|-----|--------------------------------|
| C6  | With One-touch fitting for ø6  |
| C8  | With One-touch fitting for ø8  |
| C10 | With One-touch fitting for ø10 |
| C12 | With One-touch fitting for ø12 |
| 02  | Rc 1/4                         |
| 03  | Rc 3/8                         |
| B   | Bottom ported Rc 1/4           |
| CM  | Mixed                          |

\* As a semi-standard specification, the maximum number of stations can be increased by special wiring specifications.



## How to Order Valves

**25A – VQ 4 1 0 1 – 5 – 1 –**

• Series compatible with secondary batteries

• Series

|   |        |
|---|--------|
| 4 | VQ4000 |
|---|--------|

• Type of actuation

|   |                            |
|---|----------------------------|
| 1 | 2-position single          |
| 2 | 2-position double          |
| 3 | 3-position closed center   |
| 4 | 3-position exhaust center  |
| 5 | 3-position pressure center |
| 6 | 3-position double check    |

• Seal type

|   |             |
|---|-------------|
| 1 | Rubber seal |
|---|-------------|

• Function

|       |                          |
|-------|--------------------------|
| Nil*1 | Standard (0.95 W)        |
| Y*2   | Low wattage type (0.4 W) |
| R*3   | External pilot           |

\*1 When the unit is energized continuously, refer to "Specific Product Precautions 1" in the **Web Catalog** (VQ4000 series).  
\*2 Only DC is available with Y.  
\*3 External pilot specifications are the same as standard products. Combination of external pilot and perfect interface is not possible.  
\* When two or more symbols are specified, indicate them alphabetically.

• CE/UKCA-compliant

|     |                   |
|-----|-------------------|
| Nil | —                 |
| Q   | CE/UKCA-compliant |

\* CE/UKCA-compliant: For DC only.

• Enclosure

|     |  |
|-----|--|
| Nil | Dustproof                              |
| W   | Dust-tight/Water-jet-proof type (IP65) |

• Manual override

|     |                                       |
|-----|---------------------------------------|
| Nil | Non-locking push type (Tool required) |
| B   | Locking type (Tool required)          |
| C   | Locking type (Manual)                 |

• Light/Surge voltage suppressor

|     |  |
|-----|--|
| Nil | Yes  |
| E   | Without light, with surge voltage suppressor |

• Coil voltage

|   |                    |
|---|--------------------|
| 1 | 100 VAC (50/60 Hz) |
| 2 | 200 VAC (50/60 Hz) |
| 3 | 110 VAC (50/60 Hz) |
| 4 | 220 VAC (50/60 Hz) |
| 5 | 24 VDC             |
| 6 | 12 VDC             |

\* The 25A- series specifications and dimensions are the same as those of the standard model.

For details, refer to the **Web Catalog**.

# Plug-in Unit/Base Mounted L Kit (Lead wire cable) 25A-VQ4000 Series



## How to Order Manifolds

**25A – VV5Q 4 1 – 08 C8 L D – –**

- Series compatible with secondary batteries**
- Series**

|   |        |
|---|--------|
| 4 | VQ4000 |
|---|--------|
- Manifold**

|   |              |
|---|--------------|
| 1 | Plug-in unit |
|---|--------------|
- Stations**

|    |             |
|----|-------------|
| 01 | 1 station   |
| ⋮  | ⋮           |
| 16 | 16 stations |
- Cylinder port**

|     |                                |
|-----|--------------------------------|
| C6  | With One-touch fitting for ø6  |
| C8  | With One-touch fitting for ø8  |
| C10 | With One-touch fitting for ø10 |
| C12 | With One-touch fitting for ø12 |
| 02  | Rc 1/4                         |
| 03  | Rc 3/8                         |
| B   | Bottom ported Rc 1/4           |
| CM  | Mixed                          |
- CE/UKCA-compliant**

|     |                   |
|-----|-------------------|
| Nil | —                 |
| Q   | CE/UKCA-compliant |
- Option**

| Symbol | Option         |
|--------|----------------|
| Nil    | None           |
| W      | IP65 enclosure |
- Cable (Length)**

|   |                    |
|---|--------------------|
| 0 | Cable length 0.6 m |
| 1 | Cable length 1.5 m |
| 2 | Cable length 3 m   |
- Connector locations**

|   |              |
|---|--------------|
| D | D side entry |
| U | U side entry |



## How to Order Valves

**25A – VQ 4 1 0 1 – 5 – – – 1 –**

- Series compatible with secondary batteries**
- Series**

|   |        |
|---|--------|
| 4 | VQ4000 |
|---|--------|
- Type of actuation**

|   |                            |
|---|----------------------------|
| 1 | 2-position single          |
| 2 | 2-position double          |
| 3 | 3-position closed center   |
| 4 | 3-position exhaust center  |
| 5 | 3-position pressure center |
| 6 | 3-position double check    |
- Seal type**

|   |             |
|---|-------------|
| 1 | Rubber seal |
|---|-------------|
- Function**

|       |                          |
|-------|--------------------------|
| Nil*1 | Standard (0.95 W)        |
| Y*2   | Low wattage type (0.4 W) |
| R*3   | External pilot           |
- CE/UKCA-compliant**

|     |                   |
|-----|-------------------|
| Nil | —                 |
| Q   | CE/UKCA-compliant |

\* CE/UKCA-compliant: For DC only.
- Enclosure**

|     |  |
|-----|--|
| Nil | Dustproof                              |
| W   | Dust-tight/Water-jet-proof type (IP65) |
- Manual override**

|     |                                       |
|-----|---------------------------------------|
| Nil | Non-locking push type (Tool required) |
| B   | Locking type (Tool required)          |
| C   | Locking type (Manual)                 |
- Light /Surge voltage suppressor**

|     |  |
|-----|--|
| Nil | Yes  |
| E   | Without light, with surge voltage suppressor |
- Coil voltage**

|   |                    |
|---|--------------------|
| 1 | 100 VAC (50/60 Hz) |
| 2 | 200 VAC (50/60 Hz) |
| 3 | 110 VAC (50/60 Hz) |
| 4 | 220 VAC (50/60 Hz) |
| 5 | 24 VDC             |
| 6 | 12 VDC             |

\*1 When the unit is energized continuously, refer to "Specific Product Precautions 1" in the **Web Catalog** (VQ4000 series).  
 \*2 Only DC is available with Y.  
 \*3 External pilot specifications are the same as standard products. Combination of external pilot and perfect interface is not possible.  
 \* When two or more symbols are specified, indicate them alphabetically.

\* The 25A- series specifications and dimensions are the same as those of the standard model. For details, refer to the **Web Catalog**.

# Plug-in Unit/Base Mounted S Kit (Serial transmission unit) 25A-VQ4000 Series

\* Refer to "SI Unit Part Nos." when ordering the CE/UKCA-compliant SI unit.



## How to Order Manifolds

**25A - VV5Q 4 1 - 08 C8 S D V - [ ] - [ ]**

• **Series compatible with secondary batteries**

• **Series**

|   |        |
|---|--------|
| 4 | VQ4000 |
|---|--------|

• **Manifold**

|   |              |
|---|--------------|
| 1 | Plug-in unit |
|---|--------------|

• **Stations**

|    |             |
|----|-------------|
| 03 | 3 stations  |
| :  | :           |
| 18 | 18 stations |

\* 2 stations are used for mounting SI unit. The number of stations is the number of manifold valves plus 2 stations for SI unit. For 11 stations or more, specify the wiring specifications by means of the manifold specification sheet.

• **Cylinder ports**

|     |                                |
|-----|--------------------------------|
| C6  | With One-touch fitting for ø6  |
| C8  | With One-touch fitting for ø8  |
| C10 | With One-touch fitting for ø10 |
| C12 | With One-touch fitting for ø12 |
| 02  | Rc 1/4                         |
| 03  | Rc 3/8                         |
| B   | Bottom ported Rc 1/4           |
| CM  | Mixed                          |

• **SI unit**

|   |                 |
|---|-----------------|
| 0 | Without SI unit |
| Q | DeviceNet®      |
| V | CC-Link         |

• **SI unit mounting position**

|     |                 |
|-----|-----------------|
| Nil | U side mounting |
| D   | D side mounting |

• **CE/UKCA-compliant**

|     |                   |
|-----|-------------------|
| Nil | —                 |
| Q   | CE/UKCA-compliant |

• **Option**

| Symbol | Option  |
|--------|---|
| Nil    | None  |
| K*1    | Special wiring specifications (Except double wiring, for 11 stations or more) |
| W      | IP65 enclosure  |

\*1 Specify the wiring specifications on the manifold specification sheet.  
\* When two or more symbols are specified, indicate them alphabetically. Example) -KW

## How to Order Valves

**25A - VQ 4 1 0 1 [ ] - 5 [ ] [ ] [ ] 1 - [ ]**

• **Series compatible with secondary batteries**

• **Series**

|   |        |
|---|--------|
| 4 | VQ4000 |
|---|--------|

• **Type of actuation**

|   |                            |
|---|----------------------------|
| 1 | 2-position single          |
| 2 | 2-position double          |
| 3 | 3-position closed center   |
| 4 | 3-position exhaust center  |
| 5 | 3-position pressure center |
| 6 | 3-position double check    |

• **Seal type**

|   |             |
|---|-------------|
| 1 | Rubber seal |
|---|-------------|

• **Function**

|       |                          |
|-------|--------------------------|
| Nil*1 | Standard (0.95 W)        |
| Y*2   | Low wattage type (0.4 W) |
| R*3   | External pilot           |

\*1 When the unit is energized continuously, refer to "Specific Product Precautions 1" in the **Web Catalog** (VQ4000 series).  
\*2 Only DC is available with Y.  
\*3 External pilot specifications are the same as standard products. Combination of external pilot and perfect interface is not possible.  
\* When two or more symbols are specified, indicate them alphabetically.

• **CE/UKCA-compliant**

|     |                   |
|-----|-------------------|
| Nil | —                 |
| Q   | CE/UKCA-compliant |

\* CE/UKCA-compliant: For DC only.

• **Enclosure**

|     |  |
|-----|--|
| Nil | Dustproof                              |
| W   | Dust-tight/Water-jet-proof type (IP65) |

• **Manual override**

|     |                                       |
|-----|---------------------------------------|
| Nil | Non-locking push type (Tool required) |
| B   | Locking type (Tool required)          |
| C   | Locking type (Manual)                 |

• **Light /Surge voltage suppressor**

|     |  |
|-----|--|
| Nil | Yes  |
| E   | Without light, with surge voltage suppressor |

• **Coil voltage**

|   |        |
|---|--------|
| 5 | 24 VDC |
|---|--------|

\* The 25A- series specifications and dimensions are the same as those of the standard model.

For details, refer to the **Web Catalog**.



# Plug Lead Unit/Base Mounted C Kit (Connector kit)



# 25A-VQ4000 Series

## How to Order Manifolds

**25A - VV5Q 4 5 - 08 C8 C - W -**

- Series compatible with secondary batteries**
- Series**

|   |        |
|---|--------|
| 4 | VQ4000 |
|---|--------|
- Manifold**

|   |                |
|---|----------------|
| 5 | Plug lead unit |
|---|----------------|
- Stations**

|    |             |
|----|-------------|
| 01 | 1 station   |
| ⋮  | ⋮           |
| 16 | 16 stations |
- Cylinder port**

|     |                                      |
|-----|--------------------------------------|
| C6  | With One-touch fitting for $\phi 6$  |
| C8  | With One-touch fitting for $\phi 8$  |
| C10 | With One-touch fitting for $\phi 10$ |
| C12 | With One-touch fitting for $\phi 12$ |
| 02  | Rc 1/4                               |
| 03  | Rc 3/8                               |
| B   | Bottom ported Rc 1/4                 |
| CM  | Mixed                                |
- Kit type**

|   |               |
|---|---------------|
| C | Connector kit |
|---|---------------|
- CE/UKCA-compliant**

|     |                   |
|-----|-------------------|
| Nil | —                 |
| Q   | CE/UKCA-compliant |
- Option**

| Symbol | Option         |
|--------|----------------|
| Nil    | None           |
| W      | IP65 enclosure |

**kit (Connector)**

Refer to the **Web Catalog** for wiring specifications.

## How to Order Valves

**25A - VQ 4 1 5 1 - 5 G -**

- Series compatible with secondary batteries**
- Series**

|   |        |
|---|--------|
| 4 | VQ4000 |
|---|--------|
- Type of actuation**

|   |                            |
|---|----------------------------|
| 1 | 2-position single          |
| 2 | 2-position double          |
| 3 | 3-position closed center   |
| 4 | 3-position exhaust center  |
| 5 | 3-position pressure center |
| 6 | 3-position double check    |
- Seal type**

|   |             |
|---|-------------|
| 1 | Rubber seal |
|---|-------------|
- Function**

|       |                          |
|-------|--------------------------|
| Nil*1 | Standard (0.95 W)        |
| Y*2   | Low wattage type (0.4 W) |
| R*3   | External pilot           |
- Enclosure**

|     |  |
|-----|--|
| Nil | Dustproof                              |
| W   | Dust-tight/Water-jet-proof type (IP65) |
- Manual override**

|      |                                       |
|------|---------------------------------------|
| Nil: | Non-locking push type (Tool required) |
| B:   | Locking type (Tool required)          |
| C:   | Locking type (Manual)                 |
- Light/Surge voltage suppressor**

|     |  |
|-----|--|
| Nil | Yes  |
| E   | Without light, with surge voltage suppressor |
- Electrical entry**

|   |                        |
|---|------------------------|
| G | Lead wire length 0.6 m |
| H | Lead wire length 1.5 m |
- Coil voltage**

|   |                    |   |                    |
|---|--------------------|---|--------------------|
| 1 | 100 VAC (50/60 Hz) | 4 | 220 VAC (50/60 Hz) |
| 2 | 200 VAC (50/60 Hz) | 5 | 24 VDC             |
| 3 | 110 VAC (50/60 Hz) | 6 | 12 VDC             |
- CE/UKCA-compliant**

|     |                   |
|-----|-------------------|
| Nil | —                 |
| Q   | CE/UKCA-compliant |

\* CE/UKCA-compliant: For DC only.

\*1 When the unit is energized continuously, refer to "Specific Product Precautions 1" in the **Web Catalog** (VQ4000 series).  
 \*2 Only DC is available with Y.  
 \*3 External pilot specifications are the same as standard products. Combination of external pilot and perfect interface is not possible.  
 \* When two or more symbols are specified, indicate them alphabetically.

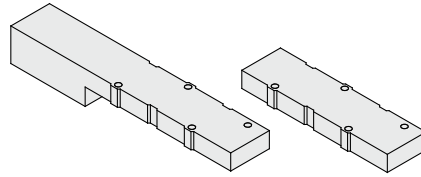
\* The 25A- series specifications and dimensions are the same as those of the standard model. For details, refer to the **Web Catalog**.

# 25A-VQ4000 Series

## Manifold Options

### Blanking plate assembly

- 25A-VVQ4000-10A-1 (Plug-in type)
- 25A-VVQ4000-10A-5 (Plug lead type)



It is used by attaching on the manifold block for being prepared for removing a valve for maintenance reasons or planning to mount a spare valve, etc.

\* The 25A- series specifications and dimensions are the same as those of the standard model.

For details, refer to the [Web Catalog](#).

### SI Unit Part Nos.

| Description   | SI unit part no.        | Note                       |
|---------------|-------------------------|----------------------------|
| EX124 SI unit | <b>EX124D-SMJ1-X220</b> | CC-Link/D side mounting    |
|               | <b>EX124D-SDN1-X220</b> | DeviceNet®/D side mounting |
|               | <b>EX124U-SMJ1-X220</b> | CC-Link/U side mounting    |
|               | <b>EX124U-SDN1-X220</b> | DeviceNet®/U side mounting |

### One-touch Fittings Part Nos.

|               |             | Port size                             | One-touch fittings part no. |
|---------------|-------------|---------------------------------------|-----------------------------|
| Cylinder port | Metric size | ø6 One-touch fitting (Straight type)  | <b>90-VVQ4000-50B-C6</b>    |
|               |             | ø8 One-touch fitting (Straight type)  | <b>90-VVQ4000-50B-C8</b>    |
|               |             | ø10 One-touch fitting (Straight type) | <b>90-VVQ4000-50B-C10</b>   |
|               |             | ø12 One-touch fitting (Straight type) | <b>90-VVQ4000-50B-C12</b>   |



# Plug-in Unit

# 25A-SQ2000 Series

## How to Order Manifolds

25A – SS5Q23 – 08 FD2 – D – – –

Series compatible with secondary batteries

### Stations

|      |             |
|------|-------------|
| 01   | 1 station   |
| ⋮    | ⋮           |
| 16*1 | 16 stations |

\*1 The maximum number of stations depends on the type of electrical entries.

### Manifold mounting

|   |                   |
|---|-------------------|
| D | DIN rail mounting |
| E | Direct mounting   |

### Option

|            |  |
|------------|--|
| Nil        | None   |
| 02 to 16*1 | DIN rail length specified                            |
| B*2        | Back pressure check valve                            |
| K*3        | Special wiring specifications (Except double wiring) |
| N          | With name plate (Side ported only)                   |
| R          | External pilot specifications                        |
| S          | Built-in silencer, direct exhaust                    |

\*1 Specify DIN rail length with "D□" at the end. (Enter the number of stations inside □.)  
The number of stations that may be displayed is longer than the manifold number of stations. Example: -D09

\*2 When "B" is selected, a back pressure check valve is included in all stations of the manifold. If the back pressure check valve is used only for the station that need it, then specify the station location in the manifold specification. ("B" is not necessary)

\*3 Specify "K" for wiring specification for cases below. (Except L kit)

- All single wiring - Single and double mixed wiring
- When there are stations which do not require wiring (e.g. single SUP spacer)

Specify the wiring specification in the manifold specification so that the number of solenoids is the maximum number of solenoids or less. (Standard wiring specification is double wiring)

\* For specifying two or more options, enter them alphabetically. Example: -BKN

|     |                   |
|-----|-------------------|
| Nil | —                 |
| Q   | CE/UKCA-compliant |

### 1(P), 3(R) port size

|     |   |
|-----|---|
| Nil | 1(P), 3(R) port<br>One-touch fittings for ø10   |
| 00T | 1(P), 3(R) port<br>One-touch fittings for ø3/8" |

### Electrical entry

| Kit type   | Lead wire connector location | Cable specifications           | Station                                     | Max. number of stations for special wiring specifications | *1 Max. number of solenoids |
|--|------------------------------|--------------------------------|---|---|-----------------------------|
| <b>F kit</b><br>The electric parts are made of copper.<br>Mounting screw: Stainless steel<br>D-sub connector kit   | D side                       | FD0                            | D-sub connector (25P) kit, without cable    | 1 to 12 stations  | 16 stations                 |
|  |                              | FD1                            | D-sub connector (25P) kit, with 1.5 m cable |   |                             |
|  |                              | FD2                            | D-sub connector (25P) kit, with 3.0 m cable |   |                             |
|  |                              | FD3                            | D-sub connector (25P) kit, with 5.0 m cable |   |                             |
| <b>T kit</b><br>Terminal block box kit   | TD0                          | Terminal block box kit         | 1 to 10 stations                            | 16 stations   | 16                          |
| <b>L kit</b><br>Mounting screw: Stainless steel<br>Lead wire kit   | LD0                          | Lead wire kit with 0.6 m cable | 1 to 12 stations                            | —   | —                           |
|  | LU0                          |                                |   |   |                             |
|  | LD1                          | Lead wire kit with 1.5 m cable |   |   |                             |
|  | LU1                          |                                |   |   |                             |
|  | LD2                          | Lead wire kit with 3.0 m cable |   |   |                             |
|  | LU2                          |                                |   |   |                             |
| <b>S kit</b><br>The electric parts are made of copper.<br>Mounting screw: Stainless steel<br>Serial transmission kit EX140 integrated-type (for output) serial transmission system*2 | SDQ                          | DeviceNet®                     | 1 to 8 stations                             | 16 stations   | 16                          |
|  | SDV                          | CC-Link                        | 1 to 8 stations                             | 16 stations   | 16                          |

\*1 The maximum number of stations should not be more than the maximum number of solenoids. (The number of solenoids are counted as: 1 for single solenoids and 2 for type 3P and 4P double solenoids.)

\*2 Refer to the **Web Catalog** for the details of EX140 integrated-type (for output) serial transmission system. Refer to "SI unit part nos." below when ordering the CE/UKCA-compliant SI unit.

### SI unit part nos.

| Symbol | Protocol type | SI unit part no. | Page |
|--------|---------------|------------------|------|
| SDQ    | DeviceNet®    | EX140-SDN1-X220  | 88   |
| SDV    | CC-Link       | EX140-SMJ1-X220  |      |

### Blanking plate assembly

25A-SSQ2000-10A-3

\* The 25A- series specifications and dimensions are the same as those of the standard model.

For details, refer to the **Web Catalog**.



## How to Order Valves

**25A-SQ2** **1** **3** **1** **5** **1** **C6** **CE/UKCA-compliant**

• Series compatible with secondary batteries

**Type of actuation**

|   |  |
|---|--|
| 1 | 2-position single                        |
| 2 | 2-position double (Double solenoid)*1    |
| 3 | 3-position closed center                 |
| 4 | 3-position exhaust center                |
| 5 | 3-position pressure center               |
| A | 4-position dual 3-port valve (N.C./N.C.) |
| B | 4-position dual 3-port valve (N.O./N.O.) |
| C | 4-position dual 3-port valve (N.C./N.O.) |

\*1 For double solenoid specification, the function symbol below is "D."

**Seal type**

|   |             |
|---|-------------|
| 1 | Rubber seal |
|---|-------------|

**Function**

|     |  |
|-----|--|
| Nil | Standard (0.4 W DC)                                |
| B   | Quick response type (0.95 W)                       |
| D*1 | 2-position double (Double solenoid specifications) |
| N*2 | Negative common                                    |
| R*3 | External pilot specifications                      |

\*1 "D" is specified for 2-position double.  
 \*2 For L kit, when the manifold specifies negative common, the valve common should also be negative.  
 \*3 Except dual 3-port valves.  
 \* When two or more symbols are specified, indicate them alphabetically.

**Coil voltage**

|   |        |
|---|--------|
| 5 | 24 VDC |
| 6 | 12 VDC |

\* Light/Surge voltage suppressor is built-in.  
 \* S kit: 24 VDC only

**CE/UKCA-compliant**

|     |                   |
|-----|-------------------|
| Nil | —                 |
| Q   | CE/UKCA-compliant |

**With/Without manifold block**

| Nil                              | M                            | MB  |
|----------------------------------|------------------------------|---|
| Without manifold block           | With manifold block          | With manifold block, built-in back pressure check valve |
|                                  |                              |   |
|                                  | * Lead wire is not included. | * Lead wire is not included.                            |
| • When ordering with manifolds   | For adding stations          |   |
| • When only valves are required. |                              |   |

**Port plug mounting port**

|     |           |
|-----|-----------|
| Nil | None      |
| A   | Port 4(A) |
| B   | Port 2(B) |

**Cylinder port**

|    |                           |               |  |
|----|---------------------------|---------------|--|
| C4 | One-touch fittings for ø4 | Side ported   |  |
| C6 | One-touch fittings for ø6 |               |  |
| C8 | One-touch fittings for ø8 |               |  |
| L4 | One-touch fittings for ø4 | Top ported *1 |  |
| L6 | One-touch fittings for ø6 |               |  |
| L8 | One-touch fittings for ø8 |               |  |

\*1 Can be changed to side ported configuration.

**Manual override**

| Nil                                   | B                            | D  |
|---------------------------------------|------------------------------|--|
| Non-locking push type (Tool required) | Locking type (Tool required) | Slide locking type (Manual type)<br>* Only side ported type applicable |
|                                       |                              |  |

### SI Unit Part Nos.

| Description   | SI unit part no. | Note       |
|---------------|------------------|------------|
| EX140 SI unit | EX140-SMJ1-X220  | CC-Link    |
|               | EX140-SDN1-X220  | DeviceNet® |

### One-touch Fittings Part Nos.

| Port size         |             | One-touch fittings part no.                                     |
|-------------------|-------------|---|
| Cylinder port     | Metric size | ø4 One-touch fitting (Straight type) <b>90-VVQ1000-51A-C4</b>   |
|                   |             | ø6 One-touch fitting (Straight type) <b>90-VVQ1000-51A-C6</b>   |
|                   |             | ø8 One-touch fitting (Straight type) <b>90-VVQ1000-51A-C8</b>   |
| 1 (P), 3 (R) port | Metric size | ø10 One-touch fitting (Straight type) <b>90-VVQ2000-51A-C10</b> |

\* The 25A- series specifications and dimensions are the same as those of the standard model.

For details, refer to the [Web Catalog](#).

# Plug Lead Unit

# 25A-SQ2000 Series

## How to Order Manifolds

25A – SS5Q24 – **08** **FD2** – **D** □ – □ – □

• Series compatible with secondary batteries

• CE/UKCA-compliant

|     |                   |
|-----|-------------------|
| Nil | —                 |
| Q   | CE/UKCA-compliant |

• Stations

|      |             |
|------|-------------|
| 01   | 1 station   |
| ⋮    | ⋮           |
| 16*1 | 16 stations |

\*1 The maximum number of stations depends on the type of electrical entries.

• 1(P), 3(R) port size

|     |   |
|-----|---|
| Nil | 1(P), 3(R) port, One-touch fittings for ø10   |
| 00T | 1(P), 3(R) port, One-touch fittings for ø3/8" |

• Option

|            |  |
|------------|--|
| Nil        | None   |
| 02 to 16*1 | DIN rail length specified                            |
| B*2        | Back pressure check valve                            |
| K*3        | Special wiring specifications (Except double wiring) |
| N          | With name plate (Side ported only)                   |
| R          | External pilot specifications                        |
| S          | Built-in silencer, direct exhaust                    |

• Manifold mounting

|     |                   |
|-----|-------------------|
| D   | DIN rail mounting |
| E*1 | Direct mounting   |

\*1 Type "E" is only available with a C kit.

- \*1 Specify DIN rail length with "D□" at the end. (Enter the number of stations inside □.)  
The number of stations that may be displayed is longer than the manifold number of stations. Example: -D09
- \*2 When "-B" is selected, a back pressure check valve is included in all stations of the manifold. If the back pressure check valve is used only for the station that need it, then specify the station location in the manifold specification. ("-B" is not necessary)
- \*3 Specify "-K" for wiring specification for cases below. (Except C kit)  
- All single wiring - Single and double mixed wiring  
Specify the wiring specification in the manifold specification so that the number of solenoids is the maximum number of solenoids or less. (Standard wiring specification is double wiring)
- \* For specifying two or more options, enter them alphabetically. Example: -BKN

• Electrical entry

| Kit type  | Lead wire connector location | Cable specifications | Stations         | Max. number of stations for special wiring specifications | *1 Max. number of solenoids |
|---|------------------------------|----------------------|------------------|---|-----------------------------|
| <b>F kit</b><br>The electric parts are made of copper.<br>D-sub connector kit<br> | D side                       | FD0                  | 1 to 12 stations | 16 stations   | 24                          |
|   |                              | FD1                  |                  |   |                             |
|   |                              | FD2                  |                  |   |                             |
|   |                              | FD3                  |                  |   |                             |
| <b>C kit</b><br>Connector kit<br>   | C                            | —                    | 1 to 16 stations | —   | —                           |

\*1 The maximum number of stations should not be more than the maximum number of solenoids. (The number of solenoids are counted as: 1 for single solenoids and 2 for type 3P and 4P double solenoids.)

\* Refer to the **Web Catalog** for manifold spare parts.

## Blanking plate assembly

### 25A-SSQ2000-10A-4

\* The 25A- series specifications and dimensions are the same as those of the standard model.

For details, refer to the **Web Catalog**.

## How to Order Valves

**25A-SQ2** **1** **4** **1** **5** **L** **1** **C6**

• Series compatible with secondary batteries

### Type of actuation

|   |  |
|---|--|
| 1 | 2-position single                        |
| 2 | 2-position double (Double solenoid)*1    |
| 3 | 3-position closed center                 |
| 4 | 3-position exhaust center                |
| 5 | 3-position pressure center               |
| A | 4-position dual 3-port valve (N.C./N.C.) |
| B | 4-position dual 3-port valve (N.O./N.O.) |
| C | 4-position dual 3-port valve (N.C./N.O.) |

\*1 For double solenoid specification, the function symbol below is "D."

### Seal type

|   |             |
|---|-------------|
| 1 | Rubber seal |
|---|-------------|

### Function

|     |  |
|-----|--|
| Nil | Standard (0.4 W DC)                                |
| B   | Quick response type (0.95 W)                       |
| D*1 | 2-position double (Double solenoid specifications) |
| N   | Negative COM                                       |
| R*2 | External pilot specifications                      |

\*1 "D" is specified for 2-position double.

\*2 Except dual 3-port valves.

\* When two or more symbols are specified, indicate them alphabetically.

### Coil voltage

|   |        |
|---|--------|
| 5 | 24 VDC |
| 6 | 12 VDC |

\* Light/Surge voltage suppressor is built-in.

### Electrical entry

| L   | LO                                    |
|---|---------------------------------------|
| Plug connector type with 300 mm lead wire | Plug connector type without connector |
|   |                                       |
|   | For F, P, J kit manifolds*1           |

\*1 Indicate "LO" when ordering centralized wiring type manifolds, F, P, and J kits, since the lead wire will be attached to the manifold side.

### One-touch Fittings Part Nos.

| Port size         |             | One-touch fittings part no.                                     |
|-------------------|-------------|---|
| Cylinder port     | Metric size | ø4 One-touch fitting (Straight type) <b>90-VVQ1000-51A-C4</b>   |
|                   |             | ø6 One-touch fitting (Straight type) <b>90-VVQ1000-51A-C6</b>   |
|                   |             | ø8 One-touch fitting (Straight type) <b>90-VVQ1000-51A-C8</b>   |
| 1 (P), 3 (R) port | Metric size | ø10 One-touch fitting (Straight type) <b>90-VVQ2000-51A-C10</b> |

\* The 25A-series specifications and dimensions are the same as those of the standard model.

For details, refer to the [Web Catalog](#).

### CE/UKCA-compliant

|     |                   |
|-----|-------------------|
| Nil | —                 |
| Q   | CE/UKCA-compliant |

### With/Without manifold block

| Nil  | M                            | MB  |
|--|------------------------------|---|
| Without manifold block   | With manifold block          | With manifold block, built-in back pressure check valve |
|  |                              |   |
|  | * Lead wire is not included. | * Lead wire is not included.                            |
| • When ordering with manifolds<br>• When only valves are required. |                              |   |
| For adding stations  |                              |   |

### Port plug mounting port

|     |           |
|-----|-----------|
| Nil | None      |
| A   | Port 4(A) |
| B   | Port 2(B) |

### Cylinder port

|    |                          |               |  |
|----|--------------------------|---------------|--|
| C4 | One-touch fitting for ø4 | Side ported   |  |
| C6 | One-touch fitting for ø6 |               |  |
| C8 | One-touch fitting for ø8 |               |  |
| L4 | One-touch fitting for ø4 | Top ported *1 |  |
| L6 | One-touch fitting for ø6 |               |  |
| L8 | One-touch fitting for ø8 |               |  |

\*1 Can be changed to side ported configuration.

### Manual override

| Nil                                   | B                            | D  |
|---------------------------------------|------------------------------|--|
| Non-locking push type (Tool required) | Locking type (Tool required) | Slide locking type (Manual type)<br>* Only side ported type applicable |
|                                       |                              |  |



Base Mounted  
Plug Lead Unit

# 5-Port Solenoid Valve

## 25A-VQZ1000 Series

### Single Unit



#### How to Order Valves

**25A-VQZ 1 1 5 1**    - **5 M**    1 - **01** -   

• Series compatible with secondary batteries

Series

**1** VQZ1000 body width 10 mm

Type of actuation

|          |                                  |
|----------|----------------------------------|
| <b>1</b> | 2-position single                |
| <b>2</b> | 2-position double                |
| <b>3</b> | 3-position closed center         |
| <b>4</b> | 3-position exhaust center        |
| <b>5</b> | 3-position pressure center       |
| <b>8</b> | 3-port for mixture mounting N.C. |
| <b>9</b> | 3-port for mixture mounting N.O. |

Body type

**5** Base mounted

Seal type

**1** Rubber seal

Function

| Symbol     | Specifications                          | DC            | AC |
|------------|---|---------------|----|
| <b>Nil</b> | Standard                                | (0.35 W)<br>○ | ○  |
| <b>B</b>   | High speed response type                | (0.9 W)<br>○  | —  |
| <b>R</b>   | External pilot type                     | ○             | ○  |
| <b>BR</b>  | High speed response/External pilot type | (0.9 W)<br>○  | —  |

• CE/UKCA-compliant

|            |                   |
|------------|-------------------|
| <b>Nil</b> | —                 |
| <b>Q</b>   | CE/UKCA-compliant |

\* CE/UKCA-compliant: For DC only.

• Port size

| Symbol     | Port size         |
|------------|-------------------|
| <b>Nil</b> | Without sub-plate |
| <b>01</b>  | Rc1/8             |

• Manual override

|  |   |
|--|---|
| <p><b>Nil</b>: Non-locking push type (Tool required)</p> | <p><b>B</b>: Locking type (Tool required)</p> |
|--|---|

• Electrical entry

| G: Grommet (DC specification) | L: L-type plug connector with lead wire | LO: L-type plug connector without connector | M: M-type plug connector with lead wire | MO: M-type plug connector without connector |
|-------------------------------|---|---|---|---|
|                               | With light/surge voltage suppressor     | With light/surge voltage suppressor         | With light/surge voltage suppressor     | With light/surge voltage suppressor         |
|                               |   |   |   |   |

• Coil voltage

|          |                              |
|----------|------------------------------|
| <b>1</b> | 100 VAC (50/60 Hz)           |
| <b>2</b> | 200 VAC (50/60 Hz)           |
| <b>3</b> | 110 VAC [115 VAC] (50/60 Hz) |
| <b>4</b> | 220 VAC [230 VAC] (50/60 Hz) |
| <b>5</b> | 24 VDC                       |
| <b>6</b> | 12 VDC                       |

### ⚠ Caution

Use standard (DC) specification for continuous duty.

\* The 25A- series specifications and dimensions are the same as those of the standard model.

For details, refer to the [Web Catalog](#).

Base Mounted  
Plug Lead Unit

# 5-Port Solenoid Valve

## 25A-VQZ1000 Series

### Manifold Connector Kit



#### How to Order Manifolds

**25A-VV5QZ 1 5-08 C6 C-R-**

Series compatible with secondary batteries

**Series**  
1 VQZ1000

**Manifold type**  
5 Base mounted

**Stations**  
02 2 stations  
: :  
20 20 stations

**Port size [4(A), 2(B) port]**

| Symbol | Port size             |
|--------|-----------------------|
| C4     | ø4 One-touch fitting  |
| C6     | ø6 One-touch fitting  |
| M5     | M5 thread             |
| CM*1   | Mixture of port sizes |

**CE/UKCA-compliant**

|     |                   |
|-----|-------------------|
| Nil | —                 |
| Q   | CE/UKCA-compliant |

**Option**

|     |                     |
|-----|---------------------|
| Nil | None                |
| R   | External pilot type |

**Kit type**  
C Connector

\*1 Specify port mixture/with port plug by the manifold specification sheet.  
Port mixture and port plug are available only for One-touch fitting type.

#### How to Order Valves

**25A-VQZ 1 1 5 1 - 5 M 1 -**

Series compatible with secondary batteries

**Series**  
1 VQZ1000 body width 10 mm

**Type of actuation**

|   |                                  |
|---|----------------------------------|
| 1 | 2-position single                |
| 2 | 2-position double                |
| 3 | 3-position closed center         |
| 4 | 3-position exhaust center        |
| 5 | 3-position pressure center       |
| 8 | 3-port for mixture mounting N.C. |
| 9 | 3-port for mixture mounting N.O. |

**Body type**  
5 Base mounted

**Seal type**  
1 Rubber seal

**Function**

| Symbol | Specifications                              | DC<br>(0.35 W) | AC |
|--------|---|----------------|----|
| Nil    | Standard                                    | ○              | ○  |
| B      | High speed response type                    | ○              | —  |
| R      | External pilot type                         | ○              | ○  |
| BR     | High speed response/<br>External pilot type | ○              | —  |

**CE/UKCA-compliant**

|     |                   |
|-----|-------------------|
| Nil | —                 |
| Q   | CE/UKCA-compliant |

\* CE/UKCA-compliant: For DC only.

**Manual override**

|     |                                       |
|-----|---------------------------------------|
| Nil | Non-locking push type (Tool required) |
| B   | Locking type (Tool required)          |

**Electrical entry**

| Symbol | Electrical entry                        | Light/surge voltage suppressor |
|--------|---|--------------------------------|
| G      | Grommet (DC specification)              | None                           |
| L      | L-type plug connector with lead wire    | Yes                            |
| LO     | L-type plug connector without connector |                                |
| M      | M-type plug connector with lead wire    |                                |
| MO     | M-type plug connector without connector |                                |

**Coil voltage**

|   |                              |
|---|------------------------------|
| 1 | 100 VAC (50/60 Hz)           |
| 2 | 200 VAC (50/60 Hz)           |
| 3 | 110 VAC [115 VAC] (50/60 Hz) |
| 4 | 220 VAC [230 VAC] (50/60 Hz) |
| 5 | 24 VDC                       |
| 6 | 12 VDC                       |



**Caution**  
Use standard (DC) specification for continuous duty.

\* The 25A- series specifications and dimensions are the same as those of the standard model.

For details, refer to the [Web Catalog](#).

Body Ported  
Plug Lead Unit

# 5-Port Solenoid Valve

## 25A-VQZ1000 Series

### Single Unit



#### How to Order Valves

**25A-VQZ 1 1 2 1** [ ] - **5 M** [ ] 1 - **C6** - [ ] - [ ]

• Series compatible with secondary batteries

Series •

1 VQZ1000 body width 10 mm

Type of actuation •

|   |                                  |
|---|----------------------------------|
| 1 | 2-position single                |
| 2 | 2-position double                |
| 3 | 3-position closed center         |
| 4 | 3-position exhaust center        |
| 5 | 3-position pressure center       |
| 8 | 3-port for mixture mounting N.C. |
| 9 | 3-port for mixture mounting N.O. |

\* 3-port for mixture mounting is only available for port size C4 or C6.

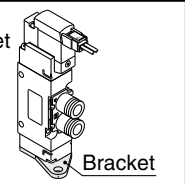
• CE/UKCA-compliant

|     |                   |
|-----|-------------------|
| Nil | —                 |
| Q   | CE/UKCA-compliant |

\* CE/UKCA-compliant: For DC only.

• Option

Nil: None  
F: With bracket (2-position single type only)



• Port size [4(A), 2(B) port]

| Symbol | Port size            |
|--------|----------------------|
| C4     | ø4 One-touch fitting |
| C6     | ø6 One-touch fitting |
| M5     | M5 thread            |

• Manual override

Nil: Non-locking push type (Tool required)    B: Locking type (Tool required)



• Electrical entry

| G: Grommet (DC specification) | L: L-type plug connector with lead wire | LO: L-type plug connector without connector | M: M-type plug connector with lead wire | MO: M-type plug connector without connector |
|-------------------------------|---|---|---|---|
|                               | With light/surge voltage suppressor     | With light/surge voltage suppressor         | With light/surge voltage suppressor     | With light/surge voltage suppressor         |
|                               |   |   |   |   |

Body type •

2 Body ported

Seal type •

1 Rubber seal

Function •

| Symbol | Specifications           | DC            | AC |
|--------|--------------------------|---------------|----|
| Nil    | Standard                 | (0.35 W)<br>○ | ○  |
| B      | High speed response type | (0.9 W)<br>○  | —  |

• Coil voltage

|   |                              |
|---|------------------------------|
| 1 | 100 VAC (50/60 Hz)           |
| 2 | 200 VAC (50/60 Hz)           |
| 3 | 110 VAC [115 VAC] (50/60 Hz) |
| 4 | 220 VAC [230 VAC] (50/60 Hz) |
| 5 | 24 VDC                       |
| 6 | 12 VDC                       |

### ⚠ Caution

Use standard (DC) specification for continuous duty.

\* The 25A-series specifications and dimensions are the same as those of the standard model.

For details, refer to the [Web Catalog](#).

Body Ported  
Plug Lead Unit

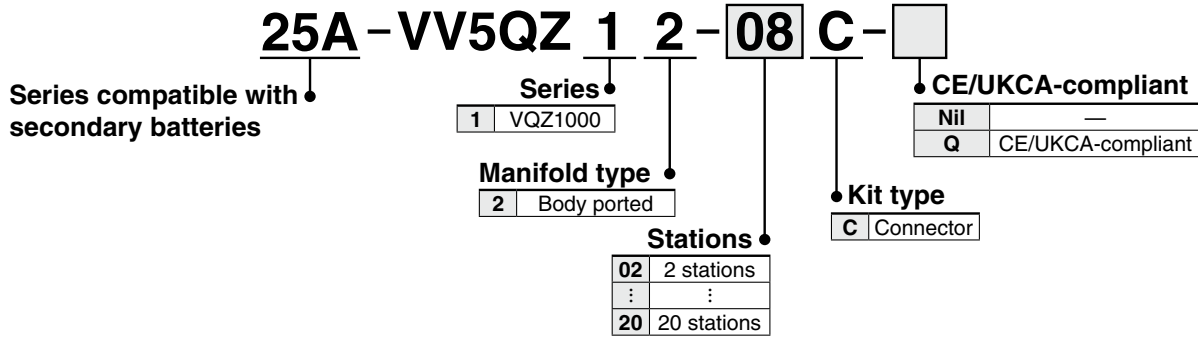
# 5-Port Solenoid Valve

## 25A-VQZ1000 Series

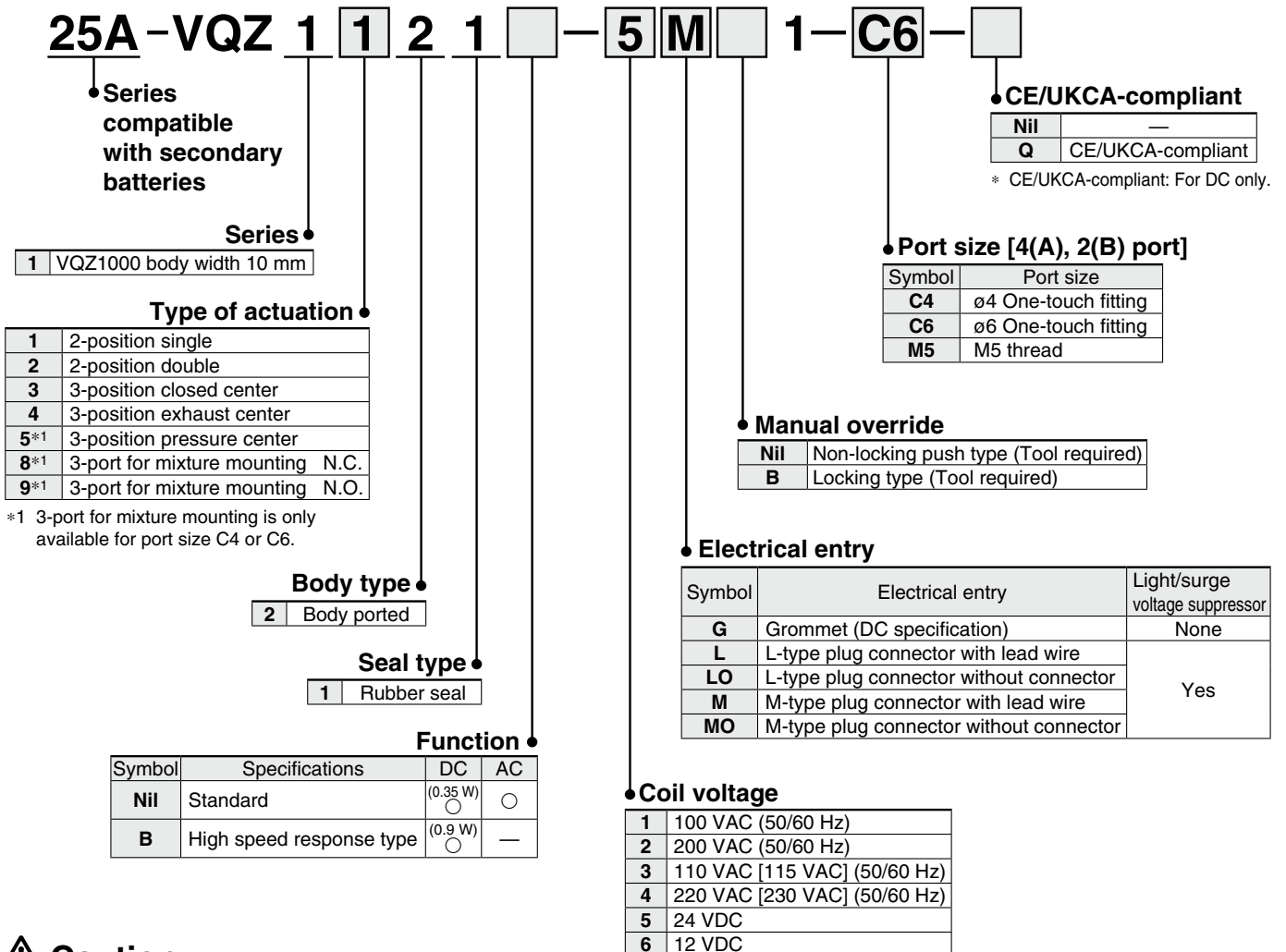
### Manifold Connector Kit



#### How to Order Manifolds



#### How to Order Valves



**Caution**  
Use standard (DC) specification for continuous duty.

\* The 25A- series specifications and dimensions are the same as those of the standard model.

For details, refer to the [Web Catalog](#).

# Plug-in Unit Base Mounted

# 25A-VQ1000/2000 Series

## Double check block (Separated)

### How to Order

Double check block

**25A-VQ1000-FPG-C4M5-F**

• Series compatible with secondary batteries

• IN side port size

|    |                        |
|----|------------------------|
| M5 | M5 thread              |
| C3 | ø3.2 One-touch fitting |
| C4 | ø4 One-touch fitting   |
| C6 | ø6 One-touch fitting   |

• OUT side port size

|    |                        |
|----|------------------------|
| M5 | M5 thread              |
| C3 | ø3.2 One-touch fitting |
| C4 | ø4 One-touch fitting   |
| C6 | ø6 One-touch fitting   |

• Option

|     |                                  |
|-----|----------------------------------|
| Nil | None                             |
| F   | With bracket                     |
| D   | DIN rail mounting (For manifold) |
| N   | Name plate                       |

\* When two or more symbols are specified, indicate them alphabetically.  
Example) -DN

Manifold (DIN rail mounting)

**25A-VVQ1000-FPG-06**

• Series compatible with secondary batteries

When ordering a double check block, order the DIN rail mounting [-D].

<Ordering example>

25A-VVQ1000-FPG-06...6-station manifold

\* 25A-VQ1000-FPG-C4M5-D; } Double check block  
3 sets  
\* 25A-VQ1000-FPG-C6M5-D; }  
3 sets

• Stations

|    |             |
|----|-------------|
| 01 | 1 station   |
| ⋮  | ⋮           |
| 16 | 16 stations |

Bracket Assembly

| Part no.          | Tightening torque |
|-------------------|-------------------|
| 25A-VQ1000-FPG-FB | 0.22 to 0.25 N·m  |

Double check block

**25A-VQ2000-FPG-0101-F**

• Series compatible with secondary batteries

• IN side port size

|    |                      |
|----|----------------------|
| 01 | Rc 1/8               |
| 02 | Rc 1/4               |
| C6 | ø6 One-touch fitting |
| C8 | ø8 One-touch fitting |

• OUT side port size

|    |                      |
|----|----------------------|
| 01 | Rc 1/8               |
| 02 | Rc 1/4               |
| C6 | ø6 One-touch fitting |
| C8 | ø8 One-touch fitting |

• Option

|     |                                  |
|-----|----------------------------------|
| Nil | None                             |
| D   | DIN rail mounting (For manifold) |
| F   | With bracket                     |
| N   | Name plate                       |

\* When two or more symbols are specified, indicate them alphabetically.  
Example) -DN

Manifold (DIN rail mounting)

**25A-VVQ2000-FPG-06**

• Series compatible with secondary batteries

When ordering a double check block, order the DIN rail mounting [-D].

<Ordering Example>

25A-VVQ2000-FPG-06...6-station manifold

\* 25A-VQ2000-FPG-C6C6-D; } Double check block  
3 sets  
\* 25A-VQ2000-FPG-C8C8-D; }  
3 sets

• Stations

|    |             |
|----|-------------|
| 01 | 1 station   |
| ⋮  | ⋮           |
| 16 | 16 stations |

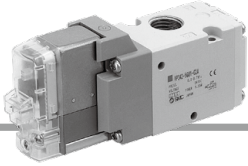
Bracket Assembly

| Part no.          | Tightening torque |
|-------------------|-------------------|
| 25A-VQ2000-FPG-FB | 0.8 to 1.0 N·m    |

\* The 25A- series specifications and dimensions are the same as those of the standard model.

For details, refer to the [Web Catalog](#).

# Rubber Seal 3-Port/Pilot Poppet Type 25A-VP342/542/742 Series



\* Only DIN and conduit terminal types are available for AC mode. Refer to the electrical entry for details.

## How to Order

Body ported **25A-VP** **3** **4** **2** **□** **□** **□** **-** **5** **D** **□** **□** **□** **1-** **01** **□** **A-** **□**

Series compatible with secondary batteries

### Series

|   |       |
|---|-------|
| 3 | VP300 |
| 5 | VP500 |
| 7 | VP700 |

### Pilot type

|     |                |
|-----|----------------|
| Nil | Internal pilot |
| R   | External pilot |

### Pressure specification

|     |                              |
|-----|------------------------------|
| Nil | Standard (0.7 MPa)           |
| K   | High pressure type (1.0 MPa) |

### Coil specification

|     |                                     |
|-----|-------------------------------------|
| Nil | Standard                            |
| T   | With power-saving circuit (DC only) |

- \* Be sure to select the power-saving circuit type if it is to be continuously energized for long periods of time.
- \* "T" type is only available for DC mode. When "T" is selected, only "Z" type of light/surge voltage suppressor is available.

### Rated voltage

| DC |        | AC (50/60 Hz) |                   |
|----|--------|---------------|-------------------|
| 5  | 24 VDC | 1             | 100 VAC           |
| 6  | 12 VDC | 2             | 200 VAC           |
|    |        | 3             | 110 VAC [115 VAC] |
|    |        | 4             | 220 VAC [230 VAC] |
|    |        | 7             | 240 VAC           |
|    |        | B             | 24 VAC            |

### Electrical entry

|                   | DIN terminal      | DIN (EN175301-803) terminal | Conduit terminal    |
|-------------------|-------------------|-----------------------------|---------------------|
|                   | [IP65 compatible] | [IP65 compatible]           | [IP65 compatible]   |
|                   |                   |                             |                     |
|                   | D: With connector | Y: With connector           | T: Conduit terminal |
| CE/UKCA-compliant | DC                | DC                          | DC                  |
|                   | AC                | AC                          | AC                  |

### Thread type

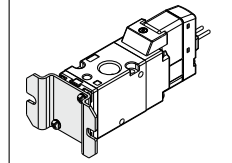
|     |      |
|-----|------|
| Nil | Rc   |
| F   | G    |
| N   | NPT  |
| T   | NPTF |

### Type of actuation

|   |                        |
|---|------------------------|
| A | N.C. (Normally closed) |
| B | N.O. (Normally open)   |

### Bracket

|     |                 |
|-----|-----------------|
| Nil | Without bracket |
| F   | With bracket    |



### Port size

| Symbol | Port size | VP300 | VP500 | VP700 |
|--------|-----------|-------|-------|-------|
| 01     | 1/8       | ○     | —     | —     |
| 02     | 1/4       | ○     | ○     | —     |
| 03     | 3/8       | —     | ○     | ○     |
| 04     | 1/2       | —     | —     | ○     |

### Manual override

| Nil: Non-locking push type | D: Push-turn locking slotted type | E: Push-turn locking lever type |
|----------------------------|-----------------------------------|---------------------------------|
|                            |                                   |                                 |

### Light/surge voltage suppressor

|     |   | DC | AC  |
|-----|---|----|-----|
| Nil | Without light/surge voltage suppressor          | ○  | ○   |
| S   | With surge voltage suppressor                   | ○  | —*1 |
| Z   | With light/surge voltage suppressor             | ○  | ○   |
| R   | With surge voltage suppressor (Non-polar)       | ○  | —   |
| U   | With light/surge voltage suppressor (Non-polar) | ○  | —   |

\*1 There is no "S" type for AC mode, since a rectifier prevents surge voltage generation.

\* The 25A- series specifications and dimensions are the same as those of the standard model.

For details, refer to the [Web Catalog](#).

# Rubber Seal

## 3-Port/Pilot Poppet Type

# 25A-VP344/544/744 Series



\* Only DIN and conduit terminal types are available for AC mode. Refer to the electrical entry for details.

### How to Order

Base mounted **25A-VP** **3** **4** **4** **-** **5** **D** **1** **-** **01** **A**

Series compatible with secondary batteries

**Series**

|   |       |
|---|-------|
| 3 | VP300 |
| 5 | VP500 |
| 7 | VP700 |

**Pilot type**

|     |                |
|-----|----------------|
| Nil | Internal pilot |
| R   | External pilot |

**Pressure specifications**

|     |                              |
|-----|------------------------------|
| Nil | Standard (0.7 MPa)           |
| K   | High pressure type (1.0 MPa) |

**Coil specifications**

|     |                                     |
|-----|-------------------------------------|
| Nil | Standard                            |
| T   | With power-saving circuit (DC only) |

\* Be sure to select the power-saving circuit type if it is to be continuously energized for long periods of time.  
\* "T" type is only available for DC mode. When "T" is selected, only "Z" type of light/surge voltage suppressor is available.

**Rated voltage**

| DC | AC (50/60 Hz) |        |                   |
|----|---------------|--------|-------------------|
| 5  | 1             | 24 VDC | 100 VAC           |
| 6  | 2             | 12 VDC | 200 VAC           |
|    | 3             |        | 110 VAC [115 VAC] |
|    | 4             |        | 220 VAC [230 VAC] |
|    | 7             |        | 240 VAC           |
|    | B             |        | 24 VAC            |

**Thread type**

|     |      |
|-----|------|
| Nil | Rc   |
| F   | G    |
| N   | NPT  |
| T   | NPTF |

**Type of actuation**

|   |                        |
|---|------------------------|
| A | N.C. (Normally closed) |
| B | N.O. (Normally open)   |

**Port size (Sub-plate)**

| Symbol | Port size           | VP300 | VP500 | VP700 |
|--------|---------------------|-------|-------|-------|
| Nil    | Without sub-plate*1 |       |       |       |
| 01     | 1/8                 | ○     | —     | —     |
| 02     | 1/4                 | ○     | ○     | —     |
| 03     | 3/8                 | —     | ○     | ○     |
| 04     | 1/2                 | —     | —     | ○     |

\*1 With a gasket and two mounting bolts.

**Electrical entry**

|                   | DIN terminal      | DIN (EN175301-803) terminal | Conduit terminal     |
|-------------------|-------------------|-----------------------------|----------------------|
|                   | [IP65 compatible] | [IP65 compatible]           | [IP65 compatible]    |
|                   |                   |                             |                      |
|                   | D: With connector | Y: With connector           | T: Conduit terminal  |
| CE/UKCA-compliant | DC<br>AC          | CE UK CA<br>CE UK CA        | CE UK CA<br>CE UK CA |

**Manual override**

| Nil: Non-locking push type | D: Push-turn locking slotted type | E: Push-turn locking lever type |
|----------------------------|-----------------------------------|---------------------------------|
|                            |                                   |                                 |

**Light/surge voltage suppressor**

|     | DC  | AC    |
|-----|---|-------|
| Nil | Without light/surge voltage suppressor          | ○ ○   |
| S   | With surge voltage suppressor                   | ○ —*1 |
| Z   | With light/surge voltage suppressor             | ○ ○   |
| R   | With surge voltage suppressor (Non-polar)       | ○ —   |
| U   | With light/surge voltage suppressor (Non-polar) | ○ —   |

\*1 There is no "S" type for AC mode, since a rectifier prevents surge voltage generation.

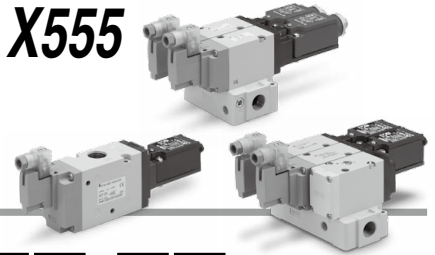
\* The 25A- series specifications and dimensions are the same as those of the standard model.

For details, refer to the [Web Catalog](#).



# 3-Port Solenoid Valve/Residual Pressure Release Valve with Detection of Main Valve Position

## 25A-VP500/700-X536, X538, X555



### How to Order

Residual pressure release valve

25A-VP 5 4 2 R - 5 D Z 1 - 03 [ ] - M [ ] - X536

Dual residual pressure release valve

25A-VP 5 4 4 R - 5 D Z 1 - 03 [ ] - M A - X538

Dual residual pressure release valve with soft start-up function

25A-VP 5 4 4 [ ] - 5 D Z 1 - 03 [ ] - M [ ] [ ] - X555

**Series**

|   |       |
|---|-------|
| 5 | VP500 |
| 7 | VP700 |

**Body**

|   |              |
|---|--------------|
| 2 | Body ported  |
| 4 | Base mounted |

**Pilot**

|     |                |
|-----|----------------|
| Nil | Internal pilot |
| R   | External pilot |

**Voltage**

|   |        |
|---|--------|
| 5 | 24 VDC |
|---|--------|

**Electrical entry**

|   |              |
|---|--------------|
| D | DIN terminal |
|---|--------------|

**Light/surge voltage suppressor**

|   |                                     |
|---|-------------------------------------|
| Z | With light/surge voltage suppressor |
|---|-------------------------------------|

**Port size**

|    | Port size | VP500 | VP700 |
|----|-----------|-------|-------|
| 03 | 3/8"      | ●     | —     |
| 04 | 1/2"      | —     | ●     |

**Thread**

|     |     |
|-----|-----|
| Nil | Rc  |
| F   | G   |
| N   | NPT |

**Safety limit switch/Wiring**

|     |   |
|-----|---|
| Nil | G1/2 (Made by OMRON)                        |
| M   | M12 connector (Made by OMRON)               |
| S1  | M12 connector (Made by Rockwell Automation) |

**With check valve (Only external pilot)**

|     | Check valve | Applicable tube O.D. | Thread |   |     |
|-----|-------------|----------------------|--------|---|-----|
|     |             |                      | Rc     | G | NPT |
| Nil | None        | —                    | ●      | ● | ●   |
| A   | Yes         | ø6                   | ●      | — | —   |
| B   |             | ø1/4"                | —      | — | ●   |

**Throttle**

|                  |                    |
|------------------|--------------------|
| Nil              | Variable throttle  |
| 10               | ø1 fixed orifice   |
| 15               | ø1.5 fixed orifice |
| 20 <sup>*1</sup> | ø2 fixed orifice   |

**Internal Pilot Type**

**Caution**

Valve may not operate properly when air supply to P port is not adequate and the supply pressure to the valve is lower than 0.25 MPa, the minimum operating pressure. Be careful with insufficient supply pressure.

**Piping for External Pilot Type**

**Caution**

The product may not operate when the external pilot pressure is insufficient due to simultaneous operation or restricted air piping. In this case, use the check valve (AKH series) with the external pilot port, change the piping size or adjust the set pressure to provide a constant pressure of 0.25 MPa or more.

\* For the internal pilot, the symbol is nil.

\*1 VP700 only

\* The 25A- series specifications and dimensions are the same as those of the standard model.

For details, refer to the [Web Catalog](#).

# 3-Port Solenoid Valve Direct Operated Poppet Type 25A-VT317 Series Rubber Seal



[Option]

\* CE/UKCA-compliant:  
For DIN terminal type.

## How to Order

25A-V T 317 [ ] - 1 G [ ] - 02 [ ] - [ ]

### Body type

|   |             |
|---|-------------|
| T | Body ported |
| O | Manifold    |

Series compatible with secondary batteries

### Valve option

|     |                      |
|-----|----------------------|
| Nil | Standard             |
| E*1 | Continuous duty type |
| V*1 | For vacuum           |

\*1 Semi-standard

### Rated voltage

|     |                    |
|-----|--------------------|
| 1   | 100 VAC (50/60 Hz) |
| 2   | 200 VAC (50/60 Hz) |
| 3*1 | 110 VAC (50/60 Hz) |
| 4*1 | 220 VAC (50/60 Hz) |
| 5   | 24 VDC             |
| 6*1 | 12 VDC             |
| 7*1 | 240 VAC (50/60 Hz) |

\*1 Semi-standard

\* Applicable only for DIN terminal type.

### Thread type

|     |      |
|-----|------|
| Nil | Rc   |
| F   | G    |
| N   | NPT  |
| T   | NPTF |

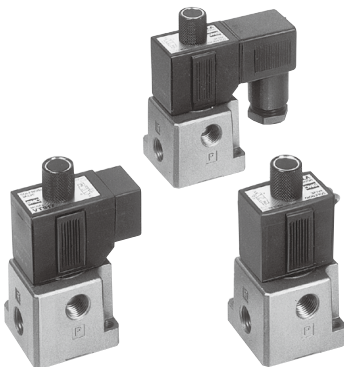
### CE/UKCA-compliant

|     |                     |
|-----|---------------------|
| Nil | —                   |
| Q   | CE/UKCA-compliant*1 |

\*1 Applicable only for DIN terminal type.

### Port size

|     |                             |
|-----|-----------------------------|
| Nil | Without port (For manifold) |
| 02  | 1/4 (8A)                    |



### Electrical entry

|   |                           | CE/UKCA-compliant |
|---|---------------------------|-------------------|
| G | Grommet, 300 mm lead wire | —                 |
| H | Grommet, 600 mm lead wire | —                 |
| C | Conduit                   | —                 |
| D | DIN terminal              | ●                 |

### Light/Surge voltage suppressor

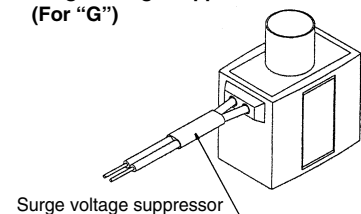
| Electrical entry<br>Symbol | CE/UKCA-compliant |     |     |   |        |
|----------------------------|-------------------|-----|-----|---|--------|
|                            | G                 | H   | C   | D | D Only |
| Nil                        | ●                 | ●   | ●   | ● | ●      |
| S                          | ●*1               | ●*1 | ●*1 | ● | ●      |
| Z                          | —                 | —   | —   | ● | ●      |

S: With surge voltage suppressor

\*1 Refer to the figure below.

Z: With light/surge voltage suppressor

Surge voltage suppressor mounting part (For "G")



## Manifold

| Model     | Applicable manifold type     | Accessory   |
|-----------|------------------------------|---|
| VO317(-Q) | Common or individual exhaust | O-ring (KA00066, 4 pcs.)*1<br>Bolts (XT012-25C#1, 2 pcs.) |

\*1 It is not applied to "Continuous duty type." Refer to the accessories in the **Web Catalog**.

\* The 25A- series specifications and dimensions are the same as those of the standard model.

For details, refer to the **Web Catalog**.

# 3-Port Solenoid Valve Direct Operated Poppet Type **25A-VG342 Series** Rubber Seal

## Low power consumption

4.8 W DC (Standard type)  
2 W DC (Energy-saving type)

## No lubrication required

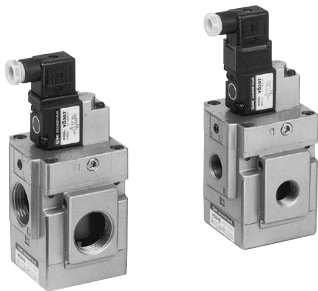
## Possible to use in vacuum or under low pressures

External pilot  
Vacuum: Up to -101.2 kPa  
Low pressure: 0 to 0.2 MPa

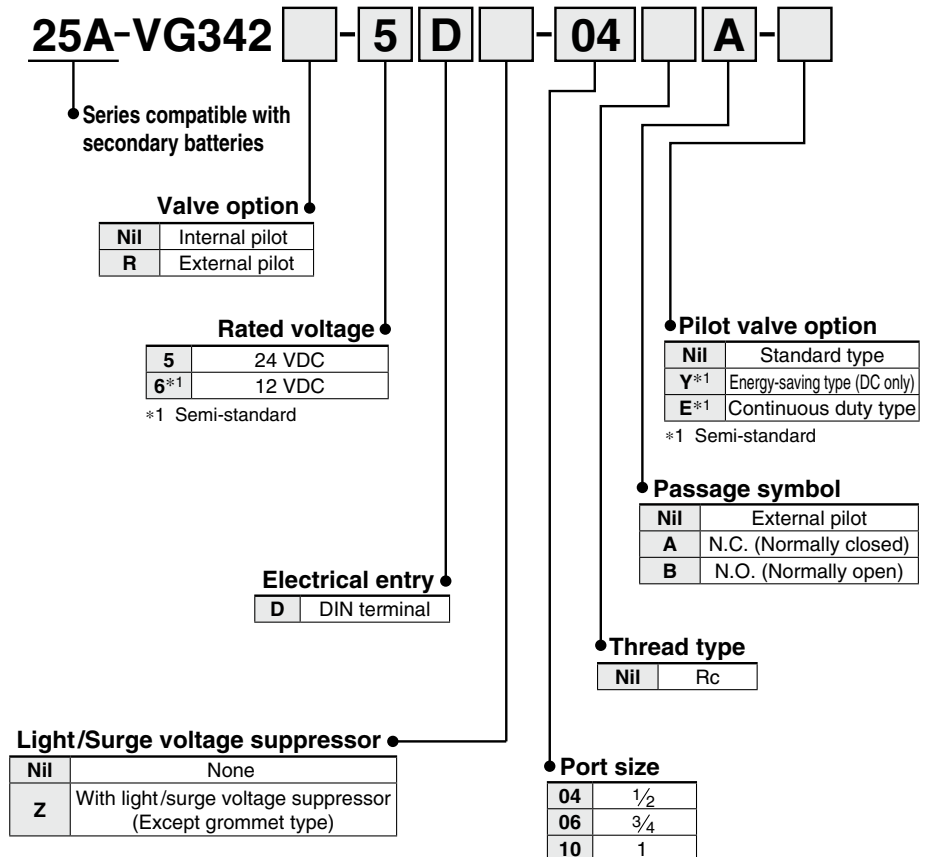
## Changeable actuation:

N.C., N.O., or external pilot

Can be used as a selector or divider valve (External pilot)



## How to Order



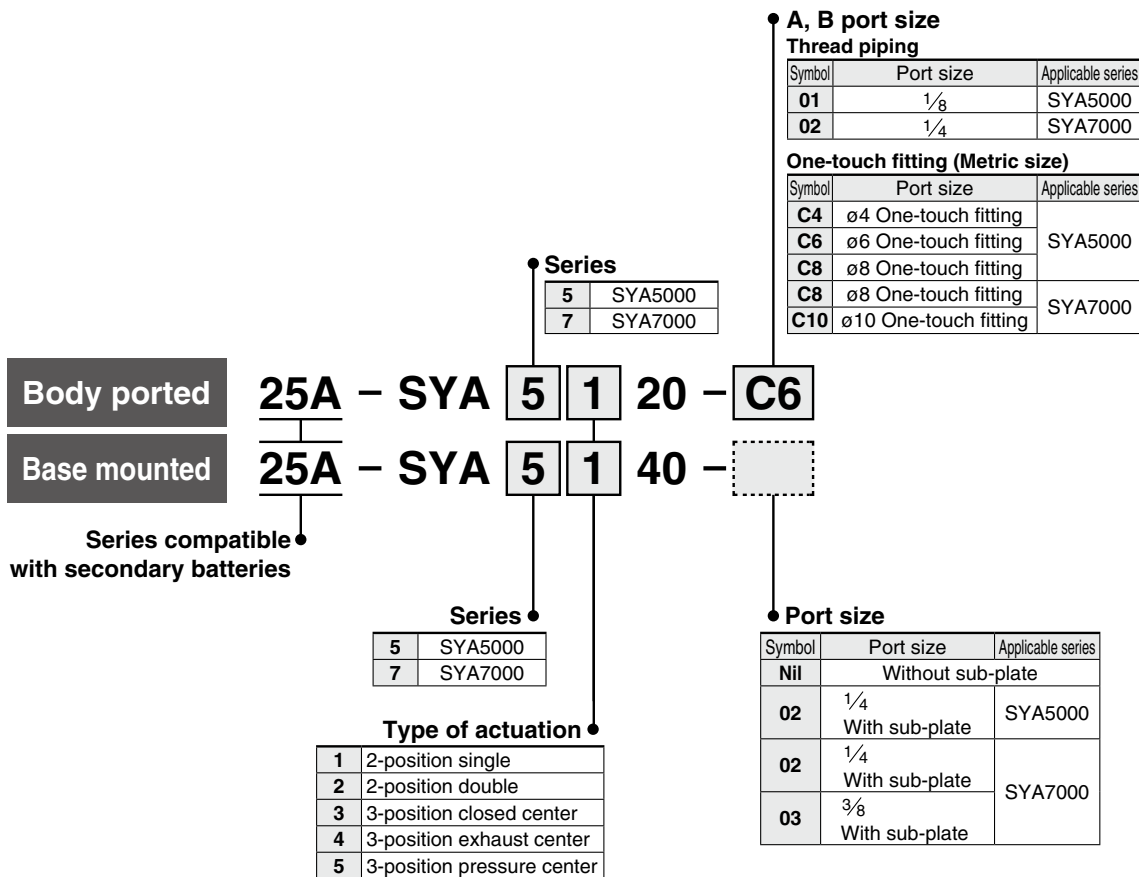
\* The 25A- series specifications and dimensions are the same as those of the standard model.

For details, refer to the [Web Catalog](#).

# 5-Port Air Operated Valve

# 25A-SYA5000/7000 Series

## How to Order



## How to Order Manifold Base

Same manifolds as the SY series (Non plug-in type) are prepared.  
(For 20, 41 and 42 Types)

25A-SS5YA<sup>5</sup><sub>7</sub>- Fill the same as 25A-SS5Y<sup>5</sup><sub>7</sub>.

(Refer to pages 65 and 67.)

\* Specify the part numbers for valves and options together beneath the manifold base part number.

<Example>

25A-SS5YA5-42-03-02....1 set (Type 42, 3-station manifold base part no.)

\* 25A-SYA5140 ..... 1 set (Single air operated valve part no.)

\* 25A-SYA5240 ..... 1 set (Double air operated valve part no.)

\* 25A-SY5000-26-1A ..... 1 set (Blanking plate the assembly part no.)

↳The asterisk denotes the symbol for the assembly.

Prefix it to the part nos. of the solenoid valve, etc.

\* When single body ported air operated valves are ordered, manifold mounting screws and gaskets are not included. Order them separately if necessary.

(For details, refer to page 70.)

\* The 25A- series specifications and dimensions are the same as those of the standard model.

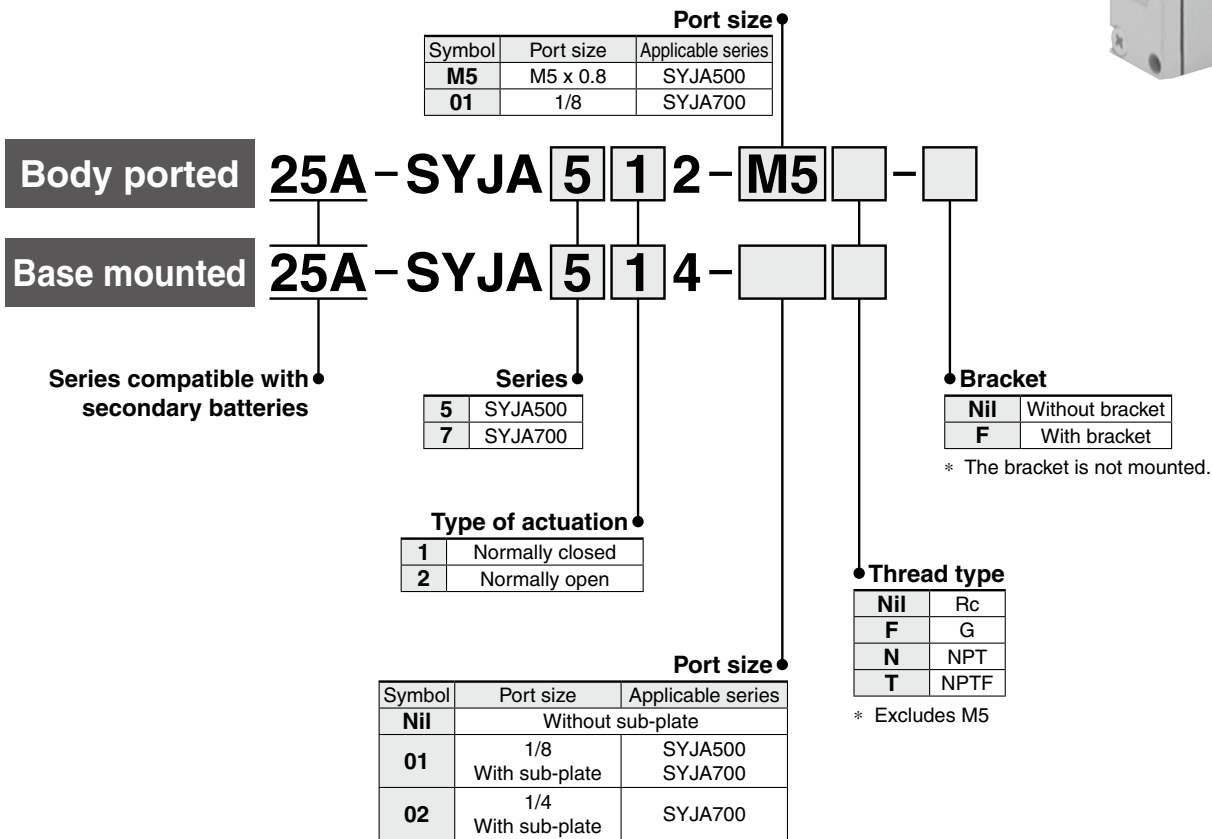
For details, refer to the [Web Catalog](#).

# 3-Port Air Operated Valve

## 25A-SYJA500/700 Series



### How to Order



\* The 25A- series specifications and dimensions are the same as those of the standard model.

For details, refer to the [Web Catalog](#).

# 25A-SYJA500/700 Series

## Manifold Type for the SYJA500

### Type 20

How to Order

25A - SS3YJA5 - 20 - 05

Stations

|    |             |
|----|-------------|
| 02 | 2 stations  |
| :  | :           |
| 20 | 20 stations |

Applicable valve  
25A-SYJA5□2

Applicable blanking  
plate assembly  
25A-SYJ500-10-1A

\* For more than 6 stations, supply air to both sides of P port and exhaust air from both sides of R port.

### Type 40

How to Order

25A - SS3YJA5 - 40 - 05 M5

Stations

|    |             |
|----|-------------|
| 02 | 2 stations  |
| :  | :           |
| 20 | 20 stations |

A port size

|    |          |
|----|----------|
| M5 | M5 x 0.8 |
| 01 | 1/8      |

Applicable valve  
25A-SYJA5□4

Applicable blanking  
plate assembly  
25A-SYJ500-10-3A

\* For more than 9 stations, supply air to both sides of P port and exhaust air from both sides of R port.

### Type 41

How to Order

25A - SS3YJA5 - 41 - 05 - C6

Stations

|    |             |
|----|-------------|
| 02 | 2 stations  |
| :  | :           |
| 20 | 20 stations |

A port size

|    |                      |
|----|----------------------|
| M5 | M5 x 0.8             |
| 01 | 1/8                  |
| C4 | ø4 One-touch fitting |
| C6 | ø6 One-touch fitting |

Applicable valve  
25A-SYJA5□4

Applicable blanking  
plate assembly  
25A-SYJ500-10-3A

\* For more than 9 stations, supply air to both sides of P port and exhaust air from both sides of R port.

## Manifold Type for the SYJA700

### Type 20/21

How to Order

25A - SS3YJA7 - 20 - 05

Manifold type

|    |         |
|----|---------|
| 20 | Type 20 |
| 21 | Type 21 |

Stations

|    |             |
|----|-------------|
| 02 | 2 stations  |
| :  | :           |
| 20 | 20 stations |

Applicable valve  
25A-SYJA7□2

Applicable blanking  
plate assembly  
25A-SYJ700-10-1A

\* If there are more than 6 stations for type 20, or more than 9 stations for type 21, supply air to both sides of P port and exhaust air from both sides of R port.

### Type 40/41

How to Order

25A - SS3YJA7 - 40 - 05 - 01

Manifold type

|    |         |
|----|---------|
| 40 | Type 40 |
| 41 | Type 41 |

A port size

|    |     |
|----|-----|
| 01 | 1/8 |
|----|-----|

Stations

|    |             |
|----|-------------|
| 02 | 2 stations  |
| :  | :           |
| 20 | 20 stations |

Applicable valve  
25A-SYJA7□4

Applicable blanking  
plate assembly  
25A-SYJ700-10-2A

\* If there are more than 6 stations for type 40, or more than 9 stations for type 41, supply air to both sides of P port and exhaust air from both sides of R port.

### Type 42

How to Order

25A - SS3YJA7 - 42 - 05 - C6

Stations

|    |             |
|----|-------------|
| 02 | 2 stations  |
| :  | :           |
| 20 | 20 stations |

A port size

|    |                      |
|----|----------------------|
| 01 | 1/8                  |
| C6 | ø6 One-touch fitting |
| C8 | ø8 One-touch fitting |

Applicable valve  
25A-SYJA7□4

Applicable blanking  
plate assembly  
25A-SYJ700-10-2A

\* For more than 9 stations, supply air to both sides of P port and exhaust air from both sides of R port.

# Finger Valve

RoHS

# 25A-VHK□A Series

## How to Order

Series compatible with secondary batteries

25A-VHK **2** A - **04F** - **04F** □ □

Valve model

|   |              |
|---|--------------|
| 2 | 2-port valve |
| 3 | 3-port valve |

1(P) port size

|     |       |
|-----|-------|
| 04F | ø4    |
| 06F | ø6    |
| 08F | ø8    |
| 01S | R 1/8 |
| 02S | R 1/4 |
| 03S | R 3/8 |

Bracket

|     |                |
|-----|----------------|
| Nil | None           |
| L   | With L-bracket |

\* Bracket and screws are attached.

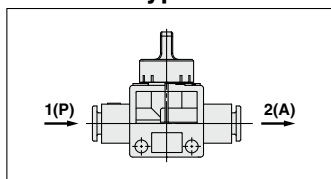
Knob color

|                |              |      |
|----------------|--------------|------|
| Nil (Standard) | 2-port valve | Gray |
|                | 3-port valve | Blue |
| R (Option)     | 2-port valve | Red  |
|                | 3-port valve |      |

2(A) port size

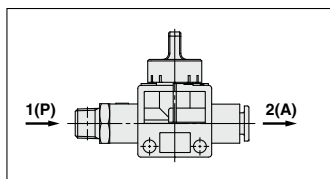
|     |       |
|-----|-------|
| 04F | ø4    |
| 06F | ø6    |
| 08F | ø8    |
| 01S | R 1/8 |
| 02S | R 1/4 |
| 03S | R 3/8 |

### Standard Type



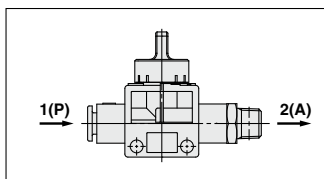
1(P): One-touch fitting  
2(A): One-touch fitting

|                             |    |                                  |    |    |
|-----------------------------|----|----------------------------------|----|----|
|                             |    | 2(A) Applicable tubing O.D. [mm] |    |    |
|                             |    | ø4                               | ø6 | ø8 |
| Applicable tubing O.D. [mm] | ø4 | ●                                |    |    |
|                             | ø6 | ●                                | ●  |    |
|                             | ø8 |                                  | ●  | ●  |



1(P): Male thread  
2(A): One-touch fitting

|             |     |                                  |    |    |
|-------------|-----|----------------------------------|----|----|
|             |     | 2(A) Applicable tubing O.D. [mm] |    |    |
|             |     | ø4                               | ø6 | ø8 |
| Port size R | 1/8 | ●                                | ●  | ●  |
|             | 1/4 |                                  | ●  | ●  |
|             | 3/8 |                                  | ●  | ●  |



1(P): One-touch fitting  
2(A): Male thread

|                             |    |                  |     |     |
|-----------------------------|----|------------------|-----|-----|
|                             |    | 2(A) Port size R |     |     |
|                             |    | 1/8              | 1/4 | 3/8 |
| Applicable tubing O.D. [mm] | ø4 | ●                |     |     |
|                             | ø6 | ●                | ●   | ●   |
|                             | ø8 | ●                | ●   | ●   |

\* The 25A- series specifications and dimensions are the same as those of the standard model.

For details, refer to the [Web Catalog](#).



# OSHA Standard Compliant Pressure Relief 3-Port Valve with Locking Holes

Single Action

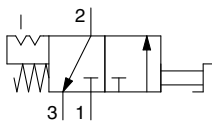
## 25A-VHS20/30/40/50-D Series

RoHS

Double Action

## 25A-VHS20W/30W/40W/50W-D Series

Symbol



### How to Order

**25A-VHS** 30   -   03 -   -   - **D**

1  
 2  
 3  
 4  
 5  
 6

• Series compatible with secondary batteries

· Option/Semi-standard: Select one each for a to f.  
 · Option/Semi-standard symbol:  
 When more than one specification is required, indicate in alphanumeric order.  
 Example) 25A-VHS30-N03-BS-RZ-D

|   | Symbol           | Description     | ①             |                                       |    |    |  |
|---|------------------|-----------------|---------------|---------------------------------------|----|----|--|
|   |                  |                 | Body size     |                                       |    |    |  |
|   |                  |                 | 20            | 30                                    | 40 | 50 |  |
| ② | Handle operation | Nil             | Single action |                                       |    |    |  |
|   |                  | W               | Double action |                                       |    |    |  |
| ③ | Pipe thread type | Nil             | Rc*1          |                                       |    |    |  |
|   |                  | N               | NPT           |                                       |    |    |  |
|   |                  | F               | G             |                                       |    |    |  |
| ④ | Port size        | 01              | 1/8           |                                       |    |    |  |
|   |                  | 02              | 1/4           |                                       |    |    |  |
|   |                  | 03              | 3/8           |                                       |    |    |  |
|   |                  | 04              | 1/2           |                                       |    |    |  |
|   |                  | 06              | 3/4           |                                       |    |    |  |
|   |                  | 10              | 1             |                                       |    |    |  |
| ⑤ | a                | Mounting        | Nil           | Without mounting option               |    |    |  |
|   |                  |                 | B             | With bracket                          |    |    |  |
|   | b                | Silencer        | Nil           | Without silencer                      |    |    |  |
|   |                  |                 | S             | With built-in silencer (for EXH port) |    |    |  |
| ⑥ | c                | Handle color    | Nil           | Red                                   |    |    |  |
|   |                  |                 | K             | Black                                 |    |    |  |
|   | d                | Handle material | Nil           | Resin                                 |    |    |  |
|   |                  |                 | M             | Metal                                 |    |    |  |
|   | e                | Flow direction  | Nil           | Flow direction: Left to right         |    |    |  |
|   |                  |                 | R             | Flow direction: Right to left         |    |    |  |
|   | f                | Pressure unit   | Nil           | Product label in SI units: MPa        |    |    |  |
|   |                  |                 | Z*2           | Product label in imperial units: psi  |    |    |  |

\*1 The pipe thread type for the EXH port is G.

\*2 For the pipe thread type: NPT only. This product is for overseas use only according to the New Measurement Act. (The SI unit type is provided for use in Japan.)

\*3 ○: For the pipe thread type: NPT only

### Option/Part Nos.

| Optional specifications | Model            |                  |                  |                  |                  |
|-------------------------|------------------|------------------|------------------|------------------|------------------|
|                         | 25A-VHS20-D      | 25A-VHS30-D      | 25A-VHS40-D      | 25A-VHS40-06-D   | 25A-VHS50-D      |
| Bracket assembly*1      | 25A-VHS24P-180AS | 25A-VHS34P-180AS | 25A-VHS44P-180AS | 25A-VHS44P-180AS | 25A-VHS54P-180AS |
| Silencer assembly*2     | VHS24P-190AS     | VHS34P-190AS     | VHS44P-190AS     | VHS54P-190AS     | VHS54P-190AS     |

\*1 The assembly consists of a bracket A/B and 2 mounting screws.

\*2 The assembly consists of the element assembly and an O-ring.

\* The 25A- series specifications and dimensions are the same as those of the standard model.

For details, refer to the [Web Catalog](#).

# Conforming to OSHA Standard

## Pressure Relief 3-Port Valve with Locking Holes (Single Action)

# 25A-VHS20/30/40/50 Series

RoHS

### How to Order

**Single action** 25A - VHS 40 - [ ] 04 A - B - [ ] - [ ]

Series compatible with secondary batteries  
Pressure relief 3-port valve

Body size

| Symbol | Body size |
|--------|-----------|
| 20     | 20        |
| 30     | 30        |
| 40     | 40        |
| 50     | 50        |

Thread type

| Symbol | Thread type |
|--------|-------------|
| Nil    | Rc          |
| N      | NPT         |
| F      | G           |

Port size

| Symbol | Port size | Body size |    |    |    |
|--------|-----------|-----------|----|----|----|
|        |           | 20        | 30 | 40 | 50 |
| 01     | 1/8       | ●         | —  | —  | —  |
| 02     | 1/4       | ●         | ●  | ●  | —  |
| 03     | 3/8       | —         | ●  | ●  | —  |
| 04     | 1/2       | —         | —  | ●  | —  |
| 06     | 3/4       | —         | —  | ●  | ●  |
| 10     | 1         | —         | —  | —  | ●  |

Handle/Bonnet material

| Symbol | Material            |
|--------|---------------------|
| A      | Flame-resistant PBT |
| B      | Aluminum            |

Made to order

| Symbol | Description |
|--------|-------------|
| X1     | Body: Red   |

Semi-standard specifications

| Symbol | Description                    |
|--------|--------------------------------|
| Nil    | —                              |
| K      | Handle color: Black            |
| R      | Flow direction: Right → Left   |
| Z*1    | psi as unit displayed on label |

\*1 Only for the NPT thread  
This product is for overseas use only according to the New Measurement Act. (The SI unit type is provided for use in Japan.)

Options

| Symbol | Description  |
|--------|--------------|
| Nil    | —            |
| B      | With bracket |

### Option Part Nos.

| Model        | Bracket assembly part no.*1 |
|--------------|-----------------------------|
| 25A-VHS20    | VHS20PW-180AS-6             |
| 25A-VHS30    | VHS30PW-180AS-6             |
| 25A-VHS40    | VHS40PW-180AS-6             |
| 25A-VHS40-06 | VHS40PW-180-06AS-6          |
| 25A-VHS50    | VHS50PW-180AS-6             |

\*1 Bracket/1 pc., Mounting screw/2 pcs.

### OSHA standard (Occupational Safety and Health Administration Department of Labor)

For safety control, OSHA rule requires energy sources for certain equipment be turned off or disconnected and that the device either be locked or labelled with a warning tag.

\* The 25A- series specifications and dimensions are the same as those of the standard model.

For details, refer to the [Web Catalog](#).

# Conforming to OSHA Standard

## Pressure Relief 3-Port Valve with Locking Holes (Double Action)

# 25A-VHS2510/3510/4510/5510 Series

RoHS

### How to Order

**Double action** 25A - VHS 4 510 - [ ] 04 A - B - [ ] - [ ]

Series compatible with secondary batteries  
Pressure relief 3-port valve

Body size

| Symbol |
|--------|
| 2      |
| 3      |
| 4      |
| 5      |

Double action

Thread type

|     |     |
|-----|-----|
| Nil | Rc  |
| N   | NPT |
| F   | G   |

Port size

| Symbol | Port size | Body size |   |   |   |
|--------|-----------|-----------|---|---|---|
|        |           | 2         | 3 | 4 | 5 |
| 01     | 1/8       | ●         | — | — | — |
| 02     | 1/4       | ●         | ● | ● | — |
| 03     | 3/8       | —         | ● | ● | — |
| 04     | 1/2       | —         | — | ● | — |
| 06     | 3/4       | —         | — | ● | ● |
| 10     | 1         | —         | — | — | ● |

Handle/Bonnet material

| Symbol | Material            |
|--------|---------------------|
| A      | Flame-resistant PBT |
| B      | Aluminum            |

Made to order

| Symbol | Description |
|--------|-------------|
| X1     | Body: Red   |

Semi-standard specifications

| Symbol | Description                    |
|--------|--------------------------------|
| Nil    | —                              |
| K      | Handle color: Black            |
| R      | Flow direction: Right → Left   |
| Z*1    | psi as unit displayed on label |

\*1 Only for the NPT thread  
This product is for overseas use only according to the New Measurement Act. (The SI unit type is provided for use in Japan.)

Options

| Symbol | Description  |
|--------|--------------|
| Nil    | —            |
| B      | With bracket |

### Option Part Nos.

| Model          | Bracket assembly part no.*1 |
|----------------|-----------------------------|
| 25A-VHS2510    | VHS20PW-180AS-6             |
| 25A-VHS3510    | VHS30PW-180AS-6             |
| 25A-VHS4510    | VHS40PW-180AS-6             |
| 25A-VHS4510-06 | VHS40PW-180-06AS-6          |
| 25A-VHS5510    | VHS50PW-180AS-6             |

\*1 Bracket/1 pc., Mounting screw/2 pcs.

### OSHA standard (Occupational Safety and Health Administration Department of Labor)

For safety control, OSHA rule requires energy sources for certain equipment be turned off or disconnected and that the device either be locked or labelled with a warning tag.

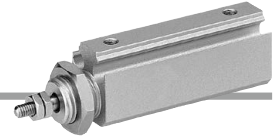
\* The 25A- series specifications and dimensions are the same as those of the standard model.

For details, refer to the [Web Catalog](#).

# Pin Cylinder: Double Acting, Single Rod

# 25A-CJP2 Series

∅4, ∅6, ∅10, ∅16



## How to Order

**25A - CDJP2 F 10 - 15 D - [ ] - M9BW S**

Series compatible with secondary batteries

With auto switch (Built-in magnet)

Mounting

| Symbol | Mounting | Standard | Built-in magnet |
|--------|----------|----------|-----------------|
| B      | Basic    | ●        | ●               |
| F      | Flange   | ●        | ●               |
| L      | Foot     | ●        | ●               |
| D      | Clevis   | ●        | ●               |
| T      | Trunnion | ●        | ●               |

- \* Bore size of 4 mm is available with basic mounting only.
- \* Mounting brackets are shipped together with the product but do not come assembled.
- \* Trunnion mounting type is shipped after assembled.

Bore size

|    |       |
|----|-------|
| 4  | 4 mm  |
| 6  | 6 mm  |
| 10 | 10 mm |
| 16 | 16 mm |

Number of auto switches

|     |   |
|-----|---|
| Nil | 2 |
| S   | 1 |

Auto switch

|     |                     |
|-----|---------------------|
| Nil | Without auto switch |
|-----|---------------------|

\* [Click here](#) for details on applicable auto switch models.

Rod end thread

|     |                |
|-----|----------------|
| Nil | With thread    |
| B   | Without thread |

Double acting

Cylinder standard stroke

| Bore size [mm] | Stroke [mm]                   |
|----------------|-------------------------------|
| 4              | 5, 10, 15, 20*1               |
| 6              | 5, 10, 15, 20, 25             |
| 10, 16         | 5, 10, 15, 20, 25, 30, 35, 40 |

\*1 20 stroke of bore size 4 mm is standard type only.

### Built-in Magnet Cylinder Model

If a built-in magnet cylinder without an auto switch is required, there is no need to enter the symbol for the auto switch.  
(Example) 25A-CDJP2F10-15D

### Mounting Bracket Part Nos. for the 25A- Series

| Bore size [mm] | Flange       | Foot         | Trunnion     |
|----------------|--------------|--------------|--------------|
| 6              | 25A-CP-F006A | 25A-CP-L006A | 25A-CP-T006A |
| 10             | 25A-CP-F010A | 25A-CP-L010A | 25A-CP-T010A |
| 16             | 25A-CP-F016A | 25A-CP-L016A | 25A-CP-T016A |

### Accessory Bracket Part Nos. for the 25A- Series

| Bore size [mm] | Single knuckle joint | Double knuckle joint | Knuckle joint pin | Trunnion pin | Mounting nut | Rod end nut |
|----------------|----------------------|----------------------|-------------------|--------------|--------------|-------------|
| 4              | —                    | —                    | —                 | —            | 25A-SNPS-004 | 25A-NTJ-004 |
| 6              | 25A-I-P006A          | 25A-Y-P006A          | 25A-IY-P006       | 25A-CT-P006  | 25A-SNP-006  | 25A-NTP-006 |
| 10             | 25A-I-P010A          | 25A-Y-P010A          | 25A-IY-P010       | 25A-CT-P010  | 25A-SNP-010  | 25A-NTP-010 |
| 16             | 25A-I-P016A          | 25A-Y-P016A          | 25A-IY-P016       | 25A-CT-P016  | 25A-SNP-016  | 25A-NTP-016 |

\* The 25A- series specifications and dimensions are the same as those of the standard model.

For details, refer to the [Web Catalog](#).

# Air Cylinder: Standard Type Double Acting, Single Rod

## 25A-CJ2 Series

ø10, ø16



### How to Order

**25A-C** **D** **J2** **L** **16** - **60** **A** **Z** - **M9BW** **B**

Series compatible with secondary batteries

#### With auto switch

|     |                                    |
|-----|------------------------------------|
| Nil | Without magnet for switch*1        |
| D   | With auto switch (Built-in magnet) |

\*1 In the case of without magnet for switch, auto switch cannot be mounted.

#### Mounting

|   |                    |
|---|--------------------|
| B | Basic              |
| E | Double-side bossed |
| D | Double clevis      |
| L | Single foot        |
| M | Double foot        |
| F | Rod flange         |
| G | Head flange        |

\* Mounting brackets are shipped together with the product but do not come assembled.

#### Bore size

|    |       |
|----|-------|
| 10 | 10 mm |
| 16 | 16 mm |

#### Cylinder standard stroke [mm]

|    |   |
|----|---|
| 10 | 15, 30, 45, 60, 75, 100, 125, 150           |
| 16 | 15, 30, 45, 60, 75, 100, 125, 150, 175, 200 |

\* The manufacturing of intermediate strokes in 1 mm increments is possible. (Spacers are not used.)

#### Auto switch mounting type

|   |               |
|---|---------------|
| B | Band mounting |
|---|---------------|

\* Refer to page 323 for auto switch mounting brackets.

#### Number of auto switches

|     |   |
|-----|---|
| Nil | 2 |
| S   | 1 |
| n   | n |

#### Auto switch

|     |                     |
|-----|---------------------|
| Nil | Without auto switch |
|-----|---------------------|

\* [Click here](#) for details on applicable auto switch models.  
\* Enter the auto switch mounting type (B) even when a built-in magnet cylinder without an auto switch is required.

#### Head cover port location

|                |                       |  |
|----------------|-----------------------|--|
| Bore size [mm] | ø10, ø16              |  |
| Symbol         |                       |  |
| Nil            | Perpendicular to axis |  |
| R              | Axial                 |  |

\* Double clevis is only available for being perpendicular to axis.  
\* Double-side bossed type is only available for being perpendicular to axis.

#### Cushion

|     |               |
|-----|---------------|
| Nil | Rubber bumper |
| A   | Air cushion   |

### Mounting Bracket Part Nos. for the 25A- Series

| Mounting bracket | Bore size [mm] |            |
|------------------|----------------|------------|
|                  | 10             | 16         |
| Foot bracket     | 25A-CJ-L010B   | CJ-L016SUS |
| Flange bracket   | 25A-CJ-F010B   | CJ-F016SUS |

\* The 25A- series specifications and dimensions are the same as those of the standard model.

For details, refer to the [Web Catalog](#).

# Air Cylinder: Non-rotating Rod Type Double Acting, Single Rod

## 25A-CJ2K Series

ø10, ø16

RoHS



### How to Order

25A - C D J2K L 16 - 60 Z - M9BW - B

Series compatible with secondary batteries

#### With auto switch

|     |                                    |
|-----|------------------------------------|
| Nil | Without magnet for switch*1        |
| D   | With auto switch (Built-in magnet) |

\*1 In the case of without magnet for switch, auto switch cannot be mounted.

#### Mounting

|   |                    |
|---|--------------------|
| B | Basic              |
| E | Double-side bossed |
| D | Double clevis      |
| L | Single foot        |
| M | Double foot        |
| F | Rod flange         |
| G | Head flange        |

\* Mounting brackets are shipped together with the product but do not come assembled.

#### Bore size

|    |       |
|----|-------|
| 10 | 10 mm |
| 16 | 16 mm |

#### Cylinder standard stroke [mm]

|    |   |
|----|---|
| 10 | 15, 30, 45, 60, 75, 100, 125, 150           |
| 16 | 15, 30, 45, 60, 75, 100, 125, 150, 175, 200 |

\* The manufacturing of intermediate strokes in 1 mm increments is possible. (Spacers are not used.)

#### Auto switch mounting type

|   |               |
|---|---------------|
| B | Band mounting |
|---|---------------|

\* Refer to page 323 for auto switch mounting brackets.

#### Number of auto switches

|     |   |
|-----|---|
| Nil | 2 |
| S   | 1 |
| n   | n |



#### Auto switch

|     |                     |
|-----|---------------------|
| Nil | Without auto switch |
|-----|---------------------|

\* [Click here](#) for details on applicable auto switch models.

\* Enter the auto switch mounting type (B) even when a built-in magnet cylinder without an auto switch is required.

#### Head cover port location

|                |          |   |
|----------------|----------|---|
| Bore size [mm] | ø10, ø16 |   |
| Symbol         | Nil      | Perpendicular to axis  |
|                | R        | Axial                  |

\* Double clevis is only available for being perpendicular to axis.

\* Double-side bossed type is only available for being perpendicular to axis.

#### Mounting Bracket Part Nos. for the 25A- Series

| Mounting bracket | Bore size [mm] |             |
|------------------|----------------|-------------|
|                  | 10             | 16          |
| Foot bracket     | CJ-L016SUS     | CJK-L016SUS |
| Flange bracket   | CJ-F016SUS     | CJK-F016SUS |

\* The 25A- series specifications and dimensions are the same as those of the standard model. (Excluding the foot and flange plate thickness)

For details, refer to the [Web Catalog](#).

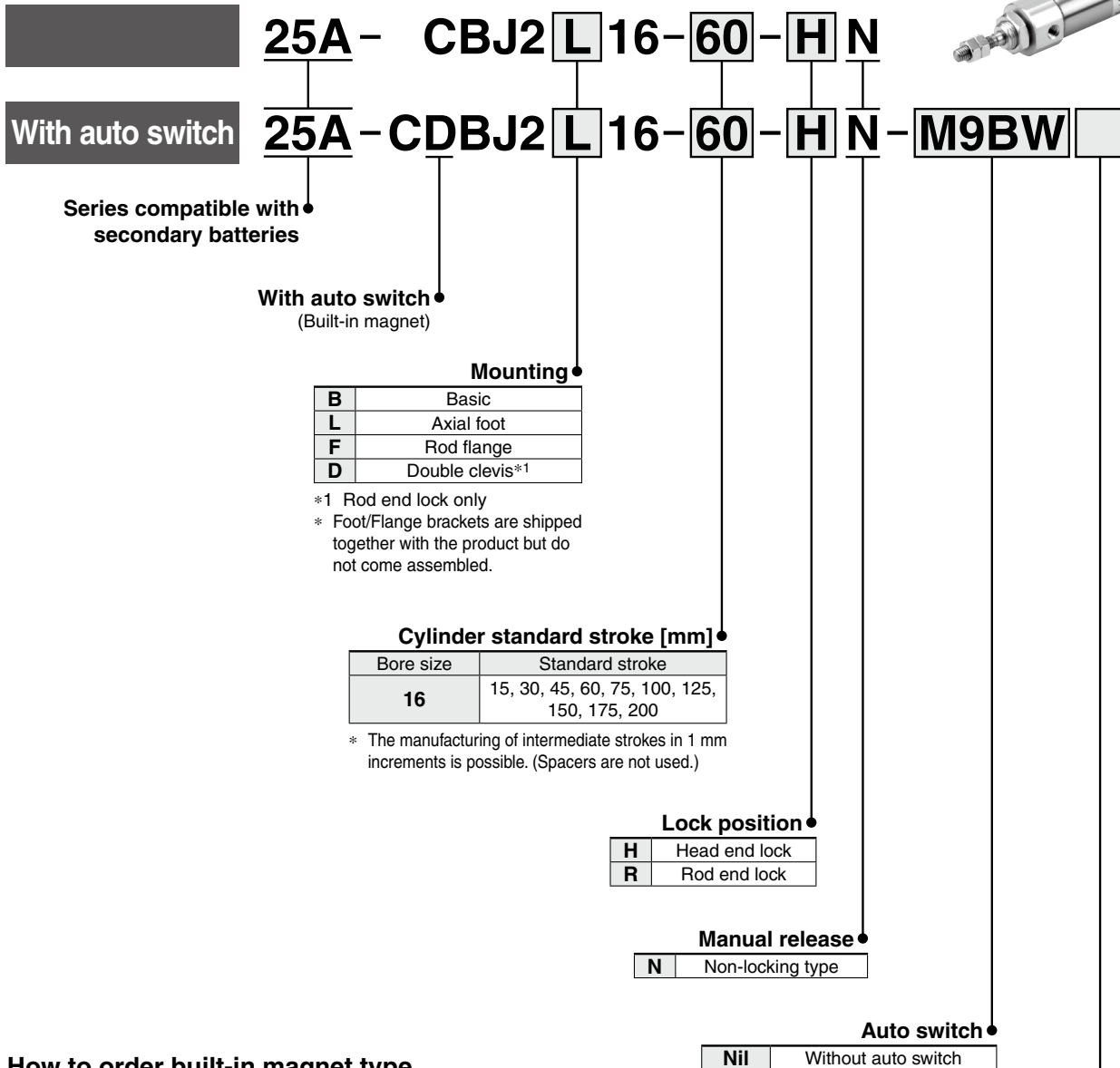
# Air Cylinder: With End Lock

# 25A-CBJ2 Series

ø16



## How to Order



### How to order built-in magnet type (Without auto switch)

Suffix the symbol "B" (Band mounting) to the end of part number for cylinder with auto switch.

|         |                      |
|---------|----------------------|
| Example | 25A-CDBJ2B16-60-HN-B |
|---------|----------------------|

### Mounting Bracket Part Nos. for the 25A- Series

| Mounting bracket | Bore size [mm] |
|------------------|----------------|
|                  | <b>16</b>      |
| Foot bracket     | CJ-L016SUS     |
| Flange bracket   | CJ-F016SUS     |

### Number of auto switches

|            |   |
|------------|---|
| <b>Nil</b> | 2 |
| <b>S</b>   | 1 |
| <b>n</b>   | n |

\* [Click here](#) for details on applicable auto switch models.

\* The 25A- series specifications and dimensions are the same as those of the standard model. For details, refer to the [Web Catalog](#).



# Air Cylinder: Standard Type Double Acting, Single Rod

## 25A-CM2 Series

∅20, ∅25, ∅32, ∅40

RoHS



### How to Order

25A - C D M2 L 40 - 150 A Z - M9BW

Series compatible with secondary batteries

With auto switch

|     |                                    |
|-----|------------------------------------|
| Nil | Without magnet for switch*1        |
| D   | With auto switch (Built-in magnet) |

\*1 In the case of without magnet for switch, auto switch cannot be mounted.

Mounting

|    |                         |
|----|-------------------------|
| B  | Basic                   |
| L  | Axial foot              |
| F  | Rod flange              |
| G  | Head flange             |
| C  | Single clevis           |
| D  | Double clevis           |
| U  | Rod trunnion            |
| T  | Head trunnion           |
| E  | Integrated clevis       |
| V  | Integrated clevis (90°) |
| BZ | Boss-cut/Basic          |
| FZ | Boss-cut/Rod flange     |
| UZ | Boss-cut/Rod trunnion   |

Bore size

|    |       |
|----|-------|
| 20 | 20 mm |
| 25 | 25 mm |
| 32 | 32 mm |
| 40 | 40 mm |

Port thread type

|     |     |
|-----|-----|
| Nil | Rc  |
| TN  | NPT |
| TF  | G   |

Number of auto switches

|     |   |
|-----|---|
| Nil | 2 |
| S   | 1 |
| n   | n |

Auto switch

|     |                     |
|-----|---------------------|
| Nil | Without auto switch |
|-----|---------------------|

\* Click here for details on applicable auto switch models.

Rod end thread

|     |                |
|-----|----------------|
| Nil | Male rod end   |
| F   | Female rod end |

Cushion

|     |               |
|-----|---------------|
| Nil | Rubber bumper |
| A   | Air cushion   |

Cylinder Stroke [mm]

| Bore size | Standard stroke*1         | Maximum stroke |
|-----------|---------------------------|----------------|
| 20        |                           | 1000           |
| 25        | 25, 50, 75, 100, 125, 150 | 1500           |
| 32        | 200, 250, 300             | 2000           |
| 40        |                           | 2000           |

\*1 Other intermediate strokes can be manufactured upon receipt of order. The manufacturing of intermediate strokes in 1 mm increments is possible. (Spacers are not used.)

\* When exceeding 300 strokes, the allowable maximum stroke length is determined by the stroke selection table (Web Catalog).

### Built-in Magnet Cylinder Model

If a built-in magnet cylinder without an auto switch is required, there is no need to enter the symbol for the auto switch.

(Example) 25A-CDM2F32-100AZ

### Mounting Bracket Part Nos. for the 25A- Series

| Mounting bracket             | Min. order | Bore size [mm] |               |               |    | Description (for min. order)                               |
|------------------------------|------------|----------------|---------------|---------------|----|--|
|                              |            | 20             | 25            | 32            | 40 |  |
| Axial foot*1                 | 2          | CM-L020B-XB12  | CM-L032B-XB12 | CM-L040B-XB12 |    | 2 foot brackets, 1 mounting nut                            |
| Flange                       | 1          | CM-F020BSUS    | CM-F032BSUS   | CM-F040BSUS   |    | 1 flange   |
| Single clevis*2              | 1          | CM-C020B       | CM-C032B      | CM-C040B      |    | 1 single clevis, 3 liners                                  |
| Double clevis*2*3 (with pin) | 1          | 25A-CM-D020B   | 25A-CM-D032B  | 25A-CM-D040B  |    | 1 double clevis, 3 liners, 1 clevis pin, 2 retaining rings |
| Trunnion (with nut)          | 1          | 25-CM-T020B    | 25-CM-T032B   | 25-CM-T040B   |    | 1 trunnion, 1 trunnion nut                                 |

\*1 Order 2 foot brackets for each cylinder unit.

\*2 3 liners are attached with a clevis bracket for adjusting the mounting angle.

\*3 A clevis pin and retaining rings (split pins for ∅40) are attached.

\* The 25A- series specifications and dimensions are the same as those of the standard model.

For details, refer to the Web Catalog.

# Air Cylinder: Standard Type Double Acting, Single Rod

RoHS

## 25A-CG1 Series

∅20, ∅25, ∅32, ∅40, ∅50, ∅63, ∅80, ∅100



### How to Order

**25A-C D G1 L N 25 - 100 Z-M9BW**

Series compatible with secondary batteries

With auto switch

|     |                                    |
|-----|------------------------------------|
| Nil | Without magnet for switch*1        |
| D   | With auto switch (Built-in magnet) |

\*1 In the case of without magnet for switch, auto switch cannot be mounted.

Mounting

|     |   |
|-----|---|
| B   | Basic   |
| Z*1 | Basic (without trunnion mounting female thread) |
| L   | Axial foot                                      |
| F   | Rod flange                                      |
| G   | Head flange                                     |
| U*1 | Rod trunnion                                    |
| T*1 | Head trunnion                                   |
| D   | Clevis  |

\*1 Not available for ∅80 or ∅100.

\* Mounting brackets are shipped together with the product but do not come assembled.

\* The cylinder for F, G, L, D mounting types is Z: Basic (without trunnion mounting female thread).

Type

|   |               |
|---|---------------|
| N | Rubber bumper |
| A | Air cushion   |

Bore size

|     |        |
|-----|--------|
| 20  | 20 mm  |
| 25  | 25 mm  |
| 32  | 32 mm  |
| 40  | 40 mm  |
| 50  | 50 mm  |
| 63  | 63 mm  |
| 80  | 80 mm  |
| 100 | 100 mm |

### Built-in Magnet Cylinder Model

If a built-in magnet cylinder without an auto switch is required, there is no need to enter the symbol for the auto switch.

(Example) 25A-CDG1FN32-100Z

Number of auto switches

|     |   |
|-----|---|
| Nil | 2 |
| S   | 1 |
| n   | n |

Auto switch

|     |                     |
|-----|---------------------|
| Nil | Without auto switch |
|-----|---------------------|

\* Click here for details on applicable auto switch models.

Rod end thread

|     |                       |
|-----|-----------------------|
| Nil | Rod end male thread   |
| F   | Rod end female thread |

Cylinder stroke [mm]

| Bore size [mm] | Standard stroke*1 [mm]                   | Long stroke*2 [mm] |
|----------------|--|--------------------|
| 20             | 25, 50, 75, 100, 125, 150, 200           | 201 to 1500        |
| 25             | 25, 50, 75, 100, 125, 150, 200, 250, 300 | 301 to 1500        |
| 32             |  |                    |
| 40             |  |                    |
| 50, 63         |  |                    |
| 80             |  |                    |
| 100            |  |                    |

\*1 Other intermediate strokes can be manufactured upon receipt of order. The manufacturing of intermediate strokes in 1 mm increments is possible. (Spacers are not used.)

\*2 For details on the maximum stroke that can be used for each mounting bracket, refer to the stroke selection table (Web Catalog).

Port thread type

Rubber bumper

|     |          |             |
|-----|----------|-------------|
| Nil | Rc       | ∅20 to ∅100 |
| TN  | NPT      | ∅20 to ∅100 |
| TF  | M5 x 0.8 | ∅20, ∅25    |
|     | G        | ∅32 to ∅100 |

Air cushion

|          |             |
|----------|-------------|
| M5 x 0.8 | ∅20, ∅25    |
| Rc       | ∅32 to ∅100 |
| NPT*1    | ∅32 to ∅100 |
| G*1      | ∅32 to ∅100 |

\*1 Not available for ∅20 and ∅25.

### Mounting Bracket Part Nos. for the 25A- Series

\* The rod end brackets are the same as those of the CG5-S series. Refer to the Web Catalog for details.

| Mounting bracket | Min. order | Bore size [mm] |               |               |               |               |               |               |               | Description   |
|------------------|------------|----------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---|
|                  |            | 20             | 25            | 32            | 40            | 50            | 63            | 80            | 100           |   |
| Foot             | 2*1        | 90-CG-L020     | 90-CG-L025    | 90-CG-L032    | 90-CG-L040    | 90-CG-L050    | 25-CG-L063    | 25-CG-L080    | 25-CG-L100    | Foot x 2, Mounting bolt x 8                                       |
| Flange           | 1          | 90-CG-F020     | 90-CG-F025    | 90-CG-F032    | 90-CG-F040    | 90-CG-F050    | 25-CG-F063    | 25-CG-F080    | 25-CG-F100    | Flange x 1, Mounting bolt x 4                                     |
| Trunnion pin     | 1          | 25-CG-T020     | 25-CG-T025    | 25-CG-T032    | 25-CG-T040    | 25-CG-T050    | 25-CG-T063    | —             | —             | Trunnion pin x 2, Trunnion bolt x 2, Flat washer x 2              |
| Clevis           | 1          | 25-CG-D020     | 25-CG-D025    | 25-CG-D032    | 25-CG-D040    | 25-CG-D050    | 25-CG-D063    | 25-CG-D080    | 25-CG-D100    | Clevis x 1, Mounting bolt x 4, Clevis pin x 1, Retaining ring x 2 |
| Pivot bracket    | 1          | 25-CG-020-24A  | 25-CG-025-24A | 25-CG-032-24A | 25-CG-040-24A | 25-CG-050-24A | 25-CG-063-24A | 25-CG-080-24A | 25-CG-100-24A | Pivot bracket x 1   |

\*1 Order two foot brackets per cylinder.

\* The 25A- series specifications and dimensions are the same as those of the standard model.

For details, refer to the Web Catalog.

# Air Cylinder: With End Lock

RoHS

# 25A-CBG1 Series

∅20, ∅25, ∅32, ∅40, ∅50, ∅63

## How to Order



**25A - CBG1 L N 25 - 100 - H N**

**25A - CDBG1 L N 25 - 100 - H N - M9BW**

Series compatible with secondary batteries

With auto switch (Built-in magnet)

### Mounting

|     |               |
|-----|---------------|
| B   | Basic         |
| L   | Axial foot    |
| F   | Rod flange    |
| G   | Head flange   |
| U*1 | Rod trunnion  |
| T*1 | Head trunnion |
| D   | Clevis        |

\*1 The trunnion cannot be attached on the side to which an end lock is attached.

\* Mounting brackets are shipped together with the product but do not come assembled.

### Type

|   |               |
|---|---------------|
| N | Rubber bumper |
|---|---------------|

### Bore size

|    |       |
|----|-------|
| 20 | 20 mm |
| 25 | 25 mm |
| 32 | 32 mm |
| 40 | 40 mm |
| 50 | 50 mm |
| 63 | 63 mm |

### Cylinder stroke [mm]

| Bore size | Standard stroke*1                        | Long stroke*2 |
|-----------|--|---------------|
| 20        | 25, 50, 75, 100, 125, 150, 200           | 201 to 1500   |
| 25        | 25, 50, 75, 100, 125, 150, 200, 250, 300 | 301 to 1500   |
| 32        |  |               |
| 40        |  |               |
| 50, 63    |  |               |

\*1 Other intermediate strokes can be manufactured upon receipt of order. The manufacturing of intermediate strokes in 1 mm increments is possible. (Spacers are not used.)

\*2 For details on the maximum stroke that can be used for each mounting bracket, refer to the stroke selection table ([Web Catalog](#)).

### Number of auto switches

|     |   |
|-----|---|
| Nil | 2 |
| S   | 1 |
| n   | n |

### Auto switch

|     |                     |
|-----|---------------------|
| Nil | Without auto switch |
|-----|---------------------|

\* [Click here](#) for details on applicable auto switch models.

### Manual release

|   |                  |
|---|------------------|
| N | Non-locking type |
|---|------------------|

### Lock position

|   |                 |
|---|-----------------|
| H | Head end lock   |
| R | Rod end lock    |
| W | Double end lock |

## Built-in Magnet Cylinder Model

If a built-in magnet cylinder without an auto switch is required, there is no need to enter the symbol for the auto switch.

(Example) 25A-CDBG1FN32-100-RN

## Mounting Bracket Part Nos. for the 25A- Series

\* The rod end brackets are the same as those of the CG5-S series. Refer to the [Web Catalog](#) for details.

| Mounting bracket | Min. order | Bore size [mm] |               |               |               |               |               | Description   |
|------------------|------------|----------------|---------------|---------------|---------------|---------------|---------------|---|
|                  |            | 20             | 25            | 32            | 40            | 50            | 63            |   |
| Foot             | 2*1        | 90-CG-L020     | 90-CG-L025    | 90-CG-L032    | 90-CG-L040    | 90-CG-L050    | 25-CG-L063    | Foot x 2, Mounting bolt x 8                                       |
| Flange           | 1          | 90-CG-F020     | 90-CG-F025    | 90-CG-F032    | 90-CG-F040    | 90-CG-F050    | 25-CG-F063    | Flange x 1, Mounting bolt x 4                                     |
| Trunnion pin     | 1          | 25-CG-T020     | 25-CG-T025    | 25-CG-T032    | 25-CG-T040    | 25-CG-T050    | 25-CG-T063    | Trunnion pin x 2, Trunnion bolt x 2, Flat washer x 2              |
| Clevis           | 1          | 25-CG-D020     | 25-CG-D025    | 25-CG-D032    | 25-CG-D040    | 25-CG-D050    | 25-CG-D063    | Clevis x 1, Mounting bolt x 4, Clevis pin x 1, Retaining ring x 2 |
| Pivot bracket    | 1          | 25-CG-020-24A  | 25-CG-025-24A | 25-CG-032-24A | 25-CG-040-24A | 25-CG-050-24A | 25-CG-063-24A | Pivot bracket x 1   |

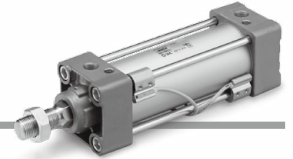
\*1 Order two foot brackets per cylinder. \* The 25A- series specifications and dimensions (excluding the cap) are the same as those of the standard model.

For details, refer to the [Web Catalog](#).

# Air Cylinder: Single Rod

## 25A-MB Series

∅32, ∅40, ∅50, ∅63, ∅80, ∅100



### How to Order

**25A-M D B L 32-50 Z-M9BW**

Series compatible with secondary batteries

With auto switch

|     |                                    |
|-----|------------------------------------|
| Nil | Without magnet for switch*1        |
| D   | With auto switch (Built-in magnet) |

\*1 In the case of without magnet for switch, auto switch cannot be mounted.

Mounting

|   |                 |
|---|-----------------|
| B | Basic           |
| L | Axial foot      |
| F | Rod flange      |
| G | Head flange     |
| C | Single clevis   |
| D | Double clevis   |
| T | Center trunnion |

Bore size

|     |        |
|-----|--------|
| 32  | 32 mm  |
| 40  | 40 mm  |
| 50  | 50 mm  |
| 63  | 63 mm  |
| 80  | 80 mm  |
| 100 | 100 mm |

Number of auto switches

|     |   |
|-----|---|
| Nil | 2 |
| S   | 1 |
| 3   | 3 |
| n   | n |

Auto switch

|     |                     |
|-----|---------------------|
| Nil | Without auto switch |
|-----|---------------------|

\* [Click here](#) for details on applicable auto switch models.

Cylinder stroke [mm]

| Bore [mm] | Standard stroke [mm]   |
|-----------|--|
| 32        | 25, 50, 75, 100, 125, 150, 175, 200, 250, 300, 350, 400, 450, 500                |
| 40        | 25, 50, 75, 100, 125, 150, 175, 200, 250, 300, 350, 400, 450, 500                |
| 50        | 25, 50, 75, 100, 125, 150, 175, 200, 250, 300, 350, 400, 450, 500, 600           |
| 63        | 25, 50, 75, 100, 125, 150, 175, 200, 250, 300, 350, 400, 450, 500, 600           |
| 80        | 25, 50, 75, 100, 125, 150, 175, 200, 250, 300, 350, 400, 450, 500, 600, 700, 800 |
| 100       | 25, 50, 75, 100, 125, 150, 175, 200, 250, 300, 350, 400, 450, 500, 600, 700, 800 |

\* Intermediate strokes are available. (No spacer is used.)

### Built-in Magnet Cylinder Model

If a built-in magnet cylinder without an auto switch is required, there is no need to enter the symbol for the auto switch.

(Example) 25A-MDBB40-100Z

\* The 25A- series specifications and dimensions are the same as those of the standard model.

For details, refer to the [Web Catalog](#).

### Mounting Bracket Part Nos. for the 25A- Series

| Bore size [mm] | 32         | 40         | 50         | 63         | 80         | 100        |
|----------------|------------|------------|------------|------------|------------|------------|
| Foot*1         | 25-MB-L03  | 25-MB-L04  | 25-MB-L05  | 25-MB-L06  | 25-MB-L08  | 25-MB-L10  |
| Flange         | MB-F03-XC7 | MB-F04-XC7 | MB-F05-XC7 | MB-F06-XC7 | MB-F08-XC7 | MB-F10-XC7 |
| Single clevis  | 25-MB-C03  | 25-MB-C04  | 25-MB-C05  | 25-MB-C06  | 25-MB-C08  | 25-MB-C10  |
| Double clevis  | 25-MB-D03  | 25-MB-D04  | 25-MB-D05  | 25-MB-D06  | 25-MB-D08  | 25-MB-D10  |

\*1 Two foot brackets required for one cylinder.

\* Accessories for each mounting bracket are as follows: Foot, flange, single clevis/body mounting bolt, double clevis/body mounting bolt, clevis pin, flat washers and split pins.

# Air Cylinder: Standard Type Double Acting, Single Rod

## 25A-CA2 Series

∅40, ∅50, ∅63, ∅80, ∅100



### How to Order

**25A-C** **D** **A2** **L** **50** - **100** **Z** - **M9BW** **□**

Series compatible with secondary batteries

With auto switch

|     |                                    |
|-----|------------------------------------|
| Nil | Without magnet for switch*1        |
| D   | With auto switch (Built-in magnet) |

\*1 In the case of without magnet for switch, auto switch cannot be mounted.

Mounting

|   |                 |
|---|-----------------|
| B | Basic           |
| L | Axial foot      |
| F | Rod flange      |
| G | Head flange     |
| C | Single clevis   |
| D | Double clevis   |
| T | Center trunnion |

Bore size

|     |        |
|-----|--------|
| 40  | 40 mm  |
| 50  | 50 mm  |
| 63  | 63 mm  |
| 80  | 80 mm  |
| 100 | 100 mm |

Number of auto switches

|     |   |
|-----|---|
| Nil | 2 |
| S   | 1 |
| 3   | 3 |
| n   | n |

Auto switch

|     |                     |
|-----|---------------------|
| Nil | Without auto switch |
|-----|---------------------|

\* Click here for details on applicable auto switch models.

Cylinder stroke [mm]

|         |   |
|---------|---|
| 40      | 25, 50, 75, 100, 125, 150, 175, 200, 250, 300, 350, 400, 450, 500           |
| 50, 63  | 25, 50, 75, 100, 125, 150, 175, 200, 250, 300, 350, 400, 500, 600           |
| 80, 100 | 25, 50, 75, 100, 125, 150, 175, 200, 250, 300, 350, 400, 450, 500, 600, 700 |

\* Intermediate strokes not listed above are produced upon receipt of order.

### Built-in Magnet Cylinder Model

If a built-in magnet cylinder without an auto switch is required, there is no need to enter the symbol for the auto switch  
(Example) 25A-CDA2L40-100Z

\* The 25A- series specifications and dimensions are the same as those of the standard model.

For details, refer to the [Web Catalog](#).

### Mounting Bracket Part Nos. for the 25A- Series

| Bore size [mm]  | 40          | 50          | 63          | 80          | 100         |
|-----------------|-------------|-------------|-------------|-------------|-------------|
| Axial foot*1    | 90-CA2-L04  | 90-CA2-L05  | 90-CA2-L06  | 90-CA2-L08  | 90-CA2-L10  |
| Flange          | 25A-CA2-F04 | 25A-CA2-F05 | 25A-CA2-F06 | 25A-CA2-F08 | 25A-CA2-F10 |
| Single clevis   | 25A-CA2-C04 | 25A-CA2-C05 | 25A-CA2-C06 | 25A-CA2-C08 | 25A-CA2-C10 |
| Double clevis*2 | 25A-CA2-D04 | 25A-CA2-D05 | 25A-CA2-D06 | 25A-CA2-D08 | 25A-CA2-D10 |

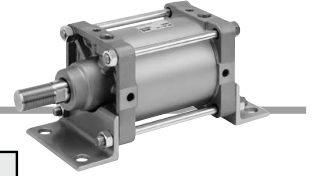
\*1 When axial foot brackets are used, two pieces should be ordered for each cylinder.

\*2 A clevis pin, flat washers and split pins are shipped together with double clevis.

# Air Cylinder: Standard Type Double Acting, Single Rod

## 25A-CS2 Series

ø125, ø140, ø160



### How to Order

**25A - C D S2 L 125 - 300 - M9BW**

Series compatible with secondary batteries

With auto switch

|     |                                    |
|-----|------------------------------------|
| Nil | Without magnet for switch*1        |
| D   | With auto switch (Built-in magnet) |

\*1 In the case of without magnet for switch, auto switch cannot be mounted.

Number of auto switches

|     |   |
|-----|---|
| Nil | 2 |
| 3   | 3 |
| S   | 1 |
| n   | n |

Auto switch

|     |                     |
|-----|---------------------|
| Nil | Without auto switch |
|-----|---------------------|

\* Click here for details on applicable auto switch models.

Mounting

|   |                 |
|---|-----------------|
| B | Basic           |
| L | Foot            |
| F | Rod flange      |
| G | Head flange     |
| C | Single clevis   |
| D | Double clevis   |
| T | Center trunnion |

Cylinder stroke [mm]

| Mounting bracket | Maximum stroke  |                  |
|------------------|---|------------------|
|                  | Basic, Head flange, Single clevis, Double clevis, Center trunnion | Foot, Rod flange |
| Bore size 125    | 1000 or less  | 1600 or less     |
| 140              |   |                  |
| 160              | 1200 or less  |                  |

Bore size

|     |        |
|-----|--------|
| 125 | 125 mm |
| 140 | 140 mm |
| 160 | 160 mm |

Port thread type

|     |     |
|-----|-----|
| Nil | Rc  |
| TN  | NPT |
| TF  | G   |

### Built-in Magnet Cylinder Model

If a built-in magnet cylinder without auto switch is required, there is no need to enter the symbol for auto switch.

(Example) 25A-CS2B125-100

\* The 25A- series specifications and dimensions are the same as those of the standard model.

For details, refer to the [Web Catalog](#).

### Mounting Bracket Part Nos. for the 25A- Series

| Bore size [mm]  | 125         | 140         | 160         |
|-----------------|-------------|-------------|-------------|
| Axial foot*1    | CS2-L12     | CS2-L14     | CS2-L16     |
| Flange          | CS2-F12     | CS2-F14     | CS2-F16     |
| Single clevis   | CS2-C12     | CS2-C14     | CS2-C16     |
| Double clevis*2 | 25A-CS2-D12 | 25A-CS2-D14 | 25A-CS2-D16 |

\*1 Order two foot brackets per cylinder.

\*2 A clevis pin and split pins are shipped together with double clevis.

# Cylinder with Lock

## Double Acting, Single Rod

# 25A-MWB Series

∅32, ∅40, ∅50, ∅63, ∅80, ∅100

RoHS



### How to Order

With auto switch **25A-M D WB B 40** - **50** - **M9BW**

With auto switch

|     |                                    |
|-----|------------------------------------|
| Nil | Without magnet for switch*1        |
| D   | With auto switch (Built-in magnet) |

\*1 In the case of without magnet for switch, auto switch cannot be mounted.

Number of auto switches

|     |   |
|-----|---|
| Nil | 2 |
| S   | 1 |
| 3   | 3 |
| n   | n |

Mounting

|   |                 |
|---|-----------------|
| B | Basic           |
| L | Axial foot      |
| F | Rod flange      |
| G | Head flange     |
| C | Single clevis   |
| D | Double clevis   |
| T | Center trunnion |

\* Mounting brackets other than center trunnion type are shipped together.

Bore size

|     |        |
|-----|--------|
| 32  | 32 mm  |
| 40  | 40 mm  |
| 50  | 50 mm  |
| 63  | 63 mm  |
| 80  | 80 mm  |
| 100 | 100 mm |

Port thread type

|     |     |
|-----|-----|
| Nil | Rc  |
| TN  | NPT |
| TF  | G   |

Auto switch

|     |                     |
|-----|---------------------|
| Nil | Without auto switch |
|-----|---------------------|

\* [Click here](#) for details on applicable auto switch models.

### Cylinder stroke [mm]

| Bore size | Standard stroke  |                |
|-----------|--|----------------|
|           | Stroke range ①   | Stroke range ② |
| 32        | 25, 50, 75, 100, 125, 150, 175, 200, 250, 300, 350, 400, 450, 500                | Up to 1000     |
| 40        | 25, 50, 75, 100, 125, 150, 175, 200, 250, 300, 350, 400, 450, 500                | Up to 1800     |
| 50        | 25, 50, 75, 100, 125, 150, 175, 200, 250, 300, 350, 400, 450, 500, 600           |                |
| 63        | 25, 50, 75, 100, 125, 150, 175, 200, 250, 300, 350, 400, 450, 500, 600           |                |
| 80        | 25, 50, 75, 100, 125, 150, 175, 200, 250, 300, 350, 400, 450, 500, 600, 700, 800 |                |
| 100       | 25, 50, 75, 100, 125, 150, 175, 200, 250, 300, 350, 400, 450, 500, 600, 700, 800 |                |

\* The manufacturing of intermediate strokes is possible. (Spacers are not used.)

### Mounting Brackets/Part Nos.

| Bore size [mm] | 32          | 40          | 50          | 63          | 80         | 100        |
|----------------|-------------|-------------|-------------|-------------|------------|------------|
| Foot           | 25-MB-L03   | 25-MB-L04   | 25-MB-L05   | 25A-MWB-L06 | 25-MB-L08  | 25-MB-L10  |
| Flange         | 25A-MWB-F03 | 25A-MWB-F04 | 25A-MWB-F05 | 25A-MWB-F06 | MB-F08-XC7 | MB-F10-XC7 |
| Single clevis  | 25-MB-C03   | 25-MB-C04   | 25-MB-C05   | 25-MB-C06   | 25-MB-C08  | 25-MB-C10  |
| Double clevis  | 25-MB-D03   | 25-MB-D04   | 25-MB-D05   | 25-MB-D06   | 25-MB-D08  | 25-MB-D10  |

\* Order two foot brackets per cylinder.

\* Accessories for each mounting bracket are as follows.

Foot, Flange, Single clevis: Body mounting bolt

Double clevis: Body mounting bolt, Clevis pin, Flat washers and Split pins

\* The 25A- series specifications and dimensions are the same as those of the standard model.

For details, refer to the [Web Catalog](#).

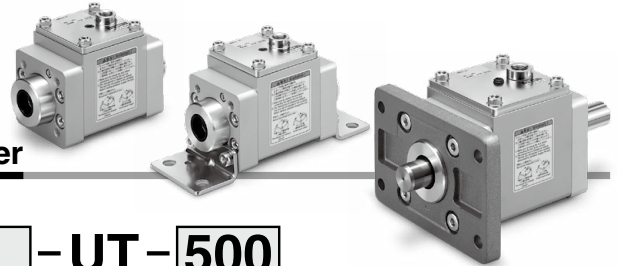


# Lock Unit



# 25A-MWB-UT Series

32, 40, 50, 63, 80, 100



## How to Order

**25A - MWB B 40 [ ] - UT - 500**

Series compatible with secondary batteries

### Mounting

|          |            |
|----------|------------|
| <b>B</b> | Basic      |
| <b>L</b> | Axial foot |
| <b>F</b> | Flange     |

\* Mounting bracket is shipped together with the product.

### Model

| Model      | Applicable rod size |
|------------|---------------------|
| <b>32</b>  | 12 mm               |
| <b>40</b>  | 16 mm               |
| <b>50</b>  | 20 mm               |
| <b>63</b>  | 20 mm               |
| <b>80</b>  | 25 mm               |
| <b>100</b> | 30 mm               |

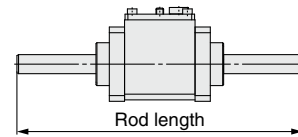
### Port thread type

|            |     |
|------------|-----|
| <b>Nil</b> | Rc  |
| <b>TN</b>  | NPT |
| <b>TF</b>  | G   |

### Rod length [mm]

| Nil         |             | Without accessory rod |   |
|-------------|-------------|-----------------------|---|
| Min. length | Max. length | Applicable model      | Note  |
| 250         | 2500        | <b>32</b>             | Can be manufactured in increments of 1 mm up to the maximum length. |
| 300         |             | <b>40</b>             |   |
|             |             | <b>50</b>             |   |
|             |             | <b>63</b>             |   |
|             | <b>80</b>   |                       |   |
|             | <b>100</b>  |                       |   |

\* The rod length indicates the overall length of the rod.



\* Rod is shipped together with the product.

\* This product uses lithium-based grease (standard grease).

## Mounting Brackets/Part Nos.

| Bore size [mm] | 32          | 40          | 50          | 63          | 80         | 100        |
|----------------|-------------|-------------|-------------|-------------|------------|------------|
| Foot           | 25-MB-L03   | 25-MB-L04   | 25-MB-L05   | 25A-MWB-L06 | 25-MB-L08  | 25-MB-L10  |
| Flange         | 25A-MWB-F03 | 25A-MWB-F04 | 25A-MWB-F05 | 25A-MWB-F06 | MB-F08-XC7 | MB-F10-XC7 |

\* Order two foot brackets per lock unit.

\* Accessories for each mounting bracket are as follows.

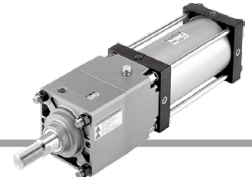
Foot, Flange: Body mounting bolt

\* The 25A- series specifications and dimensions are the same as those of the standard model.

For details, refer to the [Web Catalog](#).

# Cylinder with Lock Double Acting, Single Rod 25A-CNS Series

ø125, ø140, ø160



## How to Order

25A - C D NS L 125 - 300 - D - M9BW

Series compatible with secondary batteries

With auto switch

|     |                                    |
|-----|------------------------------------|
| Nil | Without magnet for switch*1        |
| D   | With auto switch (Built-in magnet) |

\*1 In the case of without magnet for switch, auto switch cannot be mounted.

Mounting

|   |                 |
|---|-----------------|
| B | Basic           |
| L | Foot            |
| F | Rod flange      |
| G | Head flange     |
| C | Single clevis   |
| D | Double clevis   |
| T | Center trunnion |

Mounting brackets are assembled before shipping.

Bore size

|     |        |
|-----|--------|
| 125 | 125 mm |
| 140 | 140 mm |
| 160 | 160 mm |

Port thread type

|     |     |
|-----|-----|
| Nil | Rc  |
| TN  | NPT |
| TF  | G   |

Number of auto switches

|     |   |
|-----|---|
| Nil | 2 |
| 3   | 3 |
| S   | 1 |
| n   | n |

Auto switch

|     |                     |
|-----|---------------------|
| Nil | Without auto switch |
|-----|---------------------|

\* Refer to page 256 for applicable auto switch models.

Locking direction

|   |                 |
|---|-----------------|
| D | Both directions |
|---|-----------------|

Cylinder stroke [mm]

| Bore size (mm) | Basic type, Head side flange type, Single clevis type, Double clevis type, Center trunnion type | Foot type, Rod side flange type |
|----------------|---|---------------------------------|
| 125, 140       | Up to 1000  | Up to 1400                      |
| 160            | Up to 1200  | Up to 1400                      |

### Built-in Magnet Cylinder Model

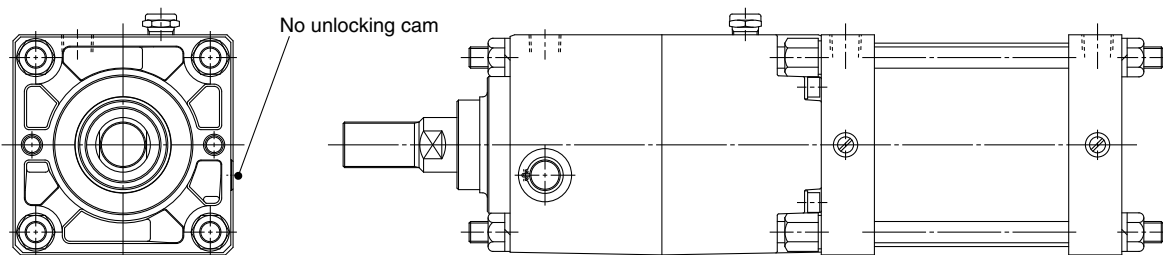
If a built-in magnet cylinder without auto switch is required, there is no need to enter the symbol for auto switch.

(Example) 25A-CDNSL140-100-D

\* The 25A- series specifications and dimensions are the same as those of the standard model.

For details, refer to the **Web Catalog**.

**⚠ There is no built-in unlocking cam.**





# Mini Free Mount Cylinder

## 25A-CUJ Series

∅6, ∅8, ∅10



### How to Order



**25A CUJ B 6 - 10 D**

**With auto switch** **25A - CDUJ B 6 - 10 D - F8N**

Series compatible with secondary batteries

With auto switch (Built-in magnet)

Mounting

|   |                      |
|---|----------------------|
| B | Basic (Through-hole) |
|---|----------------------|

Bore size

|    |       |
|----|-------|
| 6  | 6 mm  |
| 8  | 8 mm  |
| 10 | 10 mm |

Standard stroke [mm]

| Bore size | Standard stroke             |
|-----------|-----------------------------|
| 6, 8, 10  | 4, 6, 8, 10, 15, 20, 25, 30 |

Number of auto switches

|     |   |
|-----|---|
| Nil | 2 |
| S   | 1 |

\* M9□: With 1 pc.

Auto switch

|     |                     |
|-----|---------------------|
| Nil | Without auto switch |
|-----|---------------------|

\* [Click here](#) for details on applicable auto switch models.

Rod end thread

|     |                       |
|-----|-----------------------|
| Nil | Rod end female thread |
| M   | Rod end male thread   |

Action

|   |               |
|---|---------------|
| D | Double acting |
|---|---------------|

### Built-in Magnet Cylinder Model

If a built-in magnet cylinder without an auto switch is required, there is no need to enter the symbol for the auto switch.  
(Example) 25A-CDUJB8-15DM

\* The 25A- series specifications are the same as those of the standard model.

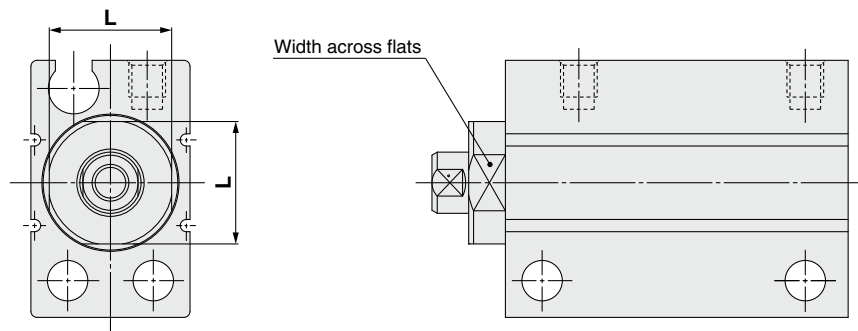
For details, refer to the [Web Catalog](#).

### Dimensions (Dimensions other than those shown below are the same as the standard model.) For details, refer to the [Web Catalog](#).

25A-C□UJB<sup>6</sup><sub>8</sub><sub>10</sub>

\* The position of the width across flats may not be parallel to the cylinder tube

| [mm]      |             |
|-----------|-------------|
| Bore size | L dimension |
| 6         | 8           |
| 8         | 10          |
| 10        | 11          |



# Mini Free Mount Cylinder

## 25A-CUJ Series

∅12, ∅16, ∅20



### How to Order



**25A - CUJ B 12 - 30 D**

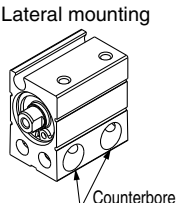
**With auto switch 25A - CDUJ B 12 - 30 D - F8N**

Series compatible with secondary batteries

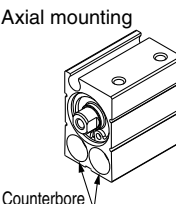
With auto switch (Built-in magnet)

**Mounting direction**

**B** Lateral mounting



**S** Axial mounting



**Bore size**

|    |       |
|----|-------|
| 12 | 12 mm |
| 16 | 16 mm |
| 20 | 20 mm |

**Standard stroke [mm]**

| Bore size  | Standard stroke                         |
|------------|---|
| 12, 16, 20 | 5, 10, 15, 20, 25<br>30, 35, 40, 45, 50 |

**Action**

|   |               |
|---|---------------|
| D | Double acting |
|---|---------------|

**Rod end thread**

|     |                       |
|-----|-----------------------|
| Nil | Rod end female thread |
| M   | Rod end male thread   |

**Auto switch**

|     |                     |
|-----|---------------------|
| Nil | Without auto switch |
|-----|---------------------|

\* [Click here](#) for details on applicable auto switch models.

**Number of auto switches**

|     |   |
|-----|---|
| Nil | 2 |
| S   | 1 |

\* M9□: With 1 pc.

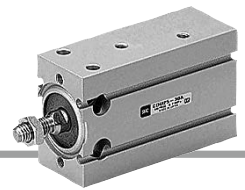
### Built-in Magnet Cylinder Model

If a built-in magnet cylinder without an auto switch is required, there is no need to enter the symbol for the auto switch.  
(Example) 25A-CDUJB12-15DM

\* The 25A- series specifications and dimensions are the same as those of the standard model.

For details, refer to the [Web Catalog](#).

# Free Mount Cylinder Double Acting, Single Rod **25A-CU Series** ø10, ø16, ø20, ø25, ø32



## How to Order

25A - C **D** U 16 - 30 D - M9BW   

Series compatible with secondary batteries

With auto switch

|     |                                    |
|-----|------------------------------------|
| Nil | Without magnet for switch*1        |
| D   | With auto switch (Built-in magnet) |

\*1 In the case of without magnet for switch, auto switch cannot be mounted.

Number of auto switches

|     |   |
|-----|---|
| Nil | 2 |
| S   | 1 |

Auto switch

|     |                     |
|-----|---------------------|
| Nil | Without auto switch |
|-----|---------------------|

\* [Click here](#) for details on applicable auto switch models.

Action

|   |               |
|---|---------------|
| D | Double acting |
|---|---------------|

Bore size

|    |       |
|----|-------|
| 10 | 10 mm |
| 16 | 16 mm |
| 20 | 20 mm |
| 25 | 25 mm |
| 32 | 32 mm |

Cylinder stroke [mm]

| Bore size  | Standard stroke               | Long stroke         |
|------------|-------------------------------|---------------------|
| 10, 16     | 5, 10, 15, 20, 25, 30         | 40, 50, 60          |
| 20, 25, 32 | 5, 10, 15, 20, 25, 30, 40, 50 | 60, 70, 80, 90, 100 |

### Built-in Magnet Cylinder Model

If a built-in magnet cylinder without an auto switch is required, there is no need to enter the symbol for the auto switch.  
(Example) 25A-CDU20-25D

\* The 25A- series specifications and dimensions are the same as those of the standard model.

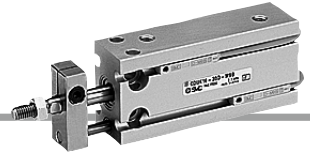
For details, refer to the [Web Catalog](#).

# Free Mount Cylinder: Non-rotating Rod Type Double Acting, Single Rod

## 25A-*CUK* Series

∅10, ∅16, ∅20, ∅25, ∅32

RoHS



### How to Order

**25A - C D UK 16 - 30 D - M9BW**

Series compatible with secondary batteries

With auto switch

|     |                                    |
|-----|------------------------------------|
| Nil | Without magnet for switch*1        |
| D   | With auto switch (Built-in magnet) |

\*1 In the case of without magnet for switch, auto switch cannot be mounted.

Non-rotating rod type

Bore size

|    |       |
|----|-------|
| 10 | 10 mm |
| 16 | 16 mm |
| 20 | 20 mm |
| 25 | 25 mm |
| 32 | 32 mm |

Number of auto switches

|     |   |
|-----|---|
| Nil | 2 |
| S   | 1 |

Auto switch

|     |                     |
|-----|---------------------|
| Nil | Without auto switch |
|-----|---------------------|

\* [Click here](#) for details on applicable auto switch models.

Action

|   |               |
|---|---------------|
| D | Double acting |
|---|---------------|

Cylinder stroke [mm]

| Bore size  | Standard stroke               | Long stroke         |
|------------|-------------------------------|---------------------|
| 10, 16     | 5, 10, 15, 20, 25, 30         | 40, 50, 60          |
| 20, 25, 32 | 5, 10, 15, 20, 25, 30, 40, 50 | 60, 70, 80, 90, 100 |

### Built-in Magnet Cylinder Model

If a built-in magnet cylinder without an auto switch is required, there is no need to enter the symbol for the auto switch.  
(Example) 25A-CDUK20-25D

\* The 25A- series specifications and dimensions are the same as those of the standard model.

For details, refer to the [Web Catalog](#).



# Compact Cylinder: Standard Type Double Acting, Single Rod

## 25A-CQS Series

∅12, ∅16, ∅20, ∅25

RoHS



### How to Order

25A - C D QS B 20 - 30 D - M9BW

Series compatible  
with secondary  
batteries

With auto switch

|     |                                    |
|-----|------------------------------------|
| Nil | Without magnet for switch*1        |
| D   | With auto switch (Built-in magnet) |

\*1 In the case of without magnet for switch, auto switch cannot be mounted.

Mounting

|    |   |
|----|---|
| B  | Through-hole/Both ends tapped common (Standard) |
| L  | Foot  |
| LC | Compact foot                                    |
| F  | Rod flange                                      |
| G  | Head flange                                     |
| D  | Double clevis                                   |

\* In the case of long strokes, use either ends tapped mounting or bracket mounting.  
\* Mounting brackets are shipped together with the product but do not come assembled.  
\* Cylinder mounting bolts are not included.

Bore size

|    |       |
|----|-------|
| 12 | 12 mm |
| 16 | 16 mm |
| 20 | 20 mm |
| 25 | 25 mm |

Number of auto switches

|     |   |
|-----|---|
| Nil | 2 |
| S   | 1 |
| n   | n |

Auto switch

|     |                     |
|-----|---------------------|
| Nil | Without auto switch |
|-----|---------------------|

\* [Click here](#) for details on applicable auto switch models.

Body option

<Standard stroke>

|     |                     |
|-----|---------------------|
| Nil | Standard            |
| C   | With rubber bumper  |
| M   | Rod end male thread |

\* Combination of body options is available.

<Long stroke>

|    |   |
|----|---|
| C  | With rubber bumper Rod end female thread (Standard) |
| CM | With rubber bumper Rod end male thread              |

\* Rubber bumper is standard equipment for long stroke type.

Action

|   |               |
|---|---------------|
| D | Double acting |
|---|---------------|

Cylinder stroke [mm]

| Bore size | Standard stroke                       | Long stroke                                 |
|-----------|---------------------------------------|---|
| 12, 16    | 5, 10, 15, 20, 25, 30                 | 35, 40, 45, 50, 75, 100, 125, 150, 175, 200 |
| 20        | 5, 10, 15, 20, 25, 30, 35, 40, 45, 50 | 75, 100, 125, 150, 175, 200                 |
| 25        |                                       | 75, 100, 125, 150, 175, 200, 250, 300       |

### Built-in Magnet Cylinder Model

If a built-in magnet cylinder without an auto switch is required, there is no need to enter the symbol for the auto switch.  
(Example) 25A-CDQSL25-30D

\* The 25A- series specifications and dimensions are the same as those of the standard model.

For details, refer to the [Web Catalog](#).

### Mounting Bracket Part Nos. for the 25A- Series

| Bore size [mm] | Foot*1       | Compact foot*1 | Flange       | Double clevis |
|----------------|--------------|----------------|--------------|---------------|
| 12             | 25A-CQS-L012 | 25A-CQS-LC012  | 25A-CQS-F012 | 25-CQS-D012   |
| 16             | 25A-CQS-L016 | 25A-CQS-LC016  | 25A-CQS-F016 | 25-CQS-D016   |
| 20             | 25A-CQS-L020 | 25A-CQS-LC020  | 25A-CQS-F020 | 25-CQS-D020   |
| 25             | 25A-CQS-L025 | 25A-CQS-LC025  | 25A-CQS-F025 | 25-CQS-D025   |

\*1 When ordering foot and compact foot brackets, order 2 pieces per cylinder.

\* Parts included with each type of bracket are as follows.

Foot, Compact foot, Flange: Body mounting bolts

Double clevis type: Clevis pin, Type C retaining ring for axis, Body mounting bolt

# Compact Cylinder: Standard Type Double Acting, Double Rod

RoHS

# 25A-CQSW Series

∅12, ∅16, ∅20, ∅25



## How to Order

**25A-C D QSW B 20-30 D - M9BWL**

Series compatible with secondary batteries

With auto switch

|     |                                    |
|-----|------------------------------------|
| Nil | Without magnet for switch*1        |
| D   | With auto switch (Built-in magnet) |

\*1 In the case of without magnet for switch, auto switch cannot be mounted.

Mounting

|    |   |
|----|---|
| B  | Through-hole/Both ends tapped common (Standard) |
| L  | Foot  |
| LC | Compact foot                                    |
| F  | Flange  |

- \* Mounting brackets are shipped together with the product but do not come assembled.
- \* Cylinder mounting bolts are not included.

Bore size

|    |       |
|----|-------|
| 12 | 12 mm |
| 16 | 16 mm |
| 20 | 20 mm |
| 25 | 25 mm |

Number of auto switches

|     |   |
|-----|---|
| Nil | 2 |
| S   | 1 |
| n   | n |

Auto switch

|     |                     |
|-----|---------------------|
| Nil | Without auto switch |
|-----|---------------------|

\* [Click here](#) for details on applicable auto switch models.

Cushion/Rod end thread

|     |                     |
|-----|---------------------|
| Nil | Standard            |
| C   | With rubber bumper  |
| M   | Rod end male thread |

\* Combination of body options is available.

Action

|   |               |
|---|---------------|
| D | Double acting |
|---|---------------|

Cylinder stroke [mm]

| Bore size | Standard stroke                       |
|-----------|---------------------------------------|
| 12, 16    | 5, 10, 15, 20, 25, 30                 |
| 20        | 5, 10, 15, 20, 25, 30, 35, 40, 45, 50 |
| 25        | 30, 35, 40, 45, 50                    |

## Mounting Bracket Part Nos. for the 25A- Series

| Bore size [mm] | Foot*1       | Compact foot*1 | Flange       |
|----------------|--------------|----------------|--------------|
| 12             | 25A-CQS-L012 | 25A-CQS-LC012  | 25A-CQS-F012 |
| 16             | 25A-CQS-L016 | 25A-CQS-LC016  | 25A-CQS-F016 |
| 20             | 25A-CQS-L020 | 25A-CQS-LC020  | 25A-CQS-F020 |
| 25             | 25A-CQS-L025 | 25A-CQS-LC025  | 25A-CQS-F025 |

\*1 When ordering foot and compact foot brackets, order 2 pieces per cylinder.

\* Body mounting bolts are included for each bracket.

## Built-in Magnet Cylinder Model

If a built-in magnet cylinder without an auto switch is required, there is no need to enter the symbol for the auto switch.

(Example) 25A-CDQSWL25-30D

\* The 25A- series specifications and dimensions are the same as those of the standard model.

For details, refer to the [Web Catalog](#).

# Compact Cylinder: Anti-lateral Load Type

# 25A-CQS□S Series

ø12, ø16, ø20, ø25

RoHS



## How to Order

25A-C D QS B S 20 - 30 D C - M9BW □

Series compatible with secondary batteries

With auto switch

|     |                                    |
|-----|------------------------------------|
| Nil | Without magnet for switch*1        |
| D   | With auto switch (Built-in magnet) |

\*1 In the case of without magnet for switch, auto switch cannot be mounted.

Mounting

|    |   |
|----|---|
| B  | Through-hole/Both ends tapped common (Standard) |
| L  | Foot  |
| LC | Compact foot                                    |
| F  | Rod flange                                      |
| G  | Head flange                                     |
| D  | Double clevis                                   |

\* Mounting brackets are shipped together with the product but do not come assembled.  
\* Cylinder mounting bolts are not included.

Cushion

|   |                        |
|---|------------------------|
| S | Anti-lateral load type |
|---|------------------------|

Bore size

|    |       |
|----|-------|
| 12 | 12 mm |
| 16 | 16 mm |
| 20 | 20 mm |
| 25 | 25 mm |

Cylinder stroke [mm]

| Bore size | Standard stroke                       |
|-----------|---------------------------------------|
| 12, 16    | 5, 10, 15, 20, 25, 30                 |
| 20, 25    | 5, 10, 15, 20, 25, 30, 35, 40, 45, 50 |

Number of auto switches

|     |   |
|-----|---|
| Nil | 2 |
| S   | 1 |
| n   | n |

Auto switch

|     |                     |
|-----|---------------------|
| Nil | Without auto switch |
|-----|---------------------|

\* [Click here](#) for details on applicable auto switch models.

Body option

|    |  |
|----|--|
| C  | With rubber bumper<br>Rod end female thread (Standard) |
| CM | With rubber bumper<br>Rod end male thread              |

Action

|   |               |
|---|---------------|
| D | Double acting |
|---|---------------|

### Built-in Magnet Cylinder Model

If a built-in magnet cylinder without an auto switch is required, there is no need to enter the symbol for the auto switch.

(Example) 25A-CDQSL12-25DC

\* With cushion only.

\* The 25A- series specifications and dimensions are the same as those of the standard model.

For details, refer to the [Web Catalog](#).

### Mounting Bracket Part Nos. for the 25A- Series

| Bore size [mm] | Foot*1       | Compact foot*1 | Flange       | Double clevis |
|----------------|--------------|----------------|--------------|---------------|
| 12             | 25A-CQS-L012 | 25A-CQS-LC012  | 25A-CQS-F012 | 25-CQS-D012   |
| 16             | 25A-CQS-L016 | 25A-CQS-LC016  | 25A-CQS-F016 | 25-CQS-D016   |
| 20             | 25A-CQS-L020 | 25A-CQS-LC020  | 25A-CQS-F020 | 25-CQS-D020   |
| 25             | 25A-CQS-L025 | 25A-CQS-LC025  | 25A-CQS-F025 | 25-CQS-D025   |

\*1 When ordering foot and compact foot brackets, order 2 pieces per cylinder.

\* Parts included with each type of bracket are as follows.

Foot, Compact foot, Flange: Body mounting bolts

Double clevis type: Clevis pin, Type C retaining ring for axis, Body mounting bolt

# Compact Cylinder: Standard Double Acting, Single Rod



# 25A-CQ2 Series

ø12, ø16, ø20, ø25, ø32, ø40, ø50, ø63, ø80, ø100



## How to Order

**25A - C D Q2 B 20 - 30 D Z - M9BW**

• Series compatible with secondary batteries

With auto switch

|     |                                    |
|-----|------------------------------------|
| Nil | Without magnet for switch*1        |
| D   | With auto switch (Built-in magnet) |

\*1 In the case of without magnet for switch, auto switch cannot be mounted.

Mounting

|    |                         |
|----|-------------------------|
| B  | Through-hole (Standard) |
| A  | Both ends tapped        |
| L  | Foot                    |
| LC | Compact foot            |
| F  | Rod flange              |
| G  | Head flange             |
| D  | Double clevis           |

\* Mounting brackets are shipped together with the product but do not come assembled.

\* Cylinder mounting bolts are not included.

Bore size

|    |       |     |        |
|----|-------|-----|--------|
| 12 | 12 mm | 40  | 40 mm  |
| 16 | 16 mm | 50  | 50 mm  |
| 20 | 20 mm | 63  | 63 mm  |
| 25 | 25 mm | 80  | 80 mm  |
| 32 | 32 mm | 100 | 100 mm |

Port thread type

|     |          |             |
|-----|----------|-------------|
| Nil | M thread | ø12 to ø25  |
|     | Rc       |             |
| TN  | NPT      | ø32 to ø100 |
| TF  | G        |             |

• Auto switch

|     |                     |
|-----|---------------------|
| Nil | Without auto switch |
|-----|---------------------|

\* Click here for details on applicable auto switch models.

• Number of auto switches

|     |   |
|-----|---|
| Nil | 2 |
| S   | 1 |
| n   | n |

• Auto switch mounting groove

|   |             |            |
|---|-------------|------------|
| Z | ø12 to ø25  | 2 surfaces |
|   | ø32 to ø100 | 4 surfaces |

\* "Z" is not available for ø12 to ø25 without auto switches.

• Body option

|     |                                  |
|-----|----------------------------------|
| Nil | Standard (Rod end female thread) |
| C   | With rubber bumper               |
| M   | Rod end male thread              |

\* Combination of body options is available.

• Action

|   |               |
|---|---------------|
| D | Double acting |
|---|---------------|

• Cylinder stroke [mm]

|           |  |
|-----------|--|
| 12, 16    | 5, 10, 15, 20, 25, 30                          |
| 20, 25    | 5, 10, 15, 20, 25, 30, 35, 40, 45, 50          |
| 32, 40    | 5, 10, 15, 20, 25, 30, 35, 40, 45, 50, 75, 100 |
| 50 to 100 | 10, 15, 20, 25, 30, 35, 40, 45, 50, 75, 100    |

\* The 25A- series specifications and dimensions are the same as those of the standard model.

For details, refer to the [Web Catalog](#).

## Built-in Magnet Cylinder Model

If a built-in magnet cylinder without an auto switch is required, there is no need to enter the symbol for the auto switch.

(Example) 25A-CDQ2L32-25DZ

## Mounting Bracket Part Nos. for the 25A- Series

| Bore size [mm] | Foot*1              | Compact foot*1 | Flange       | Double clevis |            |
|----------------|---------------------|----------------|--------------|---------------|------------|
| 12             | Without auto switch | 25A-CQ-L012    | 25A-CQ-LC012 | 25A-CQ-F012   | 25-CQ-D012 |
|                | With auto switch    | 25A-CQ-LZ12    | 25A-CQ-LCZ12 |               |            |
| 16             | Without auto switch | 25A-CQ-L016    | 25A-CQ-LC016 | 25A-CQ-F016   | 25-CQ-D016 |
|                | With auto switch    | 25A-CQ-LZ16    | 25A-CQ-LCZ16 |               |            |
| 20             | Without auto switch | 25A-CQ-L020    | 25A-CQ-LC020 | 25A-CQ-F020   | 25-CQ-D020 |
|                | With auto switch    | 25A-CQ-LZ20    | 25A-CQ-LCZ20 |               |            |
| 25             | Without auto switch | 25A-CQ-L025    | 25A-CQ-LC025 | 25A-CQ-F025   | 25-CQ-D025 |
|                | With auto switch    | 25A-CQ-LZ25    | 25A-CQ-LCZ25 |               |            |
| 32             |                     | 25A-CQ-L032    | 25A-CQ-LC032 | 25A-CQ-F032   | 25-CQ-D032 |
| 40             |                     | 25A-CQ-L040    | 25A-CQ-LC040 | 25A-CQ-F040   | 25-CQ-D040 |
| 50             |                     | 25A-CQ-L050    | 25A-CQ-LC050 | 25A-CQ-F050   | 25-CQ-D050 |
| 63             |                     | 25A-CQ-L063    | 25A-CQ-LC063 | 25A-CQ-F063   | 25-CQ-D063 |
| 80             |                     | 25A-CQ-L080    | 25A-CQ-LC080 | 25A-CQ-F080   | 25-CQ-D080 |
| 100            |                     | 25A-CQ-L100    | 25A-CQ-LC100 | 25A-CQ-F100   | 25-CQ-D100 |

\*1 When ordering foot and compact foot brackets, the required quantity will be different depending on the bore size.

ø12 to ø25:

- Without auto switch: Order 2 pieces per cylinder.
- With auto switch: Order 1 piece per cylinder. (Part number for a set of 2 foot brackets)

ø32 to ø100:

- Order 2 pieces per cylinder.

\* Parts included with each type of bracket are as follows.

Foot, Compact foot, Flange: Body mounting bolts, Double clevis: Clevis pin, Type C retaining rings for axis, Body mounting bolts

## Simple Joint (Standard)/ Part Nos.

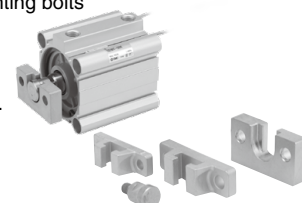
| Bore size [mm] | Joint | Type A mounting bracket | Type B mounting bracket |
|----------------|-------|-------------------------|-------------------------|
| 32, 40         | YU-03 | YA-03                   | YB-03                   |
| 50, 63         | YU-05 | YA-05                   | YB-05                   |
| 80             | YU-08 | YA-08                   | YB-08                   |
| 100            | YU-10 | YA-10                   | YB-10                   |

<Ordering>

• Joints are not included with type A or B mounting brackets. Order them separately.

(Example)

- Bore size ø40 Part no.
- Type A mounting bracket .....YA-03
- Joint.....YU-03



# Compact Cylinder: Standard Double Acting, Double Rod

RoHS

# 25A-CQ2W Series

ø12, ø16, ø20, ø25, ø32, ø40, ø50, ø63, ø80, ø100



## How to Order

**25A - C D Q2W B 20 - 30 D Z - M9BW**

Series compatible with secondary batteries

With auto switch

|     |                                    |
|-----|------------------------------------|
| Nil | Without magnet for switch*1        |
| D   | With auto switch (Built-in magnet) |

\*1 In the case of without magnet for switch, auto switch cannot be mounted.

Mounting

- \* Mounting brackets are shipped together with the product but do not come assembled.
- \* Cylinder mounting bolts are not included.

|    |                         |
|----|-------------------------|
| B  | Through-hole (Standard) |
| A  | Both ends tapped        |
| L  | Foot                    |
| LC | Compact foot            |
| F  | Flange                  |

Bore size

|    |       |     |        |
|----|-------|-----|--------|
| 12 | 12 mm | 40  | 40 mm  |
| 16 | 16 mm | 50  | 50 mm  |
| 20 | 20 mm | 63  | 63 mm  |
| 25 | 25 mm | 80  | 80 mm  |
| 32 | 32 mm | 100 | 100 mm |

### Mounting Bracket Part Nos. for the 25A- Series

| Bore size [mm] | Foot*1              | Compact foot*1 | Flange       |             |
|----------------|---------------------|----------------|--------------|-------------|
| 12             | Without auto switch | 25A-CQ-L012    | 25A-CQ-LC012 | 25A-CQ-F012 |
|                | With auto switch    | 25A-CQ-LZ12    | 25A-CQ-LCZ12 |             |
| 16             | Without auto switch | 25A-CQ-L016    | 25A-CQ-LC016 | 25A-CQ-F016 |
|                | With auto switch    | 25A-CQ-LZ16    | 25A-CQ-LCZ16 |             |
| 20             | Without auto switch | 25A-CQ-L020    | 25A-CQ-LC020 | 25A-CQ-F020 |
|                | With auto switch    | 25A-CQ-LZ20    | 25A-CQ-LCZ20 |             |
| 25             | Without auto switch | 25A-CQ-L025    | 25A-CQ-LC025 | 25A-CQ-F025 |
|                | With auto switch    | 25A-CQ-LZ25    | 25A-CQ-LCZ25 |             |
| 32             | 25A-CQ-L032         | 25A-CQ-LC032   | 25A-CQ-F032  |             |
| 40             | 25A-CQ-L040         | 25A-CQ-LC040   | 25A-CQ-F040  |             |
| 50             | 25A-CQ-L050         | 25A-CQ-LC050   | 25A-CQ-F050  |             |
| 63             | 25A-CQ-L063         | 25A-CQ-LC063   | 25A-CQ-F063  |             |
| 80             | 25A-CQ-L080         | 25A-CQ-LC080   | 25A-CQ-F080  |             |
| 100            | 25A-CQ-L100         | 25A-CQ-LC100   | 25A-CQ-F100  |             |

\*1 When ordering foot and compact foot brackets, the required quantity will be different depending on the bore size.

ø12 to ø25:

· Without auto switch: Order 2 pieces per cylinder.

· With auto switch: Order 1 piece per cylinder. (Part number for a set of 2 foot brackets)

ø32 to ø100:

· Order 2 pieces per cylinder.

\* Body mounting bolts are included for each bracket.

Number of auto switches

|     |   |
|-----|---|
| Nil | 2 |
| S   | 1 |
| n   | n |

Auto switch

|     |                     |
|-----|---------------------|
| Nil | Without auto switch |
|-----|---------------------|

\* Click here for details on applicable auto switch models.

Auto switch mounting groove

|   |             |            |
|---|-------------|------------|
| Z | ø12 to ø25  | 2 surfaces |
|   | ø32 to ø100 | 4 surfaces |

\* "Z" is not available for ø12 to ø25 without auto switches.

Body option

|     |                                  |
|-----|----------------------------------|
| Nil | Standard (Rod end female thread) |
| C   | With rubber bumper               |
| M   | Rod end male thread              |

\* Combination of body options is available.

Action

|   |               |
|---|---------------|
| D | Double acting |
|---|---------------|

Cylinder stroke [mm]

|           |  |
|-----------|--|
| 12, 16    | 5, 10, 15, 20, 25, 30                          |
| 20, 25    | 5, 10, 15, 20, 25, 30, 35, 40, 45, 50          |
| 32, 40    | 5, 10, 15, 20, 25, 30, 35, 40, 45, 50, 75, 100 |
| 50 to 100 | 10, 15, 20, 25, 30, 35, 40, 45, 50, 75, 100    |

Port thread type

|     |          |             |
|-----|----------|-------------|
| Nil | M thread | ø12 to ø25  |
|     | Rc       |             |
| TN  | NPT      | ø32 to ø100 |
| TF  | G        |             |

### Built-in Magnet Cylinder Model

If a built-in magnet cylinder without an auto switch is required, there is no need to enter the symbol for the auto switch.

(Example) 25A-CDQ2WL32-25DZ

\* The 25A- series specifications and dimensions are the same as those of the standard model.

For details, refer to the [Web Catalog](#).

### Simple Joint (Standard)/Part Nos.

| Bore size [mm] | Joint | Type A mounting bracket | Type B mounting bracket |
|----------------|-------|-------------------------|-------------------------|
| 32, 40         | YU-03 | YA-03                   | YB-03                   |
| 50, 63         | YU-05 | YA-05                   | YB-05                   |
| 80             | YU-08 | YA-08                   | YB-08                   |
| 100            | YU-10 | YA-10                   | YB-10                   |

<Ordering>

Joints are not included with type A or B mounting brackets. Order them separately.

(Example)

Bore size ø40 Part no.

Type A mounting bracket ..... YA-03

Joint ..... YU-03

# Compact Cylinder: Large Bore Size Double Acting, Single Rod

## 25A-CQ2 Series

∅125, ∅140, ∅160, ∅180, ∅200

RoHS



### How to Order

**25A-C D Q2B 125 - 30 DC Z - M9BW**

- Series compatible with secondary batteries**
- With auto switch**

|     |                                    |
|-----|------------------------------------|
| Nil | Without magnet for switch*1        |
| D   | With auto switch (Built-in magnet) |

\*1 In the case of without magnet for switch, auto switch cannot be mounted.
- Mounting**

|   |   |
|---|---|
| B | Through-hole/<br>Both ends tapped common (Standard) |
|---|---|

\* Cylinder mounting bolts are not included.
- Bore size**

|     |        |
|-----|--------|
| 125 | 125 mm |
| 140 | 140 mm |
| 160 | 160 mm |
| 180 | 180 mm |
| 200 | 200 mm |
- Port thread type**

|     |     |
|-----|-----|
| Nil | Rc  |
| TN  | NPT |
| TF  | G   |
- Number of auto switches**

|     |   |
|-----|---|
| Nil | 2 |
| S   | 1 |
| n   | n |
- Auto switch**

|     |                     |
|-----|---------------------|
| Nil | Without auto switch |
|-----|---------------------|

\* [Click here](#) for details on applicable auto switch models.
- Auto switch mounting groove**

|   |            |
|---|------------|
| Z | 4 surfaces |
|---|------------|
- Body option**

|     |                                  |
|-----|----------------------------------|
| Nil | Standard (Rod end female thread) |
| M   | Rod end male thread              |
- Cushion**

|   |               |
|---|---------------|
| C | Rubber bumper |
|---|---------------|
- Action**

|   |               |
|---|---------------|
| D | Double acting |
|---|---------------|
- Cylinder stroke [mm]**

| Bore size     | Standard stroke                   |
|---------------|-----------------------------------|
| 125, 140, 160 | 10, 20, 30, 40, 50, 75, 100, 125, |
| 180, 200      | 150, 175, 200, 250, 300           |

### Built-in Magnet Cylinder Model

If a built-in magnet cylinder without an auto switch is required, there is no need to enter the symbol for the auto switch.

(Example) 25A-CDQ2B140-30DCZ

\* The 25A- series specifications and dimensions are the same as those of the standard model.

For details, refer to the [Web Catalog](#).



# Compact Cylinder: Long Stroke Double Acting, Single Rod

RoHS

## 25A-CQ2 Series

∅32, ∅40, ∅50, ∅63, ∅80, ∅100



### How to Order

**25A - C D Q2 A 32 - 200 DC Z - M9BW**

- Series compatible with secondary batteries**
- With auto switch**

|     |                                    |
|-----|------------------------------------|
| Nil | Without magnet for switch*1        |
| D   | With auto switch (Built-in magnet) |

\*1 In the case of without magnet for switch, auto switch cannot be mounted.
- Mounting**

|    |                  |
|----|------------------|
| A  | Both ends tapped |
| L  | Foot             |
| LC | Compact foot     |
| F  | Rod flange       |
| G  | Head flange      |
| D  | Double clevis    |

\* Mounting brackets are shipped together with the product but do not come assembled.
- Bore size**

|     |        |
|-----|--------|
| 32  | 32 mm  |
| 40  | 40 mm  |
| 50  | 50 mm  |
| 63  | 63 mm  |
| 80  | 80 mm  |
| 100 | 100 mm |
- Port thread type**

|     |     |
|-----|-----|
| Nil | Rc  |
| TN  | NPT |
| TF  | G   |
- Number of auto switches**

|     |   |
|-----|---|
| Nil | 2 |
| S   | 1 |
| n   | n |
- Auto switch**

|     |                     |
|-----|---------------------|
| Nil | Without auto switch |
|-----|---------------------|

\* [Click here](#) for details on applicable auto switch models.
- Auto switch mounting groove**

|   |            |
|---|------------|
| Z | 4 surfaces |
|---|------------|
- Body option**

|     |                                  |
|-----|----------------------------------|
| Nil | Standard (Rod end female thread) |
| M   | Rod end male thread              |
- Cushion**

|   |               |
|---|---------------|
| C | Rubber bumper |
|---|---------------|
- Action**

|   |               |
|---|---------------|
| D | Double acting |
|---|---------------|
- Cylinder stroke [mm]**

| Bore size                 | Standard stroke              |
|---------------------------|------------------------------|
| 32, 40, 50<br>63, 80, 100 | 125, 150, 175, 200, 250, 300 |

### Built-in Magnet Cylinder Model

If a built-in magnet cylinder without an auto switch is required, there is no need to enter the symbol for the auto switch.  
(Example) 25A-CDQ2L40-200DCZ

### Simple Joint (Standard)/Part Nos.

| Bore size [mm] | Joint | Type A mounting bracket | Type B mounting bracket |
|----------------|-------|-------------------------|-------------------------|
| 32, 40         | YU-03 | YA-03                   | YB-03                   |
| 50, 63         | YU-05 | YA-05                   | YB-05                   |
| 80             | YU-08 | YA-08                   | YB-08                   |
| 100            | YU-10 | YA-10                   | YB-10                   |

<Ordering>

• Joints are not included with type A or B mounting brackets. Order them separately.

(Example)

Bore size ∅40 Part no.

• Type A mounting bracket.....YA-03

• Joint.....YU-03

### Mounting Bracket Part Nos. for the 25A- Series

| Bore size [mm] | Foot*1      | Compact foot*1 | Flange      | Double clevis |
|----------------|-------------|----------------|-------------|---------------|
| 32             | 25A-CQ-L032 | 25A-CQ-LC032   | 25A-CQ-F032 | 25-CQ-D032    |
| 40             | 25A-CQ-L040 | 25A-CQ-LC040   | 25A-CQ-F040 | 25-CQ-D040    |
| 50             | 25A-CQ-L050 | 25A-CQ-LC050   | 25A-CQ-F050 | 25-CQ-D050    |
| 63             | 25A-CQ-L063 | 25A-CQ-LC063   | 25A-CQ-F063 | 25-CQ-D063    |
| 80             | 25A-CQ-L080 | 25A-CQ-LC080   | 25A-CQ-F080 | 25-CQ-D080    |
| 100            | 25A-CQ-L100 | 25A-CQ-LC100   | 25A-CQ-F100 | 25-CQ-D100    |

\*1 Order 2 pieces per cylinder.

\* Parts included with each type of bracket are as follows.

Foot, Compact foot, Flange: Body mounting bolts, Double clevis: Clevis pin, Type C retaining rings for axis, Body mounting bolts

\* The 25A- series specifications and dimensions are the same as those of the standard model.

For details, refer to the [Web Catalog](#).



# Compact Cylinder: Anti-lateral Load

# 25A-CQ2□S Series

∅32, ∅40, ∅50, ∅63, ∅80, ∅100



## How to Order

**25A-C D Q2 B S 32 □ - 30 DC □ Z - M9BW □**

- Series compatible with secondary batteries**
- With auto switch**

|     |                                    |
|-----|------------------------------------|
| Nil | Without magnet for switch*1        |
| D   | With auto switch (Built-in magnet) |

\*1 In the case of without magnet for switch, auto switch cannot be mounted.
- Mounting**

|    |                         |
|----|-------------------------|
| B  | Through-hole (Standard) |
| A  | Both ends tapped        |
| L  | Foot                    |
| LC | Compact foot            |
| F  | Rod flange              |
| G  | Head flange             |
| D  | Double clevis           |

\* Mounting brackets are shipped together with the product but do not come assembled.  
\* Cylinder mounting bolts are not included.
- Type**

|   |                   |
|---|-------------------|
| S | Anti-lateral load |
|---|-------------------|
- Bore size**

|     |        |
|-----|--------|
| 32  | 32 mm  |
| 40  | 40 mm  |
| 50  | 50 mm  |
| 63  | 63 mm  |
| 80  | 80 mm  |
| 100 | 100 mm |
- Port thread type**

|     |     |
|-----|-----|
| Nil | Rc  |
| TN  | NPT |
| TF  | G   |
- Number of auto switches**

|     |   |
|-----|---|
| Nil | 2 |
| S   | 1 |
| n   | n |
- Auto switch**

|     |                     |
|-----|---------------------|
| Nil | Without auto switch |
|-----|---------------------|

\* [Click here](#) for details on applicable auto switch models.
- Auto switch mounting groove**

|   |            |
|---|------------|
| Z | 4 surfaces |
|---|------------|
- Body option**

|     |                                  |
|-----|----------------------------------|
| Nil | Standard (Rod end female thread) |
| M   | Rod end male thread              |
- Cushion**

|   |               |
|---|---------------|
| C | Rubber bumper |
|---|---------------|
- Action**

|   |               |
|---|---------------|
| D | Double acting |
|---|---------------|
- Cylinder stroke [mm]**

| Bore size       | Standard stroke                                |
|-----------------|--|
| 32, 40          | 5, 10, 15, 20, 25, 30, 35, 40, 45, 50, 75, 100 |
| 50, 63, 80, 100 | 10, 15, 20, 25, 30, 35, 40, 45, 50, 75, 100    |

### Built-in Magnet Cylinder Model

If a built-in magnet cylinder without an auto switch is required, there is no need to enter the symbol for the auto switch.

(Example) 25A-CDQ2LS40-30DCZ

\* The 25A- series specifications and dimensions are the same as those of the standard model.

For details, refer to the [Web Catalog](#).

### Mounting Bracket Part Nos. for the 25A- Series

| Bore size [mm] | Foot*1      | Compact foot*1 | Flange      | Double clevis |
|----------------|-------------|----------------|-------------|---------------|
| 32             | 25A-CQ-L032 | 25A-CQ-LC032   | 25A-CQ-F032 | 25-CQ-D032    |
| 40             | 25A-CQ-L040 | 25A-CQ-LC040   | 25A-CQ-F040 | 25-CQ-D040    |
| 50             | 25A-CQ-L050 | 25A-CQ-LC050   | 25A-CQ-F050 | 25-CQ-D050    |
| 63             | 25A-CQ-L063 | 25A-CQ-LC063   | 25A-CQ-F063 | 25-CQ-D063    |
| 80             | 25A-CQ-L080 | 25A-CQ-LC080   | 25A-CQ-F080 | 25-CQ-D080    |
| 100            | 25A-CQ-L100 | 25A-CQ-LC100   | 25A-CQ-F100 | 25-CQ-D100    |

\*1 Order 2 pieces per cylinder.

\* Parts included with each type of bracket are as follows.

Foot, Compact foot, Flange: Body mounting bolts, Double clevis: Clevis pin, Type C retaining rings for axis, Body mounting bolts

# Compact Cylinder: With End Lock

# 25A-CBQ2 Series

∅20, ∅25, ∅32, ∅40, ∅50, ∅63, ∅80, ∅100



## How to Order



**25A - C D BQ2 B 40 - 30 D C - H N - M9BW**

Series compatible with secondary batteries

With auto switch (Built-in magnet)

Mounting

| ∅20, ∅25  |   | ∅32 to ∅100 |                           |
|-----------|---|-------------|---------------------------|
| <b>B</b>  | Through-hole/Both ends tapped common (Standard) | <b>B</b>    | Through-hole (Standard)*1 |
| <b>L</b>  | Foot  | <b>A</b>    | Both ends tapped          |
| <b>LC</b> | Compact foot                                    | <b>L</b>    | Foot                      |
| <b>F</b>  | Rod flange                                      | <b>LC</b>   | Compact foot              |
| <b>G</b>  | Head flange                                     | <b>F</b>    | Rod flange                |
| <b>D</b>  | Double clevis                                   | <b>G</b>    | Head flange               |
|           |   | <b>D</b>    | Double clevis             |

\*1 At the 75 and 100 mm strokes with ∅80, ∅100, both ends tapped (A) is the standard. Through-hole (B) is not available.

\* Mounting brackets are shipped together with the product but do not come assembled.

Manual release type

|          |               |
|----------|---------------|
| <b>N</b> | Non-lock type |
|----------|---------------|

Lock position

|          |               |
|----------|---------------|
| <b>H</b> | Head end lock |
| <b>R</b> | Rod end lock  |

Body option

|            |                       |
|------------|-----------------------|
| <b>Nil</b> | Rod end female thread |
| <b>M</b>   | Rod end male thread   |

Cushion

|          |               |
|----------|---------------|
| <b>C</b> | Rubber bumper |
|----------|---------------|

Action

|          |               |
|----------|---------------|
| <b>D</b> | Double acting |
|----------|---------------|

Auto switch

|            |                     |
|------------|---------------------|
| <b>Nil</b> | Without auto switch |
|------------|---------------------|

\* [Click here](#) for details on applicable auto switch models.

Number of auto switches

|            |   |
|------------|---|
| <b>Nil</b> | 2 |
| <b>S</b>   | 1 |
| <b>n</b>   | n |

Bore size

|           |       |            |        |
|-----------|-------|------------|--------|
| <b>20</b> | 20 mm | <b>50</b>  | 50 mm  |
| <b>25</b> | 25 mm | <b>63</b>  | 63 mm  |
| <b>32</b> | 32 mm | <b>80</b>  | 80 mm  |
| <b>40</b> | 40 mm | <b>100</b> | 100 mm |

Port thread type

|            |          |             |
|------------|----------|-------------|
| <b>Nil</b> | M thread | ∅20, ∅25    |
| <b>TN</b>  | NPT      | ∅32 to ∅100 |
| <b>TF</b>  | G        |             |

Cylinder stroke [mm]

| Bore size                     | Standard stroke             |
|-------------------------------|-----------------------------|
| <b>20, 25, 32, 40, 50, 63</b> | 10, 15, 20, 25, 50, 75, 100 |
| <b>80, 100</b>                | 25, 50, 75, 100             |

## Built-in Magnet Cylinder Model

If a built-in magnet cylinder without an auto switch is required, there is no need to enter the symbol for the auto switch. (Example) 25A-CDBQ2L32-30DC-RN

\* The 25A-series specifications and dimensions are the same as those of the standard model.

For details, refer to the [Web Catalog](#).

## Mounting Bracket Part Nos. for the 25A- Series

| Bore size [mm] | Foot*1       | Compact foot*1 | Flange       | Double clevis |
|----------------|--------------|----------------|--------------|---------------|
| <b>20</b>      | 25A-CQS-L020 | 25A-CQS-LC020  | 25A-CQS-F020 | 25-CQS-D020   |
| <b>25</b>      | 25A-CQS-L025 | 25A-CQS-LC025  | 25A-CQS-F025 | 25-CQS-D025   |
| <b>32</b>      | 25A-CQ-L032  | 25A-CQ-LC032   | 25A-CQ-F032  | 25-CQ-D032    |
| <b>40</b>      | 25A-CQ-L040  | 25A-CQ-LC040   | 25A-CQ-F040  | 25-CQ-D040    |
| <b>50</b>      | 25A-CQ-L050  | 25A-CQ-LC050   | 25A-CQ-F050  | 25-CQ-D050    |
| <b>63</b>      | 25A-CQ-L063  | 25A-CQ-LC063   | 25A-CQ-F063  | 25-CQ-D063    |
| <b>80</b>      | 25A-CQ-L080  | 25A-CQ-LC080   | 25A-CQ-F080  | 25-CQ-D080    |
| <b>100</b>     | 25A-CQ-L100  | 25A-CQ-LC100   | 25A-CQ-F100  | 25-CQ-D100    |

\*1 Order 2 pieces per cylinder.

\* Parts included with each type of bracket are as follows: Foot, Compact foot, Flange: Body mounting bolts, Double clevis: Clevis pin, Type C retaining rings for axis, Body mounting bolts

# Plate Cylinder: Double Acting, Single Rod

# 25A-MU Series

ø25, ø32, ø40, ø50, ø63

RoHS



## How to Order

25A - M DUB 25 [ ] - 30 D M Z - M9BW S

Series compatible with secondary batteries

With auto switch

|     |                                    |
|-----|------------------------------------|
| Nil | Without magnet for switch*1        |
| D   | With auto switch (Built-in magnet) |

\*1 In the case of without magnet for switch, auto switch cannot be mounted.

Mounting

|   |       |
|---|-------|
| B | Basic |
|---|-------|

Size

|    |                        |
|----|------------------------|
| 25 | Equiv. ø25 piston area |
| 32 | Equiv. ø32 piston area |
| 40 | Equiv. ø40 piston area |
| 50 | Equiv. ø50 piston area |
| 63 | Equiv. ø63 piston area |

Port thread type

|     |          |          |
|-----|----------|----------|
| Nil | M thread | ø25      |
|     | Rc       | ø32, ø40 |
| TN  | NPT      | ø50, ø63 |
| TF  | G        |          |

Number of auto switches

|     |   |
|-----|---|
| Nil | 2 |
| S   | 1 |
| n   | n |

Auto switch

|     |                     |
|-----|---------------------|
| Nil | Without auto switch |
|-----|---------------------|

\* [Click here](#) for details on applicable auto switch models.

Rod end configuration

|     |                       |
|-----|-----------------------|
| Nil | Rod end female thread |
| M   | Rod end male thread   |

Action

|   |               |
|---|---------------|
| D | Double acting |
|---|---------------|

### Built-in Magnet Cylinder Model

If a built-in magnet cylinder without an auto switch is required, there is no need to enter the symbol for the auto switch. (Example) 25A-MDUB32-30DZ

Cylinder stroke [mm]

| Size       | Standard stroke                       |
|------------|---------------------------------------|
| 25, 32, 40 | 5, 10, 15, 20, 25, 30, 35, 40, 45, 50 |
| 50, 63     | 75, 100, 125, 150, 175, 200, 250, 300 |

\* The 25A- series specifications and dimensions are the same as those of the standard model.

For details, refer to the [Web Catalog](#).

# Mechanically Jointed Rodless Cylinder Basic Type

## 25A-MY1B Series

∅16, ∅20, ∅25, ∅32, ∅40, ∅50, ∅63

RoHS



### How to Order

∅16, ∅20, ∅50, ∅63    **25A-MY1B20** [ ] [ ] - **300** [ ] - **M9BW** [ ]

∅25, ∅32, ∅40    **25A-MY1B25** [ ] [ ] - **300** [ ] **Z** - **M9BW** [ ]

**Series compatible with secondary batteries**

**Basic type**

**Bore size**

|    |       |
|----|-------|
| 16 | 16 mm |
| 20 | 20 mm |
| 25 | 25 mm |
| 32 | 32 mm |
| 40 | 40 mm |
| 50 | 50 mm |
| 63 | 63 mm |

**Port thread type**

| Symbol | Type | Bore size                 |
|--------|------|---------------------------|
| Nil    | M5   | ∅16, ∅20                  |
|        | Rc   | ∅25, ∅32, ∅40<br>∅50, ∅63 |
| TN     | NPT  |                           |
| TF     | G    |                           |

**Piping**

|     |                         |
|-----|-------------------------|
| Nil | Standard type           |
| G   | Centralized piping type |

**Number of auto switches**

|     |   |
|-----|---|
| Nil | 2 |
| S   | 1 |
| n   | n |

**Auto switch**

|     |                                       |
|-----|---------------------------------------|
| Nil | Without auto switch (Built-in magnet) |
|-----|---------------------------------------|

\* Applicable auto switches vary depending on the bore size.  
\* [Click here](#) for details on applicable auto switch models.

**Cylinder stroke [mm]**

| Bore size              | Standard stroke*  | Long stroke  | Maximum manufacturable stroke |
|------------------------|---|--|-------------------------------|
| 16                     | 100, 200, 300, 400, 500, 600, 700, 800, 900, 1000, 1200, 1400, 1600, 1800, 2000 | Strokes of 2001 to 3000 mm (1 mm increments) exceeding the standard stroke | 3000                          |
| 20, 25, 32, 40, 50, 63 | * The stroke can be manufactured in 1 mm increments from 1 mm stroke.           | Strokes of 2001 to 5000 mm (1 mm increments) exceeding the standard stroke | 5000                          |

Ordering example

\* Long stroke can be ordered the same as the standard stroke. 25A-MY1B20-3000L-M9BW

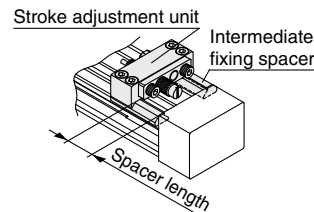
\* Please be advised that with a stroke of 49 mm or less, there are cases where auto switch mounting is not possible, and the performance of the air cushion may decline.

For ∅16 to ∅40

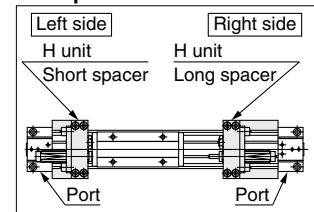
Stroke adjustment unit symbol

|  |                         | Right side stroke adjustment unit |                         |                  |                   |   |                   |                  |  |                  |      |
|--|-------------------------|-----------------------------------|-------------------------|------------------|-------------------|---|-------------------|------------------|--|------------------|------|
|  |                         | Without unit                      | A: With adjustment bolt |                  |                   | L: With low load shock absorber + Adjustment bolt |                   |                  | H: With high load shock absorber + Adjustment bolt |                  |      |
|  |                         |                                   | With short spacer       | With long spacer | With short spacer | With long spacer                                  | With short spacer | With long spacer | With short spacer                                  | With long spacer |      |
| Left side stroke adjustment unit                   | Without unit            | Nil                               | SA                      | SA6              | SA7               | SL  | SL6               | SL7              | SH   | SH6              | SH7  |
|  | A: With adjustment bolt | AS                                | A                       | AA6              | AA7               | AL  | AL6               | AL7              | AH   | AH6              | AH7  |
|  | With short spacer       | A6S                               | A6A                     | A6               | A6A7              | A6L   | A6L6              | A6L7             | A6H  | A6H6             | A6H7 |
| With long spacer                                   | A7S                     | A7A                               | A7A6                    | A7               | A7L               | A7L6  | A7L7              | A7H              | A7H6   | A7H7             |      |
| L: With low load shock absorber + Adjustment bolt  | Without unit            | LS                                | LA                      | LA6              | LA7               | L   | LL6               | LL7              | LH   | LH6              | LH7  |
|  | With short spacer       | L6S                               | L6A                     | L6A6             | L6A7              | L6L   | L6                | L6L7             | L6H  | L6H6             | L6H7 |
|  | With long spacer        | L7S                               | L7A                     | L7A6             | L7A7              | L7L   | L7L6              | L7               | L7H  | L7H6             | L7H7 |
| H: With high load shock absorber + Adjustment bolt | Without unit            | HS                                | HA                      | HA6              | HA7               | HL  | HL6               | HL7              | H  | HH6              | HH7  |
|  | With short spacer       | H6S                               | H6A                     | H6A6             | H6A7              | H6L   | H6L6              | H6L7             | H6H  | H6               | H6H7 |
|  | With long spacer        | H7S                               | H7A                     | H7A6             | H7A7              | H7L   | H7L6              | H7L7             | H7H  | H7H6             | H7   |

### Stroke adjustment unit mounting diagram



### Example of H6H7 attachment



\* Spacers are used to fix the stroke adjustment unit at an intermediate stroke position.

\* The 25A-MY1B50 and 63 are not available with the stroke adjustment unit.

\* The stroke adjustment unit H unit is not available for the 25A-MY1B16.

\* The 25A- series specifications and dimensions are the same as those of the standard model. For details, refer to the [Web Catalog](#).

# Mechanically Jointed Rodless Cylinder Slide Bearing Guide Type

# 25A-MY1M Series

∅16, ∅20, ∅25, ∅32, ∅40, ∅50, ∅63

RoHS



## How to Order

**25A - MY1M** **20** **G** - **300** - **M9BW**

Series compatible with secondary batteries

Slide bearing guide type

Bore size

|    |       |
|----|-------|
| 16 | 16 mm |
| 20 | 20 mm |
| 25 | 25 mm |
| 32 | 32 mm |
| 40 | 40 mm |
| 50 | 50 mm |
| 63 | 63 mm |

Port thread type

| Symbol | Type     | Bore size |
|--------|----------|-----------|
| Nil    | M thread | ∅16, ∅20  |
|        | Rc       | ∅25, ∅32, |
| TN     | NPT      | ∅40, ∅50, |
| TF     | G        | ∅63       |

Piping

|     |                         |
|-----|-------------------------|
| Nil | Standard type           |
| G   | Centralized piping type |

Cylinder stroke [mm]

| Bore size              | Standard stroke*  | Long stroke  | Maximum manufacturable stroke |
|------------------------|---|--|-------------------------------|
| 16                     | 100, 200, 300, 400, 500, 600, 700, 800, 900, 1000, 1200, 1400, 1600, 1800, 2000 | Strokes of 2001 to 3000 mm (1 mm increments) exceeding the standard stroke | 3000                          |
| 20, 25, 32, 40, 50, 63 | * The stroke can be manufactured in 1 mm increments from 1 mm stroke.           | Strokes of 2001 to 5000 mm (1 mm increments) exceeding the standard stroke | 5000                          |

Ordering example

\* Long stroke can be ordered the same as the standard stroke.  
25A-MY1M20-3000L-M9BW

\* Please be advised that with a stroke of 49 mm or less, there are cases where auto switch mounting is not possible, and the performance of the air cushion may decline.

Number of auto switches

|     |   |
|-----|---|
| Nil | 2 |
| S   | 1 |
| n   | n |

Auto switch

|     |                                       |
|-----|---------------------------------------|
| Nil | Without auto switch (Built-in magnet) |
|-----|---------------------------------------|

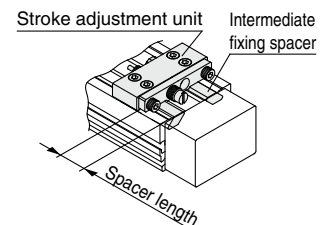
\* [Click here](#) for details on applicable auto switch models.

## Stroke adjustment unit symbol

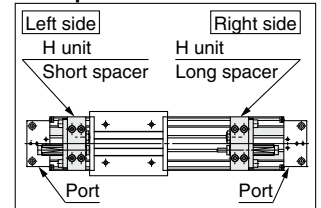
|   | Right side stroke adjustment unit |                         |                  |      |   |                  |      |  |                  |      |  |
|---|-----------------------------------|-------------------------|------------------|------|---|------------------|------|--|------------------|------|--|
|   | Without unit                      | A: With adjustment bolt |                  |      | L: With low load shock absorber + Adjustment bolt |                  |      | H: With high load shock absorber + Adjustment bolt |                  |      |  |
|   |                                   | With short spacer       | With long spacer |      | With short spacer                                 | With long spacer |      | With short spacer                                  | With long spacer |      |  |
| <b>Without unit</b>                                       | Nil                               | SA                      | SA6              | SA7  | SL  | SL6              | SL7  | SH   | SH6              | SH7  |  |
| <b>A: With adjustment bolt</b>                            | AS                                | A                       | AA6              | AA7  | AL  | AL6              | AL7  | AH   | AH6              | AH7  |  |
| With short spacer   | A6S                               | A6A                     | A6               | A6A7 | A6L   | A6L6             | A6L7 | A6H  | A6H6             | A6H7 |  |
| With long spacer  | A7S                               | A7A                     | A7A6             | A7   | A7L   | A7L6             | A7L7 | A7H  | A7H6             | A7H7 |  |
| <b>L: With low load shock absorber + Adjustment bolt</b>  | LS                                | LA                      | LA6              | LA7  | L   | LL6              | LL7  | LH   | LH6              | LH7  |  |
| With short spacer   | L6S                               | L6A                     | L6A6             | L6A7 | L6L   | L6               | L6L7 | L6H  | L6H6             | L6H7 |  |
| With long spacer  | L7S                               | L7A                     | L7A6             | L7A7 | L7L   | L7L6             | L7   | L7H  | L7H6             | L7H7 |  |
| <b>H: With high load shock absorber + Adjustment bolt</b> | HS                                | HA                      | HA6              | HA7  | HL  | HL6              | HL7  | H  | HH6              | HH7  |  |
| With short spacer   | H6S                               | H6A                     | H6A6             | H6A7 | H6L   | H6L6             | H6L7 | H6H  | H6               | H6H7 |  |
| With long spacer  | H7S                               | H7A                     | H7A6             | H7A7 | H7L   | H7L6             | H7L7 | H7H  | H7H6             | H7   |  |

\* Spacers are used to fix the stroke adjustment unit at an intermediate stroke position.  
\* Stroke adjustment unit H is not available for 25A-MY1M16.

## Stroke adjustment unit mounting diagram



## Example of H6H7 attachment



\* The 25A- series specifications and dimensions are the same as those of the standard model.

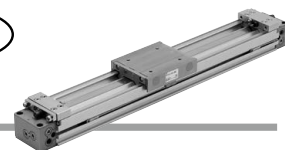
For details, refer to the [Web Catalog](#).

# Mechanically Jointed Rodless Cylinder Cam Follower Guide Type

# 25A-MY1C Series

∅16, ∅20, ∅25, ∅32, ∅40, ∅50, ∅63

RoHS



## How to Order

25A - MY1C 25 [ ] [ ] - 300 [ ] - M9BW [ ] - [ ]

Series compatible with secondary batteries

Cam follower guide type

Bore size

|    |       |
|----|-------|
| 16 | 16 mm |
| 20 | 20 mm |
| 25 | 25 mm |
| 32 | 32 mm |
| 40 | 40 mm |
| 50 | 50 mm |
| 63 | 63 mm |

Port thread type

| Symbol | Type     | Bore size |
|--------|----------|-----------|
| Nil    | M thread | ∅16, ∅20  |
|        | Rc       | ∅25, ∅32, |
| TN     | NPT      | ∅40, ∅50, |
| TF     | G        | ∅63       |

Piping

|     |                         |
|-----|-------------------------|
| Nil | Standard type           |
| G   | Centralized piping type |

Cylinder stroke [mm]

| Bore size                | Standard stroke*  | Long stroke  | Maximum manufacturable stroke |
|--------------------------|---|--|-------------------------------|
| 16                       | 100, 200, 300, 400, 500, 600<br>700, 800, 900, 1000, 1200<br>1400, 1600, 1800, 2000 | Strokes of 2001 to 3000 mm<br>(1 mm increments) exceeding<br>the standard stroke | 3000                          |
| 20, 25, 32<br>40, 50, 63 | * The stroke can be<br>manufactured in 1 mm<br>increments from 1 mm stroke.         | Strokes of 2001 to 5000 mm<br>(1 mm increments) exceeding<br>the standard stroke | 5000                          |

Ordering example

\* Long stroke can be ordered the same as the standard stroke. 25A-MY1C20-3000L-M9BW

\* Please be advised that with a stroke of 49 mm or less, there are cases where auto switch mounting is not possible, and the performance of the air cushion may decline.

Stroke adjustment unit symbol

|                                  |                                    | Right side stroke adjustment unit |                         |                  |   |                  |  |                  |                   |                  |      |  |
|----------------------------------|------------------------------------|-----------------------------------|-------------------------|------------------|---|------------------|--|------------------|-------------------|------------------|------|--|
|                                  |                                    | Without unit                      | A: With adjustment bolt |                  | L: With low load shock absorber + Adjustment bolt |                  | H: With high load shock absorber + Adjustment bolt |                  |                   |                  |      |  |
|                                  |                                    |                                   | With short spacer       | With long spacer | With short spacer                                 | With long spacer | With short spacer                                  | With long spacer | With short spacer | With long spacer |      |  |
| Left side stroke adjustment unit | Without unit                       | Nil                               | SA                      | SA6              | SA7   | SL               | SL6  | SL7              | SH                | SH6              | SH7  |  |
|                                  | A: With adjustment bolt            | AS                                | A                       | AA6              | AA7   | AL               | AL6  | AL7              | AH                | AH6              | AH7  |  |
|                                  | With short spacer                  | A6S                               | A6A                     | A6               | A6A7  | A6L              | A6L6   | A6L7             | A6H               | A6H6             | A6H7 |  |
|                                  | With long spacer                   | A7S                               | A7A                     | A7A6             | A7  | A7L              | A7L6   | A7L7             | A7H               | A7H6             | A7H7 |  |
| Adjustment bolt                  | L: With low load shock absorber +  | LS                                | LA                      | LA6              | LA7   | L                | LL6  | LL7              | LH                | LH6              | LH7  |  |
|                                  | With short spacer                  | L6S                               | L6A                     | L6A6             | L6A7  | L6L              | L6   | L6L7             | L6H               | L6H6             | L6H7 |  |
|                                  | With long spacer                   | L7S                               | L7A                     | L7A6             | L7A7  | L7L              | L7L6   | L7               | L7H               | L7H6             | L7H7 |  |
| Adjustment bolt                  | H: With high load shock absorber + | HS                                | HA                      | HA6              | HA7   | HL               | HL6  | HL7              | H                 | HH6              | HH7  |  |
|                                  | With short spacer                  | H6S                               | H6A                     | H6A6             | H6A7  | H6L              | H6L6   | H6L7             | H6H               | H6               | H6H7 |  |
|                                  | With long spacer                   | H7S                               | H7A                     | H7A6             | H7A7  | H7L              | H7L6   | H7L7             | H7H               | H7H6             | H7   |  |

\* Spacers are used to fix the stroke adjustment unit at an intermediate stroke position.

\* Stroke adjustment unit H is not available for 25A-MY1C16.

Made to order

| Symbol | Specifications      |
|--------|---------------------|
| -XC56  | With knock pin hole |

Number of auto switches

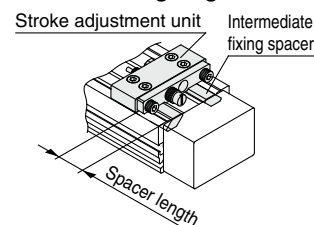
|     |   |
|-----|---|
| Nil | 2 |
| S   | 1 |
| n   | n |

Auto switch

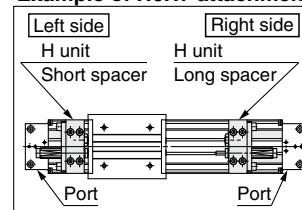
|     |  |
|-----|--|
| Nil | Without auto switch<br>(Built-in magnet) |
|-----|--|

\* [Click here](#) for details on applicable auto switch models.

Stroke adjustment unit mounting diagram



Example of H6H7 attachment



\* The 25A- series specifications and dimensions are the same as those of the standard model.

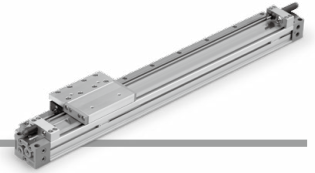
For details, refer to the [Web Catalog](#).

# Mechanically Jointed Rodless Cylinder Linear Guide Type

# 25A-MY1H Series

ø16, ø20, ø25, ø32, ø40

RoHS



## How to Order

ø16, ø20    **25A-MY1H20** [ ] [ ] - **300** [ ] - **M9BW** [ ]

ø25, ø32, ø40    **25A-MY1H25** [ ] [ ] - **300** [ ] **Z** - **M9BW** [ ]

Series compatible with secondary batteries    Linear guide type    Bore size    Port thread type    Piping    Cylinder stroke [mm]    Number of auto switches    Auto switch

|    |       |
|----|-------|
| 16 | 16 mm |
| 20 | 20 mm |
| 25 | 25 mm |
| 32 | 32 mm |
| 40 | 40 mm |

| Symbol | Type     | Bore size     |
|--------|----------|---------------|
| Nil    | M thread | ø16, ø20      |
|        | Rc       | ø25, ø32, ø40 |
| TN     | NPT      |               |
| TF     | G        |               |

|     |                         |
|-----|-------------------------|
| Nil | Standard type           |
| G   | Centralized piping type |

| Bore size  | Standard stroke                | Intermediate stroke  | Long stroke  | Maximum manufacturable stroke |
|------------|--------------------------------|--|--|-------------------------------|
| 16, 20     | 50, 100, 150<br>200, 250, 300  | Strokes of 51 to 599 mm<br>(1 mm increments) other than standard strokes | Strokes of 601 to 1000 mm<br>(1 mm increments) exceeding the standard stroke | 1000                          |
|            | 350, 400, 450<br>500, 550, 600 |  | Strokes of 601 to 1500 mm<br>(1 mm increments) exceeding the standard stroke |                               |
| 25, 32, 40 |                                |  |  | 1500                          |

|     |   |
|-----|---|
| Nil | 2 |
| S   | 1 |
| n   | n |

|     |  |
|-----|--|
| Nil | Without auto switch<br>(Built-in magnet) |
|-----|--|

\* Click here for details on applicable auto switch models.

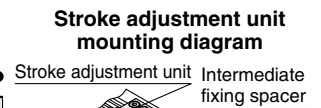
Ordering example

\* Intermediate stroke can be ordered the same as the standard stroke. 25A-MY1H20-60-M9BW

\* Long stroke can be ordered the same as the standard stroke. 25A-MY1H20-800L-M9BW

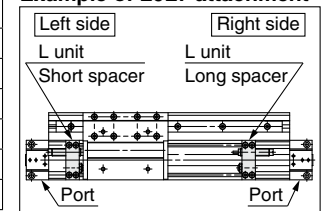
## Stroke adjustment unit symbol

|                                  |                                    | Right side stroke adjustment unit |                         |                  |      |                   |   |      |  |                  |      |
|----------------------------------|------------------------------------|-----------------------------------|-------------------------|------------------|------|-------------------|---|------|--|------------------|------|
|                                  |                                    | Without unit                      | A: With adjustment bolt |                  |      |                   | L: With low load shock absorber + Adjustment bolt |      | H: With high load shock absorber + Adjustment bolt |                  |      |
|                                  |                                    |                                   | With short spacer       | With long spacer |      | With short spacer | With long spacer                                  |      | With short spacer                                  | With long spacer |      |
| Left side stroke adjustment unit | Without unit                       | Nil                               | SA                      | SA6              | SA7  | SL                | SL6   | SL7  | SH   | SH6              | SH7  |
|                                  | A: With adjustment bolt            | AS                                | A                       | AA6              | AA7  | AL                | AL6   | AL7  | AH   | AH6              | AH7  |
|                                  | With short spacer                  | A6S                               | A6A                     | A6               | A6A7 | A6L               | A6L6  | A6L7 | A6H  | A6H6             | A6H7 |
| With long spacer                 | A7S                                | A7A                               | A7A6                    | A7               | A7L  | A7L6              | A7L7  | A7H  | A7H6   | A7H7             |      |
| Adjustment bolt                  | L: With low load shock absorber +  | LS                                | LA                      | LA6              | LA7  | L                 | LL6   | LL7  | LH   | LH6              | LH7  |
|                                  | With short spacer                  | L6S                               | L6A                     | L6A6             | L6A7 | L6L               | L6  | L6L7 | L6H  | L6H6             | L6H7 |
|                                  | With long spacer                   | L7S                               | L7A                     | L7A6             | L7A7 | L7L               | L7L6  | L7   | L7H  | L7H6             | L7H7 |
| Adjustment bolt                  | H: With high load shock absorber + | HS                                | HA                      | HA6              | HA7  | HL                | HL6   | HL7  | H  | HH6              | HH7  |
|                                  | With short spacer                  | H6S                               | H6A                     | H6A6             | H6A7 | H6L               | H6L6  | H6L7 | H6H  | H6               | H6H7 |
|                                  | With long spacer                   | H7S                               | H7A                     | H7A6             | H7A7 | H7L               | H7L6  | H7L7 | H7H  | H7H6             | H7   |



Place the protruding section on the stroke adjusting unit side.

## Example of L6L7 attachment



\* Spacers are used to fix the stroke adjustment unit at an intermediate stroke position.  
\* H: With high load shock absorber + Adjustment bolt is not available for 25A-MY1H16.

\* The 25A-series specifications and dimensions are the same as those of the standard model.

For details, refer to the [Web Catalog](#).



# Mechanically Jointed Rodless Cylinder Cam Follower Guide Type

# 25A-MY2C Series

ø16, ø25, ø40

RoHS



## How to Order

**25A - MY2C 16 G - 300 - M9BW**

Series compatible with secondary batteries

Cam follower guide type

Bore size

|    |       |
|----|-------|
| 16 | 16 mm |
| 25 | 25 mm |
| 40 | 40 mm |

Port thread type

| Symbol | Type     | Bore size |
|--------|----------|-----------|
| Nil    | M thread | ø16       |
|        | Rc       |           |
| TN     | NPT      | ø25, ø40  |
| TF     | G        |           |

Piping

|   |                                    |
|---|------------------------------------|
| G | Centralized piping type (Standard) |
|---|------------------------------------|

Cylinder stroke [mm]

| Bore size [mm] | Standard stroke [mm]*1                  | Max. manufacturable stroke [mm] |
|----------------|---|---------------------------------|
| 16             | 100, 200, 300, 400, 500, 600, 700, 800, | 3000                            |
| 25, 40         | 900, 1000, 1200, 1400, 1600, 1800, 2000 | 5000                            |

\*1 Strokes are manufacturable in 1 mm increments, up to the maximum stroke. However, please be advised that with a stroke of 49 mm or less, there are cases where auto switch mounting is not possible, and the performance of the air cushion may decline.

\* Long stroke can be ordered the same as the standard stroke.  
25A-MY2C25G-3000L-M9BW

Stroke adjustment unit symbol

|                                  |                                  | Right side stroke adjustment unit |                                 |                   |                  |                                  |                   |                  |
|----------------------------------|----------------------------------|-----------------------------------|---------------------------------|-------------------|------------------|----------------------------------|-------------------|------------------|
|                                  |                                  | Without unit                      | L: With low load shock absorber |                   |                  | H: With high load shock absorber |                   |                  |
|                                  |                                  |                                   |                                 | With short spacer | With long spacer |                                  | With short spacer | With long spacer |
| Left side stroke adjustment unit | Without unit                     | Nil                               | SL                              | SL6               | SL7              | SH                               | SH6               | SH7              |
|                                  | L: With low load shock absorber  | LS                                | L                               | LL6               | LL7              | LH                               | LH6               | LH7              |
|                                  |                                  | With short spacer                 | L6S                             | L6L               | L6               | L6L7                             | L6H               | L6H6             |
|                                  | With long spacer                 | L7S                               | L7L                             | L7L6              | L7               | L7H                              | L7H6              | L7H7             |
|                                  | H: With high load shock absorber | HS                                | HL                              | HL6               | HL7              | H                                | HH6               | HH7              |
|                                  |                                  | With short spacer                 | H6S                             | H6L               | H6L6             | H6L7                             | H6H               | H6H6             |
| With long spacer                 | H7S                              | H7L                               | H7L6                            | H7L7              | H7H              | H7H6                             | H7H7              |                  |

\* Spacers are used to fix the stroke adjustment unit at an intermediate stroke position.

Number of auto switches

|     |   |
|-----|---|
| Nil | 2 |
| S   | 1 |
| n   | n |

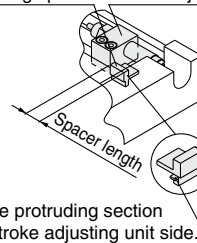
Auto switch

|     |                                       |
|-----|---------------------------------------|
| Nil | Without auto switch (Built-in magnet) |
|-----|---------------------------------------|

\* [Click here](#) for details on applicable auto switch models.

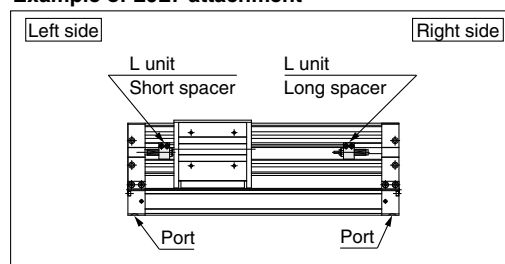
Stroke adjustment unit mounting diagram

Intermediate fixing spacer Stroke adjustment unit



Place the protruding section on the stroke adjusting unit side.

Example of L6L7 attachment



\* The 25A- series specifications and dimensions are the same as those of the standard model.

For details, refer to the [Web Catalog](#).

# Mechanically Jointed Rodless Cylinder Linear Guide Type

# 25A-MY2H/HT Series

ø16, ø25, ø40

RoHS



## How to Order

**25A - MY2 H 16** **G** - **300** - **M9BW**

Series compatible with secondary batteries

Guide type

|           |                           |
|-----------|---------------------------|
| <b>H</b>  | Linear guide, Single axis |
| <b>HT</b> | Linear guide, Double axis |

Bore size

|           |       |
|-----------|-------|
| <b>16</b> | 16 mm |
| <b>25</b> | 25 mm |
| <b>40</b> | 40 mm |

Port thread type

| Symbol     | Type     | Bore size |
|------------|----------|-----------|
| <b>Nil</b> | M thread | ø16       |
|            | Rc       |           |
| <b>TN</b>  | NPT      | ø25, ø40  |
| <b>TF</b>  | G        |           |

Piping

|          |                                    |
|----------|------------------------------------|
| <b>G</b> | Centralized piping type (Standard) |
|----------|------------------------------------|

Number of auto switches

|            |   |
|------------|---|
| <b>Nil</b> | 2 |
| <b>S</b>   | 1 |
| <b>n</b>   | n |

Auto switch

|            |                                       |
|------------|---------------------------------------|
| <b>Nil</b> | Without auto switch (Built-in magnet) |
|------------|---------------------------------------|

\* [Click here](#) for details on applicable auto switch models.

Cylinder stroke [mm]

| Bore size [mm] | Standard stroke [mm]*1                                    | Max. manufacturable stroke [mm] |
|----------------|---|---------------------------------|
| <b>16</b>      | 50, 100, 150, 200, 250, 300, 350, 400, 450, 500, 550, 600 | 1000                            |
| <b>25, 40</b>  |   | 1500                            |

\*1 Strokes are manufacturable in 1 mm increments, up to the maximum stroke.

\* Intermediate stroke can be ordered the same as the standard stroke.

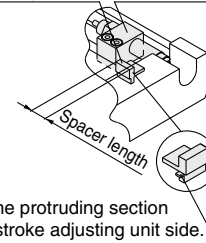
25A-MY2H16G-80-M9BW

\* Long stroke can be ordered the same as the standard stroke.

25A-MY2H25G-800L-M9BW

## Stroke adjustment unit mounting diagram

Intermediate fixing spacer Stroke adjustment unit



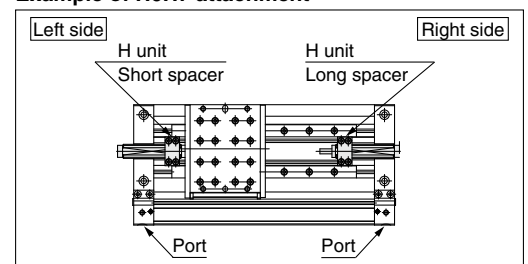
Place the protruding section on the stroke adjusting unit side.

## Stroke adjustment unit symbol

|                                  |                                  | Right side stroke adjustment unit |                                 |                  |                   |                                  |      |      |
|----------------------------------|----------------------------------|-----------------------------------|---------------------------------|------------------|-------------------|----------------------------------|------|------|
|                                  |                                  | Without unit                      | L: With low load shock absorber |                  |                   | H: With high load shock absorber |      |      |
|                                  |                                  |                                   | With short spacer               | With long spacer | With short spacer | With long spacer                 |      |      |
| Left side stroke adjustment unit | Without unit                     | Nil                               | SL                              | SL6              | SL7               | SH                               | SH6  | SH7  |
|                                  | L: With low load shock absorber  | LS                                | L                               | LL6              | LL7               | LH                               | LH6  | LH7  |
|                                  |                                  | With short spacer                 | L6S                             | L6L              | L6                | L6L7                             | L6H  | L6H6 |
|                                  | With long spacer                 | L7S                               | L7L                             | L7L6             | L7                | L7H                              | L7H6 | L7H7 |
|                                  | H: With high load shock absorber | HS                                | HL                              | HL6              | HL7               | H                                | HH6  | HH7  |
|                                  |                                  | With short spacer                 | H6S                             | H6L              | H6L6              | H6L7                             | H6H  | H6   |
| With long spacer                 | H7S                              | H7L                               | H7L6                            | H7L7             | H7H               | H7H6                             | H7   |      |

\* Spacers are used to fix the stroke adjustment unit at an intermediate stroke position.

## Example of H6H7 attachment



\* The 25A- series specifications and dimensions are the same as those of the standard model.

For details, refer to the [Web Catalog](#).

# Mechanically Jointed Rodless Cylinder/Basic Type

# 25A-MY3A/3B Series

∅16, ∅20, ∅25, ∅32, ∅40, ∅50, ∅63

RoHS

## How to Order



**25A - MY3 B 16 - 300 - M9BW**

Series compatible with secondary batteries

Type

|   |                             |
|---|-----------------------------|
| A | Short type (Rubber bumper)  |
| B | Standard type (Air cushion) |

Cylinder bore size

|    |       |
|----|-------|
| 16 | 16 mm |
| 20 | 20 mm |
| 25 | 25 mm |
| 32 | 32 mm |
| 40 | 40 mm |
| 50 | 50 mm |
| 63 | 63 mm |

Port thread type

| Symbol | Type | Bore size     |
|--------|------|---------------|
| Nil    | M5   | ∅16, ∅20      |
|        | Rc   |               |
| TN     | NPT  | ∅25, ∅32, ∅40 |
| TF     | G    | ∅50, ∅63      |

Number of auto switches

|     |   |
|-----|---|
| Nil | 2 |
| S   | 1 |
| n   | n |

Auto switch

|     |                                       |
|-----|---------------------------------------|
| Nil | Without auto switch (Built-in magnet) |
|-----|---------------------------------------|

\* Click here for details on applicable auto switch models.

Cylinder stroke [mm]

| Bore size                  | Standard stroke*   | Long stroke  | Maximum manufacturable stroke |
|----------------------------|--|--|-------------------------------|
| 16, 20, 25, 32, 40, 50, 63 | 100, 200, 300, 400, 500, 600, 700, 800, 900, 1000, 1200, 1400, 1600, 1800, 2000<br>* The stroke can be manufactured in 1 mm increments from 1 mm stroke. | Strokes of 2001 to 3000 mm (1 mm increments) exceeding the standard stroke | 3000                          |

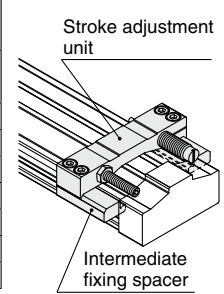
Ordering example

- \* Long stroke can be ordered the same as the standard stroke. 25A-MY3A25-3000L-M9BW
- \* Please be advised that with a stroke of 49 mm or less, there are cases where auto switch mounting is not possible, and the performance of the air cushion may decline.

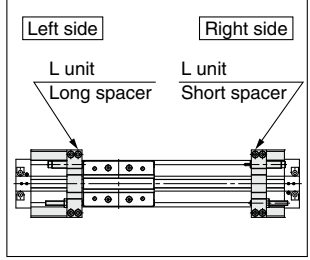
Stroke adjustment unit symbol

| Left side stroke adjustment unit                   | Without unit | Right side stroke adjustment unit |   |                  |                   |  |                   |                  |
|--|--------------|-----------------------------------|---|------------------|-------------------|--|-------------------|------------------|
|  |              | Without unit                      | L: With low load shock absorber + Adjustment bolt |                  |                   | H: With high load shock absorber + Adjustment bolt |                   |                  |
|  |              |                                   | With short spacer                                 | With long spacer | With short spacer | With long spacer                                   | With short spacer | With long spacer |
| Without unit                                       | Nil          | SL                                | SL6   | SL7              | SH                | SH6  | SH7               |                  |
| L: With low load shock absorber + Adjustment bolt  | LS           | L                                 | LL6   | LL7              | LH                | LH6  | LH7               |                  |
| With short spacer                                  | L6S          | L6L                               | L6  | L6L7             | L6H               | L6H6   | L6H7              |                  |
| With long spacer                                   | L7S          | L7L                               | L7L6  | L7               | L7H               | L7H6   | L7H7              |                  |
| H: With high load shock absorber + Adjustment bolt | HS           | HL                                | HL6   | HL7              | H                 | HH6  | HH7               |                  |
| With short spacer                                  | H6S          | H6L                               | H6L6  | H6L7             | H6H               | H6   | H6H7              |                  |
| With long spacer                                   | H7S          | H7L                               | H7L6  | H7L7             | H7H               | H7H6   | H7                |                  |

Stroke adjustment unit mounting diagram



Example of L7L6 attachment



\* Spacers are used to fix the stroke adjustment unit at an intermediate stroke position.

\* The 25A- series specifications and dimensions are the same as those of the standard model. For details, refer to the Web Catalog.



# Mechanically Jointed Rodless Cylinder Slide Bearing Guide Type

RoHS

# 25A-MY3M Series

∅16, ∅25, ∅40, ∅63



## How to Order

**25A-MY3 M 16**    - **300**    - **M9BW**   

Series compatible with secondary batteries

Slide bearing guide type

Cylinder bore size

|    |       |
|----|-------|
| 16 | 16 mm |
| 25 | 25 mm |
| 40 | 40 mm |
| 63 | 63 mm |

Port thread type

| Symbol | Type | Bore size     |
|--------|------|---------------|
| Nil    | M5   | ∅16           |
|        | Rc   |               |
| TN     | NPT  | ∅25, ∅40, ∅63 |
| TF     | G    |               |

Number of auto switches

|     |   |
|-----|---|
| Nil | 2 |
| S   | 1 |
| n   | n |

Auto switch

Nil Without auto switch (Built-in magnet)

\* [Click here](#) for details on applicable auto switch models.

Cylinder stroke [mm]

| Bore size      | Standard stroke*   | Long stroke  | Maximum manufacturable stroke |
|----------------|--|--|-------------------------------|
| 16, 25, 40, 63 | 100, 200, 300, 400, 500, 600, 700, 800, 900, 1000, 1200, 1400, 1600, 1800, 2000<br>* The stroke can be manufactured in 1 mm increments from 1 mm stroke. | Strokes of 2001 to 3000 mm (1 mm increments) exceeding the standard stroke | 3000                          |

Ordering example

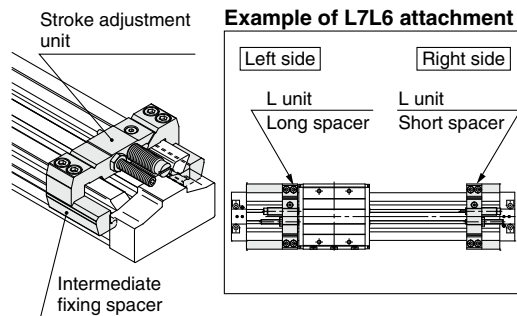
\* Long stroke can be ordered the same as the standard stroke. 25A-MY3M25-3000L-M9BW

\* Please be advised that with a stroke of 49 mm or less, there are cases where auto switch mounting is not possible, and the performance of the air cushion may decline.

Stroke adjustment unit symbol

|                                  |  | Right side stroke adjustment unit |   |                  |      |  |                  |      |
|----------------------------------|--|-----------------------------------|---|------------------|------|--|------------------|------|
|                                  |  | Without unit                      | L: With low load shock absorber + Adjustment bolt |                  |      | H: With high load shock absorber + Adjustment bolt |                  |      |
|                                  |  |                                   | With short spacer                                 | With long spacer |      | With short spacer                                  | With long spacer |      |
| Left side stroke adjustment unit | Without unit                                       | Nil                               | SL  | SL6              | SL7  | SH   | SH6              | SH7  |
|                                  | L: With low load shock absorber + Adjustment bolt  | LS                                | L   | LL6              | LL7  | LH   | LH6              | LH7  |
|                                  | With short spacer                                  | L6S                               | L6L   | L6               | L6L7 | L6H  | L6H6             | L6H7 |
|                                  | With long spacer                                   | L7S                               | L7L   | L7L6             | L7   | L7H  | L7H6             | L7H7 |
|                                  | H: With high load shock absorber + Adjustment bolt | HS                                | HL  | HL6              | HL7  | H  | HH6              | HH7  |
|                                  | With short spacer                                  | H6S                               | H6L   | H6L6             | H6L7 | H6H  | H6               | H6H7 |
| With long spacer                 | H7S  | H7L                               | H7L6  | H7L7             | H7H  | H7H6   | H7               |      |

Stroke adjustment unit mounting diagram



\* Spacers are used to fix the stroke adjustment unit at an intermediate stroke position.

\* The 25A-series specifications and dimensions are the same as those of the standard model.

For details, refer to the [Web Catalog](#).

# Magnetically Coupled Rodless Cylinder/Basic Type

# 25A-CY3B Series

ø6, ø10, ø15, ø20, ø25, ø32, ø40, ø50, ø63

RoHS

## How to Order



**25A - CY3B 25 [ ] - 300**

Series compatible with secondary batteries

Basic type

Bore size

|    |       |
|----|-------|
| 6  | 6 mm  |
| 10 | 10 mm |
| 15 | 15 mm |
| 20 | 20 mm |
| 25 | 25 mm |
| 32 | 32 mm |
| 40 | 40 mm |
| 50 | 50 mm |
| 63 | 63 mm |

Port thread type

| Symbol | Type     | Bore size                |
|--------|----------|--------------------------|
| Nil    | M thread | 6, 10, 15                |
|        | Rc       | 20, 25, 32, 40<br>50, 63 |
| TN     | NPT      |                          |
| TF     | G        |                          |

Standard stroke [mm]

| Bore size  | Standard stroke   | Max. manufacturable stroke |
|------------|---|----------------------------|
| 6          | 50, 100, 150, 200   | 300                        |
| 10         | 50, 100, 150, 200, 250, 300   | 500                        |
| 15         | 50, 100, 150, 200, 250, 300, 350<br>400, 450, 500                       | 1000                       |
| 20         | 100, 150, 200, 250, 300, 350<br>400, 450, 500, 600, 700, 800            | 1500                       |
| 25         |   | 2000                       |
| 32         |   |                            |
| 40, 50, 63 | 100, 150, 200, 250, 300, 350, 400<br>450, 500, 600, 700, 800, 900, 1000 |                            |

- \* Please contact SMC if the maximum stroke is exceeded.
- \* The longer the stroke, the larger the amount of deflection in a cylinder tube. Pay attention to the mounting bracket and clearance value.
- \* Intermediate stroke is available in 1 mm increments.

- \* The 25A- series specifications and dimensions are the same as those of the standard model.

For details, refer to the [Web Catalog](#).

# Magnetically Coupled Rodless Cylinder/Direct Mount Type

## 25A-CY3R Series

ø6, ø10, ø15, ø20, ø25, ø32, ø40, ø50, ø63

RoHS

### How to Order



25A - CY3R [ ] [ ] - 25 [ ] [ ] - 300 [ ] [ ] - M9BWL [ ] [ ]

Series compatible with secondary batteries

Direct mount type

#### Piping type

|     |                         |
|-----|-------------------------|
| Nil | Standard type           |
| G   | Centralized piping type |

\* Type G (centralized piping) is not available for ø6.

#### Bore size

|    |       |
|----|-------|
| 6  | 6 mm  |
| 10 | 10 mm |
| 15 | 15 mm |
| 20 | 20 mm |
| 25 | 25 mm |
| 32 | 32 mm |
| 40 | 40 mm |
| 50 | 50 mm |
| 63 | 63 mm |

#### Port thread type

| Symbol | Type     | Bore size              |
|--------|----------|------------------------|
| Nil    | M thread | 6, 10, 15              |
|        | Rc       | 20, 25, 32, 40, 50, 63 |
| TN     | NPT      |                        |
| TF     | G        |                        |

#### Number of auto switches

|     |   |
|-----|---|
| Nil | 2 |
| S   | 1 |
| n   | n |

#### Auto switch

|     |            |  |
|-----|------------|--|
| Nil | ø6 to ø15  | Without auto switch (Built-in magnet)                        |
|     | ø25 to ø63 |  |
| M   | ø20        | Without auto switch (Built-in magnet for reed switch)        |
|     |            | Without auto switch (Built-in magnet for solid state switch) |

\* [Click here](#) for details on applicable auto switch models.

#### Switch rail

|     |                     |
|-----|---------------------|
| Nil | With switch rail    |
| N   | Without switch rail |

- \* A type with switch rail has built-in auto switch magnets.
- \* ø15 has built-in auto switch magnets even without switch rail.
- \* Centralized piping type (G) is not available without switch rail (N).

#### Cylinder stroke [mm]

| Bore size  | Standard stroke   | Max. stroke without switch | Max. stroke with switch |
|------------|---|----------------------------|-------------------------|
| 6          | 50, 100, 150, 200   | 300                        | 300                     |
| 10         | 50, 100, 150, 200, 250, 300   | 500                        | 500                     |
| 15         | 50, 100, 150, 200, 250, 300, 350, 400, 450, 500                       | 1000                       | 750                     |
| 20         | 100, 150, 200, 250, 300, 350, 400, 450, 500, 600, 700, 800            | 1500                       | 1000                    |
| 25         |   |                            | 1200                    |
| 32         |   |                            |                         |
| 40, 50, 63 | 100, 150, 200, 250, 300, 350, 400, 450, 500, 600, 700, 800, 900, 1000 | 2000                       | 1500                    |

- \* The longer the stroke, the larger the amount of deflection in a cylinder tube. Pay attention to the mounting bracket and clearance value.
- \* Intermediate stroke is available in 1 mm increments.

\* The 25A- series specifications and dimensions are the same as those of the standard model.

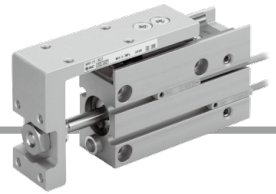
For details, refer to the [Web Catalog](#).

# Compact Slide

# 25A-MXH Series

ø6, ø10, ø16, ø20

RoHS



## How to Order

**25A - MXH 10 - 60 Z - M9BW**  

Series compatible with secondary batteries

Compact slide

Bore size

|    |       |
|----|-------|
| 6  | 6 mm  |
| 10 | 10 mm |
| 16 | 16 mm |
| 20 | 20 mm |

Number of auto switches

|     |   |
|-----|---|
| Nil | 2 |
| S   | 1 |

Auto switch

|     |                                       |
|-----|---------------------------------------|
| Nil | Without auto switch (Built-in magnet) |
|-----|---------------------------------------|

\* [Click here](#) for details on applicable auto switch models.

Cylinder stroke [mm]

|               |                                     |
|---------------|-------------------------------------|
| 6, 10, 16, 20 | 5, 10, 15, 20, 25, 30, 40<br>50, 60 |
|---------------|-------------------------------------|

\* The 25A- series specifications and dimensions are the same as those of the standard model.

For details, refer to the [Web Catalog](#).



# Air Slide Table

## 25A-MXS Series

∅6, ∅8, ∅12, ∅16, ∅20, ∅25



### How to Order

**Air slide table** **25A - MXS** **16** **□** **□** - **50** **AS** - **M9BW** **□**

Series compatible with secondary batteries

#### Port thread type

|     |          |           |
|-----|----------|-----------|
| Nil | M thread | ∅6 to ∅16 |
|     | Rc       |           |
| TN  | NPT      | ∅20, ∅25  |
| TF  | G        |           |

#### Symmetric type

|     |                |
|-----|----------------|
| Nil | Standard type  |
| L   | Symmetric type |

#### Bore size (Standard stroke [mm])

|           |                                       |
|-----------|---------------------------------------|
| <b>6</b>  | 10, 20, 30, 40, 50                    |
| <b>8</b>  | 10, 20, 30, 40, 50, 75                |
| <b>12</b> | 10, 20, 30, 40, 50, 75, 100           |
| <b>16</b> | 10, 20, 30, 40, 50, 75, 100, 125      |
| <b>20</b> | 10, 20, 30, 40, 50, 75, 100, 125, 150 |
| <b>25</b> | 10, 20, 30, 40, 50, 75, 100, 125, 150 |

#### Number of auto switches

|     |   |
|-----|---|
| Nil | 2 |
| S   | 1 |
| n   | n |

#### Auto switch

|     |                                       |
|-----|---------------------------------------|
| Nil | Without auto switch (Built-in magnet) |
|-----|---------------------------------------|

\* [Click here](#) for details on applicable auto switch models.

#### Adjuster option

|      |  |
|------|--|
| Nil  | Without adjuster                                       |
| AS   | Adjuster on extension end                              |
| AT   | Adjuster on retraction end                             |
| A    | Adjuster on both ends                                  |
| BS   | Absorber on extension end                              |
| BT   | Absorber on retraction end                             |
| B    | Absorber on both ends                                  |
| ASBT | Adjuster on extension end + Absorber on retraction end |
| BSAT | Absorber on extension end + Adjuster on retraction end |

\* With shock absorber is not available in the 25A-MXS6 series.

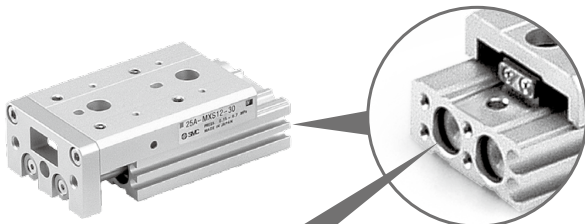
\* When the adjuster option with shock absorber is used, metal-to-metal collisions occur, and may generate dust particles.

### Corrosion Resistant Air Slide Table

(Made to order: 25A-MXS□-X1949)

The material of the head cap part has been changed to a highly corrosion-resistant material.

Please contact your local sales representative for more details.



|          | After change | Before change   |
|----------|--------------|-----------------|
| Head cap | Aluminum     | Synthetic resin |

\* The 25A- series specifications and dimensions are the same as those of the standard model.

For details, refer to the [Web Catalog](#).

# Air Slide Table Double-ported Type



# 25A-MXQ□□A Series

∅6, ∅8, ∅12, ∅16, ∅20, ∅25

## How to Order



**25A - MXQ** **12** **A** - **30** **ZA** **□** - **M9BW** **□**

Series compatible with secondary batteries

1 2 3 4 5 6 7

| 1<br>Bore size | 2 Body option: Double-ported type |  | 3 Standard stroke [mm]                |
|----------------|-----------------------------------|--|---------------------------------------|
|                | A                                 |  |                                       |
| 6              |                                   |  | 10, 20, 30, 40, 50                    |
| 8              |                                   |  | 10, 20, 30, 40, 50, 75                |
| 12             |                                   |  | 10, 20, 30, 40, 50, 75, 100           |
| 16             |                                   |  | 10, 20, 30, 40, 50, 75, 100, 125      |
| 20             |                                   |  | 10, 20, 30, 40, 50, 75, 100, 125, 150 |
| 25             |                                   |  | 10, 20, 30, 40, 50, 75, 100, 125, 150 |

### 5 Functional options

| Symbol | Functional option         |
|--------|---------------------------|
| Nil    | Without functional option |
| 1      | With buffer               |
| 2      | With end lock             |
| 3      | Axial piping              |
| 4      | With buffer, end lock     |
| 5      | With buffer, axial piping |

### 7 Number of auto switches

| Symbol | Number of auto switches |
|--------|-------------------------|
| Nil    | 2                       |
| S      | 1                       |
| n      | n                       |

### 6 Auto switch

|     |                                       |
|-----|---------------------------------------|
| Nil | Without auto switch (Built-in magnet) |
|-----|---------------------------------------|

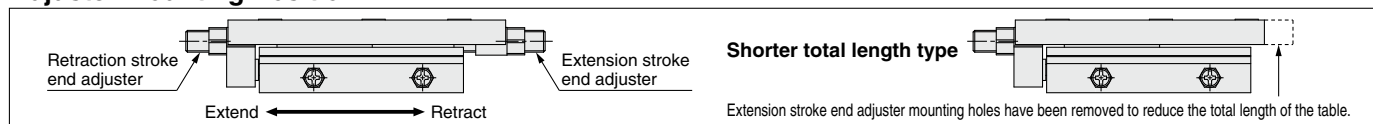
\* [Click here](#) for details on applicable auto switch models.

### 4 Adjuster options/Functional option combinations

| Symbol | Adjuster type*6             |                           | Adjuster mounting position*1 |                       | Functional option combination |                 |               |                |                           |                                 |  |
|--------|-----------------------------|---------------------------|------------------------------|-----------------------|-------------------------------|-----------------|---------------|----------------|---------------------------|---------------------------------|--|
|        |                             |                           | Extension stroke end         | Retraction stroke end | Nil                           | 1               | 2             | 3              | 4                         | 5                               |  |
|        |                             |                           |                              |                       | Without functional option     | With buffer*2*7 | With end lock | Axial piping*5 | With buffer, end lock*2*7 | With buffer, axial piping*2*5*7 |  |
| Z      | Without adjuster            |                           |                              |                       | ○                             | ○               | ○             | ○              | ○                         | ○                               |  |
| ZA     |                             |                           | ●                            | ●                     | ○                             | ×               | ×             | ○              | ×                         | ×                               |  |
| ZB     | Metal stopper with bumper   |                           | ●                            |                       | ○                             | ×               | ○             | ○              | ×                         | ×                               |  |
| ZC     |                             |                           |                              | ●                     | ○                             | ×               | ×             | ○              | ×                         | ×                               |  |
| ZD     | Rubber stopper              |                           | ●                            | ●                     | ○                             | ×               | ×             | ○              | ×                         | ×                               |  |
| ZE     |                             |                           | ●                            |                       | ○                             | ○               | ○             | ○              | ○                         | ○                               |  |
| ZF     |                             |                           |                              | ●                     | ○                             | ×               | ×             | ○              | ×                         | ×                               |  |
| ZG     | Shock absorber/RJ           |                           | ●                            | ●                     | ○                             | ×               | ×             | ○              | ×                         | ×                               |  |
| ZH     |                             |                           | ●                            |                       | ○                             | ×               | ○             | ○              | ×                         | ×                               |  |
| ZJ     |                             |                           |                              | ●                     | ○                             | ×               | ×             | ○              | ×                         | ×                               |  |
| ZK     | Metal stopper               |                           | ●                            | ●                     | ○                             | ×               | ×             | ○              | ×                         | ×                               |  |
| ZL     |                             |                           | ●                            |                       | ○                             | ○               | ○             | ○              | ○                         | ○                               |  |
| ZM     |                             |                           |                              | ●                     | ○                             | ×               | ×             | ○              | ×                         | ×                               |  |
| ZN     |                             |                           |                              |                       | ○                             | ○*4             | ×             | ○              | ×                         | ○*4                             |  |
| ZP     | Shorter total length type*3 |                           |                              |                       | ●                             | ○               | ×             | ×              | ○                         | ×                               |  |
| ZQ     |                             |                           |                              |                       | ●                             | ○               | ×             | ×              | ○                         | ×                               |  |
| ZR     |                             |                           |                              |                       | ●                             | ○               | ×             | ×              | ○                         | ×                               |  |
| ZS     |                             |                           |                              |                       | ●                             | ○               | ×             | ×              | ○                         | ×                               |  |
| ZT     |                             |                           |                              |                       | ●                             | ○               | ×             | ×              | ○                         | ×                               |  |
| ZBF    | Metal stopper with bumper   | Without adjuster          | ●                            | ●                     | ○                             | ×               | ×             | ○              | ×                         | ×                               |  |
| ZBJ    |                             | Rubber stopper            | ●                            | ●                     | ○                             | ×               | ×             | ○              | ×                         | ×                               |  |
| ZBM    |                             | Shock absorber/RJ         | ●                            | ●                     | ○                             | ×               | ×             | ○              | ×                         | ×                               |  |
| ZEC    | Rubber stopper              | Metal stopper             | ●                            | ●                     | ○                             | ×               | ×             | ○              | ×                         | ×                               |  |
| ZED    |                             | Shock absorber/RJ         | ●                            | ●                     | ○                             | ×               | ×             | ○              | ×                         | ×                               |  |
| ZEE    |                             | Metal stopper             | ●                            | ●                     | ○                             | ×               | ×             | ○              | ×                         | ×                               |  |
| ZEF    | Shock absorber/RJ           | Metal stopper             | ●                            | ●                     | ○                             | ×               | ×             | ○              | ×                         | ×                               |  |
| ZEG    |                             | Metal stopper with bumper | ●                            | ●                     | ○                             | ×               | ×             | ○              | ×                         | ×                               |  |
| ZEH    |                             | Rubber stopper            | ●                            | ●                     | ○                             | ×               | ×             | ○              | ×                         | ×                               |  |
| ZEI    | Metal stopper               | Metal stopper             | ●                            | ●                     | ○                             | ×               | ×             | ○              | ×                         | ×                               |  |
| ZEJ    |                             | Rubber stopper            | ●                            | ●                     | ○                             | ×               | ×             | ○              | ×                         | ×                               |  |
| ZEK    |                             | Shock absorber/RJ         | ●                            | ●                     | ○                             | ×               | ×             | ○              | ×                         | ×                               |  |
| ZEL    | Metal stopper               | Metal stopper with bumper | ●                            | ●                     | ○                             | ×               | ×             | ○              | ×                         | ×                               |  |
| ZEM    |                             | Rubber stopper            | ●                            | ●                     | ○                             | ×               | ×             | ○              | ×                         | ×                               |  |
| ZEN    |                             | Shock absorber/RJ         | ●                            | ●                     | ○                             | ×               | ×             | ○              | ×                         | ×                               |  |
| ZEO    | Metal stopper               | Metal stopper             | ●                            | ●                     | ○                             | ×               | ×             | ○              | ×                         | ×                               |  |
| ZEP    |                             | Rubber stopper            | ●                            | ●                     | ○                             | ×               | ×             | ○              | ×                         | ×                               |  |
| ZEQ    |                             | Shock absorber/RJ         | ●                            | ●                     | ○                             | ×               | ×             | ○              | ×                         | ×                               |  |

- \*1 ●: Shipped together with the product, but not assembled. Without any symbol for the adjuster mounting position: The adjuster can be mounted afterward.
- \*2 For the buffer mechanism, the buffer stroke will be shorter for the stroke that is adjusted by the extension stroke end adjuster.
- \*3 Extension stroke end adjuster mounting holes have been removed to reduce the total length of the table.
- \*4 The shorter total length type can be used, but a retraction stroke end adjuster cannot be mounted afterward.
- \*5 There is no piping port on the side surface of the product.
- \*6 The metal stopper with bumper option is not available for ∅6.
- \*7 As there is no magnet in the buffer mechanism, auto switches cannot be used on the buffer part.

### Adjuster Mounting Position



- \* When the shock absorber, metal stopper with bumper, or adjuster option with metal stopper is used, metal-to-metal collisions occur, and may generate dust particles.
- \* When the buffer mechanism or the end lock mechanism functional options are used, dust particles may be generated by the buffer part as well as the end lock part.

\* The 25A- series specifications and dimensions are the same as those of the standard model. For details, refer to the [Web Catalog](#).

# Air Slide Table

## Low Thrust with High Rigidity Type



# 25A-MXQ□B Series

∅6, ∅8, ∅12, ∅16, ∅20

### How to Order



25A - MXQ **12** **B** - **30** **ZA** - **M9BW** **□**

Series compatible with secondary batteries

1 2 3 4 5 6

| 1<br>Bore size | 2 Body option      |                      | 3 Standard stroke [mm]                |
|----------------|--------------------|----------------------|---------------------------------------|
|                | Standard type<br>B | Symmetric type<br>BL |                                       |
| 6              |                    |                      | 10, 20, 30, 40, 50, 75                |
| 8              |                    |                      | 10, 20, 30, 40, 50, 75, 100           |
| 12             |                    |                      | 10, 20, 30, 40, 50, 75, 100, 125      |
| 16             |                    | —*1                  | 10, 20, 30, 40, 50, 75, 100, 125, 150 |
| 20             |                    |                      | 10, 20, 30, 40, 50, 75, 100, 125, 150 |

\*1 Not available, as the standard model has piping ports and auto switch mounting grooves on both sides. Please use the standard type.

#### 4 Adjuster options

| Symbol | Adjuster type*3           | Adjuster mounting position*1   |                       |   |
|--------|---------------------------|--------------------------------|-----------------------|---|
|        |                           | Extension stroke end           | Retraction stroke end |   |
| Z      | Without adjuster          |                                |                       |   |
| ZA     |                           | ●                              | ●                     |   |
| ZB     | Metal stopper with bumper | ●                              |                       |   |
| ZC     |                           |                                | ●                     |   |
| ZD     |                           | ●                              | ●                     |   |
| ZE     | Rubber stopper            | ●                              |                       |   |
| ZF     |                           |                                | ●                     |   |
| ZG     |                           | ●                              | ●                     |   |
| ZH     | Shock absorber/RJ         | ●                              |                       |   |
| ZJ     |                           |                                | ●                     |   |
| ZK     |                           | ●                              | ●                     |   |
| ZL     | Metal stopper             | ●                              |                       |   |
| ZM     |                           |                                | ●                     |   |
| ZN     | Without adjuster          |                                |                       |   |
| ZP     | Rubber stopper            |                                | ●                     |   |
| ZQ     | Shock absorber/RJ         |                                | ●                     |   |
| ZS     | Metal stopper with bumper |                                | ●                     |   |
| ZT     | Metal stopper             |                                | ●                     |   |
| ZBF    | Metal stopper with bumper | Retraction stroke end adjuster | ●                     | ● |
| ZBJ    |                           |                                | ●                     | ● |
| ZBM    | Rubber stopper            | Retraction stroke end adjuster | ●                     | ● |
| ZEC    |                           |                                | ●                     | ● |
| ZEJ    | Shock absorber/RJ         | Retraction stroke end adjuster | ●                     | ● |
| ZEM    |                           |                                | ●                     | ● |
| ZHC    | Metal stopper with bumper | Retraction stroke end adjuster | ●                     | ● |
| ZHF    |                           |                                | ●                     | ● |
| ZHM    | Rubber stopper            | Retraction stroke end adjuster | ●                     | ● |
| ZLC    |                           |                                | ●                     | ● |
| ZLF    | Metal stopper             | Retraction stroke end adjuster | ●                     | ● |
| ZLJ    |                           |                                | ●                     | ● |

#### 5 Auto switch

**Nil** Without auto switch (Built-in magnet)

\* [Click here](#) for details on applicable auto switch models.

#### 6 Number of auto switches

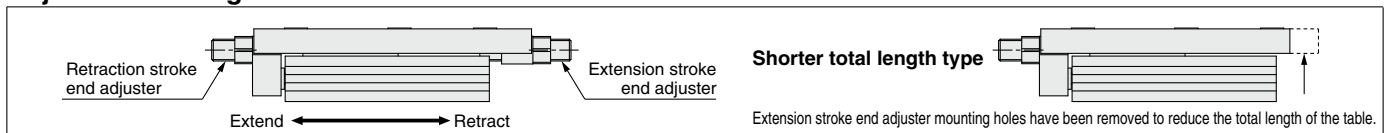
|            |   |
|------------|---|
| <b>Nil</b> | 2 |
| <b>S</b>   | 1 |
| <b>n</b>   | n |

\*1 ●: Shipped together with the product, but not assembled  
Without any symbol for the adjuster mounting position: The adjuster can be mounted afterward.

\*2 Extension stroke end adjuster mounting holes have been removed to reduce the total length of the table.

\*3 The metal stopper with bumper option is not available for ∅6.

#### Adjuster Mounting Position



\* When the shock absorber, metal stopper with bumper, or adjuster option with metal stopper is used, metal-to-metal collisions occur, and may generate dust particles.

\* The 25A- series specifications and dimensions are the same as those of the standard model. **For details, refer to the Web Catalog.**

# Air Slide Table

## Single Side-ported Type

# 25A-MXQ□C Series

ø8, ø12

RoHS

### How to Order

25A - MXQ **12** **C** - **30** **ZA** □ - **M9BW** □

Series compatible with secondary batteries



| 1<br>Bore size | 2 Body option               |                             | 3<br>Standard stroke [mm]   |
|----------------|-----------------------------|-----------------------------|-----------------------------|
|                | Standard type<br>C          | Symmetric type<br>CL        |                             |
| 8              | Port Switch mounting groove | Switch mounting groove Port | 10, 20, 30, 40, 50, 75      |
| 12             | Port Switch mounting groove | Switch mounting groove Port | 10, 20, 30, 40, 50, 75, 100 |

| 5 Functional options |                           |
|----------------------|---------------------------|
| Symbol               | Functional option         |
| Nil                  | Without functional option |
| 1                    | With buffer               |
| 2                    | With end lock             |
| 3                    | Axial piping              |
| 4                    | With buffer, end lock     |
| 5                    | With buffer, axial piping |

| 6 Auto switch |                                       |
|---------------|---------------------------------------|
| Symbol        | Auto switch                           |
| Nil           | Without auto switch (Built-in magnet) |

\* [Click here](#) for details on applicable auto switch models.

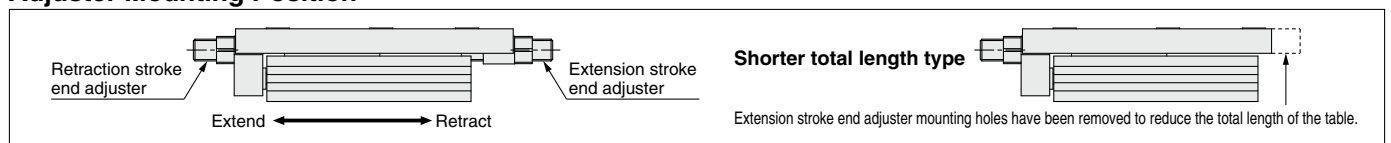
| 7 Number of auto switches |                         |
|---------------------------|-------------------------|
| Symbol                    | Number of auto switches |
| Nil                       | 2                       |
| S                         | 1                       |
| n                         | n                       |

### 4 Adjuster options/Functional option combinations

| Symbol | Adjuster type                 |                           | Adjuster mounting position*1 |                       | Functional option combination |                  |               |                |                            |                                  |
|--------|-------------------------------|---------------------------|------------------------------|-----------------------|-------------------------------|------------------|---------------|----------------|----------------------------|----------------------------------|
|        |                               |                           |                              |                       | Nil                           | 1                | 2             | 3              | 4                          | 5                                |
|        |                               |                           | Extension stroke end         | Retraction stroke end | Without functional option     | *2*6 With buffer | With end lock | Axial piping*5 | *2*6 With buffer, end lock | *3*5*6 With buffer, axial piping |
| Z      | Without adjuster              |                           |                              |                       | ○                             | ○                | ○             | ○              | ○                          | ○                                |
| ZA     | Metal stopper with bumper     |                           | ●                            | ●                     | ○                             | ×                | ×             | ○              | ×                          | ×                                |
| ZB     | Metal stopper with bumper     |                           | ●                            | ●                     | ○                             | ×                | ○             | ○              | ×                          | ×                                |
| ZC     | Metal stopper with bumper     |                           | ●                            | ●                     | ○                             | ×                | ×             | ○              | ×                          | ×                                |
| ZD     | Rubber stopper                |                           | ●                            | ●                     | ○                             | ×                | ×             | ○              | ×                          | ×                                |
| ZE     | Rubber stopper                |                           | ●                            | ●                     | ○                             | ○                | ○             | ○              | ○                          | ○                                |
| ZF     | Rubber stopper                |                           | ●                            | ●                     | ○                             | ×                | ×             | ○              | ×                          | ×                                |
| ZG     | Rubber stopper                |                           | ●                            | ●                     | ○                             | ×                | ×             | ○              | ×                          | ×                                |
| ZH     | Shock absorber/RJ             |                           | ●                            | ●                     | ○                             | ×                | ○             | ○              | ×                          | ×                                |
| ZJ     | Shock absorber/RJ             |                           | ●                            | ●                     | ○                             | ×                | ×             | ○              | ×                          | ×                                |
| ZK     | Metal stopper                 |                           | ●                            | ●                     | ○                             | ×                | ×             | ○              | ×                          | ×                                |
| ZL     | Metal stopper                 |                           | ●                            | ●                     | ○                             | ○                | ○             | ○              | ○                          | ○                                |
| ZM     | Metal stopper                 |                           | ●                            | ●                     | ○                             | ×                | ×             | ○              | ×                          | ×                                |
| ZN     | Shorter overall length type*3 |                           |                              |                       | ○                             | ○*4              | ×             | ○              | ×                          | ○*4                              |
| ZP     | Shorter overall length type*3 |                           |                              |                       | ○                             | ×                | ×             | ○              | ×                          | ×                                |
| ZQ     | Shorter overall length type*3 |                           |                              |                       | ○                             | ×                | ×             | ○              | ×                          | ×                                |
| ZR     | Shorter overall length type*3 |                           |                              |                       | ○                             | ×                | ×             | ○              | ×                          | ×                                |
| ZS     | Shorter overall length type*3 |                           |                              |                       | ○                             | ×                | ×             | ○              | ×                          | ×                                |
| ZT     | Shorter overall length type*3 |                           |                              |                       | ○                             | ×                | ×             | ○              | ×                          | ×                                |
| ZBF    | Metal stopper with bumper     | Without adjuster          |                              |                       | ○                             | ○*4              | ×             | ○              | ×                          | ○*4                              |
| ZBJ    |                               | Rubber stopper            | ●                            | ●                     | ○                             | ×                | ×             | ○              | ×                          | ×                                |
| ZBM    | Rubber stopper                | Shock absorber/RJ         | ●                            | ●                     | ○                             | ×                | ×             | ○              | ×                          | ×                                |
| ZBZ    |                               | Metal stopper             | ●                            | ●                     | ○                             | ×                | ×             | ○              | ×                          | ×                                |
| ZCJ    | Shock absorber/RJ             | Metal stopper with bumper | ●                            | ●                     | ○                             | ×                | ×             | ○              | ×                          | ×                                |
| ZCZ    |                               | Rubber stopper            | ●                            | ●                     | ○                             | ×                | ×             | ○              | ×                          | ×                                |
| ZDJ    | Metal stopper                 | Without adjuster          |                              |                       | ○                             | ○*4              | ×             | ○              | ×                          | ○*4                              |
| ZDJ    |                               | Rubber stopper            | ●                            | ●                     | ○                             | ×                | ×             | ○              | ×                          | ×                                |
| ZDJ    | Shock absorber/RJ             | Shock absorber/RJ         | ●                            | ●                     | ○                             | ×                | ×             | ○              | ×                          | ×                                |
| ZDJ    |                               | Metal stopper             | ●                            | ●                     | ○                             | ×                | ×             | ○              | ×                          | ×                                |
| ZDJ    | Metal stopper with bumper     | Without adjuster          |                              |                       | ○                             | ○*4              | ×             | ○              | ×                          | ○*4                              |
| ZDJ    |                               | Rubber stopper            | ●                            | ●                     | ○                             | ×                | ×             | ○              | ×                          | ×                                |
| ZDJ    | Shock absorber/RJ             | Shock absorber/RJ         | ●                            | ●                     | ○                             | ×                | ×             | ○              | ×                          | ×                                |
| ZDJ    |                               | Metal stopper             | ●                            | ●                     | ○                             | ×                | ×             | ○              | ×                          | ×                                |
| ZDJ    | Metal stopper                 | Without adjuster          |                              |                       | ○                             | ○*4              | ×             | ○              | ×                          | ○*4                              |
| ZDJ    |                               | Rubber stopper            | ●                            | ●                     | ○                             | ×                | ×             | ○              | ×                          | ×                                |
| ZDJ    | Shock absorber/RJ             | Shock absorber/RJ         | ●                            | ●                     | ○                             | ×                | ×             | ○              | ×                          | ×                                |
| ZDJ    |                               | Metal stopper             | ●                            | ●                     | ○                             | ×                | ×             | ○              | ×                          | ×                                |
| ZDJ    | Metal stopper with bumper     | Without adjuster          |                              |                       | ○                             | ○*4              | ×             | ○              | ×                          | ○*4                              |
| ZDJ    |                               | Rubber stopper            | ●                            | ●                     | ○                             | ×                | ×             | ○              | ×                          | ×                                |
| ZDJ    | Shock absorber/RJ             | Shock absorber/RJ         | ●                            | ●                     | ○                             | ×                | ×             | ○              | ×                          | ×                                |
| ZDJ    |                               | Metal stopper             | ●                            | ●                     | ○                             | ×                | ×             | ○              | ×                          | ×                                |
| ZDJ    | Metal stopper                 | Without adjuster          |                              |                       | ○                             | ○*4              | ×             | ○              | ×                          | ○*4                              |
| ZDJ    |                               | Rubber stopper            | ●                            | ●                     | ○                             | ×                | ×             | ○              | ×                          | ×                                |
| ZDJ    | Shock absorber/RJ             | Shock absorber/RJ         | ●                            | ●                     | ○                             | ×                | ×             | ○              | ×                          | ×                                |
| ZDJ    |                               | Metal stopper             | ●                            | ●                     | ○                             | ×                | ×             | ○              | ×                          | ×                                |

- \*1 ●: Shipped together with the product, but not assembled Without any symbol for the adjuster mounting position: The adjuster can be mounted afterward.
- \*2 For the buffer mechanism, the buffer stroke will be shorter for the stroke that is adjusted by the extension stroke end adjuster.
- \*3 Extension stroke end adjuster mounting holes have been removed to reduce the total length of the table.
- \*4 The shorter total length type can be used, but a retraction stroke end adjuster cannot be mounted afterward.
- \*5 There is no piping port on the side surface of the product.
- \*6 As there is no magnet in the buffer mechanism, auto switches cannot be used on the buffer part.

### Adjuster Mounting Position



- \* When the shock absorber, metal stopper with bumper, or adjuster option with metal stopper is used, metal-to-metal collisions occur, and may generate dust particles.
- \* When the buffer mechanism or the end lock mechanism functional options are used, dust particles may be generated by the buffer part as well as the end lock part.

\* The 25A- series specifications and dimensions are the same as those of the standard model.

For details, refer to the [Web Catalog](#).

# Air Slide Table Height Interchangeable Type

RoHS

# 25A-MXQ Series

∅6, ∅8, ∅12, ∅16, ∅20, ∅25

## How to Order



25A - MXQ 12   - 30 ZA   - M9BW  

Series compatible with secondary batteries

1 2 3 4 5 6 7

| 1 Bore size | 2 Body option |                | 3 Standard stroke [mm]                |
|-------------|---------------|----------------|---------------------------------------|
|             | Standard type | Symmetric type |                                       |
|             | Nil           | L              |                                       |
| 6           |               |                | 10, 20, 30, 40, 50                    |
| 8           |               |                | 10, 20, 30, 40, 50, 75                |
| 12          |               |                | 10, 20, 30, 40, 50, 75, 100           |
| 16          |               | —*1            | 10, 20, 30, 40, 50, 75, 100, 125      |
| 20          |               | —*1            | 10, 20, 30, 40, 50, 75, 100, 125, 150 |
| 25          |               | —*1            | 10, 20, 30, 40, 50, 75, 100, 125, 150 |

\*1 Not available, as the standard model has piping ports and auto switch mounting grooves on both sides. Please use the standard type.

### 5 Functional options

| Symbol | Functional option         |
|--------|---------------------------|
| Nil    | Without functional option |
| 1      | With buffer               |
| 2      | With end lock             |
| 3      | Axial piping              |
| 4      | With buffer, end lock     |
| 5      | With buffer, axial piping |

### 7 Number of auto switches

| Symbol | Number of auto switches |
|--------|-------------------------|
| Nil    | 2                       |
| S      | 1                       |
| n      | n                       |

### 6 Auto switch

| Symbol | Auto switch                           |
|--------|---------------------------------------|
| Nil    | Without auto switch (Built-in magnet) |

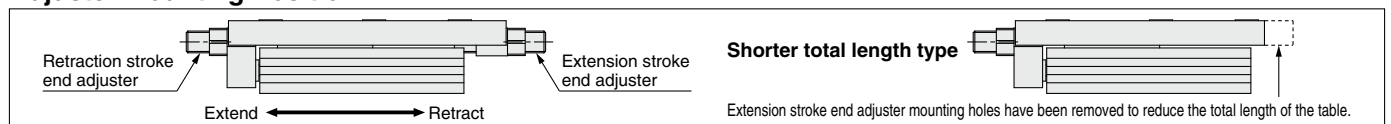
\* Click here for details on applicable auto switch models.

### 4 Adjuster options/Functional option combinations

| Symbol | Adjuster type*6             | Adjuster mounting position*1 |                       | Functional option combination |     |   |   |   |     |
|--------|-----------------------------|------------------------------|-----------------------|-------------------------------|-----|---|---|---|-----|
|        |                             | Extension stroke end         | Retraction stroke end | Nil                           | 1   | 2 | 3 | 4 | 5   |
| Z      | Without adjuster            |                              |                       | ○                             | ○   | ○ | ○ | ○ | ○   |
| ZA     | Metal stopper with bumper   | ●                            | ●                     | ○                             | ×   | × | ○ | × | ×   |
| ZB     |                             | ●                            | ●                     | ○                             | ×   | ○ | ○ | × | ×   |
| ZC     |                             | ●                            | ●                     | ○                             | ×   | × | ○ | × | ×   |
| ZD     |                             | ●                            | ●                     | ○                             | ×   | × | ○ | × | ×   |
| ZE     | Rubber stopper              | ●                            | ●                     | ○                             | ○   | ○ | ○ | ○ | ○   |
| ZF     |                             | ●                            | ●                     | ○                             | ×   | × | ○ | × | ×   |
| ZG     |                             | ●                            | ●                     | ○                             | ×   | × | ○ | × | ×   |
| ZH     | Shock absorber/RJ           | ●                            | ●                     | ○                             | ×   | ○ | ○ | × | ×   |
| ZJ     |                             | ●                            | ●                     | ○                             | ×   | × | ○ | × | ×   |
| ZK     | Metal stopper               | ●                            | ●                     | ○                             | ×   | × | ○ | × | ×   |
| ZL     |                             | ●                            | ●                     | ○                             | ○   | ○ | ○ | ○ | ○   |
| ZM     |                             | ●                            | ●                     | ○                             | ×   | × | ○ | × | ×   |
| ZN     | Shorter total length type*3 | Without adjuster             |                       | ○                             | ○*4 | × | ○ | × | ○*4 |
| ZP     |                             | Rubber stopper               | ●                     | ●                             | ○   | × | × | ○ | ×   |
| ZQ     |                             | Shock absorber/RJ            | ●                     | ●                             | ○   | × | × | ○ | ×   |
| ZS     |                             | Metal stopper with bumper    | ●                     | ●                             | ○   | × | × | ○ | ×   |
| ZT     |                             | Metal stopper                | ●                     | ●                             | ○   | × | × | ○ | ×   |
| ZBF    | Metal stopper with bumper   | Rubber stopper               | ●                     | ●                             | ○   | × | × | ○ | ×   |
| ZBJ    |                             | Shock absorber/RJ            | ●                     | ●                             | ○   | × | × | ○ | ×   |
| ZBM    | Rubber stopper              | Metal stopper                | ●                     | ●                             | ○   | × | × | ○ | ×   |
| ZEC    |                             | Metal stopper with bumper    | ●                     | ●                             | ○   | × | × | ○ | ×   |
| ZEJ    |                             | Shock absorber/RJ            | ●                     | ●                             | ○   | × | × | ○ | ×   |
| ZEM    | Shock absorber/RJ           | Metal stopper                | ●                     | ●                             | ○   | × | × | ○ | ×   |
| ZHC    |                             | Metal stopper with bumper    | ●                     | ●                             | ○   | × | × | ○ | ×   |
| ZHF    | Metal stopper               | Rubber stopper               | ●                     | ●                             | ○   | × | × | ○ | ×   |
| ZHM    |                             | Metal stopper with bumper    | ●                     | ●                             | ○   | × | × | ○ | ×   |
| ZLC    | Metal stopper               | Metal stopper with bumper    | ●                     | ●                             | ○   | × | × | ○ | ×   |
| ZLF    |                             | Rubber stopper               | ●                     | ●                             | ○   | × | × | ○ | ×   |
| ZLJ    |                             | Shock absorber/RJ            | ●                     | ●                             | ○   | × | × | ○ | ×   |

- \*1 ●: Shipped together with the product, but not assembled. Without any symbol for the adjuster mounting position: The adjuster can be mounted afterward.
- \*2 For the buffer mechanism, the buffer stroke will be shorter for the stroke that is adjusted by the extension stroke end adjuster.
- \*3 Extension stroke end adjuster mounting holes have been removed to reduce the total length of the table.
- \*4 The shorter total length type can be used, but a retraction stroke end adjuster cannot be mounted afterward.
- \*5 There is no piping port on the side surface of the product.
- \*6 The metal stopper with bumper option is not available for ∅6.
- \*7 As there is no magnet in the buffer mechanism, auto switches cannot be used on the buffer part.

### Adjuster Mounting Position



- \* When the shock absorber, metal stopper with bumper, or adjuster option with metal stopper is used, metal-to-metal collisions occur, and may generate dust particles.
- \* When the buffer mechanism or the end lock mechanism functional options are used, dust particles may be generated by the buffer part as well as the end lock part.

\* The 25A-series specifications and dimensions are the same as those of the standard model.

For details, refer to the [Web Catalog](#).



# Air Slide Table



# 25A-MXQ Series

ø6, ø8, ø12, ø16, ø20, ø25

## How to Order



**25A-MXQ 16**   - **50 AS** - **M9BW**

- Series compatible with secondary batteries

### Port thread type

|     |          |           |
|-----|----------|-----------|
| Nil | M thread | ø6 to ø16 |
|     | Rc       |           |
| TN  | NPT      | ø20, ø25  |
| TF  | G        |           |

### Symmetric type

|     |                |
|-----|----------------|
| Nil | Standard type  |
| L   | Symmetric type |

### Bore size (Standard stroke [mm])

|           |                                       |
|-----------|---------------------------------------|
| <b>6</b>  | 10, 20, 30, 40, 50                    |
| <b>8</b>  | 10, 20, 30, 40, 50, 75                |
| <b>12</b> | 10, 20, 30, 40, 50, 75, 100           |
| <b>16</b> | 10, 20, 30, 40, 50, 75, 100, 125      |
| <b>20</b> | 10, 20, 30, 40, 50, 75, 100, 125, 150 |
| <b>25</b> | 10, 20, 30, 40, 50, 75, 100, 125, 150 |

### Number of auto switches

|     |   |
|-----|---|
| Nil | 2 |
| S   | 1 |
| n   | n |

### Auto switch

|     |                                       |
|-----|---------------------------------------|
| Nil | Without auto switch (Built-in magnet) |
|-----|---------------------------------------|

\* [Click here](#) for details on applicable auto switch models.

### Adjuster option

|      |   |
|------|---|
| Nil  | Without adjuster                                      |
| AS   | Extension end rubber stopper                          |
| AT   | Retraction end rubber stopper                         |
| A    | Both ends rubber stopper                              |
| BS   | Extension end absorber                                |
| BT   | Retraction end absorber                               |
| B    | Double absorber                                       |
| CS   | Extension end metal stopper                           |
| CT   | Retraction end metal stopper                          |
| C    | Double metal stopper                                  |
| ASBT | Extension end adjuster + Retraction end absorber      |
| ASCT | Extension end adjuster + Retraction end metal stopper |
| BSAT | Extension end absorber + Retraction end adjuster      |
| BSCT | Extension end absorber + Retraction end metal stopper |
| CSAT | Extension end metal stopper + Retraction end adjuster |
| CSBT | Extension end metal stopper + Retraction end absorber |

\* With shock absorber is not available in the 25A-MXQ6 series.

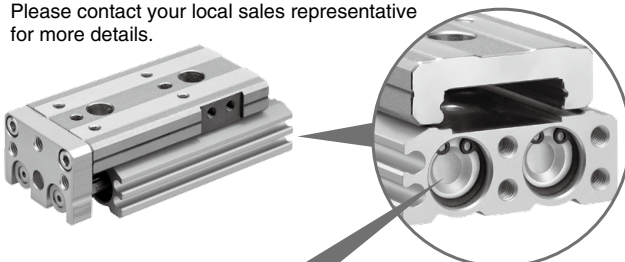
\* When the adjuster option with shock absorber or metal stopper is used, metal-to-metal collisions occur, and may generate dust particles.

## Corrosion Resistant Air Slide Table

(Made to order: 25A-MXQ□-X771)

The material of the head cap part has been changed to a highly corrosion-resistant material.

Please contact your local sales representative for more details.



|          | After change | Before change   |
|----------|--------------|-----------------|
| Head cap | Aluminum     | Synthetic resin |

\* The 25A- series specifications and dimensions are the same as those of the standard model.

For details, refer to the [Web Catalog](#).

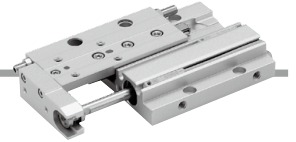
# Low Profile Slide Table

# 25A-MXF Series

ø8, ø12, ø16, ø20



## How to Order



**25A - MXF 12 - 50 - M9BW**  

Series compatible with secondary batteries

Bore size/  
Stroke (mm)

|     |                 |
|-----|-----------------|
| ø8  | 10, 20, 30      |
| ø12 | 20, 30, 50      |
| ø16 | 30, 50, 75      |
| ø20 | 30, 50, 75, 100 |

Number of auto switches

|     |   |
|-----|---|
| Nil | 2 |
| S   | 1 |
| n   | n |

Auto switch

|     |                                       |
|-----|---------------------------------------|
| Nil | Without auto switch (Built-in magnet) |
|-----|---------------------------------------|

\* [Click here](#) for details on applicable auto switch models.

\* The 25A- series specifications and dimensions are the same as those of the standard model.

For details, refer to the [Web Catalog](#).



# Air Slide Table



# 25A-MXW Series

ø8, ø12, ø16, ø20, ø25



## How to Order

25A – MXW 16 [ ] – 100 B – M9BW [ ]

Series compatible with secondary batteries

### Port thread type

|     |          |           |
|-----|----------|-----------|
| Nil | M thread | ø8 to ø16 |
|     | Rc       |           |
| TN  | NPT      | ø20, ø25  |
| TF  | G        |           |

### Number of auto switches

|     |   |
|-----|---|
| Nil | 2 |
| S   | 1 |
| n   | n |

### Auto switch

|     |                                       |
|-----|---------------------------------------|
| Nil | Without auto switch (Built-in magnet) |
|-----|---------------------------------------|

\* [Click here](#) for details on applicable auto switch models.

### Bore size (Standard stroke [mm])

|    |   |
|----|---|
| 8  | 25, 50, 75, 100, 125, 150                   |
| 12 | 50, 75, 100, 125, 150                       |
| 16 | 75, 100, 125, 150, 175, 200                 |
| 20 | 100, 125, 150, 175, 200, 225, 250           |
| 25 | 100, 125, 150, 175, 200, 225, 250, 275, 300 |

### Option

|     |                                 |
|-----|---------------------------------|
| Nil | Standard (With urethane bumper) |
| B   | With shock absorbers 2 pcs.     |

\* When the adjuster option with shock absorber is used, metal-to-metal collisions occur, and may generate dust particles.

\* The 25A- series specifications and dimensions are the same as those of the standard model.

For details, refer to the [Web Catalog](#).

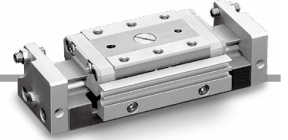
# Air Slide Table

# 25A-MXP Series

ø6, ø8, ø10, ø12, ø16



## How to Order



**25A - MXP** **12** - **15**   - **M9BW**

Series compatible with secondary batteries

Bore size (Standard stroke [mm])

|           |        |
|-----------|--------|
| <b>6</b>  | 5, 10  |
| <b>8</b>  | 10, 20 |
| <b>10</b> | 10, 20 |
| <b>12</b> | 15, 25 |
| <b>16</b> | 20, 30 |

Adjuster option

|            |                |
|------------|----------------|
| <b>Nil</b> | Rubber stopper |
| <b>B</b>   | Shock absorber |
| <b>C</b>   | Metal stopper  |

Number of auto switches

|            |   |
|------------|---|
| <b>Nil</b> | 2 |
| <b>S</b>   | 1 |
| <b>n</b>   | n |

\* In the case of 25A-MXP6-5, with 2 auto switches are available for D-M9□ type and D-M9□V type only. For other switches, no other choice is affordable but with 1 piece attached (symbol: S).

Auto switch

|            |                     |
|------------|---------------------|
| <b>Nil</b> | Without auto switch |
|------------|---------------------|

\* [Click here](#) for details on applicable auto switch models.

Magnet/Switch rail

|            |                         |
|------------|-------------------------|
| <b>Nil</b> | With magnet and rail    |
| <b>N</b>   | Without magnet and rail |

\* Auto switch cannot be mounted on type N (without magnet and rail).

- \* Adjuster for 25A-MXP6 series is available for one side only.
- \* Shock absorber is not available in 25A-MXP6 and 25A-MXP8 series.
- \* When the adjuster option with shock absorber or metal stopper is used, metal-to-metal collisions occur, and may generate dust particles.

\* The 25A- series specifications and dimensions are the same as those of the standard model.

For details, refer to the [Web Catalog](#).

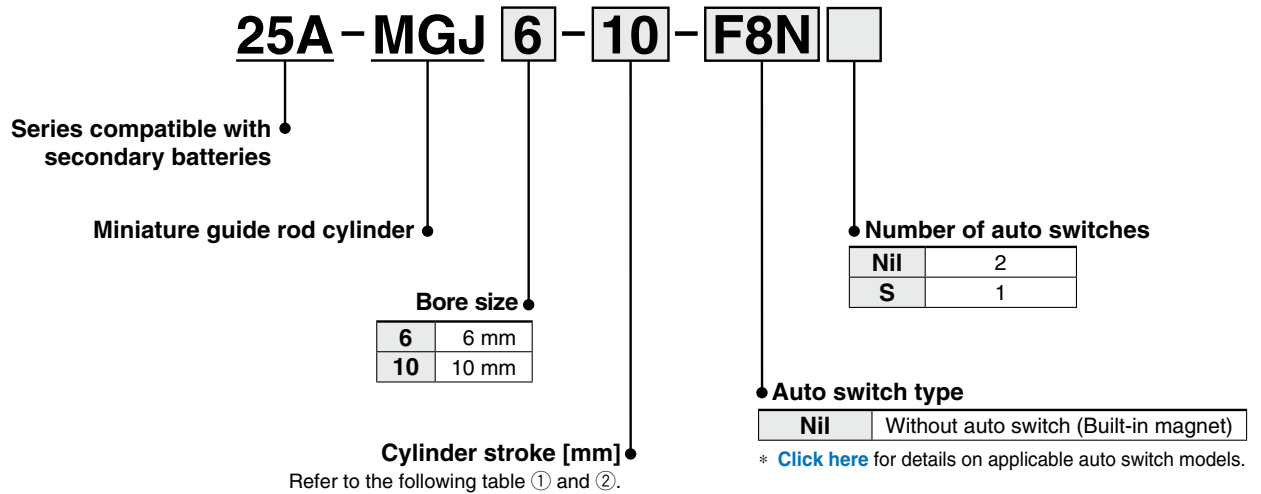
# Miniature Guide Rod Cylinder

## 25A-MGJ Series

Ø6, Ø10



### How to Order



**Table ① Standard Strokes**

| Bore size [mm] | Standard stroke [mm] |
|----------------|----------------------|
| 6              | 5, 10, 15            |
| 10             | 5, 10, 15, 20        |

**Table ② Intermediate Stroke (by the 1 mm stroke)**

| Bore size [mm] | Applicable stroke [mm]  |
|----------------|---|
| 6              | 1 to 15 (Spacer type)   |
| 10             | 1 to 20 (Spacer type)   |
| Example        | Model no.: 25A-MGJ6-9<br>Installing a 1 mm width spacer for 25A-MGJ6-10<br>External size: same as 25A-MGJ6-10 |

\* When mounting an auto switch, the min. stroke is 4 mm.  
However, only 1 auto switch can be mounted in this case.

\* The 25A- series specifications and dimensions are the same as those of the standard model.

For details, refer to the [Web Catalog](#).

# Compact Guide Cylinder



# 25A-MGP Series

ø12, ø16, ø20, ø25, ø32, ø40, ø50, ø63, ø80, ø100



## How to Order

**25A - MGP M 25**    - **30** Z - **M9BW**   

Series compatible with secondary batteries

Compact guide cylinder

Bearing type

|          |               |
|----------|---------------|
| <b>M</b> | Slide bearing |
| <b>L</b> | Ball bushing  |

Bore size

|            |        |
|------------|--------|
| <b>12</b>  | 12 mm  |
| <b>16</b>  | 16 mm  |
| <b>20</b>  | 20 mm  |
| <b>25</b>  | 25 mm  |
| <b>32</b>  | 32 mm  |
| <b>40</b>  | 40 mm  |
| <b>50</b>  | 50 mm  |
| <b>63</b>  | 63 mm  |
| <b>80</b>  | 80 mm  |
| <b>100</b> | 100 mm |

Cylinder stroke [mm]

|                  |   |
|------------------|---|
| <b>12, 16</b>    | 10, 20, 30, 40, 50, 75, 100, 125, 150, 175, 200, 250            |
| <b>20, 25</b>    | 20, 30, 40, 50, 75, 100, 125, 150, 175, 200, 250, 300, 350, 400 |
| <b>32 to 100</b> | 25, 50, 75, 100, 125, 150, 175, 200, 250, 300, 350, 400         |

Number of auto switches

|            |   |
|------------|---|
| <b>Nil</b> | 2 |
| <b>S</b>   | 1 |
| <b>n</b>   | n |

Auto switch

|            |                                       |
|------------|---------------------------------------|
| <b>Nil</b> | Without auto switch (Built-in magnet) |
|------------|---------------------------------------|

\* [Click here](#) for details on applicable auto switch models.

Port thread type

|            |          |
|------------|----------|
| <b>Nil</b> | M5 x 0.8 |
|            | Rc       |
| <b>TN</b>  | NPT      |
| <b>TF</b>  | G        |

\* For bore sizes ø12 and ø16, only M5 x 0.8 is available.

\* The 25A- series specifications and dimensions are the same as those of the standard model.

For details, refer to the [Web Catalog](#).

# Compact Guide Cylinder/With Air Cushion

# 25A-MGP Series

∅16, ∅20, ∅25, ∅32, ∅40, ∅50, ∅63, ∅80, ∅100

RoHS



## How to Order

**25A - MGP M 32 - 50 AZ - M9BW**

Series compatible with secondary batteries

Compact guide cylinder

Bearing type

|   |               |
|---|---------------|
| M | Slide bearing |
| L | Ball bushing  |

Bore size

|     |        |
|-----|--------|
| 16  | 16 mm  |
| 20  | 20 mm  |
| 25  | 25 mm  |
| 32  | 32 mm  |
| 40  | 40 mm  |
| 50  | 50 mm  |
| 63  | 63 mm  |
| 80  | 80 mm  |
| 100 | 100 mm |

Number of auto switches

|     |   |
|-----|---|
| Nil | 2 |
| S   | 1 |
| n   | n |

Auto switch

|     |                                       |
|-----|---------------------------------------|
| Nil | Without auto switch (Built-in magnet) |
|-----|---------------------------------------|

\* [Click here](#) for details on applicable auto switch models.

With air cushion

Cylinder stroke [mm]

| Bore size | Standard stroke   |
|-----------|---|
| 16        | 25, 50, 75, 100, 125, 150, 175, 200, 250                |
| 20 to 63  | 25, 50, 75, 100, 125, 150, 175, 200, 250, 300, 350, 400 |
| 80, 100   | 50, 75, 100, 125, 150, 175, 200, 250, 300, 350, 400     |

Port thread type

|     |          |
|-----|----------|
| Nil | M5 x 0.8 |
|     | Rc       |
| TN  | NPT      |
| TF  | G        |

\* For bore size 16, only M5 x 0.8 is available.

\* The 25A- series specifications and dimensions are the same as those of the standard model.

For details, refer to the [Web Catalog](#).

# Compact Guide Cylinder

# 25A-MGPK Series

ø12, ø16, ø20, ø25, ø32, ø40, ø50

RoHS

## How to Order



**25A-MGPK A M 32**    - **50**    - **M9BW**   

Series compatible with secondary batteries

Compact guide cylinder

Plate material

|          |                |
|----------|----------------|
| <b>A</b> | Aluminum alloy |
| <b>F</b> | Carbon steel   |

Bearing type

|          |               |
|----------|---------------|
| <b>M</b> | Slide bearing |
|----------|---------------|

Bore size

|           |       |           |       |
|-----------|-------|-----------|-------|
| <b>12</b> | 12 mm | <b>32</b> | 32 mm |
| <b>16</b> | 16 mm | <b>40</b> | 40 mm |
| <b>20</b> | 20 mm | <b>50</b> | 50 mm |
| <b>25</b> | 25 mm |           |       |

Port thread type

|            |          |
|------------|----------|
| <b>Nil</b> | M5 x 0.8 |
|            | Rc       |
| <b>TN</b>  | NPT      |
| <b>TF</b>  | G        |

\* For bore sizes 12 and 16, only M5 x 0.8 is available.

Number of auto switches

|            |   |
|------------|---|
| <b>Nil</b> | 2 |
| <b>S</b>   | 1 |
| <b>n</b>   | n |

Auto switch

|            |                                       |
|------------|---------------------------------------|
| <b>Nil</b> | Without auto switch (Built-in magnet) |
|------------|---------------------------------------|

\* [Click here](#) for details on applicable auto switch models.

Piping port location

|             |                 |
|-------------|-----------------|
| <b>Nil</b>  | Top/Side ported |
| <b>P</b> *1 | Top ported      |

\*1 For bore sizes 12 and 16 only

Cylinder stroke [mm]

| Bore size [mm]  | Standard stroke [mm]                        |
|-----------------|---|
| <b>12, 16</b>   | 10, 20, 30, 40, 50, 75, 100, 125, 150       |
| <b>20, 25</b>   | 20, 30, 40, 50, 75, 100, 125, 150, 175, 200 |
| <b>32 to 50</b> | 25, 50, 75, 100, 125, 150, 175, 200         |

\* The 25A- series specifications and dimensions are the same as those of the standard model.

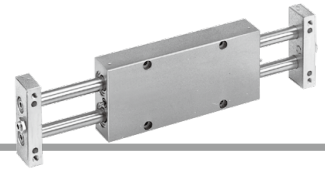
For details, refer to the [Web Catalog](#).

# Slide Unit: Built-in Shock Absorber Slide Bearing Type

RoHS

# 25A-CXWM Series

ø10, ø16, ø20, ø25, ø32



## How to Order

**25A — C DB XWM 16 — 150 — J79W**

**Series compatible with secondary batteries**

**Cylinder with auto switch**

| Symbol | Specifications/Mounting                              |
|--------|--|
| Nil    | Without magnet for switch*1                          |
| DB     | With auto switch (Built-in magnet)/ Housing mounting |
| DP     | With auto switch (Built-in magnet)/ Plate mounting   |

\*1 In the case of without magnet for switch, auto switch cannot be mounted.

**Bearing type**

|   |               |
|---|---------------|
| M | Slide bearing |
|---|---------------|

**Port thread type**

|     |          |            |
|-----|----------|------------|
| Nil | M thread | ø10 to ø20 |
|     | Rc 1/8   |            |
| TN  | NPT 1/8  | ø25, ø32   |
| TF  | G 1/8    |            |

**Number of auto switches**

|     |   |
|-----|---|
| Nil | 2 |
| S   | 1 |
| n   | n |

**Auto switch**

|     |                     |
|-----|---------------------|
| Nil | Without auto switch |
|-----|---------------------|

\* [Click here](#) for details on applicable auto switch models.

**Bore size/Stroke [mm]**

|    |   |
|----|---|
| 10 | (25), 50, 75, 100                       |
| 16 | (25), 50, 75, 100, 125, 150, 175, 200   |
| 20 | (25), 50, 75, 100, 125, 150, 175, 200   |
| 25 | (25), 50, 75, 100, 125, 150, 175, 200   |
| 32 | (25), (50), 75, 100, 125, 150, 175, 200 |

\* For the strokes indicated in the parentheses of the ø10, ø16 and ø25, shock absorbers are to be mounted on both sides of the plate. For the strokes indicated in the parentheses of the ø20 and ø32, a shock absorber is to be mounted on single side of the plate.

\* For the strokes other than those indicated above, refer to the **Web Catalog**.

\* For ø16, ø20 and ø25, strokes up to 300, and for ø32, strokes up to 250 are available as Made-to-Order.

### Built-in Magnet Cylinder Model

If a built-in magnet cylinder without an auto switch is required, there is no need to enter the symbol for the auto switch. (Example) 25A-CDPXWM20-100

\* The 25A- series specifications and dimensions are the same as those of the standard model.

For details, refer to the [Web Catalog](#).

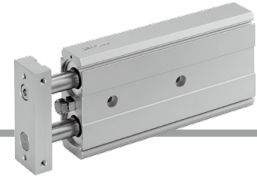


# Dual Rod Cylinder/Compact Type

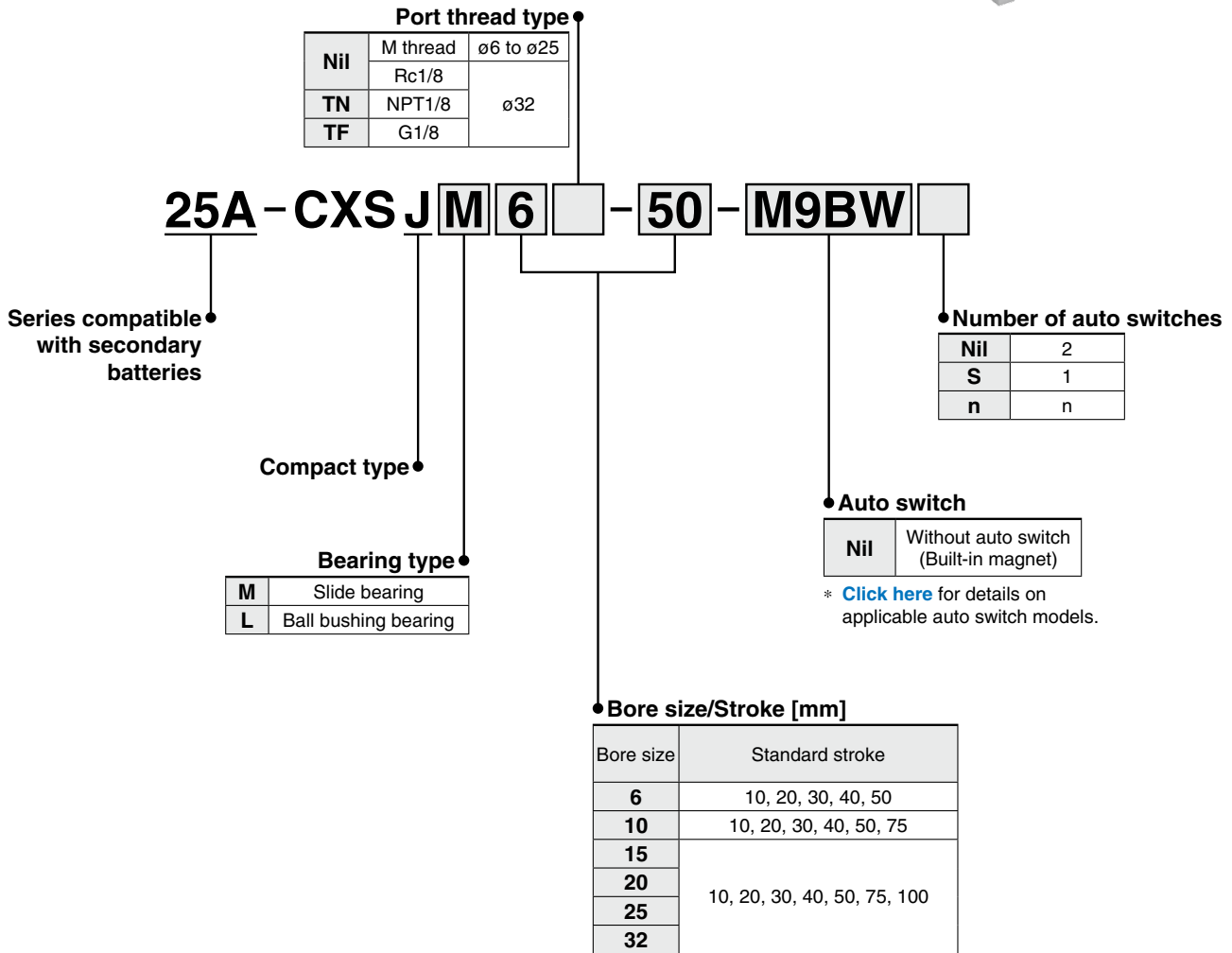
# 25A-CXSJ Series

ø6, ø10, ø15, ø20, ø25, ø32

RoHS



## How to Order



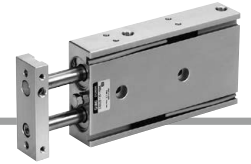
\* The 25A- series specifications and dimensions are the same as those of the standard model.

For details, refer to the [Web Catalog](#).

# Dual Rod Cylinder Basic Type

## 25A-CXS Series

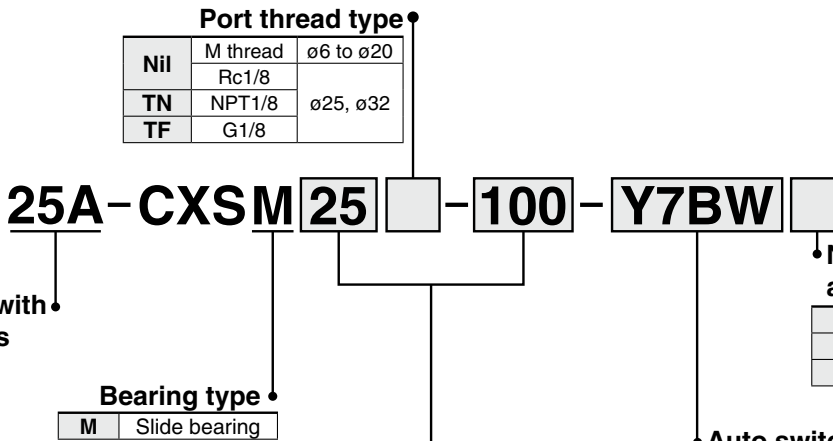
ø6, ø10, ø15, ø20, ø25, ø32



### How to Order

#### Slide bearing type

Series compatible with secondary batteries



Bore size/Stroke [mm]

| Bore size      | Standard stroke [mm]  |
|----------------|---|
| 6              | 10, 20, 30, 40, 50  |
| 10             | 10, 15, 20, 25, 30, 35, 40, 45, 50, 60, 70, 75              |
| 15, 20, 25, 32 | 10, 15, 20, 25, 30, 35, 40, 45, 50, 60, 70, 75, 80, 90, 100 |

Number of auto switches

|     |   |
|-----|---|
| Nil | 2 |
| S   | 1 |
| n   | n |

Auto switch

Nil Without auto switch (Built-in magnet)

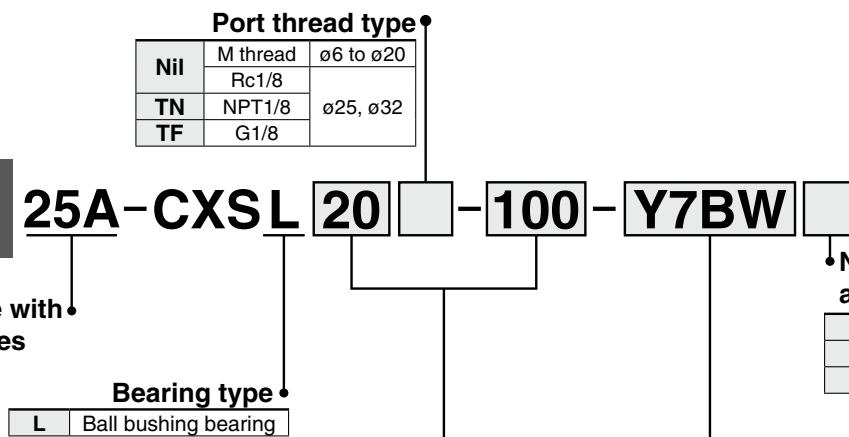
\* [Click here](#) for details on applicable auto switch models.

\* The 25A- series specifications and dimensions are the same as those of the standard model.

For details, refer to the [Web Catalog](#).

#### Ball bushing bearing type

Series compatible with secondary batteries



Bore size/Stroke [mm]

| Bore size      | Standard stroke [mm]  |
|----------------|---|
| 6              | 10, 20, 30, 40, 50  |
| 10             | 10, 15, 20, 25, 30, 35, 40, 45, 50, 60, 70, 75              |
| 15, 20, 25, 32 | 10, 15, 20, 25, 30, 35, 40, 45, 50, 60, 70, 75, 80, 90, 100 |

Number of auto switches

|     |   |
|-----|---|
| Nil | 2 |
| S   | 1 |
| n   | n |

Auto switch

Nil Without auto switch (Built-in magnet)

\* [Click here](#) for details on applicable auto switch models.

\* The 25A- series specifications and dimensions are the same as those of the standard model.

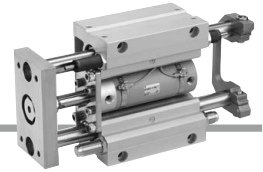
For details, refer to the [Web Catalog](#).

# Guide Cylinder



# 25A-MGG Series

Ø20, Ø25, Ø32, Ø40, Ø50



## How to Order

**25A - MGG L B 32** - **100** - **M9BW**

Series compatible with secondary batteries

Guide cylinder

Bearing type

|   |              |
|---|--------------|
| L | Ball bushing |
|---|--------------|

Mounting

|   |                       |
|---|-----------------------|
| B | Basic                 |
| F | Front mounting flange |

Bore size

|    |       |
|----|-------|
| 20 | 20 mm |
| 25 | 25 mm |
| 32 | 32 mm |
| 40 | 40 mm |
| 50 | 50 mm |

Port thread type

|     |     |
|-----|-----|
| Nil | Rc  |
| TN  | NPT |
| TF  | G   |

Number of auto switches

|     |   |
|-----|---|
| Nil | 2 |
| S   | 1 |
| n   | n |

Auto switch

|     |                                       |
|-----|---------------------------------------|
| Nil | Without auto switch (Built-in magnet) |
|-----|---------------------------------------|

\* [Click here](#) for details on applicable auto switch models.

Cylinder stroke [mm]

| Bore size [mm] | Standard stroke [mm]             | Long stroke [mm]                             |
|----------------|----------------------------------|--|
| 20             | 75, 100, 125, 150, 200           | 250, 300, 350, 400                           |
| 25             | 75, 100, 125, 150, 200, 250, 300 | 350, 400, 450, 500                           |
| 32             |                                  | 350, 400, 450, 500, 600                      |
| 40             |                                  | 350, 400, 450, 500, 600, 700, 800            |
| 50             |                                  | 350, 400, 450, 500, 600, 700, 800, 900, 1000 |

\* Intermediate strokes and short strokes other than those listed above are produced upon receipt of order.

\* The 25A- series specifications and dimensions are the same as those of the standard model.

For details, refer to the [Web Catalog](#).

# Rotary Clamp Cylinder: Standard

# 25A-MK Series

RoHS

ø12, ø16, ø20, ø25, ø32, ø40, ø50, ø63



## How to Order

25A - MKB 20 - 10 R Z - M9BW

Series compatible with secondary batteries

### Bore size

|    |       |
|----|-------|
| 12 | 12 mm |
| 16 | 16 mm |
| 20 | 20 mm |
| 25 | 25 mm |
| 32 | 32 mm |
| 40 | 40 mm |
| 50 | 50 mm |
| 63 | 63 mm |

### Port thread type

|     |          |            |
|-----|----------|------------|
| Nil | M thread | ø12 to ø25 |
|     | Rc       |            |
| TN  | NPT      | ø32 to ø63 |
| TF  | G        |            |

### Clamp stroke

| Symbol | Clamp stroke | Applicable bore size |
|--------|--------------|----------------------|
| 10     | 10 mm        | ø12 to ø63           |
| 20     | 20 mm        |                      |
| 30     | 30 mm        |                      |
| 50     | 50 mm        | ø32 to ø63           |

### Number of auto switches

|     |   |
|-----|---|
| Nil | 2 |
| S   | 1 |

### Auto switch type

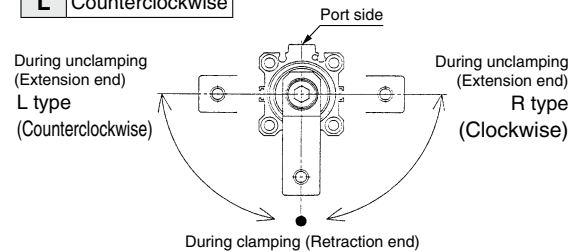
|     |                                       |
|-----|---------------------------------------|
| Nil | Without auto switch (Built-in magnet) |
|-----|---------------------------------------|

- \* [Click here](#) for details on applicable auto switch models.
- \* Auto switches are shipped together with the product but do not come assembled.

### Auto switch multiple side mounting

### Rotary direction (Unclamp → Clamp)

|   |                  |
|---|------------------|
| R | Clockwise        |
| L | Counterclockwise |



- \* The coil scraper is not built-in.
- \* The 25A- series specifications and dimensions are the same as those of the standard model.

For details, refer to the [Web Catalog](#).

# Stopper Cylinder/Fixed Mounting Height

# 25A-RSQ Series

ø12, ø16, ø20, ø32, ø40, ø50

RoHS



## How to Order

**ø12** 25A-RS **D** **Q** **B** 12 - 10 **D** - **L** - **M9BW**

**ø16 to ø50** 25A-RS **D** **Q** **B** 20 - 15 **D** **Z** - **L** - **M9BW**

**Bore size**

|    |       |
|----|-------|
| 12 | 12 mm |
|----|-------|

**Cylinder stroke [mm]**

|    |    |
|----|----|
| 12 | 10 |
|----|----|

**Series compatible with secondary batteries**

**With auto switch**

|     |                                    |
|-----|------------------------------------|
| Nil | Without magnet for switch*1        |
| D   | With auto switch (Built-in magnet) |

\*1 In the case of without magnet for switch, auto switch cannot be mounted.

**Mounting**

|   |                       |
|---|-----------------------|
| B | Through-hole          |
| A | Both ends tapped type |

\* Since ø12 uses a common tube for both A and B, only B is used for part no. denotation.

**Bore size**

|    |       |
|----|-------|
| 16 | 16 mm |
| 20 | 20 mm |
| 32 | 32 mm |
| 40 | 40 mm |
| 50 | 50 mm |

**Port thread type**

|      |          |            |
|------|----------|------------|
| Nil  | M thread | ø16        |
|      | Rc       |            |
| TN   | NPT      | ø20 to ø50 |
| TF*1 | G        |            |

\*1 TF for ø20 indicates M5.

**Cylinder stroke [mm]**

|    |            |
|----|------------|
| 16 | 10, 15     |
| 20 | 10, 15, 20 |
| 32 | 10, 15, 20 |
| 40 | 20, 25, 30 |
| 50 | 20, 25, 30 |

**Action**

|   |                                  |
|---|----------------------------------|
| D | Double acting                    |
| B | Double acting with spring loaded |
| T | Single acting (Spring extend)    |

**Rod end configuration**

|     |                               |
|-----|-------------------------------|
| Nil | Round bar                     |
| F*1 | Round bar with female rod end |
| K   | Chamfered                     |
| G*1 | Chamfered with female rod end |
| R   | Roller                        |
| L*2 | Lever (Fixed absorber type)   |

\*1 F and G are not available for bore size ø12.  
\*2 L is applicable only to bore sizes ø32, ø40, and ø50.

**Mounting bolt**

|     |                  |
|-----|------------------|
| Nil | None             |
| L   | Shipped together |

\* Mounting bolt is shipped together only when the "Mounting" symbol is B.

**Auto switch type**

|     |                     |
|-----|---------------------|
| Nil | Without auto switch |
|-----|---------------------|

\* [Click here](#) for details on applicable auto switch models.

**Number of auto switches**

|     |   |
|-----|---|
| Nil | 2 |
| S   | 1 |

\* The 25A- series specifications and dimensions are the same as those of the standard model.

For details, refer to the [Web Catalog](#).

# Heavy Duty Stopper Cylinder

# 25A-RSH Series

Ø20, Ø32

RoHS



## How to Order

25A - RSH 32 [ ] - 20 D L - M9BW [ ]

Series compatible with secondary batteries

• Bore size

|    |       |
|----|-------|
| 20 | 20 mm |
| 32 | 32 mm |

• Port thread type

|     |     |
|-----|-----|
| Nil | M*1 |
|     | Rc  |
| TN  | NPT |
| TF  | G   |

\*1 The tube I.D. of 20 is only available to port size M screws.

• Cylinder stroke

|    |               |
|----|---------------|
| 15 | 15 mm (RSH20) |
| 20 | 20 mm (RSH32) |

• Number of auto switches

|     |   |
|-----|---|
| Nil | 2 |
| S   | 1 |

• Auto switch

Nil Without auto switch (Built-in magnet)

\* [Click here](#) for details on applicable auto switch models.

• Roller material

|   |              |
|---|--------------|
| L | Resin        |
| M | Carbon steel |

• Action

|   |                               |
|---|-------------------------------|
| D | Double acting type            |
| B | Double acting spring type     |
| T | Single acting/Spring extended |

\* The 25A- series specifications and dimensions are the same as those of the standard model.

For details, refer to the [Web Catalog](#).

# ISO Standard (6432)

# ISO Cylinder: Standard Double Acting, Single Rod 25A-C85 Series

ø8, ø10, ø12, ø16, ø20, ø25



## How to Order

**Double acting, Single rod** **25A-C D 85 N 20-40 C L-B-M9BW S**

**Series compatible with secondary batteries**

**Head cover type**

|   |                           |
|---|---------------------------|
| N | Basic (Integrated clevis) |
| E | Double end boss-cut       |
| F | Boss-cut/Basic            |
| Y | Head cover axial port     |

**Applicable head cover**

| Action        | Head cover type |   |   |   |
|---------------|-----------------|---|---|---|
|               | N               | E | F | Y |
| Rubber bumper | ●               | ● | ● | ● |
| Air cushion   | ●*1             | — | — | — |

\*1 Excluding ø8

**Bore size**

|    |       |
|----|-------|
| 8  | 8 mm  |
| 10 | 10 mm |
| 12 | 12 mm |
| 16 | 16 mm |
| 20 | 20 mm |
| 25 | 25 mm |

**Cylinder stroke [mm]**

**Manufacturable stroke range**

| Bore size [mm] | Manufacturable stroke range [mm]*2, *3, *4 |
|----------------|--|
| 8*1            | 5 to 200                                   |
| 10             | 5 to 400                                   |
| 12             |  |
| 16             |  |
| 20             | 5 to 1000                                  |
| 25             |  |

**Cushion**

|     |                          |
|-----|--------------------------|
| Nil | Rubber bumper (Standard) |
| C   | Air cushion              |

**Mounting bracket\*5**

|     |             |
|-----|-------------|
| Nil | None        |
| L   | Single foot |
| M   | Double foot |
| G   | Flange      |
| U   | Trunnion    |
| N   | Clevis      |

**Auto switch**

|     |                     |
|-----|---------------------|
| Nil | Without auto switch |
|-----|---------------------|

\* Click here for details on applicable auto switch models.

**Auto switch mounting type\*6**

|   |               |
|---|---------------|
| B | Band mounting |
|---|---------------|

\*6 The symbol is "Nil" for no magnet.

**Applicable mounting bracket**

| Action        | Head cover type | Mounting bracket |   |   |   |   |
|---------------|-----------------|------------------|---|---|---|---|
|               |                 | L                | M | G | U | N |
| Rubber bumper | N               | ●                | ● | ● | ● | ● |
|               | E               | ●                | ● | ● | ● | — |
|               | F               | ●                | — | ● | ● | — |
|               | Y               | ●                | — | ● | ● | — |
| Air cushion   | N*7             | ●                | ● | ● | ● | ● |

\*7 Excluding ø8

**Built-in magnet**

|     |                 |
|-----|-----------------|
| Nil | None            |
| D   | Built-in magnet |

\*1 Not available with air cushion.  
\*2 The minimum stroke with air cushion is 25 mm.  
\*3 The min. stroke of the type with a magnet varies depending on the switch.  
\*4 Applicable strokes differ depending on the usage conditions and mounting brackets. For details, refer to the "Stroke Selection" section of the C85 series in the Web Catalog.  
\*5 Mounting bracket is shipped together with the product.  
\*6 Refer to Mounting Brackets for details of mounting brackets.

## Mounting Bracket Part Nos. for the 25A- Series

| Mounting bracket |                                   | Bore size [mm] |    |             |    |             | Contents   |   |
|------------------|-----------------------------------|----------------|----|-------------|----|-------------|------------|---|
|                  |                                   | 8              | 10 | 12          | 16 | 20          |            | 25  |
| Mounting bracket | Rod end nut                       | C85NT08A-S     |    | C85NT10A-S  |    | C85NT20A-S  | C85NT25A-S | 1 rod end nut   |
|                  | Mounting nut                      | C85NT08B-S     |    | C85NT10B-S  |    | C85NT20B-S  |            | 1 mounting nut  |
|                  | Foot (1 pc.)                      | 25A-C85L10A    |    | 25A-C85L16A |    | 25A-C85L25A |            | 1 foot bracket  |
|                  | Foot (2 pcs. with 1 mounting nut) | 25A-C85L10B    |    | 25A-C85L16B |    | 25A-C85L25B |            | 2 foot brackets, 1 mounting nut                             |
|                  | Foot (1 pc. with 1 mounting nut)  | 25A-C85L10C    |    | 25A-C85L16C |    | 25A-C85L25C |            | 1 foot bracket, 1 mounting nut                              |
|                  | Flange                            | 25A-C85F10     |    | 25A-C85F16  |    | 25A-C85F25  |            | 1 flange  |
|                  | Trunnion                          | C85T10         |    | C85T16      |    | C85T25      |            | 1 trunnion  |
|                  | Clevis                            | 25A-C85C10     |    | 25A-C85C16  |    | 25A-C85C25  |            | 1 clevis pivot bracket, 1 clevis pin, 2 pin retaining rings |

## Replacement Parts: For Standard Type

| Bore size [mm] | Part no.      | Note   |
|----------------|---------------|--|
| 20             | 25A-C85A-20PS | Every set includes:<br>1 rod seal<br>1 flat washer<br>1 retaining ring |
| 25             | 25A-C85A-25PS |  |

\* When replacing the seals, use **grease (GR-D-010: ordered separately)** on the sliding parts.

\* The 25A- series specifications and dimensions are the same as those of the standard model.

For details, refer to the [Web Catalog](#).



# ISO Standard (15552)

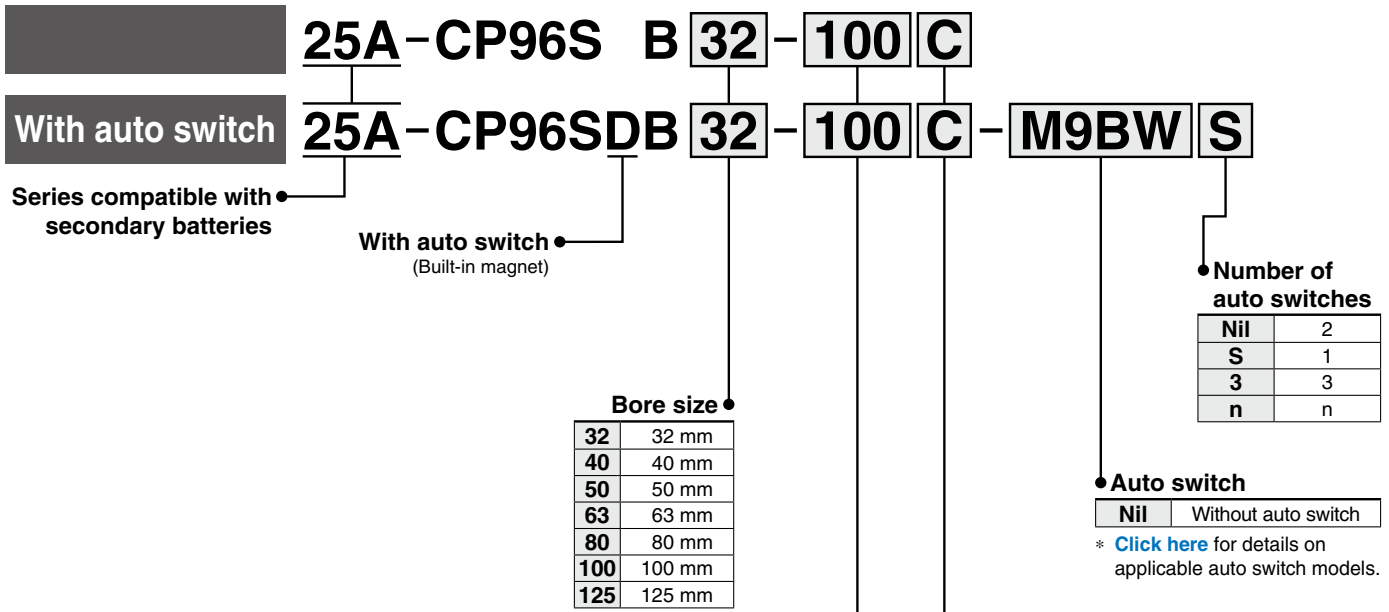
ISO Cylinder: Standard  
Double Acting, Single Rod

# 25A-CP96 Series

ø32, ø40, ø50, ø63, ø80, ø100, ø125



## How to Order



**Cylinder stroke [mm]**

| Bore size [mm] | Standard stroke [mm]  | Max. stroke |
|----------------|---|-------------|
| 32             | 25, 50, 80, 100, 125, 160, 200, 250, 320, 400, 500                | 1900        |
| 40             | 25, 50, 80, 100, 125, 160, 200, 250, 320, 400, 500                | 1900        |
| 50             | 25, 50, 80, 100, 125, 160, 200, 250, 320, 400, 500, 600           | 1900        |
| 63             | 25, 50, 80, 100, 125, 160, 200, 250, 320, 400, 500, 600           | 1900        |
| 80             | 25, 50, 80, 100, 125, 160, 200, 250, 320, 400, 500, 600, 700, 800 | 1900        |
| 100            | 25, 50, 80, 100, 125, 160, 200, 250, 320, 400, 500, 600, 700, 800 | 1850        |
| 125            | —   | 1850        |

\* Aside from the standard strokes, intermediate strokes are also available in 1 mm increments and are produced upon receipt of order.

**Cushion**

| Symbol | Cushion                                   | Bore size [mm] |
|--------|---|----------------|
| C      | Air cushion on both ends + Bumper cushion | ø32 to ø100    |
| Nil    | Air cushion                               | ø125           |

\* The 25A- series specifications and dimensions are the same as those of the standard model.

For details, refer to the [Web Catalog](#).

ISO Standard (15552)

ISO Cylinder: Standard  
Double Acting, Single Rod

# 25A-C96 Series

ø32, ø40, ø50, ø63, ø80, ø100, ø125



## How to Order

**25A-C96S B 32 - 100 C**

**With auto switch** **25A-C96SDB 32 - 100 C - M9BW S**

Series compatible with secondary batteries

With auto switch (Built-in magnet)

**Bore size**

|     |        |
|-----|--------|
| 32  | 32 mm  |
| 40  | 40 mm  |
| 50  | 50 mm  |
| 63  | 63 mm  |
| 80  | 80 mm  |
| 100 | 100 mm |
| 125 | 125 mm |

**Number of auto switches**

|     |   |
|-----|---|
| Nil | 2 |
| S   | 1 |
| 3   | 3 |
| n   | n |

**Auto switch**

|     |                     |
|-----|---------------------|
| Nil | Without auto switch |
|-----|---------------------|

\* [Click here](#) for details on applicable auto switch models.

**Cushion**

| Symbol | Cushion                                   | Bore size [mm] |
|--------|---|----------------|
| C      | Air cushion on both ends + Bumper cushion | ø32 to ø100    |
| Nil    | Air cushion                               | ø125           |

**Cylinder stroke [mm]**

| Bore size [mm] | Standard stroke [mm]  | Max. stroke |
|----------------|---|-------------|
| 32             | 25, 50, 80, 100, 125, 160, 200, 250, 320, 400, 500                | 1000        |
| 40             | 25, 50, 80, 100, 125, 160, 200, 250, 320, 400, 500                | 1900        |
| 50             | 25, 50, 80, 100, 125, 160, 200, 250, 320, 400, 500, 600           | 1900        |
| 63             | 25, 50, 80, 100, 125, 160, 200, 250, 320, 400, 500, 600           | 1900        |
| 80             | 25, 50, 80, 100, 125, 160, 200, 250, 320, 400, 500, 600, 700, 800 | 1900        |
| 100            | 25, 50, 80, 100, 125, 160, 200, 250, 320, 400, 500, 600, 700, 800 | 1850        |
| 125            | —   | 1850        |

\* Aside from the standard strokes, intermediate strokes are also available in 1 mm increments and are produced upon receipt of order.

\* The 25A- series specifications and dimensions are the same as those of the standard model.

For details, refer to the [Web Catalog](#).

# ISO/VDMA Cylinder: Large Bore Size Type Double Acting, Single Rod

## 25A-C95 Series

ø160, ø200

RoHS

### How to Order

Without auto switch

25A - C95S B 200 - 100

With auto switch

25A - C95S D B 200 - 100 - M9BW

Series compatible with secondary batteries

Built-in magnet

Mounting

B Basic/without bracket style

Bore size

|     |        |
|-----|--------|
| 160 | 160 mm |
| 200 | 200 mm |

Standard stroke

| Bore size (mm) | Max. stroke*1 |
|----------------|---------------|
| 160            | 1600          |
| 200            | 1600          |

\*1 Please consult with SMC for longer strokes.

\* Intermediate strokes are available.

Auto switch

Nil Without auto switch

\* [Click here](#) for details on applicable auto switch models.

Number of auto switches

|     |   |
|-----|---|
| Nil | 2 |
| S   | 1 |
| 3   | 3 |
| n   | n |

\* The 25A- series specifications and dimensions are the same as those of the standard model. For details, refer to the [Web Catalog](#).

ISO Standard (21287)

Compact Cylinder: Double Acting, Single Rod



# 25A-C55 Series

ø20, ø25, ø32, ø40, ø50, ø63, ø80, ø100



## How to Order

**25A-C** **D** **55** **B** **20** - **10** - **M9BW**

Series compatible with secondary batteries

With auto switch

|     |                                    |
|-----|------------------------------------|
| Nil | Without magnet for switch*1        |
| D   | With auto switch (Built-in magnet) |

\*1 In the case of without magnet for switch, auto switch cannot be mounted.

Mounting

|   |   |
|---|---|
| B | Through-hole/Both ends tapped common (Standard) |
| L | Foot  |
| F | Rod flange                                      |
| G | Head flange                                     |
| C | Single clevis                                   |

\* Mounting brackets are shipped together with the product but do not come assembled.  
\* For mounting bracket option "B" with through-holes, a mounting bolt is not included.

Bore size

|     |        |
|-----|--------|
| 20  | 20 mm  |
| 25  | 25 mm  |
| 32  | 32 mm  |
| 40  | 40 mm  |
| 50  | 50 mm  |
| 63  | 63 mm  |
| 80  | 80 mm  |
| 100 | 100 mm |

### Built-in Magnet Cylinder Model

If a built-in magnet cylinder without an auto switch is required, there is no need to enter the symbol for the auto switch. (Example) 25A-CD55L32-25

Number of auto switches

|     |   |
|-----|---|
| Nil | 2 |
| S   | 1 |
| n   | n |

Auto switch

|     |  |
|-----|--|
| Nil | Without auto switch (Built-in magnet cylinder) |
|-----|--|

\* [Click here](#) for details on applicable auto switch models.  
\* Auto switches are shipped together, but not assembled.

Rod end thread

|     |                |
|-----|----------------|
| Nil | Female rod end |
| M   | Male rod end   |

\* A rubber bumper comes as standard.

Cylinder stroke [mm]

|          |  |
|----------|--|
| 20 to 63 | 5, 10, 15, 20, 25, 30, 35, 40, 45, 50, 60, 80, 100, 125, 150 |
| 80, 100  | 10, 15, 20, 25, 30, 35, 40, 45, 50, 60, 80, 100, 125         |

### Mounting Bracket Part Nos. for the 25A- Series

| Bore size [mm] | Foot*1       | Flange       | Single clevis*2 |
|----------------|--------------|--------------|-----------------|
| 20             | 25A-C55-L020 | 25A-C55-F020 | 25A-C55-C020    |
| 25             | 25A-C55-L025 | 25A-C55-F025 | 25A-C55-C025    |
| 32             | 25A-C55-L032 | 25A-C55-F032 | —               |
| 40             | 25A-C55-L040 | 25A-C55-F040 | —               |
| 50             | 25A-C55-L050 | 25A-C55-F050 | —               |
| 63             | 25A-C55-L063 | 25A-C55-F063 | —               |
| 80             | 25A-C55-L080 | 25A-C55-F080 | —               |
| 100            | 25A-C55-L100 | 25A-C55-F100 | —               |

\*1 Foot bracket part number contains two foot brackets  
\*2 The single clevis is only applicable to bore sizes ø20 and ø25.  
\* Mounting bolts are also included with bracket.

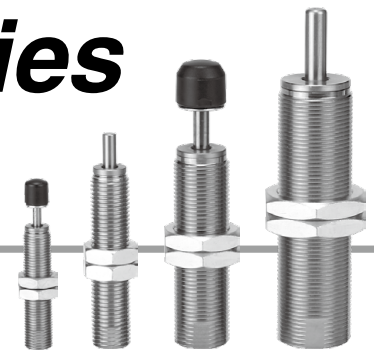
\* The 25A- series specifications and dimensions are the same as those of the standard model.

For details, refer to the [Web Catalog](#).

# Shock Absorber Soft Type

# 25A-RJ Series

RoHS



## How to Order

**O.D. thread size/Stroke**

| Symbol | O.D. thread | Stroke |
|--------|-------------|--------|
| 0604   | 6 mm        | 4 mm   |

**Option**

| Symbol | Hexagon nut |
|--------|-------------|
| Nil    | 2 pcs.      |
| N      | —           |

**25A - RJ 0604**

**25A - RJ 0806 H U**

Series compatible with secondary batteries

Shock absorber/Soft type

**O.D. thread size/Stroke**

| Symbol | O.D. thread | Stroke |
|--------|-------------|--------|
| 0806   | 8 mm        | 6 mm   |
| 1007   | 10 mm       | 7 mm   |
| 1412   | 14 mm       | 12 mm  |
| 2015   | 20 mm       | 15 mm  |
| 2725   | 27 mm       | 25 mm  |

**Option**

| Symbol | Hexagon nut | Stopper nut |
|--------|-------------|-------------|
| Nil    | 2 pcs.      | —           |
| J      | 3 pcs.      | —           |
| N      | —           | —           |
| S      | 2 pcs.      | 1 pc.       |
| SJ     | 3 pcs.      | 1 pc.       |
| SN     | —           | 1 pc.       |

**With cap**

| Symbol | Basic type        |
|--------|-------------------|
| Nil    | Basic type        |
| U      | With urethane cap |

**Collision speed range**

| Symbol | Collision speed range |
|--------|-----------------------|
| H      | 0.05 to 2 m/s         |
| L      | 0.05 to 1 m/s         |

\* RJ0604: 0.05 to 1.0 m/s  
\* RJ2725H: 0.05 to 1.5 m/s

## Hexagon Nut, Stopper Nut (Option) Part Nos. for the 25A- Series

|             |            | Thread size |           |           |           |           |           |
|-------------|------------|-------------|-----------|-----------|-----------|-----------|-----------|
|             |            | M6          | M8        | M10       | M14       | M20       | M27       |
| Hexagon nut |            | 25A-RJ06J   | 25-RB08J  | 25-RB10J  | 25-RB14J  | 25-RB20J  | 25-RB27J  |
| Stopper nut | Basic type | —           | 25-RB08S  | 25-RB10S  | 25-RB14S  | 25-RB20S  | 25-RB27S  |
|             | With cap   |             | 25-RBC08S | 25-RBC10S | 25-RBC14S | 25-RBC20S | 25-RBC27S |

Material: Special steel  
Treatment: Electroless nickel plating

\* The 25A- series specifications and dimensions are the same as those of the standard model.

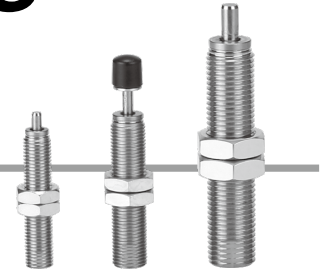
For details, refer to the [Web Catalog](#).

# Shock Absorber Short Stroke Type

RoHS

# 25A-RJ Series

## How to Order



Short stroke type

**25A - RJ 0805 U**

Series compatible with secondary batteries

Shock absorber/Soft type

O.D. thread size/Stroke

| Symbol | O.D. thread | Stroke |
|--------|-------------|--------|
| 0805   | 8 mm        | 5 mm   |
| 1006   | 10 mm       | 6 mm   |
| 1410   | 14 mm       | 10 mm  |

Option

| Symbol | Hexagon nut | Stopper nut |
|--------|-------------|-------------|
| Nil    | 2 pcs.      | —           |
| J      | 3 pcs.      | —           |
| N      | —           | —           |
| S      | 2 pcs.      | 1 pc.       |
| SJ     | 3 pcs.      | 1 pc.       |
| SN     | —           | 1 pc.       |

With cap

|     |                   |
|-----|-------------------|
| Nil | Basic type        |
| U   | With urethane cap |

## Hexagon Nut, Stopper Nut (Option) Part Nos. for the 25A- Series

|             | Thread size |           |           |           |
|-------------|-------------|-----------|-----------|-----------|
|             | M8          | M10       | M14       |           |
| Hexagon nut | 25-RB08J    | 25-RB10J  | 25-RB14J  |           |
| Stopper nut | Basic type  | 25-RB08S  | 25-RB10S  | 25-RB14S  |
|             | With cap    | 25-RBC08S | 25-RBC10S | 25-RBC14S |

Material: Special steel  
Treatment: Electroless nickel plating

\* The 25A- series specifications and dimensions are the same as those of the standard model.

For details, refer to the [Web Catalog](#).

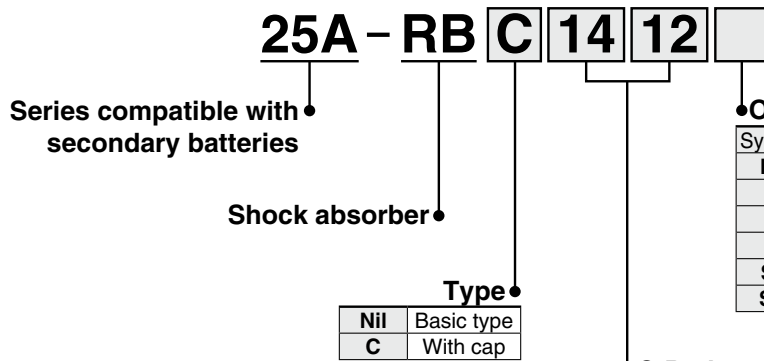
# Shock Absorber



# 25A-RB/RBC Series



## How to Order



### Option

| Symbol | Hexagon nut | Stopper nut |
|--------|-------------|-------------|
| Nil    | 2 pcs.      | —           |
| J      | 3 pcs.      | —           |
| N      | —           | —           |
| S      | 2 pcs.      | 1 pc.       |
| SJ     | 3 pcs.      | 1 pc.       |
| SN     | —           | 1 pc.       |

### O.D. thread size/Stroke

| Symbol | O.D. thread size | Stroke | Symbol | O.D. thread size | Stroke |
|--------|------------------|--------|--------|------------------|--------|
| 0805   | 8 mm             | 5 mm   | 1411   | 14 mm            | 11 mm  |
| 0806   | 8 mm             | 6 mm   | 1412   | 14 mm            | 12 mm  |
| 1006   | 10 mm            | 6 mm   | 2015   | 20 mm            | 15 mm  |
| 1007   | 10 mm            | 7 mm   | 2725   | 27 mm            | 25 mm  |

## Hexagon Nut, Stopper Nut (Option) Part Nos. for the 25A- Series

|             |            | Thread size |           |           |           |           |
|-------------|------------|-------------|-----------|-----------|-----------|-----------|
|             |            | M8          | M10       | M14       | M20       | M27       |
| Hexagon nut |            | 25-RB08J    | 25-RB10J  | 25-RB14J  | 25-RB20J  | 25-RB27J  |
| Stopper nut | Basic type | 25-RB08S    | 25-RB10S  | 25-RB14S  | 25-RB20S  | 25-RB27S  |
|             | With cap   | 25-RBC08S   | 25-RBC10S | 25-RBC14S | 25-RBC20S | 25-RBC27S |

Material: Special steel  
Treatment: Electroless nickel plating

\* The 25A- series specifications and dimensions are the same as those of the standard model.

For details, refer to the [Web Catalog](#).



# Floating Joint 25A-J□ Series

RoHS

## How to Order



### Stainless steel type

25A - J S 32 - 10-125 □

Series compatible with secondary batteries

Stainless steel type

Applicable bore size [mm]

| Symbol | Applicable bore size [mm] |
|--------|---------------------------|
| 10     | 10                        |
| 16     | 10, 16                    |
| 20     | 20                        |
| 32     | 25, 32                    |
| 40     | 40                        |
| 63     | 50, 63                    |

Thread nominal size

| Nominal thread size | Applicable cylinder nominal thread size |
|---------------------|---|
| 4-070               | M4 x 0.7                                |
| 5-080               | M5 x 0.8                                |
| 8-125               | M8 x 1.25                               |
| 10-125              | M10 x 1.25                              |
| 14-150              | M14 x 1.5                               |
| 18-150              | M18 x 1.5                               |

Material of dust cover

| Symbol | Material             |
|--------|----------------------|
| Nil    | Fluororubber (FKM)   |
| S      | Silicone rubber (Si) |

\* The 25A- series specifications and dimensions are the same as those of the standard model.

For details, refer to the [Web Catalog](#).

## How to Order

### Standard type

25A - JA 80 - 22-150

Series compatible with secondary batteries

Applicable bore size [mm]

| Model    | Symbol | Applicable bore size [mm] |
|----------|--------|---------------------------|
| Standard | 80     | 80                        |
|          | 100    | 100                       |

\* For ø63 or less, please consider using the stainless steel type 25A-JS series.

Thread nominal size (Standard)

| Nominal thread size | Applicable cylinder nominal thread size |
|---------------------|---|
| 22-150              | M22 x 1.5                               |
| 26-150              | M26 x 1.5                               |

\* The 25A- series specifications and dimensions are the same as those of the standard model.

For details, refer to the [Web Catalog](#).



## How to Order

### For compact cylinders

25A - J B 40 - 8-125

Series compatible with secondary batteries

For compact cylinders/Female thread

Applicable bore size [mm]

| Symbol | Applicable bore size [mm] |
|--------|---------------------------|
| 12     | 12                        |
| 16     | 16                        |
| 20     | 20                        |
| 25     | 25                        |
| 40     | 32, 40                    |
| 63     | 50, 63                    |
| 80     | 80                        |
| 100    | 100                       |

Thread nominal size

| Nominal thread size | Applicable cylinder nominal thread size |
|---------------------|---|
| 3-050               | M3 x 0.5                                |
| 4-070               | M4 x 0.7                                |
| 5-080               | M5 x 0.8                                |
| 6-100               | M6 x 1                                  |
| 8-125               | M8 x 1.25                               |
| 10-150              | M10 x 1.5                               |
| 16-200              | M16 x 2                                 |
| 20-250              | M20 x 2.5                               |

\* The 25A- series specifications and dimensions are the same as those of the standard model.

For details, refer to the [Web Catalog](#).



# Rotary Table: Vane Type

# 25A-MSUB Series

Size: 1, 3, 7, 20

RoHS



## How to Order

**Without auto switch** 25A-M SUB 20-90 S

**With auto switch** 25A-M D SUB 20-90 S-T79 L

**Series compatible with secondary batteries**

**With auto switch (Built-in magnet)**

**Nominal size (Torque)**

|    |        |
|----|--------|
| 1  | MSUB 1 |
| 3  | MSUB 3 |
| 7  | MSUB 7 |
| 20 | MSUB20 |

**Rotating angle**

| Application | Symbol | Rotating angle |
|-------------|--------|----------------|
| Single vane | 90     | 90°            |
|             | 180    | 180°           |
| Double vane | 90     | 90°            |

Rotation adjustment range  
Single vane: Both ends ±5° each  
Double vane: Both ends ±2.5° each

**Connection port location**

|     |              |
|-----|--------------|
| Nil | Side ported  |
| E   | Axial ported |

Available with side ported only, when equipped with auto switch unit.

**Vane type**

|   |             |
|---|-------------|
| S | Single vane |
| D | Double vane |

**Number of auto switches**

|     |     |
|-----|-----|
| S   | 1*1 |
| Nil | 2*2 |

\*1 S (1 auto switch) is shipped with a right-hand auto switch.  
\*2 Nil (2 auto switches) is shipped with a right-hand and a left-hand switch.

**Electrical entry/Lead wire length**

|     |                          |
|-----|--------------------------|
| Nil | Grommet/Lead wire: 0.5 m |
| L   | Grommet/Lead wire: 3 m   |

**Auto switch**

|     |                                       |
|-----|---------------------------------------|
| Nil | Without auto switch (Built-in magnet) |
|-----|---------------------------------------|

\* [Click here](#) for details on applicable auto switch models.

- \* The 25A- series specifications and dimensions are the same as those of the standard model.
- \* Zinc is used in part of deep groove ball bearing.

For details, refer to the [Web Catalog](#).

# Rotary Table/Rack & Pinion Type

# 25A-MSQ Series

## Size: 10, 20, 30, 50



### How to Order

25A-MSQ **10** **A** - **M9BW**   -

①      ②                      ③                      ④      ⑤                      ⑥

Series compatible with secondary batteries

#### ① Size

|    |
|----|
| 10 |
| 20 |
| 30 |
| 50 |

#### ② Cushion type

|          |                         |
|----------|-------------------------|
| <b>A</b> | Cushion pad             |
| <b>D</b> | Bumper                  |
| <b>R</b> | Internal shock absorber |

#### ③ Auto switch

|            |                                       |
|------------|---------------------------------------|
| <b>Nil</b> | Without auto switch (Built-in magnet) |
|------------|---------------------------------------|

\* [Click here](#) for details on applicable auto switch models.

#### ④ Number of auto switches

|            |   |
|------------|---|
| <b>Nil</b> | 2 |
| <b>s</b>   | 1 |
| <b>n</b>   | n |

#### ⑤ Port type

| End port type | Size    |
|---------------|---------|
| <b>Nil</b>    | M5      |
| <b>Nil</b>    | Rc1/8   |
| <b>-XF</b>    | G1/8    |
| <b>-XN</b>    | NPT1/8  |
| <b>-XT</b>    | NPTF1/8 |

10, 20  
30, 50

#### ⑥ Made to order

|            |                                      |
|------------|--------------------------------------|
| <b>Nil</b> | None                                 |
| <b>A</b>   | With interchangeable table and plate |
| <b>B</b>   | With interchangeable table           |
| <b>C</b>   | With interchangeable plate           |

\* Some parts have dimensions and shapes that are different from those of the standard model. Refer to page 176 for details. Other specifications are the same as those of the standard model.

\* Zinc is used in part of deep groove ball bearing and seal washer.

For details, refer to the [Web Catalog](#).

25A-MSQ **10** **A** - **M9BW**   -  - **X251**

①      ②                      ③                      ④      ⑤                      ⑥                      • With vacuum port

Series compatible with secondary batteries

#### ① Size

|    |
|----|
| 10 |
| 20 |
| 30 |
| 50 |

#### ② Cushion type

|          |                         |
|----------|-------------------------|
| <b>A</b> | Cushion pad             |
| <b>D</b> | Bumper                  |
| <b>R</b> | Internal shock absorber |

#### ③ Auto switch

|            |                                       |
|------------|---------------------------------------|
| <b>Nil</b> | Without auto switch (Built-in magnet) |
|------------|---------------------------------------|

\* [Click here](#) for details on applicable auto switch models.

#### ④ Number of auto switches

|            |   |
|------------|---|
| <b>Nil</b> | 2 |
| <b>s</b>   | 1 |
| <b>n</b>   | n |

#### ⑤ Port type

| End port type | Size    |
|---------------|---------|
| <b>Nil</b>    | M5      |
| <b>Nil</b>    | Rc1/8   |
| <b>-XF</b>    | G1/8    |
| <b>-XN</b>    | NPT1/8  |
| <b>-XT</b>    | NPTF1/8 |

10, 20  
30, 50

#### ⑥ Made to order

|            |                            |
|------------|----------------------------|
| <b>Nil</b> | None                       |
| <b>B</b>   | With interchangeable table |

\* Some parts have dimensions and shapes that are different from those of the standard model. Refer to page 176 for details. Other specifications are the same as those of the standard model.

\* Zinc is used in part of deep groove ball bearing and seal washer.

For details, refer to the [Web Catalog](#).

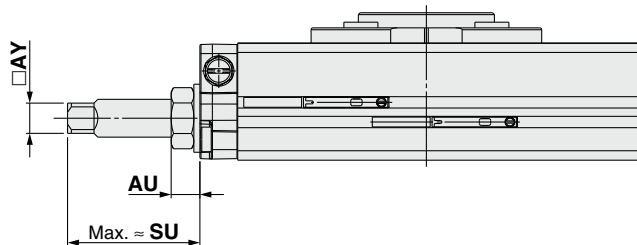
#### Internal Shock Absorber Part Nos. for the 25A- Series

| Size | Part no.         |
|------|------------------|
| 10   | 25A-RBA0805-X692 |
| 20   | 25A-RBA1006-X692 |
| 30   | 25A-RBA1411-X692 |
| 50   | 25A-RBA1411-X692 |

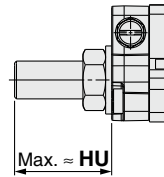
\* The part number is the same for the 25A-MSQ-X251.

## Dimensions

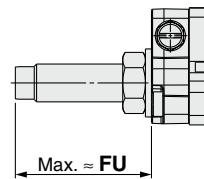
### Basic type 25A-MSQ□A



### Bumper 25A-MSQ□D



### Internal shock absorber 25A-MSQ□R



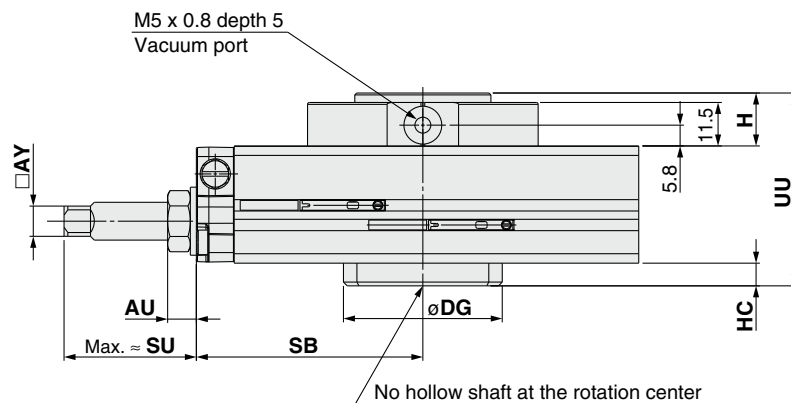
| Size | AU  | AY | FU | HU | SU   |
|------|-----|----|----|----|------|
| 10   | 6.5 | 6  | 32 | 18 | 24   |
| 20   | 7.5 | 8  | 36 | 26 | 34   |
| 30   | 7.5 | 8  | 34 | 24 | 32   |
| 50   | 10  | 10 | 54 | 34 | 45.5 |

[mm]

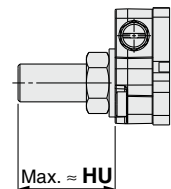
\* Dimensions other than those shown above are identical to the standard products.

For details, refer to the [Web Catalog](#).

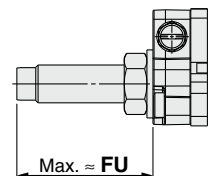
### With vacuum port 25A-MSQ□A-X251



### Bumper 25A-MSQ□D-X251



### Internal shock absorber 25A-MSQ□R-X251



| Size | AU  | AY | DG   | FU | H    | HC | HU | SB   | SU   | UU   |
|------|-----|----|------|----|------|----|----|------|------|------|
| 10   | 6.5 | 6  | 35h9 | 32 | 14.2 | 5  | 18 | 47.2 | 24   | 48.7 |
| 20   | 7.5 | 8  | 42h9 | 36 | 14   | 6  | 26 | 59.9 | 34   | 51   |
| 30   | 7.5 | 8  | 48h9 | 34 | 14   | 6  | 24 | 65.3 | 32   | 58   |
| 50   | 10  | 10 | 54h9 | 54 | 14   | 7  | 34 | 77.7 | 45.5 | 64   |

[mm]

\* Dimensions other than those shown above are identical to the standard products.

\* The product with the vacuum port has no hollow shaft at its rotation center.

For details, refer to the [Web Catalog](#).

# MSQ Series Made to Order

Please contact SMC for detailed dimensions, specifications, and delivery times.



Symbol

**-A, -B, -C**

## 1 With Interchangeable Table and Plate

### Applicable Rotary Table

| Model           | Made to order                        |                            |                            | Note |
|-----------------|--------------------------------------|----------------------------|----------------------------|------|
|                 | With interchangeable table and plate | With interchangeable table | With interchangeable plate |      |
| 25A-MSQ         | ○                                    | ○                          | ○                          |      |
| 25A-MSQ□-B-X251 | —                                    | ○                          | —                          |      |

### How to Order

Standard model no. — **A**

#### Made to order

|   |  |
|---|--|
| <b>A</b> With interchangeable table and plate | * The interchangeable table and plate can be ordered separately. For details, refer to the tables below. |
| <b>B</b> With interchangeable table           |  |
| <b>C</b> With interchangeable plate           | * The interchangeable table and plate are assembled before shipment.                                     |

### Part Nos. of Interchangeable Parts

#### Interchangeable A Unit (With Interchangeable Table and Plate)

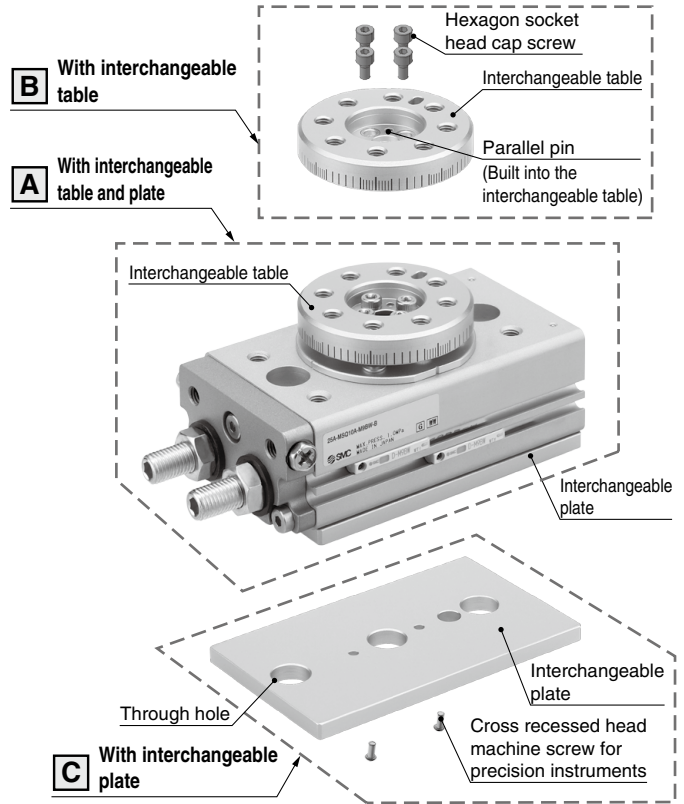
| Size | Part no.   | Contents   |
|------|------------|--|
|      |            | Description (Qty.)   |
| 10   | P891010-53 | · Interchangeable table (1)<br>· Parallel pin (1)                  |
| 20   | P891020-53 | · Hexagon socket head cap screw (4)<br>· Interchangeable plate (1) |
| 30   | P891030-53 | · Cross recessed head machine screw for precision instruments (2)  |
| 50   | P891040-53 |  |

#### Interchangeable B Unit (With Interchangeable Table)

| Size | Part no.   | Contents                            |
|------|------------|-------------------------------------|
|      |            | Description (Qty.)                  |
| 10   | P891010-54 | · Interchangeable table (1)         |
| 20   | P891020-54 | · Parallel pin (1)                  |
| 30   | P891030-54 | · Hexagon socket head cap screw (4) |
| 50   | P891040-54 |                                     |

#### Interchangeable C Unit (With Interchangeable Plate)

| Size | Part no.   | Contents  |
|------|------------|---|
|      |            | Description (Qty.)  |
| 10   | P891010-55 | · Interchangeable plate (1)                                       |
| 20   | P891020-55 | · Cross recessed head machine screw for precision instruments (2) |
| 30   | P891030-55 |   |
| 50   | P891040-55 |   |



\* To position the product, use the knock pin holes on the body instead of the through holes that are empty in the interchangeable plate.

Dimensions: The dimensions of the 25A-MSQ are the same as those of the standard product. Refer below for the dimensions of the 25A-MSQ□-B-X251 with a vacuum port.

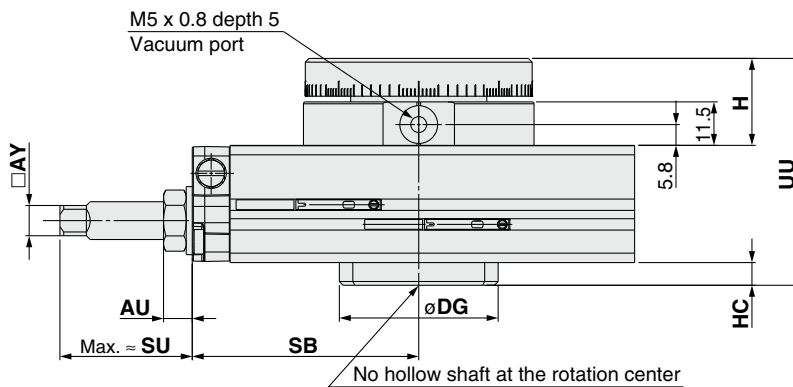
\* Refer to the **Web Catalog** for the tightening torque of the interchangeable parts.

### Dimensions

\* Mounting diagram of the interchangeable table

Dimensions other than those shown below are the same as those of the basic type. Refer to the **Web Catalog** for details.

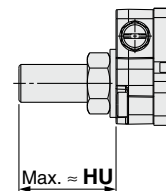
### With vacuum port/With interchangeable table 25A-MSQ□A-B-X251



| Size | AU  | AY | DG   | FU | H  | HC | HU | SB   | SU   | UU   |
|------|-----|----|------|----|----|----|----|------|------|------|
| 10   | 6.5 | 6  | 35h9 | 32 | 21 | 5  | 18 | 47.2 | 24   | 55.7 |
| 20   | 7.5 | 8  | 42h9 | 36 | 23 | 6  | 26 | 59.9 | 34   | 60   |
| 30   | 7.5 | 8  | 48h9 | 34 | 23 | 6  | 24 | 65.3 | 32   | 67   |
| 50   | 10  | 10 | 54h9 | 54 | 26 | 7  | 34 | 77.7 | 45.5 | 75.5 |

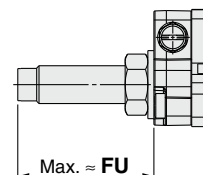
### Bumper

#### 25A-MSQ□D-B-X251



### Internal shock absorber

#### 25A-MSQ□R-B-X251



\* Dimensions other than those shown above are identical to the standard products.

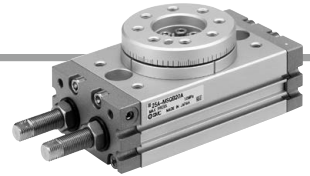
\* The product with the vacuum port has no hollow shaft at its rotation center.

# Rotary Table/Rack & Pinion Type

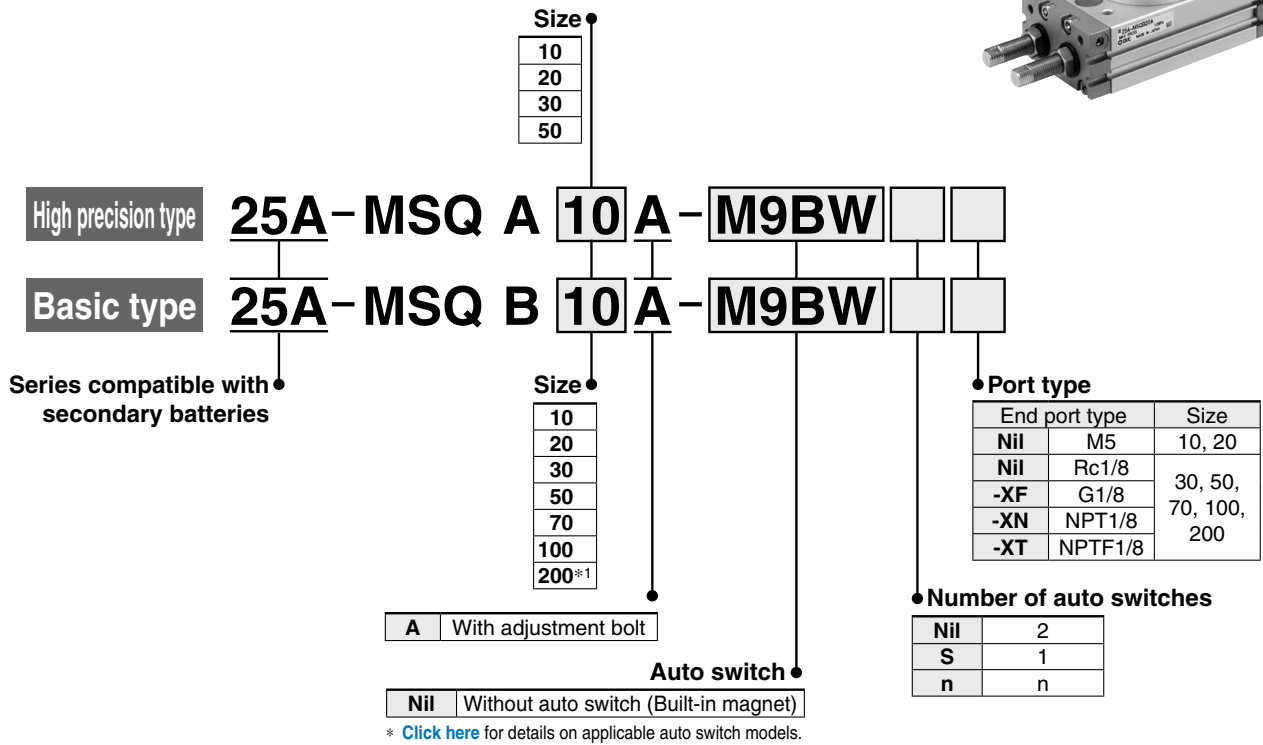
# 25A-MSQ Series

Size: 10, 20, 30, 50, 70, 100, 200

RoHS



## How to Order

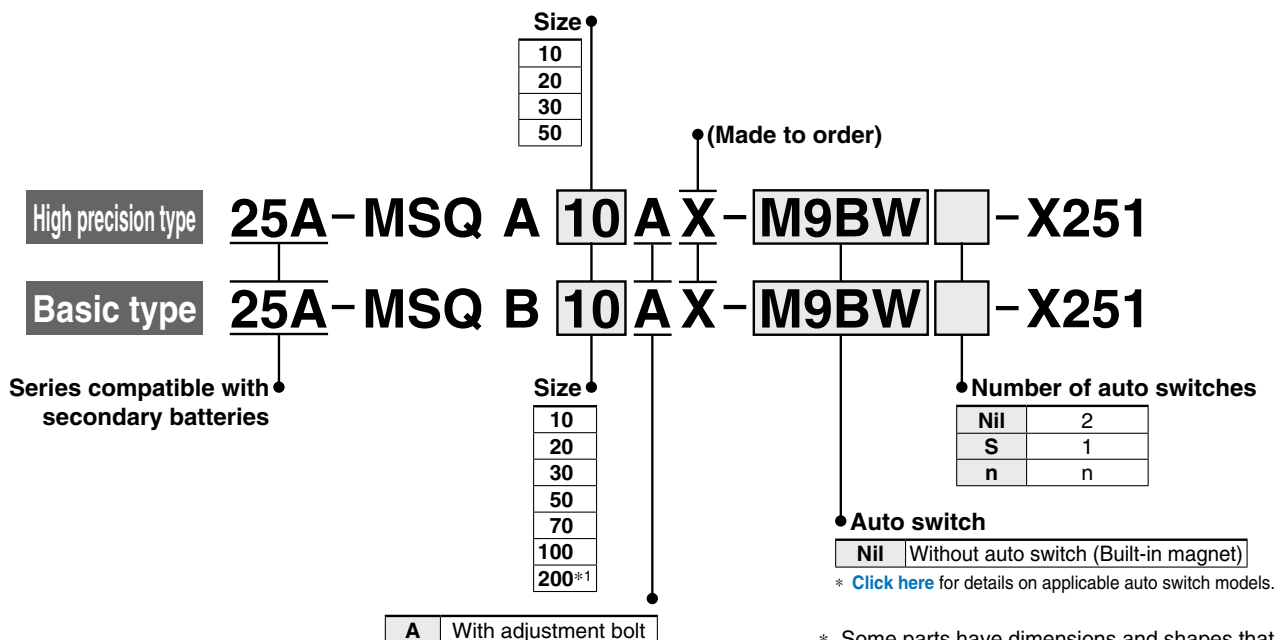


- \*1 Size 200 is produced upon receipt of order.
- \* Zinc is used in part of deep groove ball bearing and seal washer.
- \* Side port cannot be used.

- \* Some parts have dimensions and shapes that are different from those of the standard model. Refer to page 179 for details. Other specifications are the same as those of the standard model.

For details, refer to the [Web Catalog](#).

## With Vacuum Port



- \*1 Size 200 is produced upon receipt of order.
- \* Zinc is used in part of deep groove ball bearing and seal washer.
- \* Side port cannot be used.

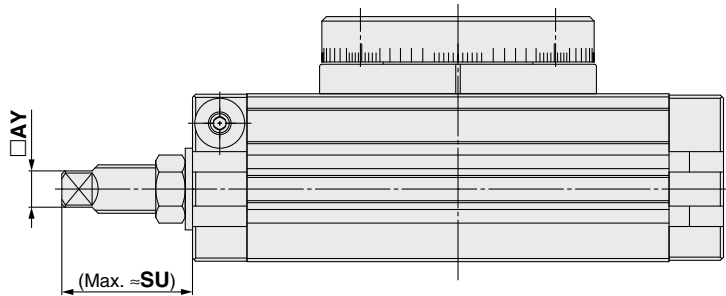
- \* Some parts have dimensions and shapes that are different from those of the standard model. Refer to page 179 for details. Other specifications are the same as those of the standard model.

For details, refer to the [Web Catalog](#).

# 25A-MSQ Series

## Dimensions

### 25A-MSQB□A

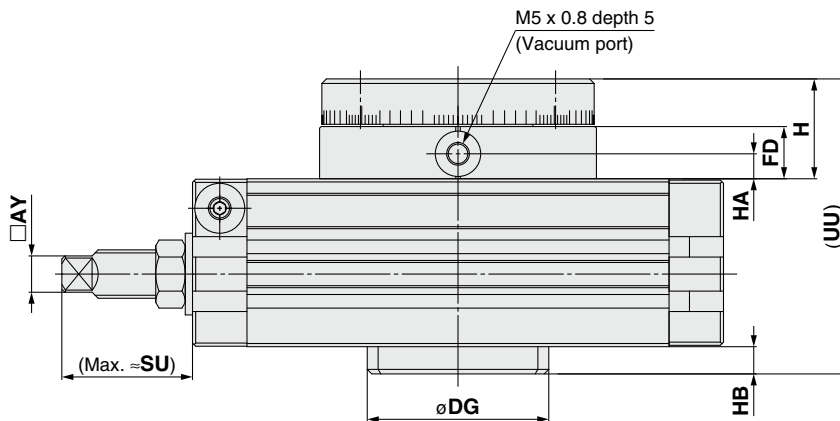


| Size | AY | SU   |
|------|----|------|
| 10   | 6  | 23.7 |
| 20   | 8  | 33   |
| 30   | 8  | 33   |
| 50   | 10 | 42.9 |
| 70   | 16 | 44.2 |
| 100  | 16 | 44.3 |
| 200  | 21 | 52.2 |

\* Dimensions other than those shown above are identical to the standard products.

For details, refer to the [Web Catalog](#).

### 25A-MSQB□AX-X251



| Size | AY | DG   | FD   | H  | HA  | HB | SU   | UU  |
|------|----|------|------|----|-----|----|------|-----|
| 10   | 6  | 35h9 | 11.5 | 20 | 5.5 | 5  | 23.7 | 59  |
| 20   | 8  | 40h9 | 11.5 | 22 | 5.5 | 6  | 33   | 65  |
| 30   | 8  | 48h9 | 11.5 | 22 | 5.5 | 6  | 33   | 68  |
| 50   | 10 | 54h9 | 11.5 | 24 | 5.5 | 7  | 42.9 | 77  |
| 70   | 16 | 50h9 | 12   | 25 | 6   | 7  | 44.2 | 85  |
| 100  | 16 | 52h9 | 12   | 27 | 6   | 7  | 44.3 | 93  |
| 200  | 21 | 64h9 | 15   | 32 | 7.5 | 8  | 52.2 | 114 |

\* The product with the vacuum port has no hollow shaft at its rotation center.  
 \* Dimensions other than those shown above are identical to the standard products.

For details, refer to the [Web Catalog](#).



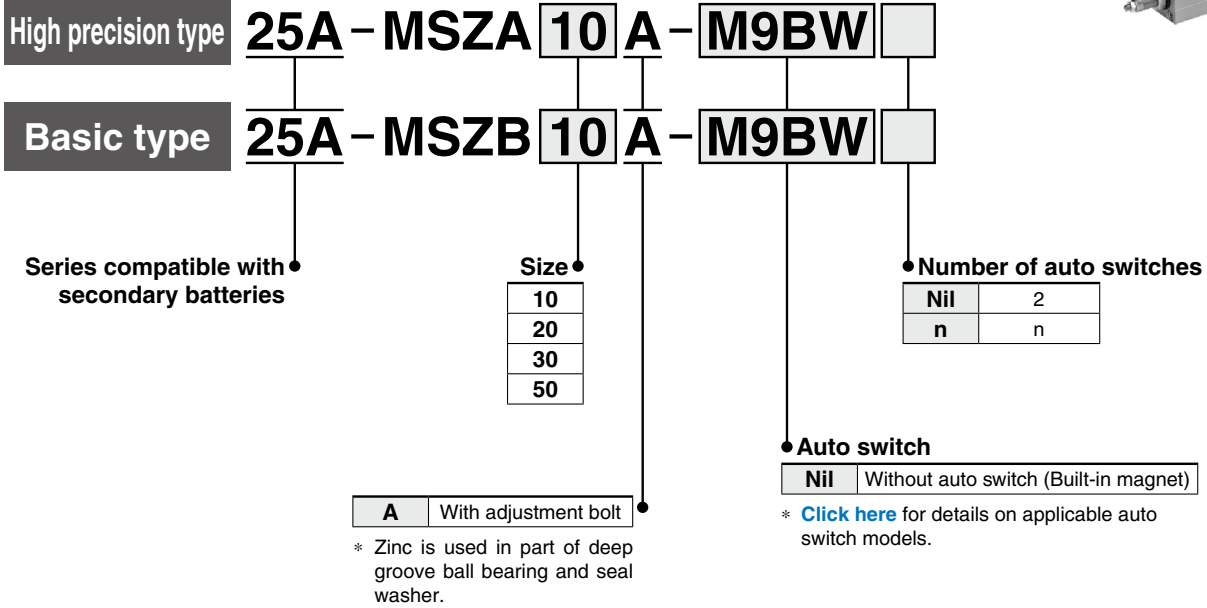
# 3-Position Rotary Table

# 25A-MSZ Series

Size: 10, 20, 30, 50

RoHS

## How to Order



\* The 25A- series specifications and dimensions are the same as those of the standard model.

For details, refer to the [Web Catalog](#).

Compact Type Parallel Style Air Gripper

# 25A-JMHZ2 Series

RoHS

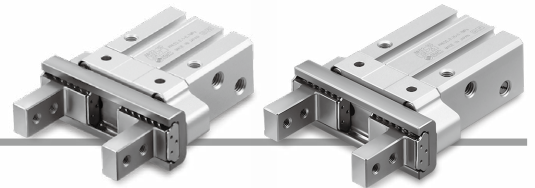
Compact Type Parallel Style Air Gripper/With Positioning Pins on the Lateral Mounting Surface

## 25A-JMHZ2-X6900(A, B) (Made to Order)

Compact Type Parallel Style Air Gripper/Lateral Auto Switch Mounting

## 25A-JMHZ2-X7460 (Made to Order)

ø8, ø12, ø16, ø20



### How to Order

#### Bore Size

ø8 to ø20

25A-JMHZ2-16D□-M9BW□

Series compatible with secondary batteries

① ② ③ ④ ⑤ ⑥

① Number of fingers

|   |   |
|---|---|
| 2 | 2 |
|---|---|

② Bore size

|    |       |
|----|-------|
| 8  | 8 mm  |
| 12 | 12 mm |
| 16 | 16 mm |
| 20 | 20 mm |

③ Action

|   |               |
|---|---------------|
| D | Double acting |
|---|---------------|

④ Finger option

|     |  |
|-----|--|
| Nil | Standard                                   |
| 1   | Side tapped mounting                       |
| 2   | Through-holes in opening/closing direction |

⑤ Auto switch

|     |                                       |
|-----|---------------------------------------|
| Nil | Without auto switch (Built-in magnet) |
|-----|---------------------------------------|

\* [Click here](#) for details on applicable auto switch models.

⑥ Number of auto switches

|     |   |
|-----|---|
| Nil | 2 |
| S   | 1 |
| n   | n |

\* The 25A- series specifications and dimensions are the same as those of the standard model. For details, refer to the [Web Catalog](#).

#### Bore Size

ø8 to ø20  
Made to Order

25A-JMHZ2-16D□-M9BW□-X6900A

Series compatible with secondary batteries

① ② ③ ④ ⑤ ⑥ ⑦

With positioning pins on the lateral mounting surface

① Number of fingers

|   |   |
|---|---|
| 2 | 2 |
|---|---|

② Bore size

|    |       |
|----|-------|
| 8  | 8 mm  |
| 12 | 12 mm |
| 16 | 16 mm |
| 20 | 20 mm |

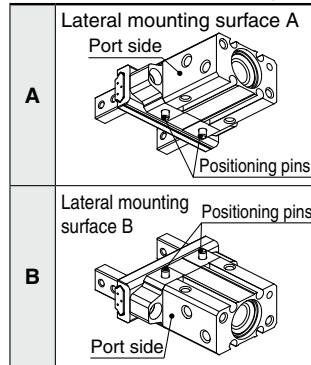
③ Action

|   |               |
|---|---------------|
| D | Double acting |
|---|---------------|

④ Finger option

|     |  |
|-----|--|
| Nil | Standard                                   |
| 1   | Side tapped mounting                       |
| 2   | Through-holes in opening/closing direction |

⑦ Direction of pin projection



⑤ Auto switch

|     |                                       |
|-----|---------------------------------------|
| Nil | Without auto switch (Built-in magnet) |
|-----|---------------------------------------|

\* [Click here](#) for details on applicable auto switch models.

⑥ Number of auto switches

|     |   |
|-----|---|
| Nil | 2 |
| S   | 1 |
| n   | n |

\* The 25A- series have the same specifications and dimensions as those of the JMHZ2-X6900(A, B) (made-to-order individual specifications). For details, refer to the [Web Catalog](#).

#### Bore Size

ø8 to ø20  
Made to Order

25A-JMHZ2-16D□-M9BW□-X7460

Series compatible with secondary batteries

① ② ③ ④ ⑤ ⑥ Lateral auto switch mounting

① Number of fingers

|   |   |
|---|---|
| 2 | 2 |
|---|---|

② Bore size

|    |       |
|----|-------|
| 8  | 8 mm  |
| 12 | 12 mm |
| 16 | 16 mm |
| 20 | 20 mm |

③ Action

|   |               |
|---|---------------|
| D | Double acting |
|---|---------------|

④ Finger option

|     |  |
|-----|--|
| Nil | Standard                                   |
| 1   | Side tapped mounting                       |
| 2   | Through-holes in opening/closing direction |

⑤ Auto switch

|     |                                       |
|-----|---------------------------------------|
| Nil | Without auto switch (Built-in magnet) |
|-----|---------------------------------------|

\* [Click here](#) for details on applicable auto switch models.

⑥ Number of auto switches

|     |   |
|-----|---|
| Nil | 2 |
| S   | 1 |

\* The 25A- series have the same specifications and dimensions as those of the JMHZ2-X7460 (made-to-order individual specifications). For details, refer to the [Web Catalog](#).

# Parallel Type Air Gripper Standard Type

# 25A-MHZ2 Series

ø10, ø16, ø20, ø25, ø32, ø40



## How to Order

### Bore size

ø16 to ø25

25A-MHZ2-16 D [ ] - M9BW [ ]

Series compatible with secondary batteries

Number of fingers  
2 2 fingers

Bore size

|    |       |
|----|-------|
| 10 | 10 mm |
| 16 | 16 mm |
| 20 | 20 mm |
| 25 | 25 mm |

Action  
D Double acting

Number of auto switches

|     |   |
|-----|---|
| Nil | 2 |
| S   | 1 |
| n   | n |

Auto switch

Nil Without auto switch (Built-in magnet)

\* [Click here](#) for details on applicable auto switch models.

Finger position/option

Standard (MHQG2 compatible type)

Nil: Basic type

1: Side tapped mounting

2: Through-holes in opening/closing direction

3: Flat type fingers

The flat type fingers do not have standard and narrow options.

Narrow type (MHQ2 compatible type)

N: Basic type

N1: Side tapped mounting

N2: Through-holes in opening/closing direction



### Bore size

ø32, ø40

25A-MHZ2-32 D [ ] - M9BW [ ]

Series compatible with secondary batteries

Number of fingers  
2 2 fingers

Bore size

|    |       |
|----|-------|
| 32 | 32 mm |
| 40 | 40 mm |

Action  
D Double acting

Number of auto switches

|     |   |
|-----|---|
| Nil | 2 |
| S   | 1 |
| n   | n |

Auto switch

Nil Without auto switch (Built-in magnet)

\* [Click here](#) for details on applicable auto switch models.

Finger option

[Standard]

Nil: Basic type

1: Side tapped mounting

2: Through-holes in opening/closing direction

3: Flat type fingers



\* The 25A-series specifications and dimensions are the same as those of the standard model.

For details, refer to the [Web Catalog](#).

# Parallel Type Air Gripper Long Stroke Type **25A-MHZL2 Series** ø10, ø16, ø20, ø25



## How to Order

**25A - MHZL2 - 16 D**   - **M9BW**  

Series compatible with secondary batteries

Number of fingers  
2 2 fingers

**Bore size**

| Symbol    | Bore size [mm] |
|-----------|----------------|
| <b>10</b> | 10 mm          |
| <b>16</b> | 16 mm          |
| <b>20</b> | 20 mm          |
| <b>25</b> | 25 mm          |

**Action**  
D Double acting

**Number of auto switches**

|     |   |
|-----|---|
| Nil | 2 |
| S   | 1 |
| n   | n |

**Auto switch**  
Nil Without auto switch (Built-in magnet)

\* [Click here](#) for details on applicable auto switch models.

**Finger option**

Nil: Basic type



1: Side tapped mounting



2: Through-holes in opening/closing direction



3: Flat type fingers



\* The 25A- series specifications and dimensions are the same as those of the standard model.

For details, refer to the [Web Catalog](#).

# 25A-MHZJ2 Series



## 25A-MHZJ2-X6100 (Made to Order)

Parallel Type Air Gripper with Dust Cover: Long Stroke Type

## 25A-MHZL2-X5955 (Made to Order)

### How to Order



#### With Dust Cover

ø10 to ø25

ø32, ø40  
Made to Order

25A - MHZJ2 - 16 D - M9BW

25A - MHZJ2 - 32 D - M9BW - X6100

Series compatible with secondary batteries

Number of fingers  
2 2 fingers

Bore size

|    |       |
|----|-------|
| 10 | 10 mm |
| 16 | 16 mm |
| 20 | 20 mm |
| 25 | 25 mm |

Bore size

|    |       |
|----|-------|
| 32 | 32 mm |
| 40 | 40 mm |

Action  
D Double acting

Dust cover type

|     |                         |
|-----|-------------------------|
| Nil | Chloroprene rubber (CR) |
| F   | Fluororubber (FKM)      |
| S   | Silicone rubber (Si)    |

Auto switch

|     |                                       |
|-----|---------------------------------------|
| Nil | Without auto switch (Built-in magnet) |
|-----|---------------------------------------|

\* Click here for details on applicable auto switch models.

Number of auto switches

|     |   |
|-----|---|
| Nil | 2 |
| S   | 1 |
| n   | n |

\* Sizes ø10 to ø25 of the 25A- series have the same specifications and dimensions as those of the standard model.

For details, refer to the [Web Catalog](#).

\* Sizes ø32 and ø40 of the 25A- series have the same specifications and dimensions as those of the MHZJ2-X6100 (made-to-order individual specifications).

For details, refer to the [Web Catalog](#).

#### Long Stroke Type/ With Dust Cover (Made to Order)

ø10 to ø20

25A - MHZL2 - 16 D - M9BW - X5955

Series compatible with secondary batteries

Number of fingers  
2 2 fingers

Bore size/Stroke

| Symbol | Bore size [mm] |
|--------|----------------|
| 10     | 10 mm          |
| 16     | 16 mm          |
| 20     | 20 mm          |

Action  
D Double acting

Dust cover type

|     |                         |
|-----|-------------------------|
| Nil | Chloroprene rubber (CR) |
| F   | Fluororubber (FKM)      |
| S   | Silicone rubber (Si)    |

Long stroke type/ With dust cover

Number of auto switches

|     |   |
|-----|---|
| Nil | 2 |
| S   | 1 |
| n   | n |

Auto switch

|     |                                       |
|-----|---------------------------------------|
| Nil | Without auto switch (Built-in magnet) |
|-----|---------------------------------------|

\* Click here for details on applicable auto switch models.

\* The 25A- specifications and dimensions are the same as those of the MHZL2-X6110 (made to order individual specifications).

For details, refer to the [Web Catalog](#).

# Low Profile Air Gripper

## 25A-MHF2 Series

ø8, ø12, ø16, ø20



### How to Order



**25A-MHF 2 - 12 D [ ] [ ] - M9BW [ ]**

Number of fingers  
 2 | 2 fingers

Series compatible with secondary batteries

Bore size [mm]

|    |    |
|----|----|
| 8  | 8  |
| 12 | 12 |
| 16 | 16 |
| 20 | 20 |

Action  
 D | Double acting

Stroke

|     |               |
|-----|---------------|
| Nil | Short stroke  |
| 1   | Medium stroke |
| 2   | Long stroke   |

Number of auto switches

|     |   |
|-----|---|
| Nil | 2 |
| S   | 1 |
| n   | n |

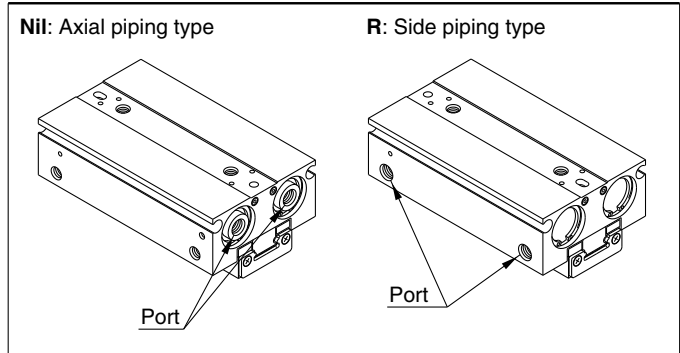
Auto switch  
 Nil | Without auto switch (Built-in magnet)

\* [Click here](#) for details on applicable auto switch models.

Body option

Nil: Axial piping type

R: Side piping type



\* The 25A- series specifications and dimensions are the same as those of the standard model.

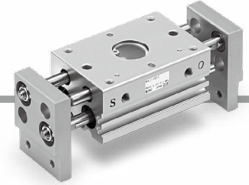
For details, refer to the [Web Catalog](#).

# Parallel Type Air Gripper: Wide Type

## 25A-MHL2 Series

∅10, ∅16, ∅20, ∅25, ∅32, ∅40

RoHS



### How to Order

25A-MHL2-20D□Z-M9BW□

Series compatible with secondary batteries

Wide opening

Number of fingers  
2 2 fingers

Bore size

|    |       |
|----|-------|
| 10 | 10 mm |
| 16 | 16 mm |
| 20 | 20 mm |
| 25 | 25 mm |
| 32 | 32 mm |
| 40 | 40 mm |

Action

|   |               |
|---|---------------|
| D | Double acting |
|---|---------------|

Number of auto switches

|     |   |
|-----|---|
| Nil | 2 |
| S   | 1 |
| n   | n |

Auto switch

|     |                                       |
|-----|---------------------------------------|
| Nil | Without auto switch (Built-in magnet) |
|-----|---------------------------------------|

\* [Click here](#) for details on applicable auto switch models.

Opening/Closing stroke [mm]

| Symbol | ∅10 | ∅16 | ∅20 | ∅25 | ∅32 | ∅40 |
|--------|-----|-----|-----|-----|-----|-----|
| Nil    | 20  | 30  | 40  | 50  | 70  | 100 |
| 1      | 40  | 60  | 80  | 100 | 120 | 160 |
| 2      | 60  | 80  | 100 | 120 | 160 | 200 |

\* The 25A- series specifications and dimensions are the same as those of the standard model.

For details, refer to the [Web Catalog](#).

### How to Order

25A-MHL2-20D□-M9BW□

Series compatible with secondary batteries

Wide opening

Number of fingers  
2 2 fingers

Bore size

|    |       |
|----|-------|
| 10 | 10 mm |
| 16 | 16 mm |
| 20 | 20 mm |
| 25 | 25 mm |
| 32 | 32 mm |
| 40 | 40 mm |

Action

|   |               |
|---|---------------|
| D | Double acting |
|---|---------------|

Number of auto switches

|     |   |
|-----|---|
| Nil | 2 |
| S   | 1 |
| n   | n |

Auto switch

|     |                                       |
|-----|---------------------------------------|
| Nil | Without auto switch (Built-in magnet) |
|-----|---------------------------------------|

\* [Click here](#) for details on applicable auto switch models.

Opening/Closing stroke [mm]

| Symbol | ∅10 | ∅16 | ∅20 | ∅25 | ∅32 | ∅40 |
|--------|-----|-----|-----|-----|-----|-----|
| Nil    | 20  | 30  | 40  | 50  | 70  | 100 |
| 1      | 40  | 60  | 80  | 100 | 120 | 160 |
| 2      | 60  | 80  | 100 | 120 | 160 | 200 |

\* The 25A- series specifications and dimensions are the same as those of the standard model.

For details, refer to the [Web Catalog](#).

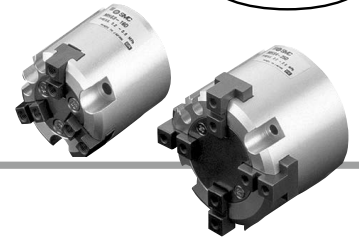




# Parallel Type Air Gripper

## 25A-MHS□ Series

ø16, ø20, ø25, ø32



### How to Order

**25A - MHS 3 - 20D - M9BW □**

Series compatible with secondary batteries

Number of fingers

|   |           |
|---|-----------|
| 3 | 3 fingers |
| 4 | 4 fingers |

Bore size

|    |       |
|----|-------|
| 16 | 16 mm |
| 20 | 20 mm |
| 25 | 25 mm |
| 32 | 32 mm |

Action

|   |               |
|---|---------------|
| D | Double acting |
|---|---------------|

Number of auto switches

|     |   |
|-----|---|
| Nil | 2 |
| S   | 1 |

Auto switch

|     |                                       |
|-----|---------------------------------------|
| Nil | Without auto switch (Built-in magnet) |
|-----|---------------------------------------|

\* [Click here](#) for details on applicable auto switch models.

\* The 25A- series specifications and dimensions are the same as those of the standard model.

For details, refer to the [Web Catalog](#).

# Parallel Type Air Gripper 3-Finger Type with Dust Cover

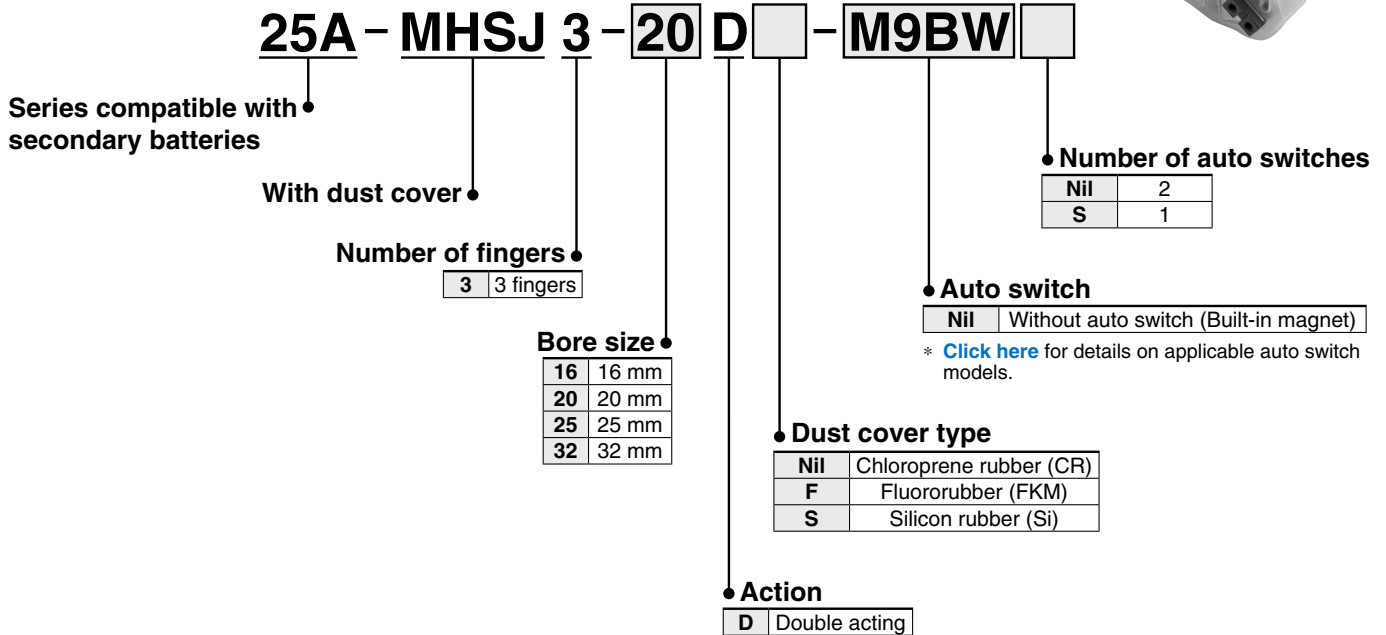
## 25A-MHSJ3 Series

ø16, ø20, ø25, ø32

RoHS



### How to Order



\* The 25A- series specifications and dimensions are the same as those of the standard model.

For details, refer to the [Web Catalog](#).

# 180° Angular Type Air Gripper Cam Type

# 25A-MHY2 Series

ø10, ø16, ø20, ø25

RoHS



## How to Order

25A - MHY 2 - 16 D 2 - M9BW

Series compatible with secondary batteries

Number of fingers

|   |           |
|---|-----------|
| 2 | 2 fingers |
|---|-----------|

Bore size

|    |       |
|----|-------|
| 10 | 10 mm |
| 16 | 16 mm |
| 20 | 20 mm |
| 25 | 25 mm |

Action

|   |               |
|---|---------------|
| D | Double acting |
|---|---------------|

Number of auto switches

|     |   |
|-----|---|
| Nil | 2 |
| S   | 1 |
| n   | n |

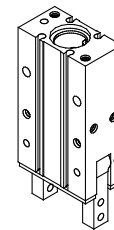
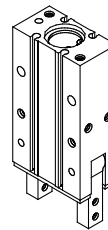
Auto switch

|     |                                       |
|-----|---------------------------------------|
| Nil | Without auto switch (Built-in magnet) |
|-----|---------------------------------------|

\* [Click here](#) for details on applicable auto switch models.

Finger option

Nil: Standard tapped mounting      2: Through-holes in opening/closing direction



\* The 25A- series specifications and dimensions are the same as those of the standard model.

For details, refer to the [Web Catalog](#).

# 180° Angular Type Air Gripper Rack & Pinion Type

RoHS

# 25A-MHW2 Series

∅20, ∅25, ∅32, ∅40, ∅50



## How to Order

**25A-MHW2-20 [ ] D 1-M9BW [ ]**

Series compatible with secondary batteries

Number of fingers  
2 | 2 fingers

Bore size

|    |       |
|----|-------|
| 20 | 20 mm |
| 25 | 25 mm |
| 32 | 32 mm |
| 40 | 40 mm |
| 50 | 50 mm |

Port thread type

| Symbol | Type     | Size     |
|--------|----------|----------|
| Nil    | M thread | ∅20, ∅25 |
|        | Rc       | ∅32      |
| TN     | NPT      | ∅40      |
| TF     | G        | ∅50      |

Action

D | Double acting

Number of auto switches

|     |   |
|-----|---|
| Nil | 2 |
| S   | 1 |
| N   | n |

Auto switch

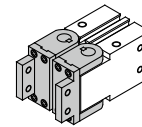
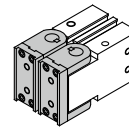
Nil | Without auto switch (Built-in magnet)

\* [Click here](#) for details on applicable auto switch models.

Finger option

Nil: Flat type fingers (Standard)

1: Right angle type fingers tapped mounting

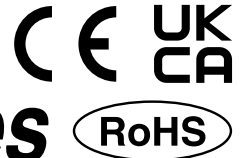


- \* Change of material and surface treatment are not available for the bearing or the parallel key.
- \* As metal-to-metal collision occurs when the fingers are fully closed, dust particles may be generated.

\* The 25A- series specifications and dimensions are the same as those of the standard model.

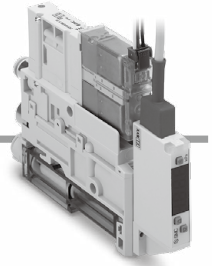
For details, refer to the [Web Catalog](#).

# Ejector System Vacuum Unit

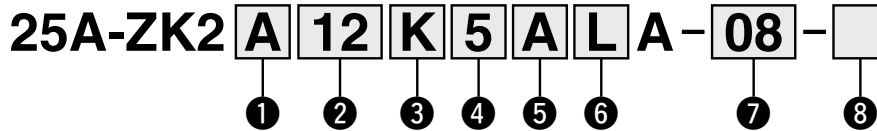


# 25A-ZK2□A Series

Single Unit Ejector + With Valve + Without Energy Saving Function



## How to Order



### 1 Body/Exhaust type

| Symbol | Body        | Exhaust type                              |
|--------|-------------|---|
| A      | Single unit | Silencer exhaust*1<br>                    |
|        |             | Port exhaust<br>                          |
| B      | Single unit | High-noise reduction silencer exhaust<br> |

\*1 With exhaust port when 2 is 12 or 15

### 4 Rated voltage (Supply valve/Release valve)

| Symbol | Voltage |
|--------|---------|
| 5      | 24 VDC  |
| 6      | 12 VDC  |

### 5 Pressure switch for vacuum/Pressure sensor

| Symbol | Type   | Pressure range [kPa] | Specifications         |                     |                                |
|--------|--|----------------------|------------------------|---------------------|--------------------------------|
|        |  |                      | NPN                    | PNP                 | With unit selection function*3 |
| A      | Pressure switch for vacuum                         | 0 to -101            | ●                      | —                   | ●                              |
| B      |  |                      | ●                      | —                   | None (SI unit only)            |
| C      |  |                      | —                      | ●                   | ●                              |
| D      |  | -100 to 100          | —                      | ●                   | None (SI unit only)            |
| E      |  |                      | ●                      | —                   | ●                              |
| F      |  |                      | ●                      | —                   | None (SI unit only)            |
| H      | —  | ●                    | ●                      |                     |                                |
| J      | —  | ●                    | ●                      | None (SI unit only) |                                |
| P      | Pressure sensor                                    | 0 to -101            | Analog output 1 to 5 V |                     |                                |
| T      |  | -100 to 100          |                        |                     |                                |
| N      | Without pressure switch for vacuum/pressure sensor |                      |                        |                     |                                |

\*3 The unit selection function is not available in Japan due to the New Measurement Law. The unit for the type without the unit selection function is fixed as kPa.

### 7 Vacuum (V) port

| Symbol | Vacuum (V) port |
|--------|-----------------|
| 06     | ø6              |
| 08     | ø8              |

### 2 Nominal nozzle size

| Symbol | Nominal nozzle size |
|--------|---------------------|
| 07     | ø0.7                |
| 10     | ø1.0                |
| 12     | ø1.2                |
| 15     | ø1.5                |

\* The standard supply pressure of each nozzle diameter is the same as that of the corresponding standard product. For details, refer to the [Web Catalog](#).

### 3 Combination of supply valve and release valve

| Symbol | Supply valve |              | Release valve |
|--------|--------------|--------------|---------------|
|        | N.C.         | Self-holding | N.C.          |
| K      | ●            | —            | ●             |
| J      | ●            | —            | —             |
| R      | —            | ●*2          | ●             |

\*2 Supply valve maintains vacuum by energization (20 ms or more). Stopping the vacuum turns on the release valve.

### 6 Connector (Supply valve/Release valve/Pressure switch for vacuum)

| Symbol | For supply valve/ release valve: 300 mm (Connector assembly)*4 | For pressure switch for vacuum: 2 m (Lead wire with connector) | Pressure sensor assembly: 3 m (With lead wire) | Note                                |
|--------|--|--|--|-------------------------------------|
| L      | ●  | ●  | —  | Cannot be selected when 5 is N      |
| L1     | None   | ●  | —  |                                     |
| L2     | ●  | None   | —  | Cannot be selected when 5 is P or T |
| L3     | None   | None   | —  |                                     |

\*4 For the connector length other than 300 mm, select L1 or L3, and order the connector assembly on page 194 separately.

### 8 Option\*5 (For details on the Function/Application, refer to page 195.)

| Symbol | Type   | Note  |
|--------|--|---|
| Nil    | Without option   | —   |
| B      | Mounting bracket for single unit (nuts and bolts are included)<br>                 | —   |
| D      | With individual release pressure supply (PD) port (M3)*6<br>                       | Cannot be selected when 3 is J  |
| E      | Vacuum break flow adjusting needle<br>Screwdriver operation type long lock nut<br> | Cannot be selected when 3 is J  |
| J      | Round lock nut<br>Lock nut<br>   |   |
| K      | Vacuum break flow adjusting needle<br>Screwdriver operation type<br>               | Can be selected only for the combination of J and K   |
| W      | With exhaust interference prevention valve<br>                                     | When J is selected for 8, install the release valve or vacuum breaker in the middle of the vacuum piping. |

\*5 When more than one option is selected, list the option symbols in alphabetical order. (Example -BJ)

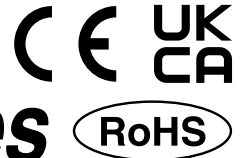
\*6 Use a One-touch fitting or barb fitting for piping. (O.D.: Within ø6.2)

\* The 25A-series specifications and dimensions are the same as those of the standard model.

The manifold type is available as a special order.

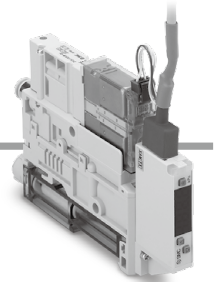
For details, refer to the [Web Catalog](#).

# Ejector System Vacuum Unit



# 25A-ZK2□A Series

Single Unit Ejector + With Valve + With Energy Saving Function



## How to Order

25A-ZK2 **A** **12** **K** **5** **K** **W** **A** - **08** - □

①
②
③
④
⑤
⑥
⑦
⑧

### ① Body/Exhaust type

| Symbol | Body        | Exhaust type                              |
|--------|-------------|---|
| A      | Single unit | Silencer exhaust*1<br>                    |
|        |             | Port exhaust<br>                          |
| G      | Single unit | High-noise reduction silencer exhaust<br> |

\*1 With exhaust port when ② is 12 or 15

### ② Nominal nozzle size

| Symbol | Nominal nozzle size |
|--------|---------------------|
| 07     | ø0.7                |
| 10     | ø1.0                |
| 12     | ø1.2                |
| 15     | ø1.5                |

\* The standard supply pressure of each nozzle diameter is the same as that of the corresponding standard product.  
For details, refer to the [Web Catalog](#).

### ③ Combination of supply valve and release valve

| Symbol | Supply valve | Release valve |
|--------|--------------|---------------|
|        | N.C.         | N.C.          |
| K      | ●            | ●             |

### ④ Rated voltage (Supply valve/Release valve)

| Symbol | Voltage |
|--------|---------|
| 5      | 24 VDC  |
| 6      | 12 VDC  |

### ⑤ Pressure switch for vacuum with energy saving function

| Symbol | Pressure range [kPa] | Specifications |     |                                |
|--------|----------------------|----------------|-----|--------------------------------|
|        |                      | NPN            | PNP | With unit selection function*2 |
| K      | -100 to 100          | ●              | —   | ●                              |
| Q      |                      | ●              | —   | None (SI unit only)            |
| R      |                      | —              | ●   | ●                              |
| S      |                      | —              | ●   | None (SI unit only)            |

\*2 The unit selection function is not available in Japan due to the New Measurement Law. The unit for the type without the unit selection function is fixed as kPa.

### ⑥ Connector

| Symbol | For pressure switch for vacuum with energy saving function: 2 m (Lead wire with connector) |
|--------|--|
| W      | ●  |
| L3     | None   |

### ⑦ Vacuum (V) port

| Symbol | Vacuum (V) port |
|--------|-----------------|
| 06     | ø6              |
| 08     | ø8              |

### ⑧ Option\*3 (For details on the Function/Application, refer to page 195.)

| Symbol | Type   | Note  |
|--------|--|---|
| Nil    | Without option   | —   |
| B      | Mounting bracket for single unit (nuts and bolts are included)<br>   | —   |
| D      | With individual release pressure supply (PD) port (M3)*4<br>         | —   |
| E      | Screwdriver operation type long lock nut<br>                         | Can be selected only for the combination of J and K |
| J      | Round lock nut<br>   |   |
| K      | Screwdriver operation type<br>Vacuum break flow adjusting needle<br> |   |

\*3 When more than one option is selected, list the option symbols in alphabetical order. (Example -BJ)

\*4 Use a One-touch fitting or barb fitting for piping. (O.D.: Within ø6.2)

The manifold type is available as a special order.

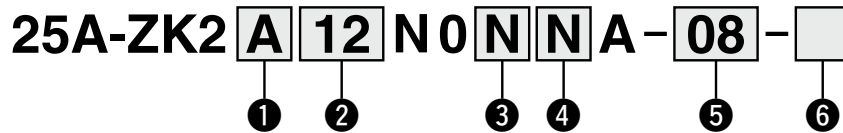
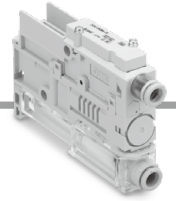
\* The 25A- series specifications and dimensions are the same as those of the standard model.

For details, refer to the [Web Catalog](#).

# 25A-ZK2□A Series

Single Unit Ejector + Without Valve + Without Energy Saving Function

## How to Order



### ① Body/Exhaust type

| Symbol   | Body        | Exhaust type   |
|----------|-------------|--|
| <b>A</b> | Single unit | Silencer exhaust* <sup>1</sup><br>   |
| <b>B</b> |             | Port exhaust<br>   |
| <b>G</b> |             | High-noise reduction silencer exhaust<br>High-noise reduction silencer exhaust<br> |

\*1 With exhaust port when ② is 12 or 15

### ② Nominal nozzle size

| Symbol    | Nominal nozzle size |
|-----------|---------------------|
| <b>07</b> | ø0.7                |
| <b>10</b> | ø1.0                |
| <b>12</b> | ø1.2                |
| <b>15</b> | ø1.5                |

\* The standard supply pressure of each nozzle diameter is the same as that of the corresponding standard product.  
For details, refer to the [Web Catalog](#).

### ④ Connector

| Symbol    | For pressure switch for vacuum: 2 m (Lead wire with connector) | Pressure sensor assembly: 3 m (With lead wire) | Note                                    |
|-----------|--|--|---|
| <b>Y</b>  | ●  |  | Cannot be selected when ③ is N          |
| <b>Y1</b> | None   |  | Cannot be selected when ③ is P, T, or N |
| <b>N</b>  | None   |  | When "N" is selected for ③              |

### ③ Pressure switch for vacuum/Pressure sensor

| Symbol   | Type   | Pressure range [kPa] | Specifications         |                     |  |
|----------|--|----------------------|------------------------|---------------------|--|
|          |  |                      | NPN 2 outputs          | PNP                 | With unit selection function* <sup>2</sup> |
| <b>A</b> | Pressure switch for vacuum                         | 0 to -101            | ●                      | —                   | ●  |
| <b>B</b> |  |                      | ●                      | —                   | None (SI unit only)                        |
| <b>C</b> |  |                      | —                      | ●                   | ●  |
| <b>D</b> |  | —                    | ●                      | None (SI unit only) |  |
| <b>E</b> |  | -100 to 100          | ●                      | —                   | ●  |
| <b>F</b> |  |                      | ●                      | —                   | None (SI unit only)                        |
| <b>H</b> | —  |                      | ●                      | ●                   |  |
| <b>J</b> |  |                      | —                      | ●                   | None (SI unit only)                        |
| <b>P</b> | Pressure sensor                                    | 0 to -101            | Analog output 1 to 5 V |                     |  |
| <b>T</b> |  | -100 to 100          |                        |                     |  |
| <b>N</b> | Without pressure switch for vacuum/pressure sensor |                      |                        |                     |  |

\*<sup>2</sup> The unit selection function is not available in Japan due to the New Measurement Law. The unit for the type without the unit selection function is fixed as kPa.

### ⑤ Vacuum (V) port

| Symbol    | Vacuum (V) port |
|-----------|-----------------|
| <b>06</b> | ø6              |
| <b>08</b> | ø8              |

### ⑥ Option\*<sup>3</sup> (For details on the Function/Application, refer to page 195.)

| Symbol     | Type   | Note  |
|------------|--|---|
| <b>Nil</b> | Without option   | —   |
| <b>B</b>   | Mounting bracket for single unit (nuts and bolts are included)<br> | —   |
| <b>W</b>   | With exhaust interference prevention valve<br>                     | Install the release valve or vacuum breaker in the middle of the vacuum piping. |

\*<sup>3</sup> When more than one option is selected, list the option symbols in alphabetical order. (Example -BW)

The manifold type is available as a special order.

\* The 25A- series specifications and dimensions are the same as those of the standard model.

For details, refer to the [Web Catalog](#).



## Replacement Parts for Single Unit / How to Order

### Valve assembly

**25A-ZK2 - VA** **A** **K** **5** **L** **A-A**

① ② ③ ④

#### ① Applicable system

|          |                |
|----------|----------------|
| <b>A</b> | Ejector system |
|----------|----------------|

#### ② Valve type

|          |  |
|----------|--|
| <b>K</b> | Supply valve: N.C., Release valve: N.C.                              |
| <b>R</b> | Supply valve: Self-holding release valve linked, Release valve: N.C. |
| <b>J</b> | Supply valve: N.C., Release valve: None                              |

#### ③ Rated voltage

|          |        |
|----------|--------|
| <b>5</b> | 24 VDC |
| <b>6</b> | 12 VDC |

#### ④ Wiring

|           |   |
|-----------|---|
| <b>L</b>  | Individual wiring: With connector assembly (Lead wire length: 300 mm) |
| <b>LO</b> | Individual wiring: Without connector assembly                         |

Select the 25A-ZK2VAAK□LOA-A for a switch with energy saving function.

### Connector assembly

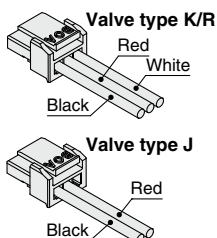
**ZK2 - LV** **W** □ **A**

#### Applicable valve type

|          |                |
|----------|----------------|
| <b>W</b> | Valve type K/R |
| <b>S</b> | Valve type J   |

#### Lead wire length

|           |         |
|-----------|---------|
| Nil       | 300 mm  |
| <b>6</b>  | 600 mm  |
| <b>10</b> | 1000 mm |
| <b>20</b> | 2000 mm |
| <b>30</b> | 3000 mm |



### Sound absorbing material (10 pcs. per set)

**ZK2 - SE1 - 1 - A**

#### Sound absorbing material hole diameter

|          |        |
|----------|--------|
| <b>1</b> | 300 μm |
|----------|--------|

### Vacuum port adapter assembly (Purchasing order is available in units of 1 piece.)

**ZK2 - VA1S** **8** - **A**

#### One-touch fitting size

|          |                      |             |
|----------|----------------------|-------------|
| <b>6</b> | φ6 One-touch fitting | Metric size |
| <b>8</b> | φ8 One-touch fitting |             |

### Filter element (10 pcs. per set)

**ZK2 - FE1 - 3 - A**

#### Nominal filtration rating

|          |       |
|----------|-------|
| <b>3</b> | 30 μm |
|----------|-------|

### Body gasket\*<sup>1</sup> (10 pcs. per set)

**ZK2 - BG5 - 1 - A**

#### Applicable type

|          |   |
|----------|---|
| <b>1</b> | One check valve type<br>(All specifications other than vacuum switch with energy saving function and exhaust interference prevention valve) |
| <b>2</b> | Two check valve type<br>(Vacuum switch with energy saving function and exhaust interference prevention valve)                               |

\*1 When ZK2-BG5-2-A is mounted, the workpiece cannot be removed until vacuum is released.

### Filter case\*<sup>1</sup>

**ZK2 - FC** □ **A**

#### Port for the pressure switch or sensor

| Symbol   | Port for the pressure switch or sensor                | Filter case color |
|----------|---|-------------------|
| <b>P</b> | With port (type with pressure switch or sensor)       | Smoke             |
| <b>T</b> | Without port (type without pressure switch or sensor) | Clear             |

\*1 Vacuum port adapter assembly is not included.

### Pressure switch for vacuum assembly (With 2 mounting screws)

**25A-ZK2 - ZS** **E** **A** **M** **G** - **A**

① ② ③ ④

#### ① Rated pressure range and function

|          |                 |  |                          |
|----------|-----------------|--|--------------------------|
| <b>E</b> | 0 to -101 kPa   | Pressure switch for vacuum                             | Open collector 2 outputs |
| <b>F</b> | -100 to 100 kPa | Pressure switch for vacuum with energy saving function | Open collector 1 output  |
| <b>V</b> | -100 to 100 kPa | Pressure switch for vacuum with energy saving function | Open collector 1 output  |

#### ② Output

|          |     |
|----------|-----|
| <b>A</b> | NPN |
| <b>B</b> | PNP |

#### ③ Unit

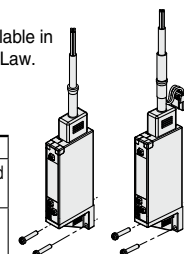
|            |                                       |
|------------|---------------------------------------|
| <b>Nil</b> | Unit selection function* <sup>1</sup> |
| <b>M</b>   | SI unit only* <sup>2</sup>            |

\*1 The unit selection function is not available in Japan due to the New Measurement Law.

\*2 Fixed unit: kPa

#### ④ Lead wire with connector

|            |                |   |
|------------|----------------|---|
| <b>Nil</b> | None           |   |
| <b>G</b>   | With lead wire | When ① is E or F...For pressure switch for vacuum, Lead wire with connector (Length 2 m)                        |
|            |                | When ① is V...For pressure switch for vacuum with energy saving function, Lead wire with connector (Length 2 m) |



### Lead wire with connector

(When individual lead wire is necessary, order with the part number below.)

#### Lead wire with connector for pressure switch for vacuum

**ZS - 39 - 5G**

#### Lead wire with connector for pressure switch for vacuum with energy saving function

**ZK2 - LW** **A** **20 - A**

#### Output

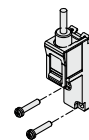
|          |                    |
|----------|--------------------|
| <b>A</b> | NPN open collector |
| <b>B</b> | PNP open collector |

### Pressure sensor assembly (With 2 mounting screws)

**25A-ZK2 - PS** **1** - **A**

#### Rated pressure range

|          |  |
|----------|--|
| <b>1</b> | 0 to -101 kPa, Output: 1 to 5 V, Accuracy: ± 2% F.S.   |
| <b>3</b> | -100 to 100 kPa, Output: 1 to 5 V, Accuracy: ± 2% F.S. |



### High-noise reduction silencer case assembly

**ZK2 - SC3 - 4 - A**

#### Applicable nozzle size

|          |                        |
|----------|------------------------|
| <b>4</b> | For nozzle size 07, 10 |
| <b>6</b> | For nozzle size 12, 15 |

### Sound absorbing material for high-noise reduction silencer (5 pcs. per set)

**ZK2 - SE4 - 6 - A**

### Release lever (10 pcs. per set)

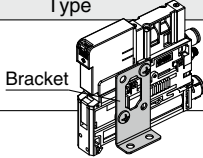
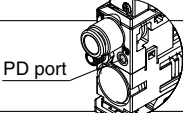
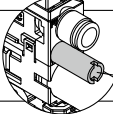
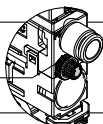
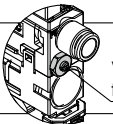
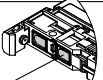
**ZK2 - RL1 - A**

### Lock nut (10 pcs. per set)

**25A-ZK2 - LN1 - A**

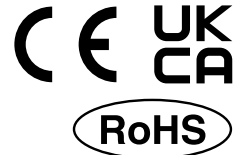
# 25A-ZK2□A Series

## Optional Specifications/Functions/Applications

| Symbol   | Type   | Function/Application   |
|----------|--|--|
| <b>B</b> | Mounting bracket for single unit<br>(nuts and bolts are included)<br> Bracket         | · Use when a single unit is mounted to the floor in an upright position is requested. If only ordering the bracket, the product number is as follows: 25A-ZK2-BK1-A (includes nuts and bolts). |
| <b>D</b> | With individual release pressure supply (PD) port (M3)<br> PD port                    | · Use when supply pressure for vacuum release is individually requested.   |
| <b>E</b> | Screwdriver operation type long lock nut<br> Screwdriver operation type long lock nut | · Used when the needle adjustment operation is difficult   |
| <b>J</b> | Vacuum break flow adjusting needle<br>Round lock nut<br> Lock nut                     | · Thicker than standard hexagon type. More suitable for hand tightening.<br>· Round lock nut improves operability when the port exhaust type is used.  |
| <b>K</b> | Screwdriver operation type<br> Vacuum break flow adjusting needle                     | · Slotted type improves fine adjustment performance when the port exhaust type is used.  |
| <b>W</b> | With exhaust interference prevention valve<br> Exhaust interference prevention valve  | · When ejectors are operated individually, exhausted air may flow backward from the V port of ejectors that are turned off. Exhaust interference prevention valve prevents backflow.           |

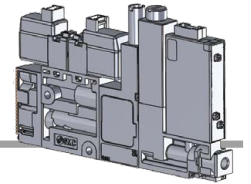


# Ejector System Compact Vacuum Unit With Energy Saving Function



# 25A-ZQ□A Series

Single Unit Part Number



## How to Order

25A-ZQ **05** **1U** A-K**15** LO □ - **VA** **M** **W** - **00** - □

Series compatible with secondary batteries

### 1 Nominal nozzle size

|           |     |
|-----------|-----|
| <b>05</b> | 0.5 |
| <b>07</b> | 0.7 |
| <b>10</b> | 1.0 |

### 2 Body type

|           |                 |
|-----------|-----------------|
| <b>1U</b> | For Single unit |
| <b>3M</b> | For Manifold    |

### 3 Solenoid valve combination

|           |   |
|-----------|---|
| <b>K1</b> | Supply valve (N.C.), Release valve (N.C.) |
|-----------|---|

### 4 Solenoid valve rated voltage

|          |        |
|----------|--------|
| <b>5</b> | 24 VDC |
|----------|--------|

### 5 Electrical entry

|           |   |
|-----------|---|
| <b>LO</b> | L plug connector (Without connector)<br>With light/surge voltage suppressor |
|-----------|---|

### 6 Manual override

|            |                       |
|------------|-----------------------|
| <b>Nil</b> | Non-locking push type |
| <b>B</b>   | Locking slotted type  |

### 7 Vacuum pressure switch (With suction filter\*1)

| Symbol    | Pressure range [kPa] | Output                                |
|-----------|----------------------|---------------------------------------|
| <b>VA</b> | -100 to 100          | NPN 1 output + Energy saving function |
| <b>VB</b> |                      | PNP 1 output + Energy saving function |

\*1 The filter used in this product is of a simple type, and will become clogged quickly in environments with high quantities of dust or particulates. Please consider using in combination with an air suction filter of the ZFC series, etc.

### 8 Unit

|               |                              |
|---------------|------------------------------|
| <b>Nil</b> *2 | With unit switching function |
| <b>M</b>      | SI unit only (kPa)           |

\*2 Under the New Measurement Act, switches with the unit switching function are not permitted for use in Japan (implemented October 1999).

### 9 Lead wire

|            |   |
|------------|---|
| <b>Nil</b> | Without lead wire with connector  |
| <b>W</b>   | Lead wire for switch with energy saving function (Length: 2 m) (Included) |

### 10 Fitting (V port)

| Symbol   | Applicable tubing O.D.     |
|----------|----------------------------|
| <b>0</b> | Without fitting (M5 x 0.8) |

### 11 Fitting (P port)

| Symbol     | Applicable tubing O.D.     | Specification |
|------------|----------------------------|---------------|
| <b>Nil</b> | Without port               | Manifold      |
| <b>0</b>   | Without fitting (M5 x 0.8) | Single unit   |

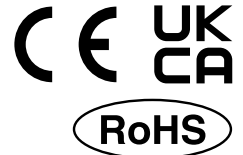
### 12 Option

|            | Bracket for single unit |               |
|------------|-------------------------|---------------|
|            | Single unit             | Manifold      |
| <b>Nil</b> | With                    | Without       |
| <b>N</b>   | Without                 | Not available |

\* The 25A- series specifications and dimensions are the same as those of the standard model.

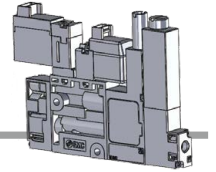
For details, refer to the [Web Catalog](#).

# Ejector System Compact Vacuum Unit Without Energy Saving Function

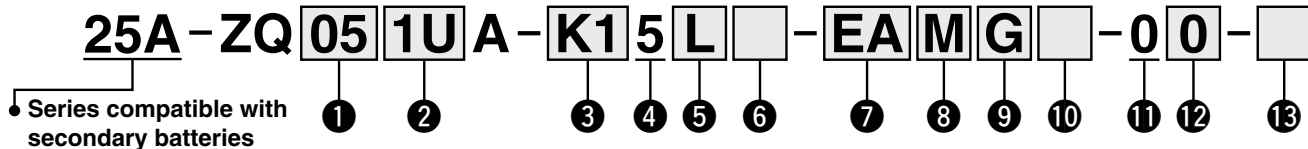


# 25A-ZQ□A Series

Single Unit Part Number



## How to Order



Series compatible with secondary batteries

### ① Nominal nozzle size

|    |     |
|----|-----|
| 05 | 0.5 |
| 07 | 0.7 |
| 10 | 1.0 |

### ② Body type

|    |                 |
|----|-----------------|
| 1U | For Single unit |
| 3M | For Manifold    |

### ③ Solenoid valve combination

|      |   |
|------|---|
| K1   | Supply valve (N.C.), Release valve (N.C.)     |
| K2   | Supply valve (N.O.), Release valve (N.C.)     |
| J1   | Supply valve (N.C.)                           |
| J2   | Supply valve (N.O.)                           |
| Q1*1 | Supply valve (Latching), Release valve (N.C.) |
| Q2*1 | Supply valve (Latching)                       |

\*1 Latching (+ common)

### ④ Solenoid valve rated voltage

|   |        |
|---|--------|
| 5 | 24 VDC |
|---|--------|

### ⑤ Electrical entry

|    |   |
|----|---|
| L  | L plug connector (Lead wire length: 0.3 m)<br>With light/surge voltage suppressor |
| LO | L plug connector (Without connector)<br>With light/surge voltage suppressor       |

### ⑥ Manual override

|     |  |
|-----|--|
| Nil | Non-locking push type                  |
|     | Latching:<br>Push-locking slotted type |
| B*2 | Locking slotted type                   |

\*2 When "Q1" is selected in ③, the locking slotted type is only available in the release valve.  
This option cannot be chosen when "Q2" is selected in ③.

### ⑦ Vacuum pressure switch (With suction filter\*3)

| Symbol | Pressure range [kPa] | Output                        |
|--------|----------------------|-------------------------------|
| EA     | 0 to -100            | NPN 2 outputs                 |
| EB     |                      | PNP 2 outputs                 |
| EC     |                      | NPN 1 output + Analog voltage |
| EE     |                      | PNP 1 output + Analog voltage |
| FA     | -100 to 100          | NPN 2 outputs                 |
| FB     |                      | PNP 2 outputs                 |
| FC     |                      | NPN 1 output + Analog voltage |
| FE     |                      | PNP 1 output + Analog voltage |
| F*4    | Suction filter only  |                               |

\*3 The filter used in this product is of a simple type, and will become clogged quickly in environments with high quantities of dust or particulates. Please consider using in combination with an air suction filter of the ZFC series, etc.

\*4 It is not necessary to select the items for ⑧ and ⑨.

### ⑧ Unit

|       |  |
|-------|--|
| Nil*5 | With unit switching function                         |
| M     | SI unit only (kPa)                                   |
| P*5   | With unit switching function<br>(Initial value: psi) |

\*5 Under the New Measurement Act, switches with the unit switching function are not permitted for use in Japan (implemented October 1999).

### ⑨ Lead wire

|     |  |
|-----|--|
| Nil | Without lead wire with connector                     |
| G   | Lead wire with connector<br>(Length: 2 m) (Included) |

### ⑩ Check valve\*6

|     |                  |
|-----|------------------|
| Nil | None             |
| K*7 | With check valve |

\*6 The check valve has a function to prevent the exhaust air from the exhaust unit overflowing to the vacuum port side when a manifold is used, but it cannot prevent overflow of the exhaust air completely. During usage, please inspect thoroughly with actual machine.

Also, in order to completely prevent the overflow of exhaust air, leave plenty of space between the check valve unit and adjacent ejector to avoid interference from the ejector's exhaust unit.

\*7 Cannot be selected when ② is "1U"

In addition, for the type with a check valve, the air in the adsorption part is not released to the atmosphere when vacuum is stopped. If "J1," "J2," or "Q2" is selected for ③, be sure to also install a circuit for vacuum release.

## ⚠ Warning

- Cannot be used for vacuum retention
- Use a release valve. Without a release valve, a workpiece may not be released.

### ⑪ Fitting (V port)

|        |                            |
|--------|----------------------------|
| Symbol | Applicable tubing O.D.     |
| 0      | Without fitting (M5 x 0.8) |

### ⑫ Fitting (P port)

|        |                            |               |
|--------|----------------------------|---------------|
| Symbol | Applicable tubing O.D.     | Specification |
| Nil    | Without port               | Manifold      |
| 0      | Without fitting (M5 x 0.8) | Single unit   |

### ⑬ Option

#### For Single Unit (②: 1U)

| Symbol | Bracket assembly | Converter assembly for solenoid valve*8 |
|--------|------------------|---|
| Nil    | ○                | —                                       |
| N      | —                | —                                       |
| C      | —                | ○                                       |
| D      | ○                | ○                                       |

#### For Manifold (②: 3M)

| Symbol | Low release pressure specification*9 | Converter assembly for solenoid valve*8 |
|--------|--------------------------------------|---|
| Nil    | —                                    | —                                       |
| S      | ○                                    | —                                       |
| C      | —                                    | ○                                       |
| E      | ○                                    | ○                                       |

\*8 A converter assembly for attaching the VQ100 lead wire assembly with a connector to the ZQ-A is included. Refer to the "Converter assembly for solenoid valve" in the [Web Catalog](#).  
"Q2" cannot be selected in ③. Select "LO" in ⑤.

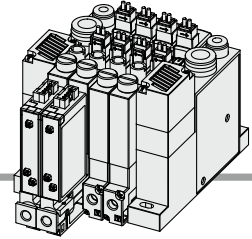
\*9 Select "C" for ④ for the manifold part number on page 180-3. "J1," "J2," or "Q2" cannot be selected in ③. For a release pressure supply pressure of 0.3 MPa or lower, select "S" or "E."

\* The 25A- series specifications and dimensions are the same as those of the standard model.

For details, refer to the [Web Catalog](#).

# 25A-ZQ□A Series

Manifold Part Number



## How to Order

25A-ZZQ1 08 A-B S C-A

①
②
③
④
⑤

Series compatible with secondary batteries

### ① Stations\*1

|    |            |
|----|------------|
| 01 | 1 station  |
| 02 | 2 stations |
| ⋮  | ⋮          |
| 08 | 8 stations |

\*1 Number of stations varies according to nominal nozzle size during simultaneous operation. (Table 1)

**Table 1. Max. Number of Stations that Can Operate Simultaneously\*2**

| Nominal nozzle size | Max. number of stations that can operate simultaneously |
|---------------------|---|
| 0.5                 | 8 stations  |
| 0.7                 | 6 stations  |
| 1.0                 | 4 stations  |

\*2 For any of the nominal nozzle sizes, the max. number of stations that can be mounted is 8. However, please ensure that the max. number of stations that are operated simultaneously comply with the values above.

### ② Air pressure supply (P) port location

|   |            |
|---|------------|
| B | Both sides |
|---|------------|

### ④ Release pressure supply (PD) port

|     |  |
|-----|--|
| B   | None (Release pressure: Commonly supplied from the P port) |
| C*3 | Provided (Release pressure: Supplied from the PD port)     |

\*3 For a release pressure supply pressure of 0.3 MPa or lower (for an individual unit without the energy-saving function), select "S" or "E" for ④ for the single unit part number on page 198.

### ③ Exhaust

|   |                               |
|---|-------------------------------|
| S | Silencer exhaust (Both sides) |
| P | Port exhaust (Both sides)     |

### ⑤ Shipping configuration

|     |                            |
|-----|----------------------------|
| Nil | Assembled as a vacuum unit |
| A*4 | Manifold unit only         |

\*4 A set of end blocks and the clamp rod assembly is included in this manifold unit. (Used for the maintenance of the end block)

\* The 25A- series specifications and dimensions are the same as those of the standard model.

For details, refer to the [Web Catalog](#).

## Manifold Order Example

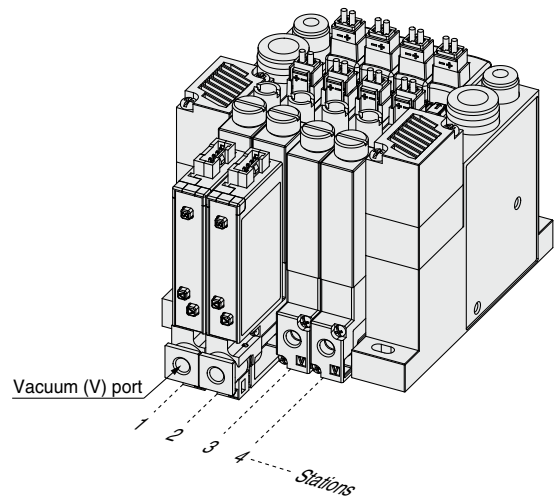
25A-ZZQ104A-BSB..... 1 pc.

\* 25A-ZQ053MA-K15L-EAG-0... 2 pcs. → Stations 1 and 2

\* 25A-ZQ103MA-K15L-F-0 ..... 2 pcs. → Stations 3 and 4

\* When the manifold is viewed from the vacuum (V) port, the first station starts from the left.

25A-ZQ053MA-K15L-EAG-0 (2 pcs.) and 25A-ZQ103MA-K15L-F-0 (2 pcs.) are arranged from the first station.

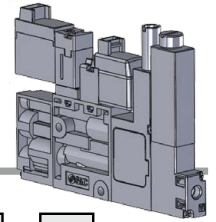


### ⚠ Caution when ordering manifold

- ! The asterisk (\*) denotes the symbol for the assembly.
- ! Prefix it to the single unit part number.
- ! If "\*" is not entered, the manifold and single unit will be shipped without being assembled.
- ! When the manifold and the units are not assembled, please assemble them by referring to "How to increase/decrease manifold stations" in the [Web Catalog](#).
- ! There is nothing else to arrange additionally.

# 25A-ZQ□A Series

Single Unit Part Number



## How to Order

25A-ZQ000 **U** A - **K1** **5** **L** □ - **E** **A** **M** **G** - **0** **0** - □

① ② ③ ④ ⑤ ⑥ ⑦ ⑧ ⑨ ⑩ ⑪

Series compatible with secondary batteries

### 1 Body type

|          |                 |
|----------|-----------------|
| <b>U</b> | For Single unit |
| <b>M</b> | For Manifold    |

### 2 Solenoid valve combination

|                 |   |
|-----------------|---|
| <b>K1</b>       | Supply valve (N.C.), Release valve (N.C.)     |
| <b>K2</b>       | Supply valve (N.O.), Release valve (N.C.)     |
| <b>J1</b> *1    | Supply valve (N.C.)                           |
| <b>J2</b> *1    | Supply valve (N.O.)                           |
| <b>Q1</b> *2    | Supply valve (Latching), Release valve (N.C.) |
| <b>Q2</b> *1 *2 | Supply valve (Latching)                       |

\*1 The air in the adsorption section of this product is not released to the atmosphere at the vacuum suspension state. Devise the circuit for the vacuum release additionally.  
\*2 Latching (+ common)

### 3 Solenoid valve rated voltage

|          |        |
|----------|--------|
| <b>5</b> | 24 VDC |
|----------|--------|

### 4 Electrical entry

|           |  |
|-----------|--|
| <b>L</b>  | L plug connector (Lead wire length: 0.3 m) With light/surge voltage suppressor |
| <b>LO</b> | L plug connector (Without connector) With light/surge voltage suppressor       |

### 5 Manual override

|             |                                     |
|-------------|-------------------------------------|
| <b>Nil</b>  | Non-locking push type               |
|             | Latching: Push-locking slotted type |
| <b>B</b> *3 | Locking slotted type                |

\*3 When "Q1" is selected in ②, the locking slotted type is only available in the release valve. This option cannot be chosen when "Q2" is selected in ②.

### 6 Vacuum pressure switch (With suction filter\*4)

| Symbol      | Pressure range [kPa] | Output                        |
|-------------|----------------------|-------------------------------|
| <b>EA</b>   | 0 to -100            | NPN 2 outputs                 |
| <b>EB</b>   |                      | PNP 2 outputs                 |
| <b>EC</b>   |                      | NPN 1 output + Analog voltage |
| <b>EE</b>   |                      | PNP 1 output + Analog voltage |
| <b>FA</b>   |                      | NPN 2 outputs                 |
| <b>FB</b>   | -100 to 100          | PNP 2 outputs                 |
| <b>FC</b>   |                      | NPN 1 output + Analog voltage |
| <b>FE</b>   |                      | PNP 1 output + Analog voltage |
| <b>F</b> *5 | Suction filter only  |                               |

\*4 The filter used in this product is of a simple type, and will become clogged quickly in environments with high quantities of dust or particulates. Please consider using in combination with an air suction filter of the ZFC series, etc.

\*5 It is not necessary to select the items for ⑦ and ⑧.

### 7 Unit

|               |   |
|---------------|---|
| <b>Nil</b> *6 | With unit switching function                      |
| <b>M</b>      | SI unit only (kPa)                                |
| <b>P</b> *6   | With unit switching function (Initial value: psi) |

\*6 Under the New Measurement Act, switches with the unit switching function are not permitted for use in Japan (implemented October 1999).

### 8 Lead wire

|            |   |
|------------|---|
| <b>Nil</b> | Without lead wire with connector                  |
| <b>G</b>   | Lead wire with connector (Length: 2 m) (Included) |

### 9 Fitting (V port)

|               |                            |
|---------------|----------------------------|
| <b>Symbol</b> | Applicable tubing O.D.     |
| <b>0</b>      | Without fitting (M5 x 0.8) |

### 10 Fitting (PS/PV port)

| Symbol     | Applicable tubing O.D.     | Specification |
|------------|----------------------------|---------------|
| <b>Nil</b> | Without port               | Manifold      |
| <b>0</b>   | Without fitting (M5 x 0.8) | Single unit   |

### 11 Option

#### For Single Unit (①: U)

| Symbol     | Bracket assembly | Converter assembly for solenoid valve*7 |
|------------|------------------|---|
| <b>Nil</b> | ○                | —                                       |
| <b>N</b>   | —                | —                                       |
| <b>C</b>   | —                | ○                                       |
| <b>D</b>   | ○                | ○                                       |

#### For Manifold (①: M)

| Symbol     | Low release pressure specification*8 | Converter assembly for solenoid valve*7 |
|------------|--------------------------------------|---|
| <b>Nil</b> | —                                    | —                                       |
| <b>S</b>   | ○                                    | —                                       |
| <b>C</b>   | —                                    | ○                                       |
| <b>E</b>   | ○                                    | ○                                       |

\*7 A converter assembly for attaching the VQ100 lead wire assembly with a connector to the ZQ-A is included. Refer to the "Converter Assembly for Solenoid Valve" in the **Web Catalog**. "Q2" cannot be selected in ②. Select "LO" in ④.

\*8 Select "C" for ③ for the manifold part number on page 201. "J1", "J2", or "Q2" cannot be selected in ②. For a release pressure supply pressure of 0.3 MPa or lower, select "S" or "E."

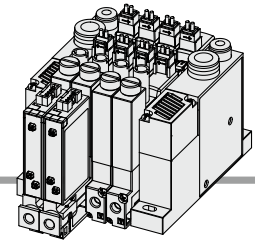
\* The 25A- series specifications and dimensions are the same as those of the standard model.

For details, refer to the **Web Catalog**.



# 25A-ZQ□A Series

Manifold Part Number



## How to Order

25A-ZZQ1 08 A-L O C-A

Series compatible with secondary batteries

1 2 3 4

### 1 Stations

|    |            |
|----|------------|
| 01 | 1 station  |
| 02 | 2 stations |
| ⋮  | ⋮          |
| 08 | 8 stations |

### 2 Vacuum pressure supply (PV) port location\*1

|   |            |
|---|------------|
| L | Left side  |
| R | Right side |

\*1 The position of the vacuum pressure supply (PV) port when the vacuum (V) port is facing front. The pilot pressure supply (PS) port is on the opposite side. Refer to the "Table 1" for details.

### 3 Release pressure supply (PD) port

|     |   |
|-----|---|
| B   | None (Release pressure: Commonly supplied from the PS port) |
| C*2 | Provided (Release pressure: Supplied from the PD port)      |

\*2 For a release pressure supply pressure of 0.3 MPa or lower, select "S" or "E" for 1 for the single unit part number on page 200.

### 4 Shipping configuration

|     |                            |
|-----|----------------------------|
| Nil | Assembled as a vacuum unit |
| A*3 | Manifold unit only         |

\*3 A set of end blocks and the clamp rod assembly is included in this manifold unit. (Used for the maintenance of the end block)

Table 1. Location of Each Port

| 2 PV port location | 3 PD port | Left side with the V port facing the front |         |         | Right side with the V port facing the front |         |         |
|--------------------|-----------|--|---------|---------|---|---------|---------|
|                    |           | PS port                                    | PV port | PD port | PS port                                     | PV port | PD port |
| L                  | B         | —  | ●       | —       | ●   | —       | —       |
|                    | C         | —  | ●       | ●       | ●   | —       | ●       |
| R                  | B         | ●  | —       | —       | —   | ●       | —       |
|                    | C         | ●  | —       | ●       | —   | ●       | ●       |

\* The 25A- series specifications and dimensions are the same as those of the standard model.

For details, refer to the [Web Catalog](#).

## Manifold Order Example

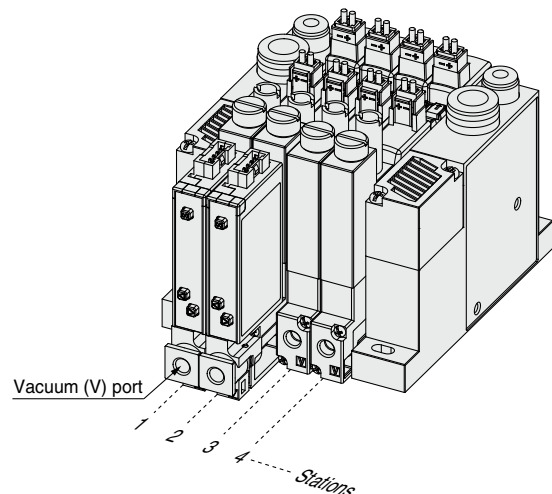
25A-ZZQ104A-ROB ..... 1 pc.

\* 25A-ZQ000MA-K15L-EAG-0... 2 pcs. → Stations 1 and 2

\* 25A-ZQ000MA-K15L-F-0 ..... 2 pcs. → Stations 3 and 4

\* When the manifold is viewed from the vacuum (V) port, the first station starts from the left.

25A-ZQ000MA-K15L-EAG-0 (2 pcs.) and 25A-ZQ000MA-K15L-F-0 (2 pcs.) are arranged from the first station.

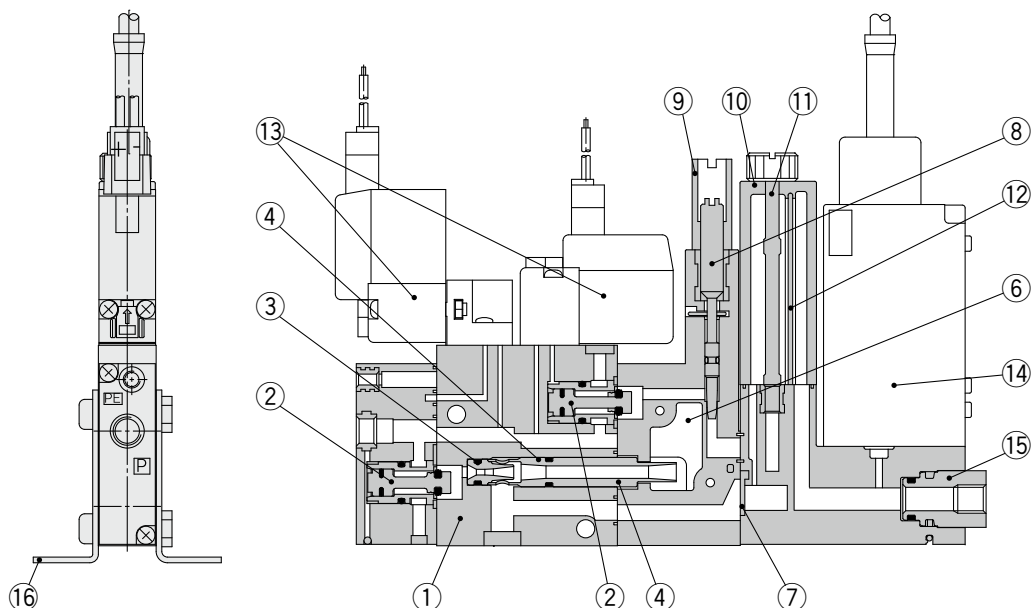


### ⚠ Caution when ordering manifold

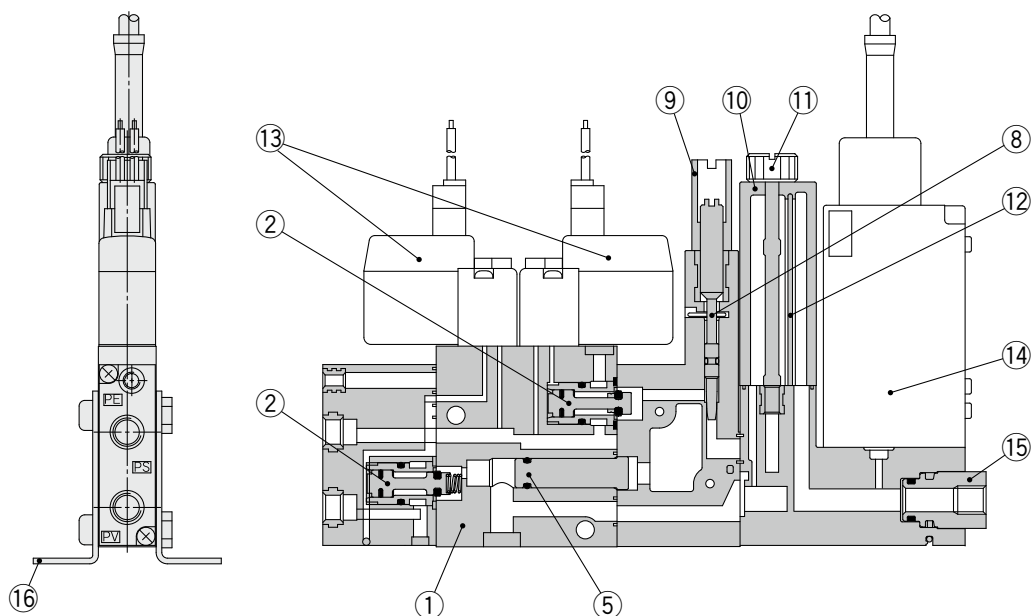
- ! The asterisk (\*) denotes the symbol for the assembly.
- ! Prefix it to the single unit part number.
- ! If "\*" is not entered, the manifold and single unit will be shipped without being assembled.
- ! When the manifold and the units are not assembled, please assemble them by referring to "How to increase/decrease manifold stations" in the [Web Catalog](#).
- ! There is nothing else to arrange additionally.

## Construction

### Vacuum ejector (N.O. specification)



### Vacuum pump system (N.C. specification)



### Component Parts

| No. | Description                                    | Material  | Note   |
|-----|--|---|--|
| 1   | Body   | PBT   | Aluminum alloy is also used.   |
| 2   | Supply valve / Release valve assembly          | POM/Aluminum alloy/Stainless steel                        |  |
| 3   | Nozzle   | PBT   |  |
| 4   | Diffuser                                       | PBT   |  |
| 5   | Bushing  | Aluminum alloy  |  |
| 6   | Sound absorbing material                       | Non-woven fabric (PET)                                    | Refer to [3] on page 204 for how to order. (When replacing the sound absorbing material, order a silencer plate assembly.)<br>Refer to [6] on page 204 for how to order. |
| 7   | Check valve                                    | HNBR  |  |
| 8   | Vacuum release flow adjusting needle           | Stainless steel   |  |
| 9   | Lock nut                                       | Aluminum alloy (Anodized)                                 |  |
| 10  | Filter case                                    | PC (Refer to the precautions in the <b>Web Catalog</b> .) | Refer to [4] on page 204 for how to order.   |
| 11  | Tension bolt                                   | Stainless steel   |  |
| 12  | Filter element                                 | PVA sponge  | Refer to [5] on page 204 for how to order.   |
| 13  | Pilot supply valve / Pilot valve (for release) | —   | Refer to [1] on page 203 for how to order.   |
| 14  | Vacuum pressure switch                         | —   | Refer to [2] on page 203 for how to order.   |
| 15  | Vacuum (V) port M5 bushing                     | Aluminum alloy (Anodized)                                 |  |
| 16  | Bracket assembly                               | Steel (Electroless nickel plating), Stainless steel       | Refer to [7] on page 204 for how to order.   |
| —   | Seal material (O-ring, etc.)                   | NBR/HNBR  |  |
| —   | Screws for assembly                            | Steel (Electroless nickel plating), Stainless steel       |  |

# 25A-ZQ□A Series

## How to Order Replacement Parts for Single Unit

### 1 Solenoid Valve

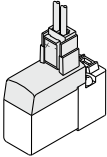
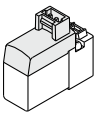
(Recommended torque for replacement: 0.054 to 0.08 N-m)

N.C. Pilot Supply Valves,  
Pilot Valves (for Release)

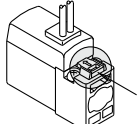
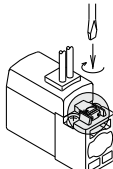
25A - ZQ1 - V114 - 5 **L** **U** □ - A

①      ②

#### 1 Electrical entry

| L   | LO  |
|---|---|
| With lead wire (300 mm)   | Without connector   |
|  |  |

#### 2 Manual override

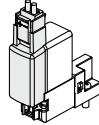
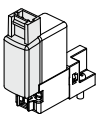
| Nil   | B   |
|---|---|
| Non-locking push type   | Locking slotted type  |
|  |  |

N.O. Pilot Supply Valves

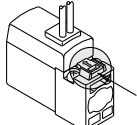
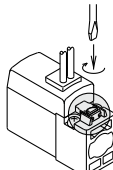
25A - ZQ1 - V124 - 5 **M** **U** □ - A

①      ②

#### 1 Electrical entry

| M   | MO  |
|---|---|
| With lead wire (300 mm)   | Without connector   |
|  |  |

#### 2 Manual override

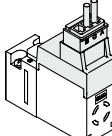
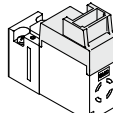
| Nil   | B   |
|---|---|
| Non-locking push type   | Locking slotted type  |
|  |  |

Latching Pilot Supply Valves

25A - ZQ1 - VQ110L - 5 **L** - A

①

#### 1 Electrical entry

| L   | LO  |
|---|---|
| With lead wire (300 mm)   | Without connector   |
|  |  |

### Lead Wire with Connector Assembly for Solenoid Valve

For N.C./N.O. Pilot Valves,  
Pilot Valves (for Release)

SY100 - 30 - 4 A - **6** ① Lead wire length

For Latching Pilot Valves

AXT661 - 13A - **6**

|           |         |
|-----------|---------|
| Nil       | 300 mm  |
| <b>6</b>  | 600 mm  |
| <b>10</b> | 1000 mm |
| <b>15</b> | 1500 mm |
| <b>20</b> | 2000 mm |
| <b>30</b> | 3000 mm |
| <b>50</b> | 5000 mm |

### Connector and Socket for Solenoid Valve

For N.C./N.O. Pilot Valves,  
Pilot Valves (for Release)

SY100 - 30 - A \* With connector and sockets only  
(Number of sockets: 2)

For Latching Pilot Valves

AXT661 - 12A  
(Number of sockets: 3)

### 2 Vacuum Pressure Switch (With Suction Filter)

(Recommended torque for replacement: 0.11 to 0.13 N-m)

25A - ZQ - ZS **EA** **M** **G** □ - 0 - A

①   ②   ③   ④   ⑤

#### 1 Vacuum pressure switch

| Symbol       | Pressure range [kPa] | Output                               |
|--------------|----------------------|--------------------------------------|
| <b>EA</b>    | 0 to -100            | NPN 2 outputs                        |
| <b>EB</b>    |                      | PNP 2 outputs                        |
| <b>EC</b>    |                      | NPN 1 output + Analog voltage        |
| <b>EE</b>    |                      | PNP 1 output + Analog voltage        |
| <b>FA</b>    | -100 to 100          | NPN 2 outputs                        |
| <b>FB</b>    |                      | PNP 2 outputs                        |
| <b>FC</b>    |                      | NPN 1 output + Analog voltage        |
| <b>FE</b>    |                      | PNP 1 output + Analog voltage        |
| <b>VA</b> *1 |                      | NPN 1 output + Energy saving control |
| <b>VB</b> *1 |                      | PNP 1 output + Energy saving control |

\*1 It is not possible to replace the vacuum pressure switch from the specification without energy saving function to the specification with energy saving function.

#### 2 Unit

|                 |   |
|-----------------|---|
| <b>Nil</b> *2   | With unit switching function                      |
| <b>M</b>        | SI unit only (kPa)                                |
| <b>P</b> *2, *3 | With unit switching function (Initial value: psi) |

\*2 Under the New Measurement Act, switches with the unit switching function are not permitted for use in Japan (implemented October 1999).

\*3 Cannot be selected when ① is "VA" or "VB"

#### 3 Lead wire

|            |   |
|------------|---|
| <b>Nil</b> | Without lead wire with connector  |
| <b>G</b>   | Lead wire with connector (Length: 2 m) (Included)                         |
| <b>W</b>   | Lead wire for switch with energy saving function (Length: 2 m) (Included) |

#### 4 Check valve\*4

|             |                  |
|-------------|------------------|
| <b>Nil</b>  | None             |
| <b>K</b> *5 | With check valve |

\*4 The check valve has a function to prevent the exhaust air from the exhaust unit overflowing to the vacuum port side when a manifold is used, but it cannot prevent overflow of the exhaust air completely. During usage, please inspect thoroughly with actual machine.

Also, in order to completely prevent the overflow of exhaust air, leave plenty of space between the check valve unit and adjacent ejector to avoid interference from the ejector's exhaust unit.

\*5 When "VA" or "VB" is specified for ①, the check valve is already built in.

### ⚠ Warning

- Cannot be used for vacuum retention
- Use a release valve. Without a release valve, a workpiece may not be released.

#### 5 Fitting (V port)

|          |                            |
|----------|----------------------------|
| Symbol   | Applicable tubing O.D.     |
| <b>0</b> | Without fitting (M5 x 0.8) |

### Lead Wire with Connector Assembly for Vacuum Pressure Switch

(When an individual lead wire is necessary, order with the part numbers below.)

- Lead wire with connector for vacuum pressure switch

**ZS - 39 - 5G**

- Lead wire with connector for pressure switch with energy saving function

**ZQ1 - LW6 - **N** - A**

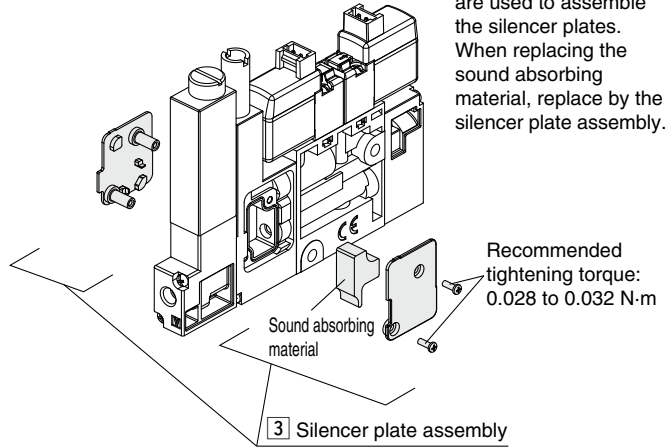
#### ① Output

|          |                    |
|----------|--------------------|
| <b>N</b> | NPN open collector |
| <b>P</b> | PNP open collector |

## How to Order Replacement Parts for Single Unit

### 3 Silencer Plate Assembly

25A – ZQ1 – PL11 – A



### 4 Filter Case Assembly \* One filter element is included.

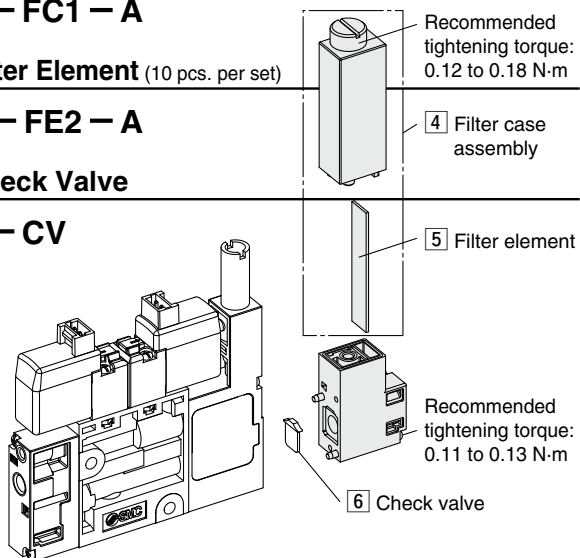
ZQ1 – FC1 – A

### 5 Filter Element (10 pcs. per set)

ZQ1 – FE2 – A

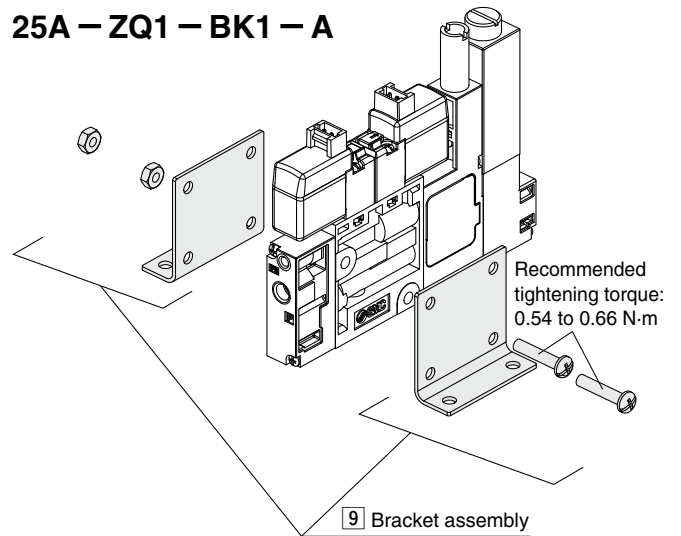
### 6 Check Valve

ZQ1 – CV

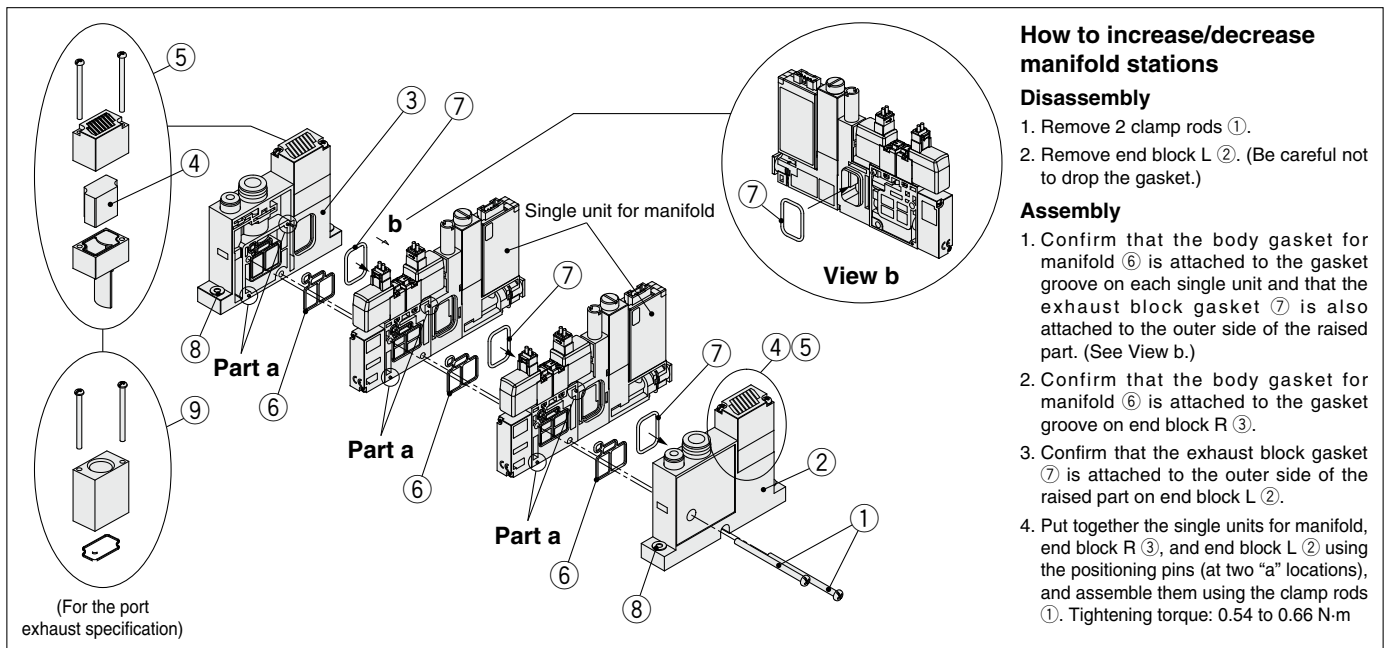


### 7 Bracket Assembly

25A – ZQ1 – BK1 – A



# Compact Vacuum Unit/25A-ZQ□A Series Manifold Exploded View



## How to increase/decrease manifold stations

### Disassembly

1. Remove 2 clamp rods ①.
2. Remove end block L ②. (Be careful not to drop the gasket.)

### Assembly

1. Confirm that the body gasket for manifold ⑥ is attached to the gasket groove on each single unit and that the exhaust block gasket ⑦ is also attached to the outer side of the raised part. (See View b.)
2. Confirm that the body gasket for manifold ⑥ is attached to the gasket groove on end block R ③.
3. Confirm that the exhaust block gasket ⑦ is attached to the outer side of the raised part on end block L ②.
4. Put together the single units for manifold, end block R ③, and end block L ② using the positioning pins (at two "a" locations), and assemble them using the clamp rods ①. Tightening torque: 0.54 to 0.66 N·m

## Component Parts

| No. | Description                             | Material  | Note   |
|-----|---|---|--|
| 1   | Clamp rod assembly                      | Steel (Electroless nickel plating)                      | Refer to ① below for how to order.                   |
| 2   | End block L                             | PBT, POM, PET, Steel, Aluminum alloy, Stainless steel   | Left side with the vacuum (V) port facing the front  |
| 3   | End block R                             | PBT, POM, PET, Steel, Aluminum alloy, Stainless steel   | Right side with the vacuum (V) port facing the front |
| 4   | Sound absorbing material (For Manifold) | Non-woven fabric (PET)                                  | Refer to ② below for how to order.                   |
| 5   | Silencer block assembly                 | PBT   | Refer to ③ below for how to order.                   |
| 6   | Body gasket for manifold                | NBR   | Refer to ④ below for how to order.                   |
| 7   | Exhaust block gasket                    | NBR   | Refer to ⑤ below for how to order.                   |
| 8   | Washer assembly                         | Stainless steel   | Refer to ⑥ below for how to order.                   |
| 9   | Port block assembly                     | Aluminum alloy, Steel (Electroless nickel plating), NBR | Refer to ⑦ below for how to order.                   |

## How to Order Replacement Parts for Manifold

### ① Clamp Rod Assembly (2 pcs. per set)

25A - ZQ1 - SR1 - 04 - A ① Stations

|    |                |
|----|----------------|
| 01 | For 1 station  |
| 02 | For 2 stations |
| ⋮  | ⋮              |
| 08 | For 8 stations |

### ② Sound Absorbing Material (For Manifold)

(2 pcs. per set)

ZQ1 - SE2 - A

Recommended tightening torque: 0.25 to 0.31 N·m

### ③ Silencer Block Assembly

(2 pcs. per set)

25A - ZQ1 - SC1 - A

② Sound absorbing material (For Manifold)

③ Silencer block assembly

### ④ Body Gasket for Manifold (10 pcs. per set)

ZQ - 3 - 005 - 10AS

### ⑤ Exhaust Block Gasket (10 pcs. per set)

ZQ - 3 - 009 - 10AS

### ⑥ Washer Assembly (4 pcs. per set)

25A - ZQ1 - WS ③ - A

### ① Size

|   |   |
|---|---|
| 3 | For M3 (Without release pressure supply port) |
| 4 | For M4 (With release pressure supply port)    |

### ⑦ Port Block Assembly

(2 pcs. per set)

25A - ZQ1 - EP2 - A

Recommended tightening torque: 0.25 to 0.31 N·m



This product (only the One-touch fitting port type) is a secondary battery compatible product. For details, refer to the [Web Catalog](#).

# Vacuum Ejector Body Ported Type/Box Type (Built-in Silencer)

**ZH Series**

RoHS

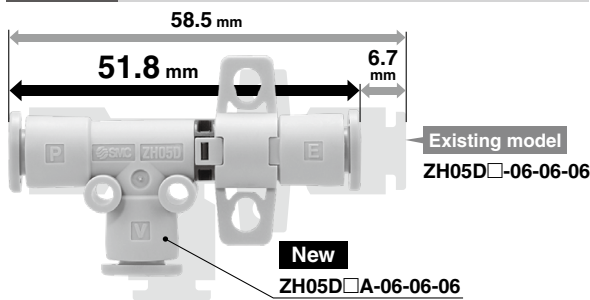
## Compact and lightweight

### Body ported type

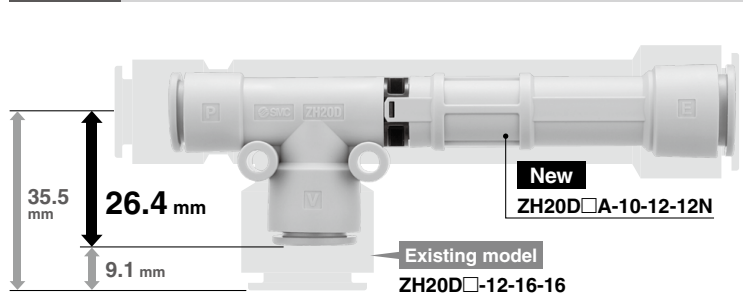
Port size: G threads have been added.



**Overall length** Max. **12%** reduction  
(6.7 mm shorter)



**Port height** Max. **26%** reduction  
(9.1 mm shorter)



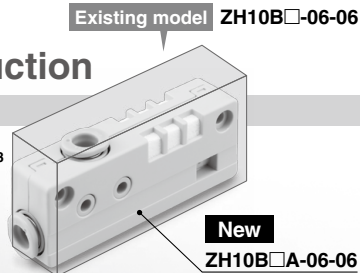
**Weight** Max. **74%** reduction Existing model 88.4 g ▶ New 23.3 g  
(65.1 g lighter)

### Box type (Built-in silencer)



**Volume** Max. **39%** reduction  
(14.1 cm<sup>3</sup> reduction)

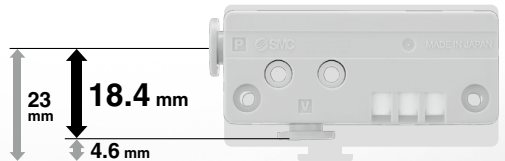
Existing model 36.3 cm<sup>3</sup> ▶ New 22.2 cm<sup>3</sup>



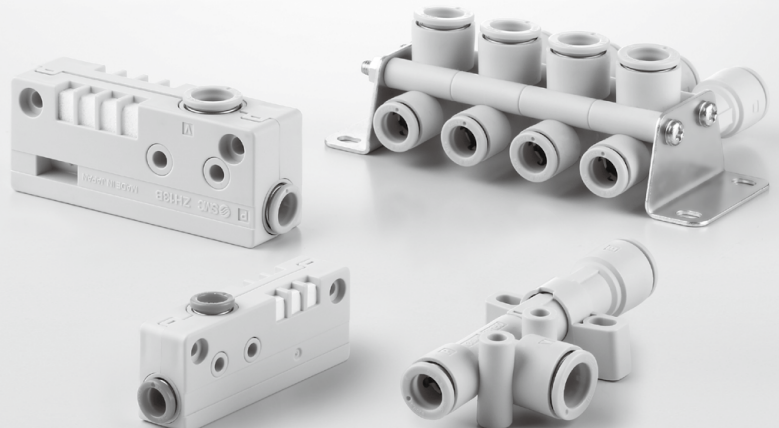
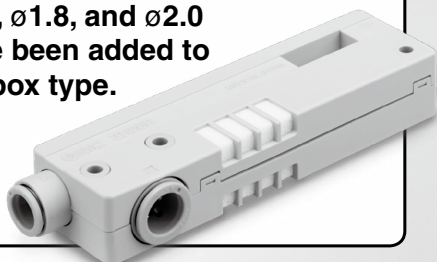
**Weight** Max. **59%** reduction  
(19.4 g lighter)

Existing model 33 g ▶ New 13.6 g

**Port height** Max. **20%** reduction  
(4.6 mm shorter)



**Nozzle sizes**  
ø1.5, ø1.8, and ø2.0  
have been added to  
the box type.



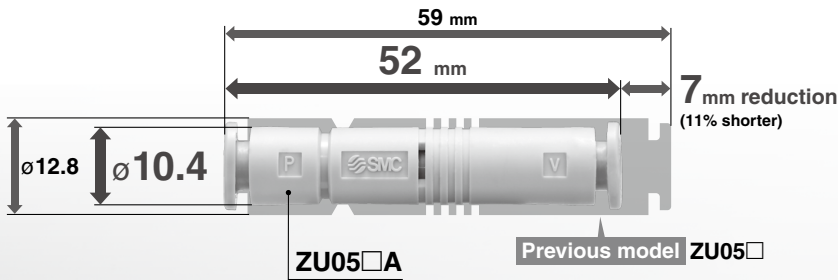
This product (only the One-touch fitting port type) is a secondary battery compatible product. For details, refer to the [Web Catalog](#).

# In-line Type Vacuum Ejector

## ZU□A Series

RoHS

# Compact and Lightweight

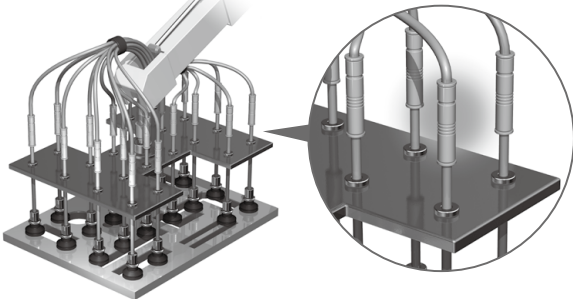


- O.D.**  $\varnothing 10.4$  (Previous model  $\varnothing 12.8$ )
- Weight** **3.9 g** (Previous model 6.5 g)
- Overall length** **52 mm** (Previous model 59 mm)



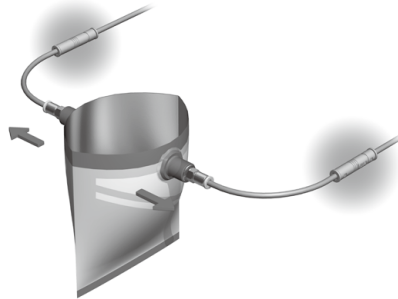
### Application Examples

For preventing pad adsorption failures from the vacuum source



Numerous pads can be used to adsorb workpieces with holes.

For improving responsiveness by installing on flexible parts



Can be used to open and close plastic bags



For mounting on the end of a Z-axis air cylinder

### Variations

| Model  | Nozzle size [mm] | Standard supply pressure [MPa] | Ultimate vacuum pressure [kPa] |        | Maximum suction flow rate [L/min (ANR)] |        | Air consumption [L/min (ANR)] | Port size   |
|--------|------------------|--------------------------------|--------------------------------|--------|---|--------|-------------------------------|---|
|        |                  |                                | Type S                         | Type L | Type S                                  | Type L |                               |   |
| ZU03□A | 0.3              | 0.35                           | -85                            | -40    | 1.8                                     | 3.4    | 4.2                           | $\varnothing 4$ One-touch fitting<br>$\varnothing 5/32$ " |
| ZU04□A | 0.4              |                                | -87                            |        | 3.2                                     | 5.8    |                               |   |
| ZU05□A | 0.5              | 0.45                           | -90                            | -48    | 7                                       | 13     | 14                            | $\varnothing 6$ One-touch fitting<br>Rc1/8                |
| ZU07□A | 0.7              |                                |                                |        | 11                                      | 16     |                               |   |





# Basic Pad

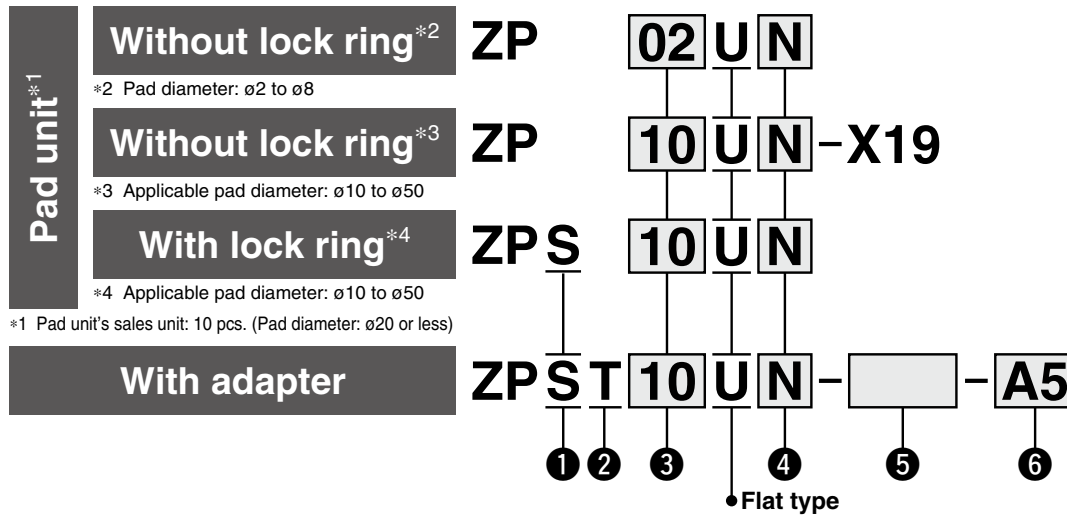
## Flat Type

# ZP Series

For pad units and pads with an adapter (stainless steel type): The standard product is a secondary battery compatible product. For details on specifications and dimensions, refer to the [Web Catalog](#).



### How to Order



#### ① Adapter (Lock ring) material

|          |                                       |
|----------|---------------------------------------|
| <b>S</b> | Stainless steel (Stainless steel 304) |
|----------|---------------------------------------|

#### ② Vacuum inlet direction

|          |          |
|----------|----------|
| <b>T</b> | Vertical |
|----------|----------|

#### ③ Pad diameter

|           |           |           |           |
|-----------|-----------|-----------|-----------|
| <b>02</b> | $\phi 2$  | <b>16</b> | $\phi 16$ |
| <b>04</b> | $\phi 4$  | <b>20</b> | $\phi 20$ |
| <b>06</b> | $\phi 6$  | <b>25</b> | $\phi 25$ |
| <b>08</b> | $\phi 8$  | <b>32</b> | $\phi 32$ |
| <b>10</b> | $\phi 10$ | <b>40</b> | $\phi 40$ |
| <b>13</b> | $\phi 13$ | <b>50</b> | $\phi 50$ |

#### ④ Material

|           |                            |
|-----------|----------------------------|
| <b>N</b>  | NBR                        |
| <b>S</b>  | Silicone rubber*1 *2       |
| <b>U</b>  | Urethane rubber            |
| <b>F</b>  | FKM                        |
| <b>GN</b> | Conductive NBR             |
| <b>GS</b> | Conductive silicone rubber |

\*1 Compliant with the FDA (USA Food and Drug Administration) regulation 21CFR§177.2600 for "Rubber articles intended for repeated use"

\*2 Compliant with the standards for "Rubber apparatus (excluding baby drinking apparatus) and containers/packaging" (D3) (Partial revision: Ministry of Health, Labour, and Welfare Notification No. 595, 2012) in Section 3 "Apparatus and Containers/Packaging" of the Food Sanitation Act, Article 18 "Specifications and Standards for Food and Food Additives, etc." (Ministry of Health and Welfare Notification No. 370, 1959)

### With adapter

#### ⑤ Vacuum inlet

| Type          | Symbol      | Size      | Pad diameter [mm]    |                                |                             |                             |     |
|---------------|-------------|-----------|----------------------|--------------------------------|-----------------------------|-----------------------------|-----|
|               |             |           | $\phi 2$ to $\phi 8$ | $\phi 10$ to $\phi 16$         | $\phi 20$ to $\phi 32$      | $\phi 40, \phi 50$          |     |
| Male thread   | <b>A5</b>   | M5 x 0.8  | ○*1                  | —                              | —                           | —                           |     |
|               | <b>AS5</b>  |           | —                    | ○*1                            | ○*1                         | —                           |     |
|               | <b>A6</b>   | M6 x 1    | ○*1                  | —                              | —                           | —                           |     |
|               | <b>AS6</b>  |           | —                    | ○*1                            | ○*1                         | ○*1                         |     |
|               | <b>AG01</b> |           | G1/8                 | —                              | ○*1                         | ○*1                         | —   |
|               | <b>AG02</b> |           | G1/4                 | —                              | —                           | —                           | ○*1 |
| Female thread | <b>Nil</b>  | M3 x 0.5  | —                    | ○ (⑥ Connection thread: A5/A6) | ○ (⑥ Connection thread: A6) | ○ (⑥ Connection thread: A6) |     |
|               |             | M5 x 0.8  | —                    | —                              | ○ (⑥ Connection thread: A8) | ○ (⑥ Connection thread: A8) |     |
|               | <b>B4</b>   | M4 x 0.7  | ○*1                  | —                              | —                           | —                           |     |
|               | <b>B5</b>   | M5 x 0.8  | ○*1                  | ○*1                            | ○*1                         | —                           |     |
|               | <b>B6</b>   | M6 x 1    | —                    | ○*1                            | ○*1                         | ○*1                         |     |
|               | <b>B8</b>   | M8 x 1.25 | —                    | —                              | ○*1                         | ○*1                         |     |
|               | <b>B01</b>  | Rc1/8     | —                    | ○*1                            | ○*1                         | ○*1                         |     |
|               | <b>BG01</b> | G1/8      | —                    | ○*1                            | ○*1                         | —                           |     |
|               | <b>BG02</b> | G1/4      | —                    | —                              | —                           | ○*1                         |     |

\*1 Use the connection thread.

#### ⑥ Connection thread

| Type        | Symbol    | Size     | Pad diameter [mm]    |                        |                        |                    |
|-------------|-----------|----------|----------------------|------------------------|------------------------|--------------------|
|             |           |          | $\phi 2$ to $\phi 8$ | $\phi 10$ to $\phi 16$ | $\phi 20$ to $\phi 32$ | $\phi 40, \phi 50$ |
| Male thread | <b>A5</b> | M5 x 0.8 | —                    | ○*2                    | —                      | —                  |
|             | <b>A6</b> | M6 x 1   | —                    | ○*2                    | ○*2                    | ○*2                |
|             | <b>A8</b> | M8 x 1   | —                    | —                      | ○*2                    | ○*2                |

\*2 With a (female) vacuum inlet

#### Lock ring unit

| Part no.     | Pad diameter [mm]      |
|--------------|------------------------|
| <b>ZPSL1</b> | $\phi 10$ to $\phi 16$ |
| <b>ZPSL2</b> | $\phi 20$ to $\phi 32$ |
| <b>ZPSL3</b> | $\phi 40, \phi 50$     |



# Basic Pad

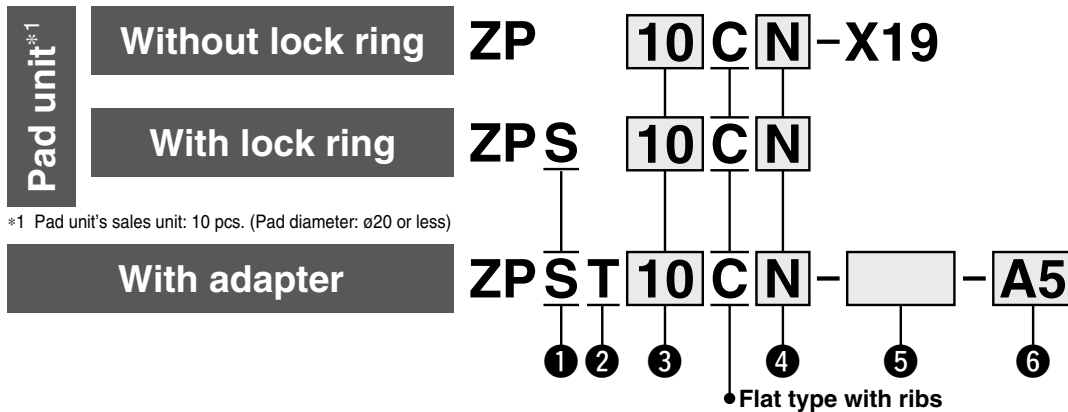
## Flat Type with Ribs

# ZP Series

For pad units and pads with an adapter (stainless steel type): The standard product is a secondary battery compatible product. For details on specifications and dimensions, refer to the [Web Catalog](#).



### How to Order



\*1 Pad unit's sales unit: 10 pcs. (Pad diameter: ø20 or less)

#### ① Adapter (Lock ring) material

|   |                                       |
|---|---------------------------------------|
| S | Stainless steel (Stainless steel 304) |
|---|---------------------------------------|

#### ② Vacuum inlet direction

|   |          |
|---|----------|
| T | Vertical |
|---|----------|

#### ③ Pad diameter

|    |     |
|----|-----|
| 10 | ø10 |
| 13 | ø13 |
| 16 | ø16 |
| 20 | ø20 |
| 25 | ø25 |
| 32 | ø32 |
| 40 | ø40 |
| 50 | ø50 |

#### ④ Material

|    |                            |
|----|----------------------------|
| N  | NBR                        |
| S  | Silicone rubber*1 *2       |
| U  | Urethane rubber            |
| F  | FKM                        |
| GN | Conductive NBR             |
| GS | Conductive silicone rubber |

\*1 Compliant with the FDA (USA Food and Drug Administration) regulation 21CFR§177.2600 for "Rubber articles intended for repeated use"

\*2 Compliant with the standards for "Rubber apparatus (excluding baby drinking apparatus) and containers/packaging" (D3) (Partial revision: Ministry of Health, Labour, and Welfare Notification No. 595, 2012) in Section 3 "Apparatus and Containers/Packaging" of the Food Sanitation Act, Article 18 "Specifications and Standards for Food and Food Additives, etc." (Ministry of Health and Welfare Notification No. 370, 1959)

### With adapter

#### ⑤ Vacuum inlet

| Type          | Symbol | Size      | Pad diameter [mm]              |                             |                             |
|---------------|--------|-----------|--------------------------------|-----------------------------|-----------------------------|
|               |        |           | ø10 to ø16                     | ø20 to ø32                  | ø40, ø50                    |
| Male thread   | AS5    | M5 x 0.8  | ○*2                            | ○*2                         | —                           |
|               | AS6    | M6 x 1    | ○*2                            | ○*2                         | ○*2                         |
|               | AG01   | G1/8      | ○*2                            | ○*2                         | —                           |
|               | AG02   | G1/4      | —                              | —                           | ○*2                         |
| Female thread | Nil    | M3 x 0.5  | ○ (⑥ Connection thread: A5/A6) | ○ (⑥ Connection thread: A6) | ○ (⑥ Connection thread: A6) |
|               |        | M5 x 0.8  | —                              | ○ (⑥ Connection thread: A8) | ○ (⑥ Connection thread: A8) |
|               | B5     | M5 x 0.8  | ○*2                            | ○*2                         | —                           |
|               | B6     | M6 x 1    | ○*2                            | ○*2                         | ○*2                         |
|               | B8     | M8 x 1.25 | —                              | ○*2                         | ○*2                         |
|               | B01    | Rc1/8     | ○*2                            | ○*2                         | ○*2                         |
|               | BG01   | G1/8      | ○*2                            | ○*2                         | —                           |
|               | BG02   | G1/4      | —                              | —                           | ○*2                         |

\*1 Use the connection thread.

#### ⑥ Connection thread

| Type        | Symbol | Size     | Pad diameter [mm] |            |          |
|-------------|--------|----------|-------------------|------------|----------|
|             |        |          | ø10 to ø16        | ø20 to ø32 | ø40, ø50 |
| Male thread | A5     | M5 x 0.8 | ○*2               | —          | —        |
|             | A6     | M6 x 1   | ○*2               | ○*2        | ○*2      |
|             | A8     | M8 x 1   | —                 | ○*2        | ○*2      |

\*2 With a (female) vacuum inlet

#### Lock ring unit

| Part no. | Pad diameter [mm] |
|----------|-------------------|
| ZPSL1    | ø10 to ø16        |
| ZPSL2    | ø20 to ø32        |
| ZPSL3    | ø40, ø50          |

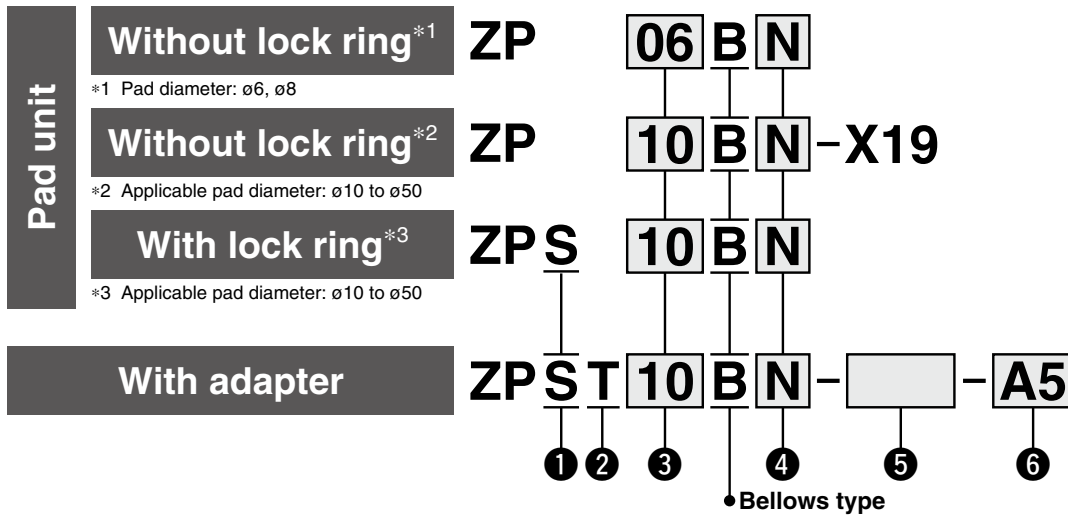


# Basic Pad Bellows Type ZP Series

For pad units and pads with an adapter (stainless steel type): The standard product is a secondary battery compatible product. For details on specifications and dimensions, refer to the [Web Catalog](#).



## How to Order



### ① Adapter (Lock ring) material

|          |                                       |
|----------|---------------------------------------|
| <b>S</b> | Stainless steel (Stainless steel 304) |
|----------|---------------------------------------|

### ② Vacuum inlet direction

|          |          |
|----------|----------|
| <b>T</b> | Vertical |
|----------|----------|

### ③ Pad diameter

|           |     |           |     |
|-----------|-----|-----------|-----|
| <b>06</b> | ø6  | <b>20</b> | ø20 |
| <b>08</b> | ø8  | <b>25</b> | ø25 |
| <b>10</b> | ø10 | <b>32</b> | ø32 |
| <b>13</b> | ø13 | <b>40</b> | ø40 |
| <b>16</b> | ø16 | <b>50</b> | ø50 |

### ④ Material

|           |                            |
|-----------|----------------------------|
| <b>N</b>  | NBR                        |
| <b>S</b>  | Silicone rubber*1 *2       |
| <b>U</b>  | Urethane rubber            |
| <b>F</b>  | FKM                        |
| <b>GN</b> | Conductive NBR             |
| <b>GS</b> | Conductive silicone rubber |

\*1 Compliant with the FDA (USA Food and Drug Administration) regulation 21CFR§177.2600 for "Rubber articles intended for repeated use"

\*2 Compliant with the standards for "Rubber apparatus (excluding baby drinking apparatus) and containers/packaging" (D3) (Partial revision: Ministry of Health, Labour, and Welfare Notification No. 595, 2012) in Section 3 "Apparatus and Containers/Packaging" of the Food Sanitation Act, Article 18 "Specifications and Standards for Food and Food Additives, etc." (Ministry of Health and Welfare Notification No. 370, 1959)

## With adapter

### ⑤ Vacuum inlet

| Type          | Symbol      | Size      | Pad diameter [mm] |                                |                             |                             |
|---------------|-------------|-----------|-------------------|--------------------------------|-----------------------------|-----------------------------|
|               |             |           | ø6, ø8            | ø10 to ø16                     | ø20 to ø32                  | ø40, ø50                    |
| Male thread   | <b>A5</b>   | M5 x 0.8  | ○*1               | —                              | —                           | —                           |
|               | <b>AS5</b>  |           | —                 | ○*1                            | ○*1                         | —                           |
|               | <b>A6</b>   | M6 x 1    | ○*1               | —                              | —                           | —                           |
|               | <b>AS6</b>  |           | —                 | ○*1                            | ○*1                         | ○*1                         |
|               | <b>AG01</b> |           | G1/8              | —                              | ○*1                         | ○*1                         |
| <b>AG02</b>   | G1/4        | —         | —                 | —                              | ○*1                         |                             |
| Female thread | <b>Nil</b>  | M3 x 0.5  | —                 | ○ (⑥ Connection thread: A5/A6) | ○ (⑥ Connection thread: A6) | ○ (⑥ Connection thread: A6) |
|               |             | M5 x 0.8  | —                 | —                              | ○ (⑥ Connection thread: A8) | ○ (⑥ Connection thread: A8) |
|               | <b>B4</b>   | M4 x 0.7  | ○*1               | —                              | —                           | —                           |
|               | <b>B5</b>   | M5 x 0.8  | ○*1               | ○*1                            | ○*1                         | —                           |
|               | <b>B6</b>   | M6 x 1    | —                 | ○*1                            | ○*1                         | ○*1                         |
|               | <b>B8</b>   | M8 x 1.25 | —                 | —                              | ○*1                         | ○*1                         |
|               | <b>B01</b>  | Rc1/8     | —                 | ○*1                            | ○*1                         | ○*1                         |
|               | <b>BG01</b> | G1/8      | —                 | ○*1                            | ○*1                         | —                           |
|               | <b>BG02</b> | G1/4      | —                 | —                              | —                           | ○*1                         |

\*1 Use the connection thread.

### ⑥ Connection thread

| Type        | Symbol    | Size     | Pad diameter [mm] |            |            |          |
|-------------|-----------|----------|-------------------|------------|------------|----------|
|             |           |          | ø6, ø8            | ø10 to ø16 | ø20 to ø32 | ø40, ø50 |
| Male thread | <b>A5</b> | M5 x 0.8 | —                 | ○*2        | —          | —        |
|             | <b>A6</b> | M6 x 1   | —                 | ○*2        | ○*2        | ○*2      |
|             | <b>A8</b> | M8 x 1   | —                 | —          | ○*2        | ○*2      |

\*2 With a (female) vacuum inlet

### Lock ring unit

| Part no.     | Pad diameter [mm] |
|--------------|-------------------|
| <b>ZPSL1</b> | ø10 to ø16        |
| <b>ZPSL2</b> | ø20 to ø32        |
| <b>ZPSL3</b> | ø40, ø50          |



# Basic Pad

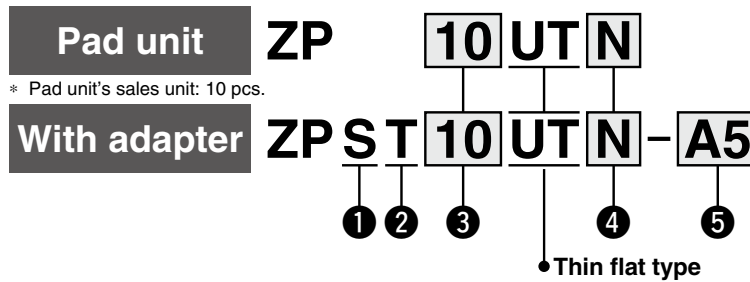
## Thin Flat Type

# ZP Series

For pad units and pads with an adapter (stainless steel type): The standard product is a secondary battery compatible product. For details on specifications and dimensions, refer to the [Web Catalog](#).



### How to Order



#### ① Adapter material

|          |                                       |
|----------|---------------------------------------|
| <b>S</b> | Stainless steel (Stainless steel 304) |
|----------|---------------------------------------|

#### ② Vacuum inlet direction

|          |          |
|----------|----------|
| <b>T</b> | Vertical |
|----------|----------|

#### ③ Pad diameter

|           |     |
|-----------|-----|
| <b>10</b> | ø10 |
| <b>13</b> | ø13 |
| <b>16</b> | ø16 |

#### ④ Material

|           |                            |
|-----------|----------------------------|
| <b>N</b>  | NBR                        |
| <b>S</b>  | Silicone rubber *1 *2      |
| <b>U</b>  | Urethane rubber            |
| <b>F</b>  | FKM                        |
| <b>GN</b> | Conductive NBR             |
| <b>GS</b> | Conductive silicone rubber |

\*1 Compliant with the FDA (USA Food and Drug Administration) regulation 21CFR§177.2600 for "Rubber articles intended for repeated use"

\*2 Compliant with the standards for "Rubber apparatus (excluding baby drinking apparatus) and containers/packaging" (D3) (Partial revision: Ministry of Health, Labour, and Welfare Notification No. 595, 2012) in Section 3 "Apparatus and Containers/Packaging" of the Food Sanitation Act, Article 18 "Specifications and Standards for Food and Food Additives, etc." (Ministry of Health and Welfare Notification No. 370, 1959)

#### With adapter

#### ⑤ Vacuum inlet

| Type              | Symbol    | Size     | Pad diameter |
|-------------------|-----------|----------|--------------|
|                   |           |          | All sizes    |
| Female thread     | <b>A5</b> | M5 x 0.8 | ○            |
|                   | <b>A6</b> | M6 x 1   | ○            |
| One-touch fitting | <b>B4</b> | M4 x 0.7 | ○            |
|                   | <b>B5</b> | M5 x 0.8 | ○            |



# Basic Pad

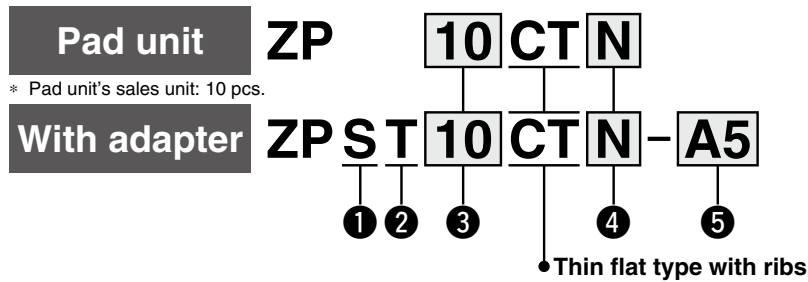
## Thin Flat Type with Ribs

# ZP Series

For pad units and pads with an adapter (stainless steel type): The standard product is a secondary battery compatible product. For details on specifications and dimensions, refer to the [Web Catalog](#).



### How to Order



#### ① Adapter material

|          |                                       |
|----------|---------------------------------------|
| <b>S</b> | Stainless steel (Stainless steel 304) |
|----------|---------------------------------------|

#### ② Vacuum inlet direction

|          |          |
|----------|----------|
| <b>T</b> | Vertical |
|----------|----------|

#### ③ Pad diameter

|           |     |
|-----------|-----|
| <b>10</b> | ø10 |
| <b>13</b> | ø13 |
| <b>16</b> | ø16 |

#### ④ Material

|           |                            |
|-----------|----------------------------|
| <b>N</b>  | NBR                        |
| <b>S</b>  | Silicone rubber*1 *2       |
| <b>U</b>  | Urethane rubber            |
| <b>F</b>  | FKM                        |
| <b>GN</b> | Conductive NBR             |
| <b>GS</b> | Conductive silicone rubber |

\*1 Compliant with the FDA (USA Food and Drug Administration) regulation 21CFR§177.2600 for "Rubber articles intended for repeated use"

\*2 Compliant with the standards for "Rubber apparatus (excluding baby drinking apparatus) and containers/packaging" (D3) (Partial revision: Ministry of Health, Labour, and Welfare Notification No. 595, 2012) in Section 3 "Apparatus and Containers/Packaging" of the Food Sanitation Act, Article 18 "Specifications and Standards for Food and Food Additives, etc." (Ministry of Health and Welfare Notification No. 370, 1959)

#### With adapter

#### ⑤ Vacuum inlet

| Type          | Symbol    | Size     | Pad diameter |
|---------------|-----------|----------|--------------|
|               |           |          | All sizes    |
| Male thread   | <b>A5</b> | M5 x 0.8 | ○            |
|               | <b>A6</b> | M6 x 1   | ○            |
| Female thread | <b>B4</b> | M4 x 0.7 | ○            |
|               | <b>B5</b> | M5 x 0.8 | ○            |

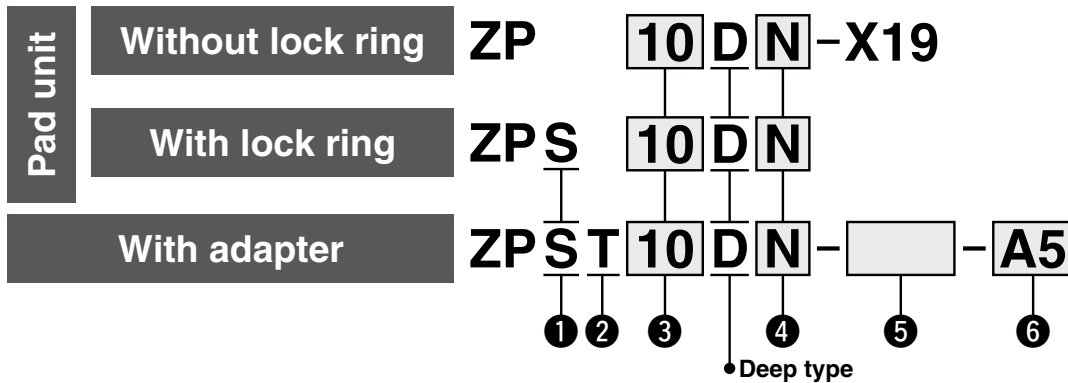


# Basic Pad Deep Type ZP Series

For pad units and pads with an adapter (stainless steel type): The standard product is a secondary battery compatible product. For details on specifications and dimensions, refer to the [Web Catalog](#).



## How to Order



### 1 Adapter (Lock ring) material

|   |                                       |
|---|---------------------------------------|
| S | Stainless steel (Stainless steel 304) |
|---|---------------------------------------|

### 3 Pad diameter

|    |     |
|----|-----|
| 10 | ø10 |
| 16 | ø16 |
| 25 | ø25 |
| 40 | ø40 |

### 4 Material

|    |                            |
|----|----------------------------|
| N  | NBR                        |
| S  | Silicone rubber*1 *2       |
| U  | Urethane rubber            |
| F  | FKM                        |
| GN | Conductive NBR             |
| GS | Conductive silicone rubber |

\*1 Compliant with the FDA (USA Food and Drug Administration) regulation 21CFR§177.2600 for "Rubber articles intended for repeated use"

\*2 Compliant with the standards for "Rubber apparatus (excluding baby drinking apparatus) and containers/packaging" (D3) (Partial revision: Ministry of Health, Labour, and Welfare Notification No. 595, 2012) in Section 3 "Apparatus and Containers/Packaging" of the Food Sanitation Act, Article 18 "Specifications and Standards for Food and Food Additives, etc." (Ministry of Health and Welfare Notification No. 370, 1959)

### 2 Vacuum inlet direction

|   |          |
|---|----------|
| T | Vertical |
|---|----------|

## With adapter

### 5 Vacuum inlet

| Type          | Symbol | Size      | Pad diameter [mm]              |                             |                             |
|---------------|--------|-----------|--------------------------------|-----------------------------|-----------------------------|
|               |        |           | ø10, ø16                       | ø25                         | ø40                         |
| Male thread   | AS5    | M5 x 0.8  | ○*1                            | ○*1                         | —                           |
|               | AS6    | M6 x 1    | ○*1                            | ○*1                         | ○*1                         |
|               | AG01   | G1/8      | ○*1                            | ○*1                         | —                           |
|               | AG02   | G1/4      | —                              | —                           | ○*1                         |
| Female thread | Nil    | M3 x 0.5  | ○ (6 Connection thread: A5/A6) | ○ (6 Connection thread: A6) | ○ (6 Connection thread: A6) |
|               |        | M5 x 0.8  | —                              | ○ (6 Connection thread: A8) | ○ (6 Connection thread: A8) |
|               | B5     | M5 x 0.8  | ○*1                            | ○*1                         | —                           |
|               | B6     | M6 x 1    | ○*1                            | ○*1                         | ○*1                         |
|               | B8     | M8 x 1.25 | —                              | ○*1                         | ○*1                         |
|               | B01    | Rc1/8     | ○*1                            | ○*1                         | ○*1                         |
|               | BG01   | G1/8      | ○*1                            | ○*1                         | —                           |
|               | BG02   | G1/4      | —                              | —                           | ○*1                         |

\*1 Use the connection thread.

### 6 Connection thread

| Type        | Symbol | Size     | Pad diameter [mm] |     |     |
|-------------|--------|----------|-------------------|-----|-----|
|             |        |          | ø10, ø16          | ø25 | ø40 |
| Male thread | A5     | M5 x 0.8 | ○*2               | —   | —   |
|             | A6     | M6 x 1   | ○*2               | ○*2 | ○*2 |
|             | A8     | M8 x 1   | —                 | ○*2 | ○*2 |

\*2 With a (female) vacuum inlet

### Lock ring unit

| Part no. | Pad diameter [mm] |
|----------|-------------------|
| ZPSL1    | ø10, ø16          |
| ZPSL2    | ø25               |
| ZPSL3    | ø40               |



# Compact Type

## Flat Type

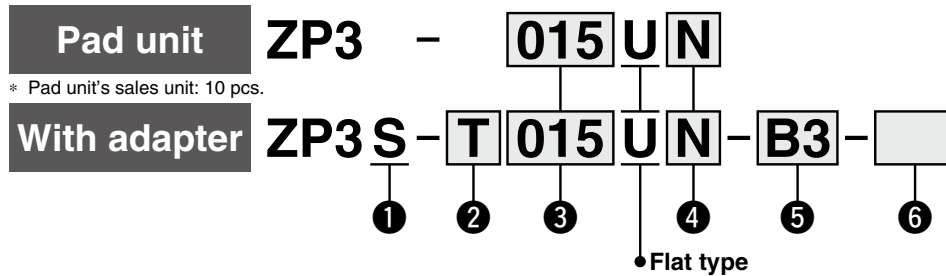
# ZP3 Series

Pad diameter:  $\varnothing 1.5$ ,  $\varnothing 2$ ,  $\varnothing 3.5$

For pad units and pads with an adapter (stainless steel type): The standard product is a secondary battery compatible product. For details on specifications and dimensions, refer to the [Web Catalog](#).



### How to Order



#### ① Adapter material

|          |                                       |
|----------|---------------------------------------|
| <b>S</b> | Stainless steel (Stainless steel 304) |
|----------|---------------------------------------|

#### ② Vacuum inlet direction

|            |          |
|------------|----------|
| <b>Nil</b> | Pad unit |
| <b>T</b>   | Vertical |
| <b>Y</b>   | Lateral  |

#### ③ Pad diameter

|            |                   |
|------------|-------------------|
| <b>015</b> | $\varnothing 1.5$ |
| <b>02</b>  | $\varnothing 2$   |
| <b>035</b> | $\varnothing 3.5$ |

#### ④ Material

|           |                            |
|-----------|----------------------------|
| <b>N</b>  | NBR                        |
| <b>S</b>  | Silicone rubber*1 *2       |
| <b>U</b>  | Urethane rubber            |
| <b>F</b>  | FKM                        |
| <b>GN</b> | Conductive NBR             |
| <b>GS</b> | Conductive silicone rubber |

### With adapter

#### ⑤ Connection thread/ ⑥ Vacuum inlet

○: ZP3S-T/Vertical ●: ZP3S-Y/Lateral

| ⑤ Connection thread |           |           | ⑥ Vacuum inlet |            |          | Pad diameter |
|---------------------|-----------|-----------|----------------|------------|----------|--------------|
| Type                | Symbol    | Size      | Type           | Symbol     | Size     | All sizes    |
| Male thread         | <b>A3</b> | M3 x 0.5  | —              | <b>Nil</b> | —*1      | ○            |
|                     | <b>A6</b> | M6 x 0.75 | Female thread  | <b>B3</b>  | M3 x 0.5 | ○            |
| Female thread       | <b>B3</b> | M3 x 0.5  | —              | <b>Nil</b> | —*1      | ○            |
|                     |           |           | Female thread  | <b>B3</b>  | M3 x 0.5 | ●            |

\*1 Use the connection thread.

\*1 Compliant with the FDA (USA Food and Drug Administration) regulation 21CFR§177.2600 for "Rubber articles intended for repeated use"

\*2 Compliant with the standards for "Rubber apparatus (excluding baby drinking apparatus) and containers/packaging" (D3) (Partial revision: Ministry of Health, Labour, and Welfare Notification No. 595, 2012) in Section 3 "Apparatus and Containers/Packaging" of the Food Sanitation Act, Article 18 "Specifications and Standards for Food and Food Additives, etc." (Ministry of Health and Welfare Notification No. 370, 1959)





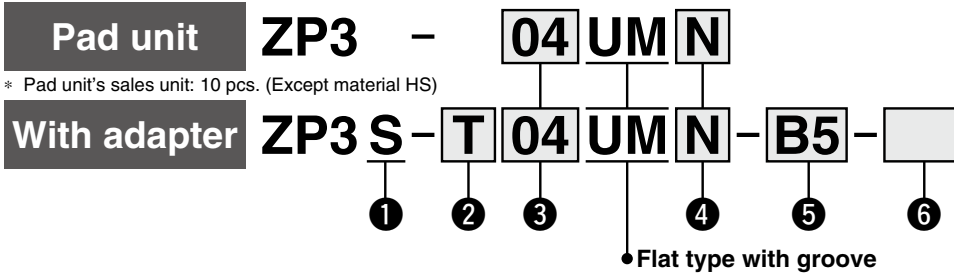
# Compact Type Flat Type with Groove

## ZP3 Series

Pad diameter:  $\varnothing 4$ ,  $\varnothing 6$ ,  $\varnothing 8$ ,  $\varnothing 10$ ,  $\varnothing 13$ ,  $\varnothing 16$

For pad units and pads with an adapter (stainless steel type): The standard product is a secondary battery compatible product. For details on specifications and dimensions, refer to the [Web Catalog](#).

### How to Order



#### 1 Adapter material

|          |                                       |
|----------|---------------------------------------|
| <b>S</b> | Stainless steel (Stainless steel 304) |
|----------|---------------------------------------|

#### 2 Vacuum inlet direction

|            |          |
|------------|----------|
| <b>Nil</b> | Pad unit |
| <b>T</b>   | Vertical |
| <b>Y</b>   | Lateral  |

#### 3 Pad diameter

|           |                  |
|-----------|------------------|
| <b>04</b> | $\varnothing 4$  |
| <b>06</b> | $\varnothing 6$  |
| <b>08</b> | $\varnothing 8$  |
| <b>10</b> | $\varnothing 10$ |
| <b>13</b> | $\varnothing 13$ |
| <b>16</b> | $\varnothing 16$ |

#### 4 Material

|           |                                |
|-----------|--------------------------------|
| <b>N</b>  | NBR                            |
| <b>S</b>  | Silicone rubber*1*2            |
| <b>U</b>  | Urethane rubber                |
| <b>F</b>  | FKM                            |
| <b>GN</b> | Conductive NBR                 |
| <b>GS</b> | Conductive silicone rubber     |
| <b>HS</b> | Semiconductive silicone rubber |

### With adapter

#### 5 Connection thread/ 6 Vacuum inlet

○: ZP3S-T/Vertical ●: ZP3S-Y/Lateral

| 5 Connection thread |            |          | 6 Vacuum inlet |            |                            | Pad diameter [mm]                  |                                      |
|---------------------|------------|----------|----------------|------------|----------------------------|------------------------------------|--------------------------------------|
| Type                | Symbol     | Size     | Type           | Symbol     | Size                       | $\varnothing 4$ to $\varnothing 8$ | $\varnothing 10$ to $\varnothing 16$ |
| Male thread         | <b>A5</b>  | M5 x 0.8 | —              | <b>Nil</b> | Use the connection thread. | ○                                  | ○                                    |
|                     | <b>A10</b> | M10 x 1  | Female thread  | <b>B5</b>  | M5 x 0.8                   | ○                                  | —                                    |
|                     | <b>A12</b> | M12 x 1  | Female thread  | <b>B5</b>  | M5 x 0.8                   | —                                  | ○                                    |
| Female thread       | <b>B5</b>  | M5 x 0.8 | —              | <b>Nil</b> | Use the connection thread. | ○                                  | ○                                    |
|                     |            |          | Female thread  | <b>B5</b>  | M5 x 0.8                   | ●                                  | ●                                    |

\*1 Compliant with the FDA (USA Food and Drug Administration) regulation 21CFR§177.2600 for "Rubber articles intended for repeated use"

\*2 Compliant with the standards for "Rubber apparatus (excluding baby drinking apparatus) and containers/packaging" (D3) (Partial revision: Ministry of Health, Labour, and Welfare Notification No. 595, 2012) in Section 3 "Apparatus and Containers/Packaging" of the Food Sanitation Act, Article 18 "Specifications and Standards for Food and Food Additives, etc." (Ministry of Health and Welfare Notification No. 370, 1959).



# Compact Type

## Bellows Type

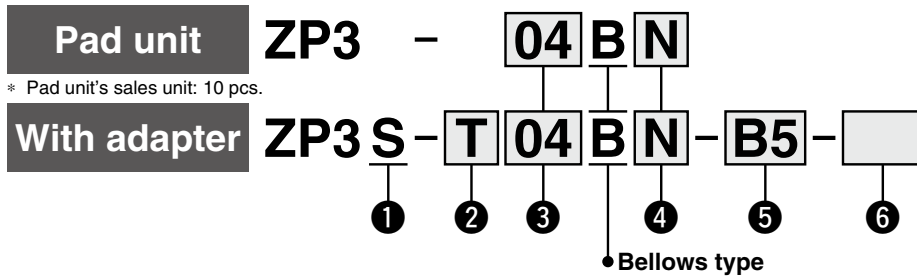
# ZP3 Series

Pad diameter:  $\varnothing 4$ ,  $\varnothing 6$ ,  $\varnothing 8$

For pad units and pads with an adapter (stainless steel type): The standard product is a secondary battery compatible product. For details on specifications and dimensions, refer to the [Web Catalog](#).



### How to Order



#### 1 Adapter material

|          |                                       |
|----------|---------------------------------------|
| <b>S</b> | Stainless steel (Stainless steel 304) |
|----------|---------------------------------------|

#### 2 Vacuum inlet direction

|            |          |
|------------|----------|
| <b>Nil</b> | Pad unit |
| <b>T</b>   | Vertical |
| <b>Y</b>   | Lateral  |

#### 3 Pad diameter

|           |                 |
|-----------|-----------------|
| <b>04</b> | $\varnothing 4$ |
| <b>06</b> | $\varnothing 6$ |
| <b>08</b> | $\varnothing 8$ |

#### 4 Material

|           |                            |
|-----------|----------------------------|
| <b>N</b>  | NBR                        |
| <b>S</b>  | Silicone rubber*1 *2       |
| <b>U</b>  | Urethane rubber            |
| <b>F</b>  | FKM                        |
| <b>GN</b> | Conductive NBR             |
| <b>GS</b> | Conductive silicone rubber |

### With adapter

#### 5 Connection thread/ 6 Vacuum inlet

○: ZP3S-T/Vertical ●: ZP3S-Y/Lateral

| 5 Connection thread |            |          | 6 Vacuum inlet |            |                            | Pad diameter |
|---------------------|------------|----------|----------------|------------|----------------------------|--------------|
| Type                | Symbol     | Size     | Type           | Symbol     | Size                       | All sizes    |
| Male thread         | <b>A5</b>  | M5 x 0.8 | —              | <b>Nil</b> | Use the connection thread. | ○            |
|                     | <b>A10</b> | M10 x 1  | Female thread  | <b>B5</b>  | M5 x 0.8                   | ○            |
| Female thread       | <b>B5</b>  | M5 x 0.8 | —              | <b>Nil</b> | Use the connection thread. | ○            |
|                     |            |          | Female thread  | <b>B5</b>  | M5 x 0.8                   | ●            |

\*1 Compliant with the FDA (USA Food and Drug Administration) regulation 21CFR§177.2600 for "Rubber articles intended for repeated use"

\*2 Compliant with the standards for "Rubber apparatus (excluding baby drinking apparatus) and containers/packaging" (D3) (Partial revision: Ministry of Health, Labour, and Welfare Notification No. 595, 2012) in Section 3 "Apparatus and Containers/Packaging" of the Food Sanitation Act, Article 18 "Specifications and Standards for Food and Food Additives, etc." (Ministry of Health and Welfare Notification No. 370, 1959)



# Compact Type Bellows Type with Ribs

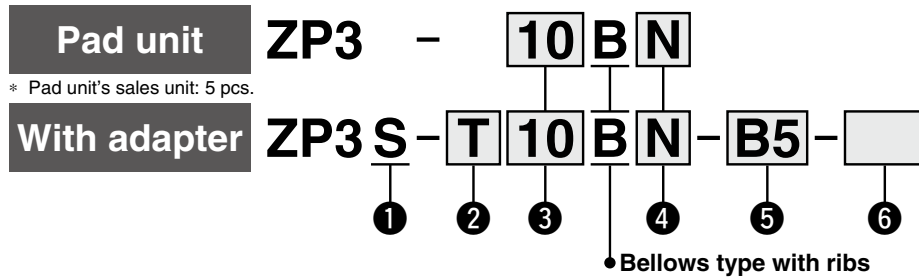
## ZP3 Series

Pad diameter:  $\varnothing 10$ ,  $\varnothing 13$ ,  $\varnothing 16$

For pad units and pads with an adapter (stainless steel type): The standard product is a secondary battery compatible product. For details on specifications and dimensions, refer to the [Web Catalog](#).



### How to Order



#### 1 Adapter material

|          |                                       |
|----------|---------------------------------------|
| <b>S</b> | Stainless steel (Stainless steel 304) |
|----------|---------------------------------------|

#### 2 Vacuum inlet direction

|            |          |
|------------|----------|
| <b>Nil</b> | Pad unit |
| <b>T</b>   | Vertical |
| <b>Y</b>   | Lateral  |

#### 3 Pad diameter

|           |                  |
|-----------|------------------|
| <b>10</b> | $\varnothing 10$ |
| <b>13</b> | $\varnothing 13$ |
| <b>16</b> | $\varnothing 16$ |

#### 4 Material

|           |                            |
|-----------|----------------------------|
| <b>N</b>  | NBR                        |
| <b>S</b>  | Silicone rubber*1 *2       |
| <b>U</b>  | Urethane rubber            |
| <b>F</b>  | FKM                        |
| <b>GN</b> | Conductive NBR             |
| <b>GS</b> | Conductive silicone rubber |

### With adapter

#### 5 Connection thread/ 6 Vacuum inlet

○: ZP3S-T/Vertical ●: ZP3S-Y/Lateral

| 5 Connection thread |            |          | 6 Vacuum inlet |            |                            | Pad diameter |
|---------------------|------------|----------|----------------|------------|----------------------------|--------------|
| Type                | Symbol     | Size     | Type           | Symbol     | Size                       | All sizes    |
| Male thread         | <b>A5</b>  | M5 x 0.8 | —              | <b>Nil</b> | Use the connection thread. | ○            |
|                     | <b>A12</b> | M12 x 1  | Female thread  | <b>B5</b>  | M5 x 0.8                   | ○            |
| Female thread       | <b>B5</b>  | M5 x 0.8 | —              | <b>Nil</b> | Use the connection thread. | ○            |
|                     |            |          | Female thread  | <b>B5</b>  | M5 x 0.8                   | ●            |

\*1 Compliant with the FDA (USA Food and Drug Administration) regulation 21CFR§177.2600 for "Rubber articles intended for repeated use"

\*2 Compliant with the standards for "Rubber apparatus (excluding baby drinking apparatus) and containers/packaging" (D3) (Partial revision: Ministry of Health, Labour, and Welfare Notification No. 595, 2012) in Section 3 "Apparatus and Containers/Packaging" of the Food Sanitation Act, Article 18 "Specifications and Standards for Food and Food Additives, etc." (Ministry of Health and Welfare Notification No. 370, 1959)



# Vacuum Pad

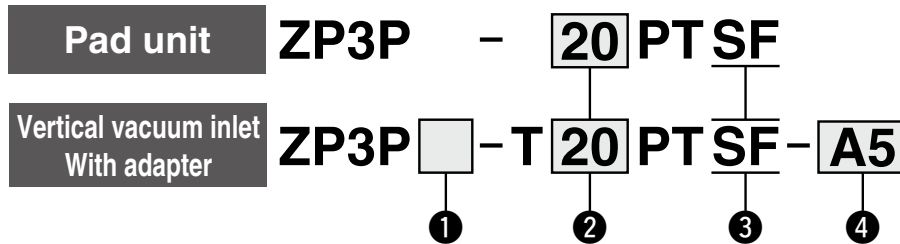
## ZP3P-PT Series

Pad diameter:  $\varnothing 20$ ,  $\varnothing 25$ ,  $\varnothing 35$ ,  $\varnothing 50$

For pad units and pads with an adapter (Excludes the M12 x 1.75 type):  
The standard product is a secondary battery compatible product. For  
details on specifications and dimensions, refer to the [Web Catalog](#).



### How to Order



#### 1 Adapter material

|     |  |
|-----|--|
| Nil | Aluminum                                 |
| S   | Stainless steel<br>(Stainless steel 304) |

#### 2 Pad diameter

|    |                  |
|----|------------------|
| 20 | $\varnothing 20$ |
| 25 | $\varnothing 25$ |
| 35 | $\varnothing 35$ |
| 50 | $\varnothing 50$ |

#### 3 Pad material

|    |                       |
|----|-----------------------|
| SF | Silicone rubber*1, *2 |
|----|-----------------------|

\*1 Compliant with the FDA (USA Food and Drug Administration) regulation 21CFR§177.2600 for "Rubber articles intended for repeated use"

\*2 Compliant with the standards for "Rubber apparatus (excluding baby drinking apparatus) and containers/packaging" (D3) (Partial revision: Ministry of Health, Labour, and Welfare Notification No. 595, 2012) in Section 3 "Apparatus and Containers/Packaging" of the Food Sanitation Act, Article 18 "Specifications and Standards for Food and Food Additives, etc." (Ministry of Health and Welfare Notification No. 370, 1959).

### With adapter

#### 4 Mounting thread size

| Type          | Symbol | Size      | $\varnothing 20$ | $\varnothing 25$ | $\varnothing 35$ | $\varnothing 50$ |
|---------------|--------|-----------|------------------|------------------|------------------|------------------|
| Male thread   | A5     | M5 x 0.8  | ●                | ●                | —                | —                |
|               | AG1    | G1/8      | ●                | ●                | —                | —                |
|               | AG2    | G1/4      | —                | —                | ●                | ●                |
|               | AG3    | G3/8      | —                | —                | ●                | ●                |
| Female thread | B5     | M5 x 0.8  | ●                | ●                | —                | —                |
|               | B8     | M8 x 1.25 | —                | —                | ●                | ●                |



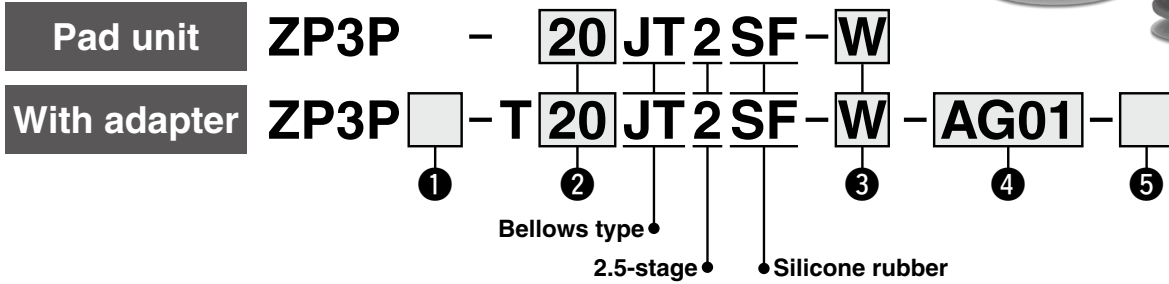
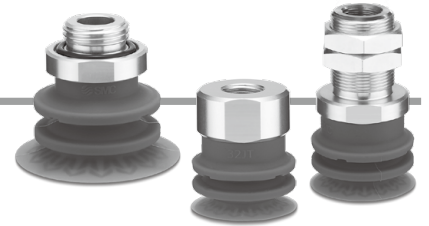
# Vacuum Pad

## 2.5-Stage Bellows Type

# ZP3P-JT Series

For pad units and pads with an adapter (Vacuum inlet: Excludes the built-in One-touch fitting type): The standard product is a secondary battery compatible product. For details on specifications and dimensions, refer to the [Web Catalog](#).

### How to Order



#### 1 Adapter material

|     |                                       |
|-----|---------------------------------------|
| Nil | Aluminum                              |
| S   | Stainless steel (Stainless steel 304) |

#### 2 Pad diameter

|    |     |
|----|-----|
| 20 | ø20 |
| 25 | ø25 |
| 32 | ø32 |
| 40 | ø40 |
| 50 | ø50 |

#### 3 Attachment

|    |                      |
|----|----------------------|
| W  | With attachment      |
| WM | With mesh attachment |
| WF | With flat attachment |

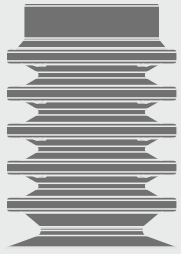
### With adapter

#### 4 Connection thread/5 Vacuum inlet

| Type            | 4 Connection thread |        |         | 5 Vacuum inlet |        |        | Pad diameter [mm] |               |
|-----------------|---------------------|--------|---------|----------------|--------|--------|-------------------|---------------|
|                 | Thread              | Symbol | Size    | Thread         | Symbol | Size   | ø20, ø25          | ø32, ø40, ø50 |
| Direct mounting | Male thread         | AG01   | G1/8    | —              | Nil    | —*1    | ●                 | ●             |
|                 |                     | AG02   | G1/4    |                |        |        | ●                 | ●             |
|                 |                     | AG03   | G3/8    |                |        |        | ●                 | ●             |
|                 |                     | AG04   | G1/2    |                |        |        | —                 | ●             |
|                 | Female thread       | BG01   | G1/8    | —              | Nil    | —*1    | ●                 | —             |
|                 |                     | BG02   | G1/4    |                |        |        | —                 | ●             |
| Plate mounting  | Male thread         | A16    | M16 x 1 | Female thread  | B01    | Rc1/8  | ●                 | —             |
|                 |                     |        |         |                | BN01   | NPT1/8 | —                 | —             |
|                 |                     | A20    | M20 x 1 | Female thread  | B02    | Rc1/4  | —                 | ●             |
|                 |                     |        |         |                | BN02   | NPT1/4 | —                 | ●             |

\*1 Use the connection thread.

Pad, adapter assembly, and mounting nuts are included but do not come assembled.



# Vacuum Pad

## 5.5-Stage Bellows Type

# ZP3P-JT Series

For pad units and pads with an adapter (Vacuum inlet: Excludes the built-in One-touch fitting type): The standard product is a secondary battery compatible product. For details on specifications and dimensions, refer to the [Web Catalog](#).

### How to Order



**Pad unit** ZP3P - **20** **JT** **5** **SF** - **WG**

**With adapter** ZP3P **1** - **T** **20** **JT** **5** **SF** - **AG01** - **4**

\* With guide attachment

• Bellows type • 5.5-stage • Silicone rubber • With guide attachment

#### 1 Adapter material

|            |                                       |
|------------|---------------------------------------|
| <b>Nil</b> | Aluminum                              |
| <b>S</b>   | Stainless steel (Stainless steel 304) |

#### 2 Pad diameter

|           |     |
|-----------|-----|
| <b>20</b> | ø20 |
| <b>25</b> | ø25 |
| <b>32</b> | ø32 |
| <b>40</b> | ø40 |
| <b>50</b> | ø50 |

### With adapter

#### 3 Connection thread/4 Vacuum inlet

| Type            | 3 Connection thread |             |             | 4 Vacuum inlet |            |               | Pad diameter [mm] |            |
|-----------------|---------------------|-------------|-------------|----------------|------------|---------------|-------------------|------------|
|                 | Thread              | Symbol      | Size        | Thread         | Symbol     | Size          | ø20, ø25          | ø32 to ø50 |
| Direct mounting | Male thread         | <b>AG01</b> | G1/8        | —              | <b>Nil</b> | —*1           | ●                 | ●          |
|                 |                     | <b>AG02</b> | G1/4        |                |            |               | —                 | ●          |
|                 | Female thread       | <b>BG01</b> | G1/8        |                |            |               | ●                 | —          |
|                 |                     | <b>BG02</b> | G1/4        |                |            |               | —                 | ●          |
| Plate mounting  | Male thread         | <b>A16</b>  | M16 x 1     | Female thread  | <b>B01</b> | Rc1/8         | ●                 | —          |
|                 |                     |             | <b>A20</b>  |                | M20 x 1    | Female thread | <b>BN01</b>       | NPT1/8     |
|                 |                     |             |             |                |            |               | <b>B02</b>        | Rc1/4      |
|                 |                     |             | <b>BN02</b> |                |            | NPT1/4        | —                 | ●          |

\*1 Use the connection thread.

Pad, adapter assembly, and mounting nuts are included but do not come assembled.

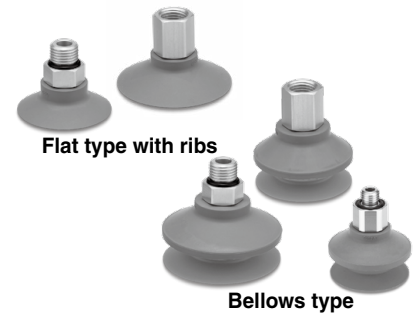


# Vacuum Pad

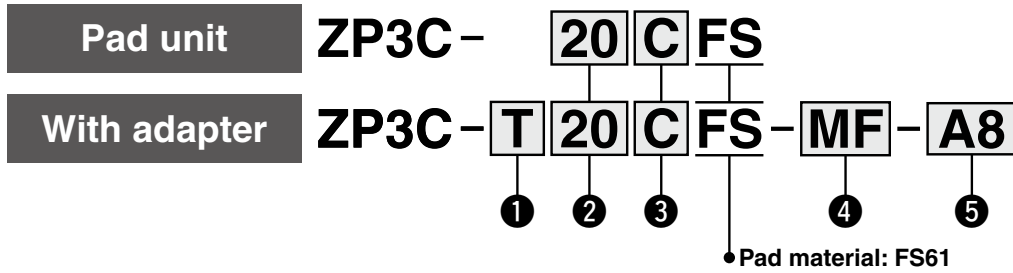
Flat Type with Ribs Bellows Type

## ZP3C Series

For pad units and pads with an adapter: The standard product is a secondary battery compatible product. For details on specifications and dimensions, refer to the [Web Catalog](#).



### How to Order



#### ① Vacuum inlet direction

|     |          |
|-----|----------|
| Nil | Pad unit |
| T   | Vertical |

#### ② Pad diameter

|    |     |
|----|-----|
| 20 | ø20 |
| 25 | ø25 |
| 32 | ø32 |
| 40 | ø40 |
| 50 | ø50 |

#### ③ Pad form

|   |                     |
|---|---------------------|
| C | Flat type with ribs |
| B | Bellows type        |

#### ④ Mesh filter

|     |                     |
|-----|---------------------|
| Nil | Without mesh filter |
| MF  | With mesh filter    |

#### ⑤ Connection thread

| Type            | Thread        | Symbol | Size    | Pad diameter [mm] |          |
|-----------------|---------------|--------|---------|-------------------|----------|
|                 |               |        |         | ø20 to ø32        | ø40, ø50 |
| Direct mounting | Male thread   | A8     | M8 x 1  | ●                 | —        |
|                 |               | A10    | M10 x 1 | —                 | ●        |
|                 |               | AG01   | G1/8    | ●                 | —        |
|                 | Female thread | AG02   | G1/4    | —                 | ●        |
|                 |               | BG01   | G1/8    | ●                 | —        |
|                 |               | BG02   | G1/4    | —                 | ●        |

\* Use the connection thread for the vacuum inlet.

## Specifications

### Pad/Mesh filter specifications

|             |                         |                            |
|-------------|-------------------------|----------------------------|
| Pad         | Material                | FS61 (Fluoro-based rubber) |
|             | Color                   | Green                      |
|             | Hardness (Shore A: ±5°) | 60                         |
| Mesh filter | Opening: 250 μm         |                            |

### Adapter specifications

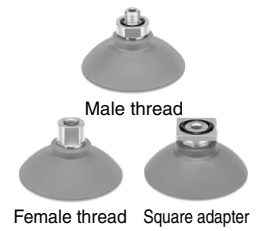
| Connection        | Male thread                |                 | Female thread |          |
|-------------------|----------------------------|-----------------|---------------|----------|
|                   | ø20 to ø32                 | ø40, ø50        | ø20 to ø32    | ø40, ø50 |
| Pad diameter      |                            |                 |               |          |
| Connection thread | M8 x 1<br>G1/8             | M10 x 1<br>G1/4 | G1/8          | G1/4     |
| Vacuum inlet      | Use the connection thread. |                 |               |          |



# Vacuum Pad/Bowl Shape with Non-slip Feature

# ZP3M Series

For pads with an adapter: The standard product is a secondary battery compatible product. For details on specifications and dimensions, refer to the [Web Catalog](#).



## How to Order

With adapter **ZP3M - T 63 R FS - A16 - MF**



### 1 Vacuum inlet direction

|   |          |
|---|----------|
| T | Vertical |
|---|----------|

### 2 Pad diameter

|     |      |
|-----|------|
| 32  | ø32  |
| 40  | ø40  |
| 50  | ø50  |
| 63  | ø63  |
| 80  | ø80  |
| 100 | ø100 |

### 3 Material

| Symbol | Material                   | Color |
|--------|----------------------------|-------|
| FS     | FS61 (Fluoro-based rubber) | Green |

### 4 Connection thread and type

| Mounting        | Type          | Symbol | Size      | Pad diameter |             |
|-----------------|---------------|--------|-----------|--------------|-------------|
|                 |               |        |           | ø32 to ø50   | ø63 to ø100 |
| Direct mounting | Male thread   | A10    | M10 x 1.0 | ●            | —           |
|                 |               | A16    | M16 x 1.5 | —            | ●           |
|                 |               | AG02   | G1/4      | ●            | ●           |
|                 | Female thread | B14    | M14 x 1.0 | ●            | ●           |
|                 |               | BG02   | G1/4      | ●            | ●           |
|                 |               | BG03   | G3/8      | ●            | ●           |
| Square adapter  | S32           | □31.8  | ●         | ●            |             |

### 5 Mesh filter

|     |                  |
|-----|------------------|
| Nil | None             |
| MF  | With mesh filter |

### Mesh filter unit

| Part no.    | Pad diameter |             |
|-------------|--------------|-------------|
|             | ø32 to ø50   | ø63 to ø100 |
| ZPMF-60-D13 | ●            | —           |
| ZPMF-60-D18 | —            | ●           |

\* The adapter and pad are adhered to each other and cannot be disassembled.

## Specifications

### Pad Material

| Material                       | FS61 (Fluoro-based rubber) |
|--------------------------------|----------------------------|
| Color of rubber                | Green                      |
| Rubber hardness (Shore A: ±5°) | 60                         |
| Operating temperature range*1  | 0°C to 200°C               |
| Ambient temperature            | 0°C to 150°C               |

\*1 Surface temperature of the workpiece to be adsorbed

### Adapter Specifications

| Connection   | Male thread                         |                   | Female thread             |             | Square adapter |
|--------------|-------------------------------------|-------------------|---------------------------|-------------|----------------|
| Pad diameter | ø32 to ø50                          | ø63 to ø100       | ø32 to ø50                | ø63 to ø100 | ø32 to ø100    |
| Size         | M10 x 1.0<br>G1/4                   | M16 x 1.5<br>G1/4 | M14 x 1.0<br>G1/4<br>G3/8 |             | □31.8          |
| Vacuum inlet | Use the connection thread and type. |                   |                           |             |                |

### Pad Specifications

| Part no.     | Horizontal holding force [N]*1 |          | Minimum curvature radius for adsorption [mm]*2 |
|--------------|--------------------------------|----------|--|
|              | Without oil                    | With oil |  |
| ZP3M-T32RFS  | 47                             | 21       | 14   |
| ZP3M-T40RFS  | 81                             | 53       | 15   |
| ZP3M-T50RFS  | 111                            | 74       | 20   |
| ZP3M-T63RFS  | 170                            | 108      | 27.5   |
| ZP3M-T80RFS  | 231                            | 178      | 36   |
| ZP3M-T100RFS | 387                            | 224      | 46   |

\*1 These are actual measurement values when flat workpieces were adsorbed and are not guaranteed values. (According to the SMC test)

The values vary depending on the conditions (shape, surface roughness, oil type, oil amount, and other conditions) of the workpiece.

\*2 These are actual measurement values when cylindrical workpieces were adsorbed and are not guaranteed values. (According to the SMC test)

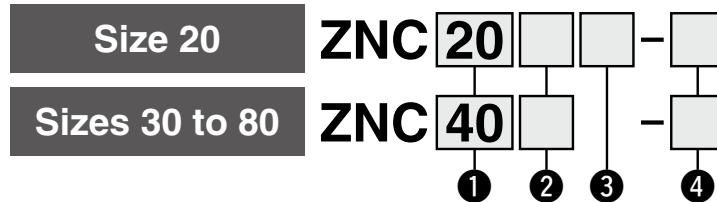
### Mesh Filter Specifications

|             |        |
|-------------|--------|
| Mesh filter | 60     |
| Opening     | 250 μm |

For grippers without a sensor: The standard product is a secondary battery compatible product. For details on specifications and dimensions, refer to the [Web Catalog](#).

# Bernoulli Gripper ZNC Series

## How to Order



### 1 Body size

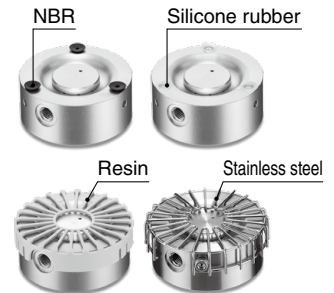
|    |        |
|----|--------|
| 20 | ø20 mm |
| 30 | ø30 mm |
| 40 | ø40 mm |
| 60 | ø60 mm |
| 80 | ø80 mm |

### 2 Body material

|     |                 |  |
|-----|-----------------|--|
| Nil | Aluminum        |  |
| P   | Resin           |  |
| S   | Stainless steel |  |

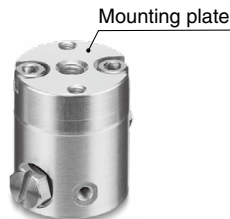
### 4 Attachment

|     |                                    |                         |
|-----|------------------------------------|-------------------------|
| Nil | Basic type (Without attachment)    |                         |
| PN  | With stoppers                      | NBR (Black)             |
| PS  |                                    | Silicone rubber (White) |
| VP  | With vibration suppression cover*1 | Resin                   |
| VS  |                                    | Stainless steel         |



### 3 Mounting plate (Size 20)

|     |                        |                 |
|-----|------------------------|-----------------|
| Nil | Without mounting plate |                 |
| T   | With mounting plate    | Aluminum        |
| TS  |                        | Stainless steel |



\*1 Refer to the Table 1. With Vibration Suppression Cover for the size and material.

\* Stoppers cannot be retrofitted.

\* Vibration suppression cover can be retrofitted to the basic type.

\* The vibration suppression cover cannot be used with the type with stoppers.

\* The mounting plate is shipped together with the product but does not come assembled. Single unit part nos. ⇒ [Web Catalog](#)

\* The piping methods for types with and without a mounting plate are shown in Table 2 below.

Table 1. With Vibration Suppression Cover

| Symbol | Material        | Body size symbol | Body material |       |                 |
|--------|-----------------|------------------|---------------|-------|-----------------|
|        |                 |                  | Aluminum      | Resin | Stainless steel |
| VP     | Resin           | 20               | —             | —     | —               |
|        |                 | 30               | —             | —     | —               |
|        |                 | 40               | ●             | ●     | —               |
|        |                 | 60               | —             | —     | —               |
|        |                 | 80               | —             | —     | —               |
| VS     | Stainless steel | 20               | ●             | ●     | ●               |
|        |                 | 30               | ●             | ●     | ●               |
|        |                 | 40               | ●             | —     | ●               |
|        |                 | 60               | ●             | ●     | ●               |
|        |                 | 80               | ●             | ●     | ●               |

Table 2. Size 20 Piping (Refer to the [Web Catalog](#) for details on how to mount the product.)

|                        | Without mounting plate  |   |
|------------------------|---|---|
|                        | Side ported   | Body ported (Requires no piping)  |
| Without mounting plate | <br>Can be used by blocking the supply port on the top surface of the product with the mounting surface and connecting from the side port | <br>Can be used by connecting the piping inside the mounting surface with the supply port on the top surface of the product             |
| With mounting plate    | Top ported  | Side ported   |
|                        | <br>Can be used by mounting a fitting on the supply port on the top surface of the product and connecting                                 | <br>Can be used by blocking the supply port on the top surface of the product with the mounting plate and connecting from the side port |

\* An O-ring (5.7 x 3.7 x 1) and a plug are shipped together with the product as accessories.

## Attachments/Part Nos.

Stopper ZNCM-PS 2

### Material

|    |                         |
|----|-------------------------|
| PN | NBR (Black)             |
| PS | Silicone rubber (White) |

### Stopper size

| Symbol | Body size  |
|--------|------------|
| 1      | 20, 30     |
| 2      | 40, 60, 80 |

\* Stopper size 1: With 3 stoppers

Stopper size 2: With 3 stoppers and 3 spring pins

For replacement instructions ⇒ Refer to the [Web Catalog](#).

Vibration suppression cover ZNCM-40 VP

### Body size

|    |        |    |        |
|----|--------|----|--------|
| 20 | ø20 mm | 60 | ø60 mm |
| 30 | ø30 mm | 80 | ø80 mm |
| 40 | ø40 mm |    |        |

### Material

|    |                 |
|----|-----------------|
| VP | Resin           |
| VS | Stainless steel |

\* Material: Resin is only selectable for body size 40.

\* For stainless steel:

Body sizes ø20mm and ø30 mm: With 2 mounting screws

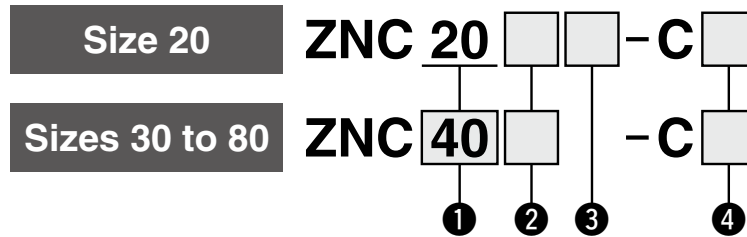
Body sizes ø40 mm, ø60 mm, and ø80 mm: With 3 mounting screws

# Bernoulli Gripper With Coanda Grip **ZNC-C Series**

For grippers without a sensor: The standard product is a secondary battery compatible product. For details on specifications and dimensions, refer to the [Web Catalog](#).



## How to Order



### ① Body size

|    |        |
|----|--------|
| 20 | ø20 mm |
| 30 | ø30 mm |
| 40 | ø40 mm |
| 60 | ø60 mm |
| 80 | ø80 mm |

### ② Body material

|     |                 |
|-----|-----------------|
| Nil | Aluminum        |
| S   | Stainless steel |

### ③ Mounting plate

|     |                 |
|-----|-----------------|
| Nil | None            |
| T   | Aluminum        |
| TS  | Stainless steel |

\* The mounting plate is shipped together with the product but does not come assembled.

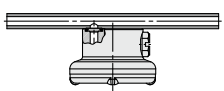
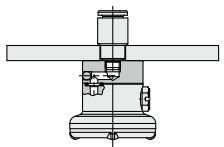
\* The piping methods for types with and without a mounting plate are shown in Table 1 below.

### ④ Attachment

|     |                                     |
|-----|-------------------------------------|
| Nil | Without vibration suppression cover |
| V   | With vibration suppression cover    |

\* It is not possible to additionally install or remove the vibration suppression cover.

**Table 1. Piping**

|                        | Body ported (Requires no piping)   |
|------------------------|--|
| Without mounting plate |  <p>Can be used by connecting the piping inside the mounting surface with the supply port on the top surface of the product</p> |
| With mounting plate    |  <p>Can be used by mounting a fitting on the supply port on the top surface of the product and connecting</p>                   |

## Coanda Grip Only / Part No.

ZNCM -  40  C

Body size ●

|    |        |    |        |
|----|--------|----|--------|
| 20 | ø20 mm | 60 | ø60 mm |
| 30 | ø30 mm | 80 | ø80 mm |
| 40 | ø40 mm |    |        |

# Vacuum Regulator

RoHS

# 25A-IRV10/20 Series



## How to Order

**Standard connections** 25A-IRV 20 - [ ] C08 [ ] [ ]

Series compatible with secondary batteries

Body size

|    |                           |
|----|---------------------------|
| 10 | Max. flow 140 L/min (ANR) |
| 20 | Max. flow 240 L/min (ANR) |

Fittings

|     |          |
|-----|----------|
| Nil | Straight |
| L   | Elbow    |

Connection tubing O.D.

| Symbol | Tubing O.D. | IRV10 | IRV20 |
|--------|-------------|-------|-------|
| C06    | Metric      | ø6    | ●     |
| C08    |             | ø8    | ●     |
| C10    |             | ø10   | —     |

Accessory ② [Supplied with product]

|     |                      |
|-----|----------------------|
| Nil | None*1               |
| GN  | Gauge nut assembly*2 |

\*1 Two plug nuts are mounted on the gauge port. When the Rc1/8 port is required, please order the optional gauge nut assembly P601010-130 separately.

\*2 One plug nut, one gauge nut (Rc1/8), and two clips are included. The pressure gauge and digital pressure switch are not included.

Accessory ① [Supplied with product]

|     |              |
|-----|--------------|
| Nil | None         |
| B   | With bracket |

**Single sided connections** 25A-IRV 20 A - [ ] C08 [ ] [ ]

Series compatible with secondary batteries

Body size

|    |                           |
|----|---------------------------|
| 10 | Max. flow 140 L/min (ANR) |
| 20 | Max. flow 240 L/min (ANR) |

Single sided connections

|   |                          |
|---|--------------------------|
| A | Single sided connections |
|---|--------------------------|

Fittings

|     |          |
|-----|----------|
| Nil | Straight |
| L   | Elbow    |

Connection tubing O.D.

| Symbol | Tubing O.D. | IRV10A | IRV20A |
|--------|-------------|--------|--------|
| C06    | Metric      | ø6     | ●      |
| C08    |             | ø8     | ●      |
| C10    |             | ø10    | —      |

Accessory ② [Supplied with product]

|     |                      |
|-----|----------------------|
| Nil | None*1               |
| GN  | Gauge nut assembly*2 |

\*1 Two plug nuts are mounted on the gauge port. When the Rc1/8 port is required, please order the optional gauge nut assembly P601010-130 separately.

\*2 One gauge nut (Rc1/8) and one clip are included. The pressure gauge and digital pressure switch are not included.

Accessory ① [Supplied with product]

|     |              |
|-----|--------------|
| Nil | None         |
| B   | With bracket |

\* This product cannot be used in environments containing chemical agents such as hydrofluoric acid, etc.

\* The 25A- series specifications and dimensions are the same as those of the standard model.

For details, refer to the [Web Catalog](#).



# Membrane Air Dryer

## 25A-IDG Series

### Single Unit/Standard Dew Point -40°C/-60°C Specifications

RoHS



#### How to Order

25A - IDG 50 L A - 03 - P

Series compatible with secondary batteries

Size

|     |
|-----|
| 30  |
| 50  |
| 60  |
| 75  |
| 100 |

Standard dew point temperature

| Symbol | Standard dew point [°C] |
|--------|-------------------------|
| L      | -40                     |
| S      | -60                     |

| Symbol | 30 | 50 | 60 | 75 | 100 |
|--------|----|----|----|----|-----|
| L      | ●  | ●  | ●  | ●  | ●   |
| S      | —  | —  | ●  | ●  | ●   |

Semi-standard

| Symbol | Contents                      |
|--------|-------------------------------|
| Nil    | None                          |
| R      | Flow direction (Right → Left) |

Fitting for purge air discharge

| Symbol | Contents                             |
|--------|--------------------------------------|
| P      | With fitting for purge air discharge |

Accessory

| Symbol | Description  |
|--------|--------------|
| Nil    | None         |
| B      | With bracket |

\* When symbol B is indicated, a bracket assembly with a part number shown in the table left below is shipped together as an accessory but does not come assembled.

Port size

| Symbol | Bore  | Size |    |    |    |     |
|--------|-------|------|----|----|----|-----|
|        |       | 30   | 50 | 60 | 75 | 100 |
| 02     | Rc1/4 | ●    | ●  | —  | —  | —   |
| 03     | Rc3/8 | ●    | ●  | ●  | ●  | ●   |
| 04     | Rc1/2 | —    | —  | ●  | ●  | ●   |

#### Piping materials

Piping to the outlet side with piping made of water-absorbent or hydrophilic material (nylon, etc.) may result in a rising dew point on the outlet side. Therefore, be sure to use either stainless steel or fluoropolymer piping and fittings.

#### Bracket Assembly (Accessory) Part Nos.

| Part no. | Applicable model         |
|----------|--------------------------|
| 25A-BM64 | 25A-IDG30LA, 50LA        |
| 25A-BM65 | 25A-IDG60LA, 75LA, 100LA |

\* The assembly consists of a bracket and 2 mounting screws.

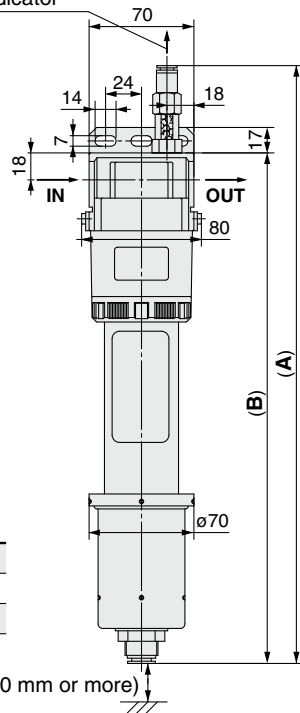
\* Some parts have dimensions that are different from those of the standard model. Refer to page 228 for details. Other specifications are the same as those of the standard model.

For details, refer to the [Web Catalog](#).

## Dimensions

**25A-IDG30LA**  
**25A-IDG50LA**

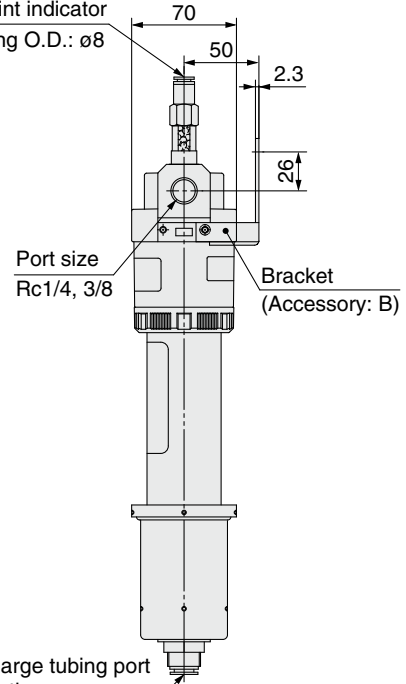
Purge air for dew point indicator



| Model              | A   | B   |
|--------------------|-----|-----|
| <b>25A-IDG30LA</b> | 361 | 302 |
| <b>25A-IDG50LA</b> | 400 | 341 |

(Maintenance space 100 mm or more)

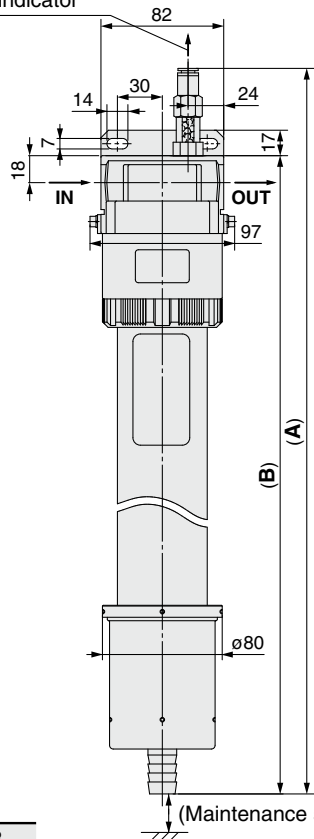
Purge air discharge tubing port for dew point indicator  
Applicable tubing O.D.:  $\phi 8$



Purge air discharge tubing port for dehumidification  
Applicable tubing O.D.:  $\phi 12$

**25A-IDG60LA**  
**25A-IDG75LA**  
**25A-IDG100LA**

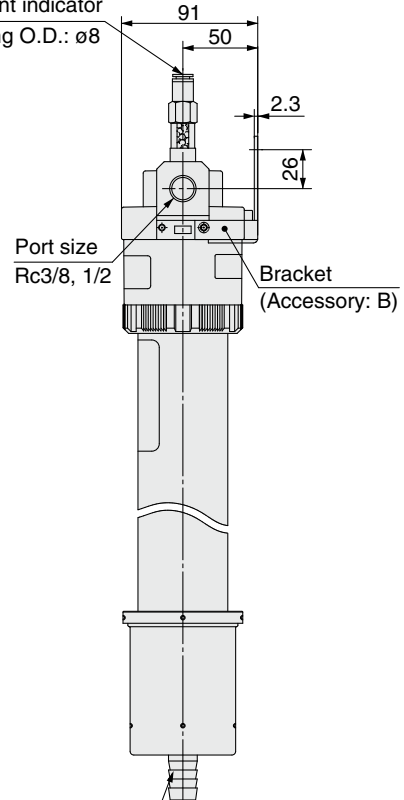
Purge air for dew point indicator



| Model               | A   | B   |
|---------------------|-----|-----|
| <b>25A-IDG60LA</b>  | 426 | 367 |
| <b>25A-IDG75LA</b>  | 495 | 436 |
| <b>25A-IDG100LA</b> | 560 | 501 |

(Maintenance space 100 mm or more)

Purge air discharge tubing port for dew point indicator  
Applicable tubing O.D.:  $\phi 8$



Purge air discharge tubing port for dehumidification  
Applicable tubing I.D.:  $\phi 19$

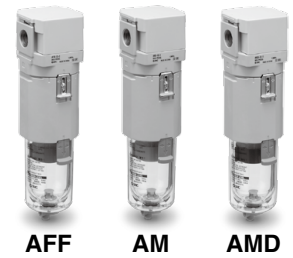


# Compressed Air Preparation Filter

Line Filter/Mist Separator/Micro Mist Separator

## 25A-AFF/AM/AMD-D Series

RoHS



### How to Order

25A - **AFF** **30** - **03** **B** -  - D

①      ②      ③      ④      ⑤      ⑥

• Series compatible with secondary batteries

• Option/Semi-standard: Select one each for a to c.  
 • Option/Semi-standard symbol: When more than one specification is required, indicate in alphanumeric order.  
 Example) 25A-AM30-N03B-RZ-D

|   |               | Symbol | Description  | ②         |  |     |     |     |     |     |
|---|---------------|--------|--|-----------|--|-----|-----|-----|-----|-----|
|   |               |        |  | Body size |  |     |     |     |     |     |
|   |               |        |  | 20        | 30   | 40  | 50  | 60  |     |     |
| ① | Filter type   | AFF    | Nominal filtration rating: 1 μm                                  | ●         | ●  | ●   | ●   | ●   |     |     |
|   |               |        | Water droplet removal ratio: 99%                                 | ●         | ●  | ●   | ●   | ●   |     |     |
|   |               | AM     | Nominal filtration rating: 0.1 μm                                | ●         | ●  | ●   | ●   | ●   |     |     |
|   |               |        | Oil mist concentration on the outlet side: 1 mg/m <sup>3</sup>   | ●         | ●  | ●   | ●   | ●   |     |     |
|   |               | AMD    | Nominal filtration rating: 0.01 μm                               | ●         | ●  | ●   | ●   | ●   |     |     |
|   |               |        | Oil mist concentration on the outlet side: 0.1 mg/m <sup>3</sup> | ●         | ●  | ●   | ●   | ●   |     |     |
|   |               | +      |  |           |  |     |     |     |     |     |
| ③ | Thread type   | Nil    | Rc   | ●         | ●  | ●   | ●   | ●   |     |     |
|   |               | N      | NPT  | ●         | ●  | ●   | ●   | ●   |     |     |
|   |               | F      | G  | ●         | ●  | ●   | ●   | ●   |     |     |
|   |               | +      |  |           |  |     |     |     |     |     |
| ④ | Port size     | 01     | 1/8  | ●         | —  | —   | —   | —   |     |     |
|   |               | 02     | 1/4  | ●         | ●  | ●   | —   | —   |     |     |
|   |               | 03     | 3/8  | —         | ●  | ●   | —   | —   |     |     |
|   |               | 04     | 1/2  | —         | —  | ●   | —   | —   |     |     |
|   |               | 06     | 3/4  | —         | —  | —   | ●   | —   |     |     |
|   |               | 10     | 1  | —         | —  | —   | ●   | ●   |     |     |
|   |               | +      |  |           |  |     |     |     |     |     |
| ⑤ | Option        | a      | Mounting   | Nil       | Without mounting option  | ●   | ●   | ●   | ●   | ●   |
|   |               |        |  | B*1       | With bracket   | ●   | ●   | ●   | ●   | ●   |
|   |               | +      |  |           |  |     |     |     |     |     |
| ⑥ | Semi-standard | b      | Flow direction   | Nil       | Flow direction: Left to right                                    | ●   | ●   | ●   | ●   | ●   |
|   |               |        |  | R         | Flow direction: Right to left                                    | ●   | ●   | ●   | ●   | ●   |
|   |               | c      | Unit   | Nil       | Name plate and caution plate for bowl in SI units: MPa, °C       | ●   | ●   | ●   | ●   | ●   |
|   |               |        |  | Z*2       | Name plate and caution plate for bowl in imperial units: psi, °F | ○*3 | ○*3 | ○*3 | ○*3 | ○*3 |

\*1 Option B is included in the package with the product but does not come assembled. The assembly consists of 2 types of the bracket and 2 mounting screws.

\*2 For pipe thread type: NPT

This product is for overseas use only according to the new Measurement Act. (The SI unit type is provided for use in Japan.)

\*3 ○: For pipe thread type: NPT only

### 25A-Bracket, Bowl Assembly/Part Nos.

| Description                | Size 20         | Size 30         | Size 40         | Size 50         | Size 60         |
|----------------------------|-----------------|-----------------|-----------------|-----------------|-----------------|
| <b>Bracket assembly</b> *1 | 25A-AF24P-070AS | 25A-AF34P-070AS | 25A-AF44P-070AS | 25A-AF54P-070AS |                 |
| <b>Bowl assembly</b>       | 25A-C2SF-D      | 25A-C3SF-D      | 25A-C4SF-D      | 25A-AM54P-120AS | 25A-AM64P-120AS |

\*1 The assembly consists of a bracket A/B and 2 mounting screws.

\* The 25A- series specifications and dimensions are the same as those of the standard model.

# Compressed Air Preparation Filter

Activated Carbon Filter

## 25A-AMK-D Series



### How to Order

**25A-AMK** **30** - **F** **03** **B** -  - **D**

①      ②      ③      ④      ⑤      ⑥

• Series compatible with secondary batteries

• Option/Semi-standard: Select one each for a to c.  
 • Option/Semi-standard symbol: When more than one specification is required, indicate in alphanumeric order.  
 Example) 25A-AMK30-N03B-RZ-D

|                    | Symbol        | Description    | ②<br>Body size   |                               |     |     |     |     |     |   |
|--------------------|---------------|----------------|--|-------------------------------|-----|-----|-----|-----|-----|---|
|                    |               |                | 20   | 30                            | 40  | 50  | 60  |     |     |   |
| ①                  | Filter type   | <b>AMK</b>     | Activated carbon filter                                |                               | ●   | ●   | ●   | ●   | ●   |   |
|                    |               | +              |  |                               |     |     |     |     |     |   |
| ③                  | Thread type   | <b>Nil</b>     | Rc   |                               | ●   | ●   | ●   | ●   | ●   |   |
|                    |               | <b>N</b>       | NPT  |                               | ●   | ●   | ●   | ●   | ●   |   |
|                    |               | <b>F</b>       | G  |                               | ●   | ●   | ●   | ●   | ●   |   |
|                    |               | +              |  |                               |     |     |     |     |     |   |
| ④                  | Port size     | <b>01</b>      | 1/8  |                               | ●   | —   | —   | —   | —   |   |
|                    |               | <b>02</b>      | 1/4  |                               | ●   | ●   | ●   | —   | —   |   |
|                    |               | <b>03</b>      | 3/8  |                               | —   | ●   | ●   | —   | —   |   |
|                    |               | <b>04</b>      | 1/2  |                               | —   | —   | ●   | —   | —   |   |
|                    |               | <b>06</b>      | 3/4  |                               | —   | —   | —   | ●   | —   |   |
|                    |               | +              |  |                               |     |     |     |     |     |   |
| ⑤<br>Option        | a             | Mounting       | <b>Nil</b>   | Without mounting option       |     | ●   | ●   | ●   | ●   | ● |
|                    |               |                | <b>B*1</b>   | With bracket                  |     | ●   | ●   | ●   | ●   | ● |
|                    |               | +              |  |                               |     |     |     |     |     |   |
| ⑥<br>Semi-standard | b             | Flow direction | <b>Nil</b>   | Flow direction: Left to right |     | ●   | ●   | ●   | ●   | ● |
|                    |               |                | <b>R</b>   | Flow direction: Right to left |     | ●   | ●   | ●   | ●   | ● |
|                    |               |                | +  |                               |     |     |     |     |     |   |
| c                  | Pressure unit | <b>Nil</b>     | Name plate and caution plate in SI units: MPa/°C       |                               | ●   | ●   | ●   | ●   | ●   |   |
|                    |               | <b>Z*2</b>     | Name plate and caution plate in imperial units: psi/°F |                               | ○*3 | ○*3 | ○*3 | ○*3 | ○*3 |   |

\*1 Option B is included in the package with the product but does not come assembled. The assembly consists of 2 types of the bracket and 2 mounting screws.

\*2 For pipe thread type: NPT

This product is for overseas use only according to the new Measurement Act. (The SI unit type is provided for use in Japan.)

\*3 ○: For pipe thread type: NPT only

### 25A-Bracket, Bowl Assembly/Part Nos.

| Description               | Size 20         | Size 30         | Size 40         | Size 50                            | Size 60                            |
|---------------------------|-----------------|-----------------|-----------------|------------------------------------|------------------------------------|
| <b>Bracket assembly*1</b> | 25A-AF24P-070AS | 25A-AF34P-070AS | 25A-AF44P-070AS | 25A-AF54P-070AS                    |                                    |
| <b>Bowl assembly</b>      | 25A-C2SF-D-X401 | 25A-C3SK-D      | 25A-C4SK-D      | Equivalent to the standard product | Equivalent to the standard product |

\*1 The assembly consists of a bracket A/B and 2 mounting screws.

\* The 25A- series specifications and dimensions are the same as those of the standard model.

# Main Line Filter

# 25A-AFF Series

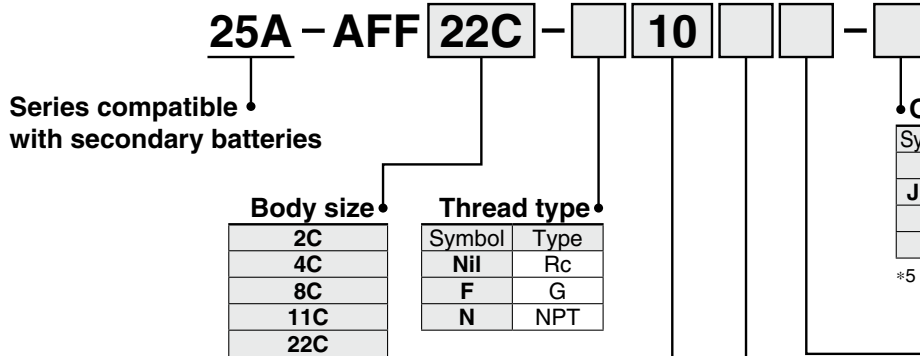


\* 25A-AFF75B only



## How to Order

### 25A-AFF2C to 25A-AFF22C



### Bracket Assembly Part Nos.\*3

| Applicable model | Part no.     |
|------------------|--------------|
| 25A-AFF2C        | 25A-AM-BM101 |
| 25A-AFF4C        | 25A-AM-BM102 |
| 25A-AFF8C        | 25A-AM-BM103 |
| 25A-AFF11C       | 25A-AM-BM104 |
| 25A-AFF22C       | 25A-AM-BM105 |

\*3 The assembly consists of a bracket and 2 mounting screws.

### Port size

| Symbol | Size | Applicable body size |    |    |     |     |
|--------|------|----------------------|----|----|-----|-----|
|        |      | 2C                   | 4C | 8C | 11C | 22C |
| 01     | 1/8  | ●                    | —  | —  | —   | —   |
| 02     | 1/4  | ●                    | ●  | —  | —   | —   |
| 03     | 3/8  | —                    | ●  | ●  | —   | —   |
| 04     | 1/2  | —                    | —  | ●  | ●   | —   |
| 06     | 3/4  | —                    | —  | —  | ●   | ●   |
| 10     | 1    | —                    | —  | —  | —   | ●   |

### Auto drain\*4

| Symbol | Description                     |
|--------|---------------------------------|
| Nil    | Drain cock (Without auto drain) |
| C      | N.C. auto drain                 |
| D      | N.O. auto drain                 |

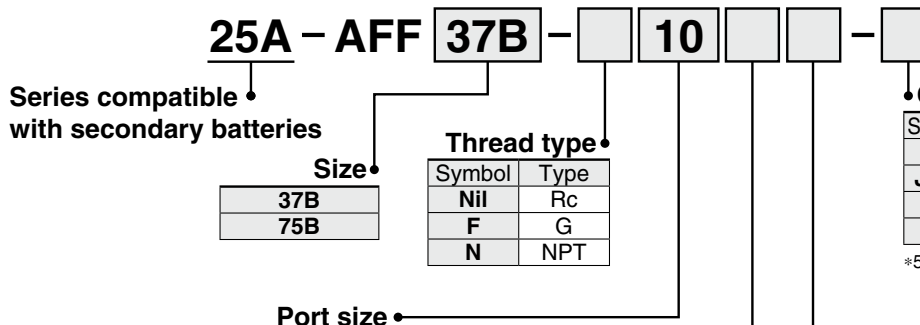
\*4 Only one drain exhaust method can be selected. The drain cock, N.C. auto drain, N.O. auto drain and drain guide cannot be selected together.

### Accessory

| Symbol | Description |
|--------|-------------|
| Nil    | —           |
| B      | Bracket *2  |

\*2 When symbol "B" is indicated, a bracket assembly with a part number shown in the left table is shipped together as an accessory but does not come assembled.

### 25A-AFF37B/75B



| Symbol | Size  | Applicable body size |     |
|--------|-------|----------------------|-----|
|        |       | 37B                  | 75B |
| 10     | 1     | ●                    | —   |
| 14     | 1 1/2 | ●                    | ●   |
| 20     | 2     | —                    | ●   |

### Bracket Assembly Part Nos.\*3

| Applicable model | Part no. |
|------------------|----------|
| 25A-AFF37B       | 25A-BM56 |
| 25A-AFF75B       | 25A-BM57 |

\*3 The assembly consists of a bracket and 2 mounting screws.

### Accessory

| Symbol | Description |
|--------|-------------|
| Nil    | —           |
| B      | Bracket *1  |

\*1 When symbol "B" is indicated, a bracket assembly with a part number shown in the left table is shipped together as an accessory but does not come assembled.

### Auto drain\*4

| Symbol | Description                        |
|--------|------------------------------------|
| Nil    | Drain cock (Without auto drain) *2 |
| D      | N.O. auto drain (37B only)         |

\*2 Body size 75B is equipped with a ball valve (Rc 3/8 female threaded).

\*4 Body size 37B: Only one drain exhaust method can be selected. The drain cock, N.O. auto drain and drain guide cannot be selected together.

\* The 25A-series specifications and dimensions are the same as those of the standard model.

For details, refer to the [Web Catalog](#).

# Mist Separator

# 25A-AM Series



\* 25A-AM850 only



## How to Order

### 25A-AM150C to 25A-AM550C

**25A - AM 550C - [ ] 10 [ ] [ ] - [ ]**

Series compatible with secondary batteries

**Body size**

|      |
|------|
| 150C |
| 250C |
| 350C |
| 450C |
| 550C |

**Thread type**

| Symbol | Type |
|--------|------|
| Nil    | Rc   |
| F      | G    |
| N      | NPT  |

**Option**

| Symbol | Description                     |
|--------|---------------------------------|
| Nil    | —                               |
| J*4,*5 | Drain guide 1/4 female threaded |
| R      | IN-OUT reversal direction       |
| T      | With element service indicator  |

\*5 Drain piping and piping for a stop valve such as ball valve are required.

**Auto drain\*4**

| Symbol | Description                     |
|--------|---------------------------------|
| Nil    | Drain cock (Without auto drain) |
| C      | N.C. auto drain                 |
| D      | N.O. auto drain                 |

\*4 Only one drain exhaust method can be selected. The drain cock, N.C. auto drain, N.O. auto drain and drain guide cannot be selected together.

**Accessory**

| Symbol | Description |
|--------|-------------|
| Nil    | —           |
| B      | Bracket *2  |

\*2 When symbol "B" is indicated, a bracket assembly with a part number shown in the left table is shipped together as an accessory but does not come assembled.

**Port size**

| Symbol | Size | Applicable body size |      |      |      |      |
|--------|------|----------------------|------|------|------|------|
|        |      | 150C                 | 250C | 350C | 450C | 550C |
| 01     | 1/8  | ●                    | —    | —    | —    | —    |
| 02     | 1/4  | ●                    | —    | —    | —    | —    |
| 03     | 3/8  | —                    | ●    | —    | —    | —    |
| 04     | 1/2  | —                    | —    | ●    | ●    | —    |
| 06     | 3/4  | —                    | —    | —    | ●    | ●    |
| 10     | 1    | —                    | —    | —    | —    | ●    |

**Bracket Assembly Part Nos.\*3**

| Applicable model | Part no.     |
|------------------|--------------|
| 25A-AM150C       | 25A-AM-BM101 |
| 25A-AM250C       | 25A-AM-BM102 |
| 25A-AM350C       | 25A-AM-BM103 |
| 25A-AM450C       | 25A-AM-BM104 |
| 25A-AM550C       | 25A-AM-BM105 |

\*3 The assembly consists of a bracket and 2 mounting screws.

### 25A-AM650/850

**25A - AM 650 - [ ] 10 [ ] [ ] - [ ]**

Series compatible with secondary batteries

**Body size**

|     |
|-----|
| 650 |
| 850 |

**Thread type**

| Symbol | Type |
|--------|------|
| Nil    | Rc   |
| F      | G    |
| N      | NPT  |

**Option**

| Symbol | Description                                |
|--------|--|
| Nil    | —  |
| J*4,*5 | Drain guide 1/4 female threaded (650 only) |
| R      | IN-OUT reversal direction                  |
| T      | With element service indicator             |

\*5 Drain piping and piping for a stop valve such as ball valve are required.

**Auto drain\*4**

| Symbol | Description                        |
|--------|------------------------------------|
| Nil    | Drain cock (Without auto drain) *2 |
| D      | N.O. auto drain (650 only)         |

\*2 Body size 850 is equipped with a ball valve (Rc 3/8 female threaded).

\*4 Body size 650: Only one drain exhaust method can be selected. The drain cock, N.O. auto drain and drain guide cannot be selected together.

**Accessory**

| Symbol | Description |
|--------|-------------|
| Nil    | —           |
| B      | Bracket *1  |

\*1 When symbol "B" is indicated, a bracket assembly with a part number shown in the left table is shipped together as an accessory but does not come assembled.

**Port size**

| Symbol | Size  | Applicable body size |     |
|--------|-------|----------------------|-----|
|        |       | 650                  | 850 |
| 10     | 1     | ●                    | —   |
| 14     | 1 1/2 | ●                    | ●   |
| 20     | 2     | —                    | ●   |

**Bracket Assembly Part Nos.\*3**

| Applicable model | Part no. |
|------------------|----------|
| 25A-AM650        | 25A-BM56 |
| 25A-AM850        | 25A-BM57 |

\*3 The assembly consists of a bracket and 2 mounting screws.

\* The 25A- series specifications and dimensions are the same as those of the standard model.

For details, refer to the [Web Catalog](#).

# Micro Mist Separator

# 25A-AMD Series



\* 25A-AMD850 only



## How to Order

### 25A-AMD150C to 25A-AMD550C

**25A - AMD 550C** - [ ] - [ ] - [ ] - [ ]

**Series compatible with secondary batteries**

**Body size**

|      |
|------|
| 150C |
| 250C |
| 350C |
| 450C |
| 550C |

**Thread type**

| Symbol | Type |
|--------|------|
| Nil    | Rc   |
| F      | G    |
| N      | NPT  |

**Option**

| Symbol | Description                     |
|--------|---------------------------------|
| Nil    | —                               |
| J*4,*5 | Drain guide 1/4 female threaded |
| R      | IN-OUT reversal direction       |
| T      | With element service indicator  |

\*5 Drain piping and piping for a stop valve such as ball valve are required.

**Auto drain\*4**

| Symbol | Description                     |
|--------|---------------------------------|
| Nil    | Drain cock (Without auto drain) |
| C      | N.C. auto drain                 |
| D      | N.O. auto drain                 |

\*4 Only one drain exhaust method can be selected. The drain cock, N.C. auto drain, N.O. auto drain and drain guide cannot be selected together.

**Accessory**

| Symbol | Description |
|--------|-------------|
| Nil    | —           |
| B      | Bracket *2  |

\*2 When symbol "B" is indicated, a bracket assembly with a part number shown in the left table is shipped together as an accessory but does not come assembled.

**Port size**

| Symbol | Size | Applicable body size |      |      |      |      |
|--------|------|----------------------|------|------|------|------|
|        |      | 150C                 | 250C | 350C | 450C | 550C |
| 01     | 1/8  | ●                    | —    | —    | —    | —    |
| 02     | 1/4  | ●                    | ●    | —    | —    | —    |
| 03     | 3/8  | —                    | ●    | ●    | —    | —    |
| 04     | 1/2  | —                    | —    | ●    | ●    | —    |
| 06     | 3/4  | —                    | —    | —    | ●    | ●    |
| 10     | 1    | —                    | —    | —    | —    | ●    |

**Bracket Assembly Part Nos.\*3**

| Applicable model | Part no.     |
|------------------|--------------|
| 25A-AMD150C      | 25A-AM-BM101 |
| 25A-AMD250C      | 25A-AM-BM102 |
| 25A-AMD350C      | 25A-AM-BM103 |
| 25A-AMD450C      | 25A-AM-BM104 |
| 25A-AMD550C      | 25A-AM-BM105 |

\*3 The assembly consists of a bracket and 2 mounting screws.

### 25A-AMD650/850

**25A - AMD 650** - [ ] - [ ] - [ ] - [ ]

**Series compatible with secondary batteries**

**Body size**

|     |
|-----|
| 650 |
| 850 |

**Thread type**

| Symbol | Type |
|--------|------|
| Nil    | Rc   |
| F      | G    |
| N      | NPT  |

**Option**

| Symbol | Description                                |
|--------|--|
| Nil    | —  |
| J*4,*5 | Drain guide 1/4 female threaded (650 only) |
| R      | IN-OUT reversal direction                  |
| T      | With element service indicator             |

\*5 Drain piping and piping for a stop valve such as ball valve are required.

**Auto drain\*4**

| Symbol | Description                        |
|--------|------------------------------------|
| Nil    | Drain cock (Without auto drain) *2 |
| D      | N.O. auto drain (650 only)         |

\*2 Body size 850 is equipped with a ball valve (Rc 3/8 female threaded).

\*4 Body size 650: Only one drain exhaust method can be selected. The drain cock, N.O. auto drain and drain guide cannot be selected together.

**Accessory**

| Symbol | Description |
|--------|-------------|
| Nil    | —           |
| B      | Bracket *1  |

\*1 When symbol "B" is indicated, a bracket assembly with a part number shown in the left table is shipped together as an accessory but does not come assembled.

**Port size**

| Symbol | Size  | Applicable body size |     |
|--------|-------|----------------------|-----|
|        |       | 650                  | 850 |
| 10     | 1     | ●                    | —   |
| 14     | 1 1/2 | ●                    | ●   |
| 20     | 2     | —                    | ●   |

**Bracket Assembly Part Nos.\*3**

| Applicable model | Part no. |
|------------------|----------|
| 25A-AMD650       | 25A-BM56 |
| 25A-AMD850       | 25A-BM57 |

\*3 The assembly consists of a bracket and 2 mounting screws.

\* The 25A-series specifications and dimensions are the same as those of the standard model.

For details, refer to the [Web Catalog](#).

# Micro Mist Separator with Pre-filter



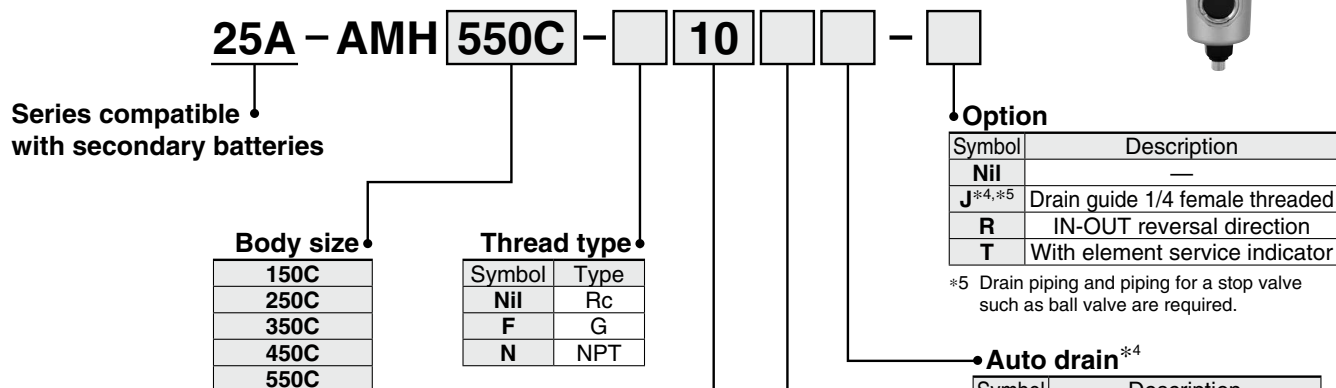
\* 25A-AMH850 only

# 25A-AMH Series



## How to Order

### 25A-AMH150C to 25A-AMH550C

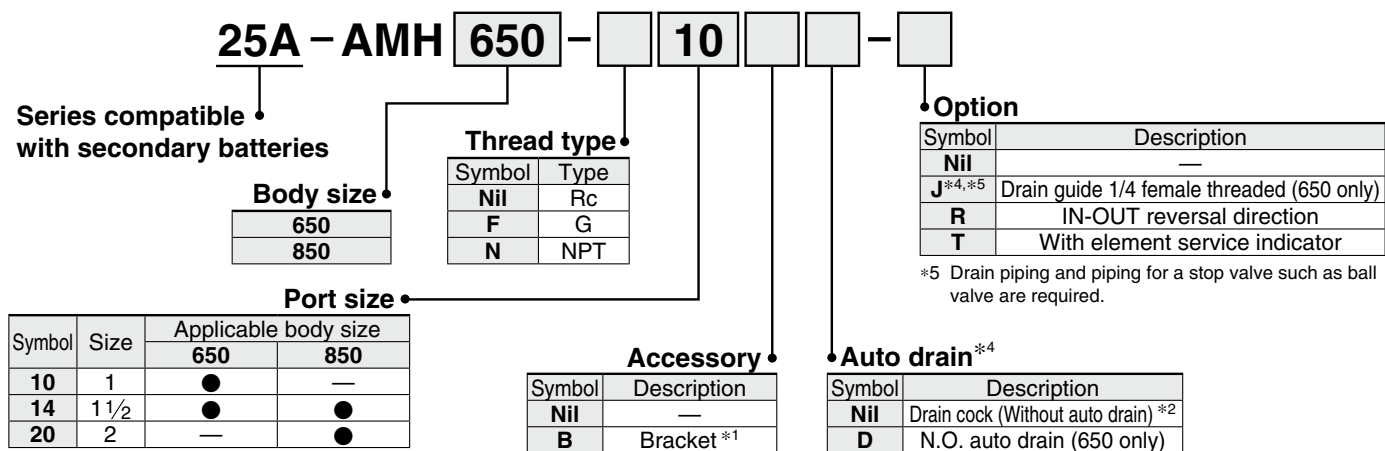


#### Bracket Assembly Part Nos.\*3

| Applicable model | Part no.    |
|------------------|-------------|
| 25A-AMH150C      | 25A-AMBM101 |
| 25A-AMH250C      | 25A-AMBM102 |
| 25A-AMH350C      | 25A-AMBM103 |
| 25A-AMH450C      | 25A-AMBM104 |
| 25A-AMH550C      | 25A-AMBM105 |

\*3 The assembly consists of a bracket and 2 mounting screws.

### 25A-AMH650/850



#### Bracket Assembly Part Nos.\*3

| Applicable model | Part no. |
|------------------|----------|
| 25A-AMH650       | 25A-BM56 |
| 25A-AMH850       | 25A-BM57 |

\*3 The assembly consists of a bracket and 2 mounting screws.

\* The 25A- series specifications and dimensions are the same as those of the standard model. For details, refer to the [Web Catalog](#).



# Clean Air Filter

**SFD Series**

RoHS

## Hollow Fiber Element

- Nominal filtration rating: **0.01**  $\mu\text{m}$  (filtration efficiency 99.99%)
- Initial pressure drop: **0.03** MPa (at inlet pressure 0.7 MPa, maximum flow)
- Maximum operating pressure: **1.0** MPa (at 20°C)

SFD100/110

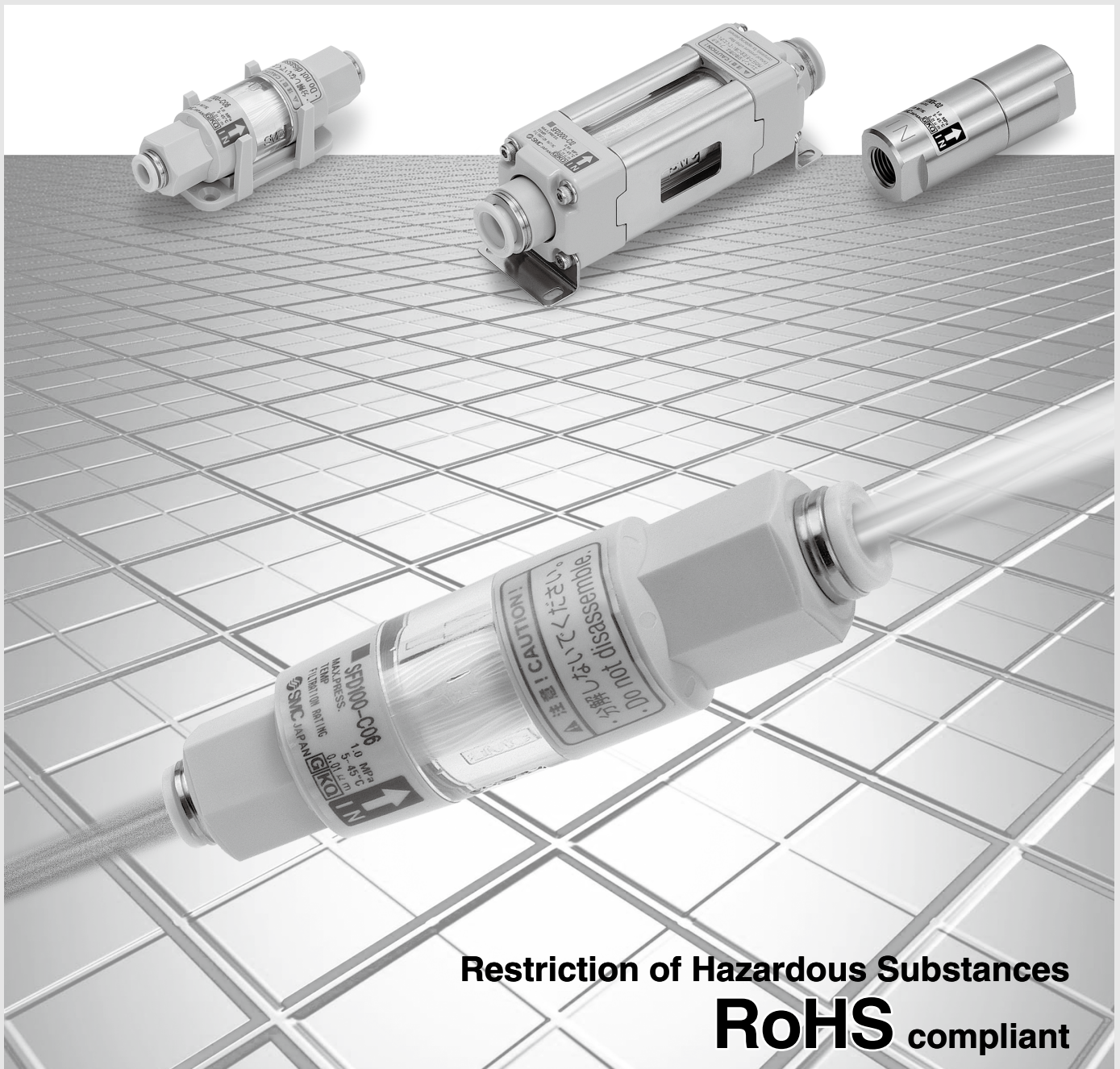
SFD200

SFD101/102 Made to Order

Up to **100** L/min(ANR)/Up to **120** L/min(ANR)

Up to **500** L/min(ANR)

Up to **100** L/min(ANR)



Restriction of Hazardous Substances  
**RoHS** compliant



# Exhaust Cleaner for Clean Room

# 25A-AMP Series



## How to Order

25A - AMP 2 20 - [ ] 03 [ ] - [ ]

Series compatible with secondary batteries

Size

|   |
|---|
| 2 |
| 3 |
| 4 |

Thread type

| Symbol | Type |
|--------|------|
| Nil    | Rc   |
| N      | NPT  |
| F      | G    |

Port size

| Symbol | Port size | Size |   |   |
|--------|-----------|------|---|---|
|        |           | 2    | 3 | 4 |
| 02     | 1/4       | ●    | — | — |
| 03     | 3/8       | ●    | ● | — |
| 04     | 1/2       | —    | ● | ● |
| 06     | 3/4       | —    | — | ● |

Semi-standard specifications

| Symbol | Description                    |
|--------|--------------------------------|
| Nil    | None                           |
| R      | Flow direction Right→Down*3    |
| T      | With element service indicator |

\*3 Flow direction when the nameplate is viewed from the front. Indicate RT when combining.

Accessories

| Symbol | Name           |
|--------|----------------|
| Nil    | None           |
| B      | With bracket*1 |

\*1 When symbol "B" is indicated, a bracket assembly with a part number shown in the left table is shipped together as an accessory but does not come assembled.

### Bracket Assembly Part Nos.\*2

| Applicable model | Part no. |
|------------------|----------|
| 25A-AMP220       | 25A-BM66 |
| 25A-AMP320       | 25A-BM67 |
| 25A-AMP420       | 25A-BM68 |

\*2 The assembly consists of a bracket and 2 mounting screws.

\* The 25A- series specifications and dimensions are the same as those of the standard model.

For details, refer to the [Web Catalog](#).

# Clean Exhaust Filter

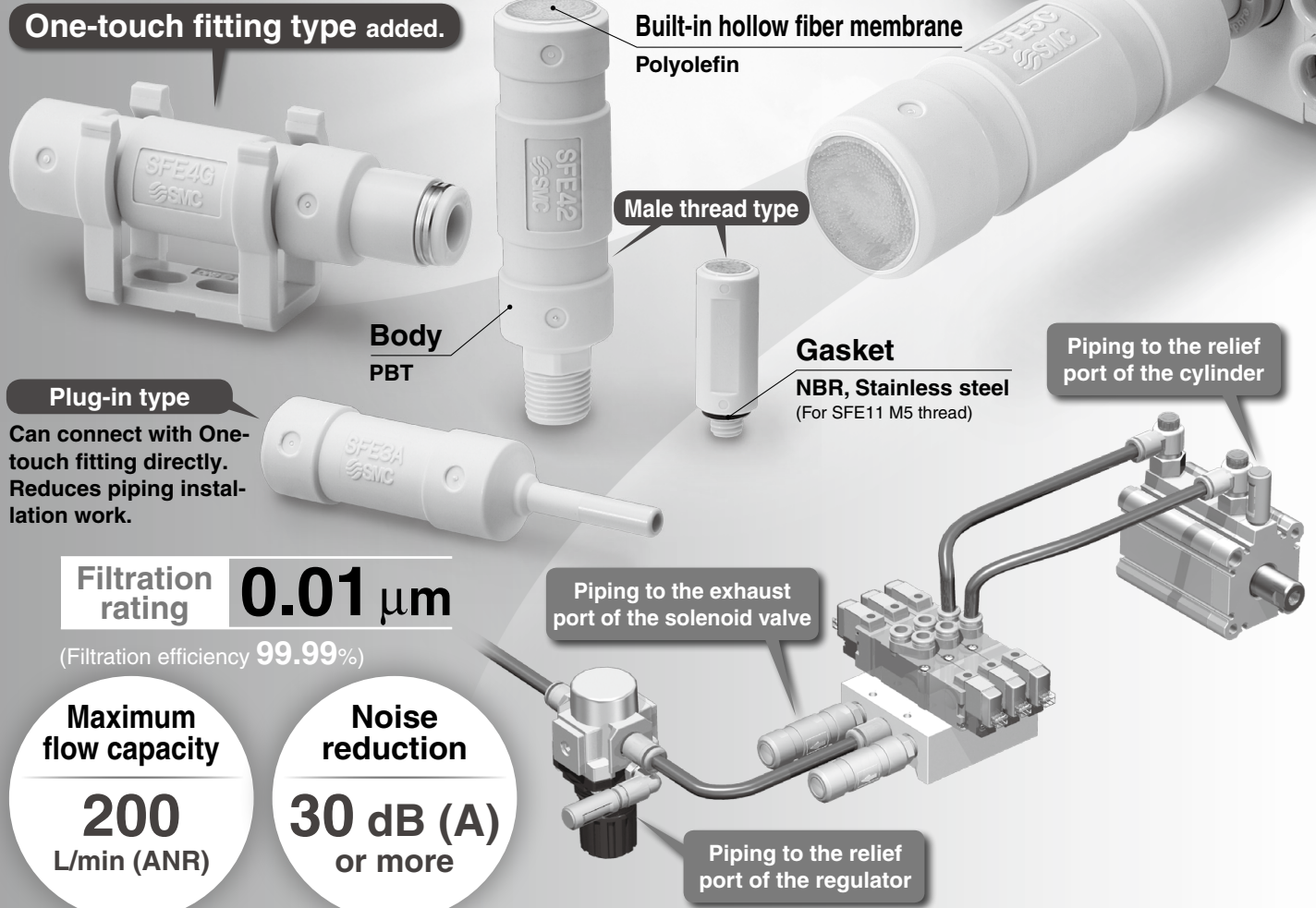
**SFE Series**

This product (standard product) is a secondary battery compatible product. For details, refer to the [Web Catalog](#).

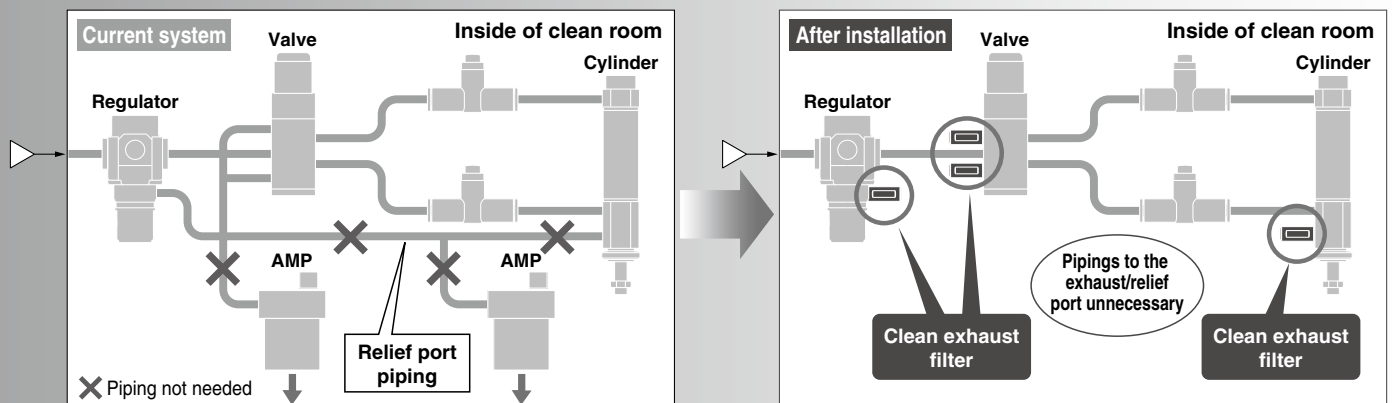
**RoHS**

**This filter enables direct exhaust of air in a clean room!** (Cleanliness class 4\*: ISO14644-1) (\* Based on SMC's measuring conditions.)

Air can be directly exhausted in a clean room only by mounting this product to the pneumatic equipment in the clean room.



**No need for piping for exhaust air and relief air. Reduces piping installation work and space.**



# Modular Type Air Combination

## AC-D Series

Modular connection units are available through the Simple Specials System.

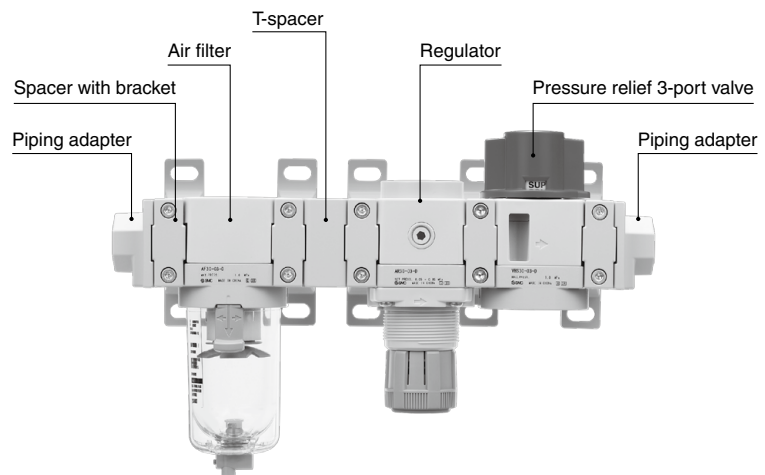
Please contact your local sales representative for more details.

## Examples of Simple Specials

### Combination example ①

\* Please contact your local sales representative for ordering procedures.

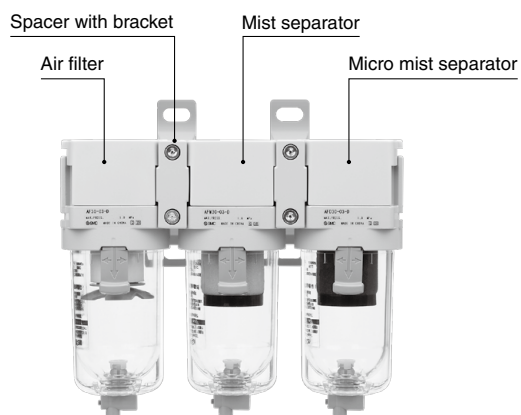
|  |        |
|--|--------|
| Piping adapter<br>E300-04-D                    | 2 pcs. |
| Spacer with bracket<br>25A-Y300T-D             | 5 pcs. |
| Air filter<br>25A-AF30-03-D                    | 1 pc.  |
| T-spacer<br>Y310-03-D                          | 1 pc.  |
| Regulator<br>25A-AR30-03-D                     | 1 pc.  |
| Pressure relief 3-port valve<br>25A-VHS30-03-D | 1 pc.  |



### Combination example ②

\* Please contact your local sales representative for ordering procedures.

|  |        |
|--|--------|
| Air filter<br>25A-AF30-03-D            | 1 pc.  |
| Spacer with bracket<br>25A-Y300T-D     | 2 pcs. |
| Mist separator<br>25A-AFM30-03-D       | 1 pc.  |
| Micro mist separator<br>25A-AFD30-03-D | 1 pc.  |



# Air Filter

# 25A-AF20-D to 25A-AF60-D



## How to Order

25A - AF **30** - **03** **B** - **D**

① ② ③ ④ ⑤

• Series compatible with secondary batteries

- Semi-standard: Select one each for **a** and **b**.
- Semi-standard symbol: When more than one specification is required, indicate in alphanumeric order. Example) 25A-AF30-N03B-RZ-D

|                    | Symbol         | Description             | ① Body size |     |     |     |     |
|--------------------|----------------|-------------------------|-------------|-----|-----|-----|-----|
|                    |                |                         | 20          | 30  | 40  | 50  | 60  |
| ② Pipe thread type | Nil            | Rc                      | ●           | ●   | ●   | ●   | ●   |
|                    | N              | NPT                     | ●           | ●   | ●   | ●   | ●   |
|                    | F              | G                       | ●           | ●   | ●   | ●   | ●   |
| ③ Port size        | 01             | 1/8                     | ●           | —   | —   | —   | —   |
|                    | 02             | 1/4                     | ●           | ●   | ●   | —   | —   |
|                    | 03             | 3/8                     | —           | ●   | ●   | —   | —   |
|                    | 04             | 1/2                     | —           | —   | ●   | —   | —   |
|                    | 06             | 3/4                     | —           | —   | ●   | ●   | —   |
|                    | 10             | 1                       | —           | —   | —   | ●   | ●   |
| ④ Option Mounting  | Nil            | Without mounting option | ●           | ●   | ●   | ●   | ●   |
|                    | B*1            | With bracket            | ●           | ●   | ●   | ●   | ●   |
| ⑤ Semi-standard a  | Flow direction | Nil                     | ●           | ●   | ●   | ●   | ●   |
|                    |                | R                       | ●           | ●   | ●   | ●   | ●   |
| ⑤ Semi-standard b  | Unit           | Nil                     | ●           | ●   | ●   | ●   | ●   |
|                    |                | Z*2                     | ○*2         | ○*2 | ○*2 | ○*2 | ○*2 |

\*1 Option B is included in the package with the product but does not come assembled. The assembly consists of 2 types of brackets and 2 mounting screws.

\*2 ○ : For pipe thread type: NPT. This product is for overseas use only according to the New Measurement Act. (The SI unit type is provided for use in Japan.)

### Bracket, Bowl Assembly Part Nos. for the 25A- Series

| Option                     | Model           |                 |                 |                 |                 |            |
|----------------------------|-----------------|-----------------|-----------------|-----------------|-----------------|------------|
|                            | 25A-AF20-D      | 25A-AF30-D      | 25A-AF40-D      | 25A-AF40-06-D   | 25A-AF50-D      | 25A-AF60-D |
| <b>Bracket assembly</b> *1 | 25A-AF24P-070AS | 25A-AF34P-070AS | 25A-AF44P-070AS | 25A-AF49P-070AS | 25A-AF54P-070AS |            |
| <b>Bowl assembly</b>       | 25A-C2SF-D      | 25A-C3SF-D      | 25A-C4SF-D      |                 |                 |            |

\*1 The assembly consists of an A and B bracket and 2 mounting screws.

\* The 25A- series specifications and dimensions are the same as those of the standard model.

For details, refer to the [Web Catalog](#).

# Air Filter

# 25A-AF20-A to 25A-AF60-A



## How to Order

25A - AF 30 -   03 B -   - A

1  
 2  
 3  
 4  
 5

• Series compatible with secondary batteries

• Semi-standard: Select one each for **a** and **b**.  
 • Semi-standard symbol: When more than one specification is required, indicate in alphanumeric order.  
 Example) 25A-AF30-N03B-RZ-A

|     |                  | Symbol        | Description  | ①  |                               |     |     |     |   |   |
|-----|------------------|---------------|--|--|-------------------------------|-----|-----|-----|---|---|
|     |                  |               |  | Body size  |                               |     |     |     |   |   |
|     |                  |               |  | 20   | 30                            | 40  | 50  | 60  |   |   |
| ②   | Pipe thread type | Nil           | Rc   | ●  | ●                             | ●   | ●   | ●   |   |   |
|     |                  | N             | NPT  | ●  | ●                             | ●   | ●   | ●   |   |   |
|     |                  | F             | G  | ●  | ●                             | ●   | ●   | ●   |   |   |
| +   |                  |               |  |  |                               |     |     |     |   |   |
| ③   | Port size        | 01            | 1/8  | ●  | —                             | —   | —   | —   |   |   |
|     |                  | 02            | 1/4  | ●  | ●                             | ●   | —   | —   |   |   |
|     |                  | 03            | 3/8  | —  | ●                             | ●   | —   | —   |   |   |
|     |                  | 04            | 1/2  | —  | —                             | ●   | —   | —   |   |   |
|     |                  | 06            | 3/4  | —  | —                             | ●   | ●   | —   |   |   |
|     |                  | 10            | 1  | —  | —                             | —   | ●   | ●   |   |   |
| +   |                  |               |  |  |                               |     |     |     |   |   |
| ④   | Option           | Mounting      | Nil  | Without mounting option                                | ●                             | ●   | ●   | ●   | ● |   |
|     |                  |               | B*1  | With bracket   | ●                             | ●   | ●   | ●   | ● |   |
| +   |                  |               |  |  |                               |     |     |     |   |   |
| ⑤   | Semi-standard    | a             | Flow direction   | Nil  | Flow direction: Left to right | ●   | ●   | ●   | ● | ● |
|     |                  |               |  | R  | Flow direction: Right to left | ●   | ●   | ●   | ● | ● |
|     | +                |               |  |  |                               |     |     |     |   |   |
|     | b                | Pressure unit | Nil  | Name plate and caution plate for bowl in SI units: MPa | ●                             | ●   | ●   | ●   | ● |   |
| Z*2 |                  |               | Name plate and caution plate for bowl in imperial units: psi, °F | ○*2  | ○*2                           | ○*2 | ○*2 | ○*2 |   |   |

\*1 A bracket is not assembled and supplied loose at the time of shipment. Including 2 mounting screws.

\*2 ○ : For pipe thread type: NPT. This product is for overseas use only according to the New Measurement Act. (The SI unit type is provided for use in Japan.)

### Bracket, Bowl Assembly Part Nos. for the 25A- Series

| Option             | Model | 25A-AF20-A      | 25A-AF30-A      | 25A-AF40-A      | 25A-AF40-06-A   | 25A-AF50-A<br>25A-AF60-A |
|--------------------|-------|-----------------|-----------------|-----------------|-----------------|--------------------------|
| Bracket assembly*1 |       | 25A-AF22P-050AS | 25A-AF32P-050AS | 25A-AF42P-050AS | 25A-AF42P-070AS | 25A-AF52P-050AS          |
| Bowl assembly      |       | 25A-C2SF-A      | 25A-C3SF-A      | 25A-C4SF-A      |                 |                          |

\*1 The assembly consists of a bracket and 2 mounting screws.

\* The 25A- series specifications and dimensions are the same as those of the standard model.

For details, refer to the [Web Catalog](#).

# Mist Separator

## 25A-AFM20-D to 25A-AFM40-06-D

### Micro Mist Separator

## 25A-AFD20-D to 25A-AFD40-06-D



- 25A-AFM Series Nominal filtration rating: 0.3 μm
- 25A-AFD Series Nominal filtration rating: 0.01 μm

### How to Order

25A - AFM **30** - **03** **B** - **D**

25A - AFD **30** - **03** **B** - **D**

① ② ③ ④ ⑤

• Series compatible with secondary batteries

- Semi-standard: Select one each for **a** and **b**.
- Semi-standard symbol: When more than one specification is required, indicate in alphanumeric order. Example) 25A-AFM30-N03B-RZ-D

|     | Symbol                         | Description | ①              |                         |                                |     |   |   |
|-----|--------------------------------|-------------|----------------|-------------------------|--------------------------------|-----|---|---|
|     |                                |             | Body size      |                         |                                |     |   |   |
|     |                                |             | 20             | 30                      | 40                             |     |   |   |
| ②   | Pipe thread type               | Nil         | Rc             | ●                       | ●                              | ●   |   |   |
|     |                                | N           | NPT            | ●                       | ●                              | ●   |   |   |
|     |                                | F           | G              | ●                       | ●                              | ●   |   |   |
| +   |                                |             |                |                         |                                |     |   |   |
| ③   | Port size                      | 01          | 1/8            | ●                       | —                              | —   |   |   |
|     |                                | 02          | 1/4            | ●                       | ●                              | ●   |   |   |
|     |                                | 03          | 3/8            | —                       | ●                              | ●   |   |   |
|     |                                | 04          | 1/2            | —                       | —                              | ●   |   |   |
|     |                                | 06          | 3/4            | —                       | —                              | ●   |   |   |
| +   |                                |             |                |                         |                                |     |   |   |
| ④   | Option                         | Mounting    | Nil            | Without mounting option | ●                              | ●   | ● |   |
|     |                                |             | B*1            | With bracket            | ●                              | ●   | ● |   |
| +   |                                |             |                |                         |                                |     |   |   |
| ⑤   | Semi-standard                  | a           | Flow direction | Nil                     | Flow direction: Left to right  | ●   | ● | ● |
|     |                                |             |                | R                       | Flow direction: Right to left  | ●   | ● | ● |
|     |                                | b           | Unit           | Nil                     | Unit on product label: MPa, °C | ●   | ● | ● |
| Z*2 | Unit on product label: psi, °F |             |                | ○*2                     | ○*2                            | ○*2 |   |   |

\*1 Option B is included in the package with the product but does not come assembled. The assembly consists of 2 types of brackets and 2 mounting screws.

\*2 ○ : For pipe thread type: NPT. This product is for overseas use only according to the New Measurement Act.  
(The SI unit type is provided for use in Japan.)

### Bracket, Bowl Assembly Part Nos. for the 25A- Series

| Option             | Model                      |                            |                            |                                  |
|--------------------|----------------------------|----------------------------|----------------------------|----------------------------------|
|                    | 25A-AFM20-D<br>25A-AFD20-D | 25A-AFM30-D<br>25A-AFD30-D | 25A-AFM40-D<br>25A-AFD40-D | 25A-AFM40-06-D<br>25A-AFD40-06-D |
| Bracket assembly*1 | 25A-AF24P-070AS            | 25A-AF34P-070AS            | 25A-AF44P-070AS            | 25A-AF49P-070AS                  |
| Bowl assembly      | 25A-C2SF-D                 | 25A-C3SF-D                 | 25A-C4SF-D                 |                                  |

\*1 The assembly consists of an A and B bracket and 2 mounting screws.

\* The 25A- series specifications and dimensions are the same as those of the standard model.

For details, refer to the [Web Catalog](#).



# Mist Separator

# 25A-AFM20-A to 25A-AFM40-A

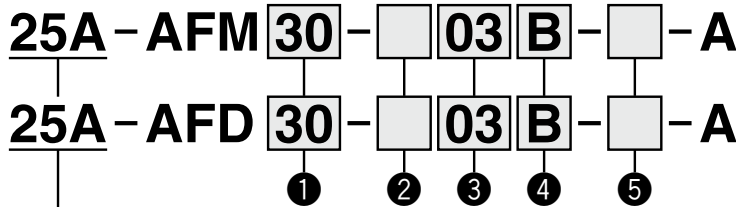
## Micro Mist Separator

# 25A-AFD20-A to 25A-AFD40-A



- 25A-AFM Series Nominal filtration rating: 0.3 μm
- 25A-AFD Series Nominal filtration rating: 0.01 μm

### How to Order



• Series compatible with secondary batteries

- Semi-standard: Select one each for **a** and **b**.
- Semi-standard symbol: When more than one specification is required, indicate in alphanumeric order. Example) 25A-AFM30-N03B-RZ-A

|     |                    | Symbol         | Description  | ①  |     |     |   |
|-----|--------------------|----------------|--|--|-----|-----|---|
|     |                    |                |  | Body size  |     |     |   |
|     |                    |                |  | 20   | 30  | 40  |   |
| ②   | Pipe thread type   | Nil            | Rc   | ●  | ●   | ●   |   |
|     |                    | N              | NPT  | ●  | ●   | ●   |   |
|     |                    | F              | G  | ●  | ●   | ●   |   |
| +   |                    |                |  |  |     |     |   |
| ③   | Port size          | 01             | 1/8  | ●  | —   | —   |   |
|     |                    | 02             | 1/4  | ●  | ●   | ●   |   |
|     |                    | 03             | 3/8  | —  | ●   | ●   |   |
|     |                    | 04             | 1/2  | —  | —   | ●   |   |
|     |                    | 06             | 3/4  | —  | —   | ●   |   |
| +   |                    |                |  |  |     |     |   |
| ④   | Option<br>Mounting | Nil            | Without mounting option  | ●  | ●   | ●   |   |
|     |                    | B*1            | With bracket   | ●  | ●   | ●   |   |
| +   |                    |                |  |  |     |     |   |
| ⑤   | Semi-standard<br>a | Flow direction | Nil  | Flow direction: Left to right                          | ●   | ●   | ● |
|     |                    |                | R  | Flow direction: Right to left                          | ●   | ●   | ● |
|     | b                  | Pressure unit  | Nil  | Name plate and caution plate for bowl in SI units: MPa | ●   | ●   | ● |
| Z*2 |                    |                | Name plate and caution plate for bowl in imperial units: psi, °F | ○*2  | ○*2 | ○*2 |   |

\*1 A bracket is not assembled and supplied loose at the time of shipment. Including 2 mounting screws.

\*2 ○ : For pipe thread type: NPT. This product is for overseas use only according to the New Measurement Act. (The SI unit type is provided for use in Japan.)

### Bracket, Bowl Assembly Part Nos. for the 25A- Series

| Option             | Model | 25A-AFM20-A<br>25A-AFD20-A | 25A-AFM30-A<br>25A-AFD30-A | 25A-AFM40-A<br>25A-AFD40-A | 25A-AFM40-06-A<br>25A-AFD40-06-A |
|--------------------|-------|----------------------------|----------------------------|----------------------------|----------------------------------|
| Bracket assembly*1 |       | 25A-AF22P-050AS            | 25A-AF32P-050AS            | 25A-AF42P-050AS            | 25A-AF42P-070AS                  |
| Bowl assembly      |       | 25A-C2SF-A                 | 25A-C3SF-A                 | 25A-C4SF-A                 |                                  |

\*1 The assembly consists of a bracket and 2 mounting screws.

\* The 25A- series specifications and dimensions are the same as those of the standard model.

For details, refer to the [Web Catalog](#).



# Regulator

# 25A-AR20-D to 25A-AR60-D

## Regulator with Backflow Function

# 25A-AR20K-D to 25A-AR60K-D



### How to Order

25A - AR **30** **K** - **03** **B** - **D**

① ② ③ ④ ⑤ ⑥

• Series compatible with secondary batteries

- Semi-standard: Select one each for a to e.
- Semi-standard symbol: When more than one specification is required, indicate in alphanumeric order. Example) 25A-AR30K-03B-1NR-D

|                          | Symbol | Description  | ① Body size |     |     |     |     |
|--------------------------|--------|--|-------------|-----|-----|-----|-----|
|                          |        |  | 20          | 30  | 40  | 50  | 60  |
| ② With backflow function | Nil    | Without backflow function                                      | ●           | ●   | ●   | ●   | ●   |
|                          | K*1    | With backflow function   | ●           | ●   | ●   | ●   | ●   |
| ③ Pipe thread type       | Nil    | Rc   | ●           | ●   | ●   | ●   | ●   |
|                          | N      | NPT  | ●           | ●   | ●   | ●   | ●   |
|                          | F      | G  | ●           | ●   | ●   | ●   | ●   |
| ④ Port size              | 01     | 1/8  | ●           | —   | —   | —   | —   |
|                          | 02     | 1/4  | ●           | ●   | ●   | —   | —   |
|                          | 03     | 3/8  | —           | ●   | ●   | —   | —   |
|                          | 04     | 1/2  | —           | —   | ●   | —   | —   |
|                          | 06     | 3/4  | —           | —   | ●   | ●   | —   |
| ⑤ Option*2 Mounting      | Nil    | Without mounting option  | ●           | ●   | ●   | ●   | ●   |
|                          | B*3    | With bracket   | ●           | ●   | ●   | ●   | ●   |
| ⑥ Semi-standard a        | Nil    | 0.05 to 0.85 MPa setting                                       | ●           | ●   | ●   | ●   | ●   |
|                          | 1*4    | 0.02 to 0.2 MPa setting  | ●           | ●   | ●   | ●   | ●   |
| ⑥ Semi-standard b        | Nil    | Relieving type   | ●           | ●   | ●   | ●   | ●   |
|                          | N      | Non-relieving type   | ●           | ●   | ●   | ●   | ●   |
| ⑥ Semi-standard c        | Nil    | Flow direction: Left to right                                  | ●           | ●   | ●   | ●   | ●   |
|                          | R      | Flow direction: Right to left                                  | ●           | ●   | ●   | ●   | ●   |
| ⑥ Semi-standard d        | Nil    | Downward   | ●           | ●   | ●   | ●   | ●   |
|                          | Y      | Upward   | ●           | ●   | ●   | ●   | ●   |
| ⑥ Semi-standard e        | Nil    | Unit on product label: MPa, Pressure gauge in SI units: MPa    | ●           | ●   | ●   | ●   | ●   |
|                          | Z*5    | Unit on product label: psi, Pressure gauge: MPa/psi dual scale | ○*5         | ○*5 | ○*5 | ○*5 | ○*5 |

- \*1 Set the inlet pressure to at least 0.05 MPa higher than the set pressure.
- \*2 Options B and H are not assembled and supplied loose at the time of shipment.
- \*3 The assembly consists of a bracket and set nuts.
- \*4 Pressure can be set higher than the specification pressure in some cases, but use pressure within the specification range.
- \*5 ○: For pipe thread type: NPT. This product is for overseas use only according to the New Measurement Act. (The SI unit type is provided for use in Japan.)

### Bracket, Set Nut Part Nos. for the 25A- Series

| Option             | Model           |                 |                 |                  |                 |               |
|--------------------|-----------------|-----------------|-----------------|------------------|-----------------|---------------|
|                    | 25A-AR20(K)-D   | 25A-AR30(K)-D   | 25A-AR40(K)-D   | 25A-AR40(K)-06-D | 25A-AR50(K)-D   | 25A-AR60(K)-D |
| Bracket assembly*1 | 25A-AR23P-270AS | 25A-AR33P-270AS | 25A-AR43P-270AS |                  | 25A-AR54P-270AS |               |
| Set nut            | AR23P-260S      | AR33P-260S      | AR43P-260S      |                  | —*2             |               |

- \*1 The assembly consists of a bracket and set nuts. For the 25A-AR50(K)-D and 25A-AR60(K)-D, the assembly consists of an A and B bracket and 2 mounting screws.
- \*2 Please contact SMC regarding the set nuts for the 25A-AR50(K)-D and 25A-AR60(K)-D.

\* The 25A- series specifications and dimensions are the same as those of the standard model.

For details, refer to the [Web Catalog](#).

# Regulator

# 25A-AR20-B to 25A-AR60-B

## Regulator with Backflow Function

# 25A-AR20K-B to 25A-AR60K-B



### How to Order

25A - AR **30** **K** - **03** **B** - **03** - B

①    ②    ③    ④    ⑤    ⑥

• Series compatible with secondary batteries

- Semi-standard: Select one each for a to e.
- Semi-standard symbol: When more than one specification is required, indicate in alphanumeric order.  
Example) 25A-AR30K-03B-1NR-B

|   | Symbol                 | Description       | ①                                 |                               |    |    |    |    |  |
|---|------------------------|-------------------|-----------------------------------|-------------------------------|----|----|----|----|--|
|   |                        |                   | Body size                         |                               |    |    |    |    |  |
|   |                        |                   | 20                                | 25                            | 30 | 40 | 50 | 60 |  |
| ② | With backflow function | Nil               | Without backflow function         |                               |    |    |    |    |  |
|   |                        | K                 | With backflow function            |                               |    |    |    |    |  |
| + |                        |                   |                                   |                               |    |    |    |    |  |
| ③ | Pipe thread type       | Nil               | Rc                                |                               |    |    |    |    |  |
|   |                        | N                 | NPT                               |                               |    |    |    |    |  |
|   |                        | F                 | G                                 |                               |    |    |    |    |  |
| + |                        |                   |                                   |                               |    |    |    |    |  |
| ④ | Port size              | 01                | 1/8                               |                               |    |    |    |    |  |
|   |                        | 02                | 1/4                               |                               |    |    |    |    |  |
|   |                        | 03                | 3/8                               |                               |    |    |    |    |  |
|   |                        | 04                | 1/2                               |                               |    |    |    |    |  |
|   |                        | 06                | 3/4                               |                               |    |    |    |    |  |
| + |                        |                   |                                   |                               |    |    |    |    |  |
| ⑤ | Mounting               | Nil               | Without mounting option           |                               |    |    |    |    |  |
|   |                        | B*2               | With bracket                      |                               |    |    |    |    |  |
|   |                        | H                 | With set nut (For panel fitting)  |                               |    |    |    |    |  |
| + |                        |                   |                                   |                               |    |    |    |    |  |
| ⑥ | a                      | Set pressure      | Nil                               | 0.05 to 0.85 MPa setting      |    |    |    |    |  |
|   |                        |                   | 1*3                               | 0.02 to 0.2 MPa setting       |    |    |    |    |  |
|   | +                      |                   |                                   |                               |    |    |    |    |  |
|   | b                      | Exhaust mechanism | Nil                               | Relieving type                |    |    |    |    |  |
|   |                        |                   | N                                 | Non-relieving type            |    |    |    |    |  |
|   | +                      |                   |                                   |                               |    |    |    |    |  |
|   | c                      | Flow direction    | Nil                               | Flow direction: Left to right |    |    |    |    |  |
|   |                        |                   | R                                 | Flow direction: Right to left |    |    |    |    |  |
|   | +                      |                   |                                   |                               |    |    |    |    |  |
|   | d                      | Knob              | Nil                               | Downward                      |    |    |    |    |  |
| Y |                        |                   | Upward                            |                               |    |    |    |    |  |
| + |                        |                   |                                   |                               |    |    |    |    |  |
| e | Pressure unit          | Nil               | Name plate in SI units: MPa       |                               |    |    |    |    |  |
|   |                        | Z*4               | Name plate in imperial units: psi |                               |    |    |    |    |  |

\*1 Options B and H are not assembled and supplied loose at the time of shipment.

\*2 The assembly consists of a bracket and set nuts (25A-AR20(K) to 25A-AR40(K)). Including 2 mounting screws for the 25A-AR50(K) and 25A-AR60(K).

\*3 Pressure can be set higher than the specification pressure in some cases, but use pressure within the specification range.

\*4 ○: For pipe thread type: NPT. This product is for overseas use only according to the New Measurement Act.

(The SI unit type is provided for use in Japan.)

### Bracket, Set Nut Part Nos. for the 25A- Series

| Option             | Model | 25A-AR20(K)-B   | 25A-AR25(K)-B   | 25A-AR30(K)-B   | 25A-AR40(K)-B   | 25A-AR50(K)-B<br>25A-AR60(K)-B |
|--------------------|-------|-----------------|-----------------|-----------------|-----------------|--------------------------------|
| Bracket assembly*1 |       | 25A-AR23P-270AS | 25A-AR28P-270AS | 25A-AR33P-270AS | 25A-AR43P-270AS | 25A-AR52P-270AS*2              |
| Set nut            |       | AR23P-260S      | AR28P-260S      | AR33P-260S      | AR43P-260S      | —*3                            |

\*1 The assembly consists of a bracket and set nuts.

\*2 The assembly consists of a bracket and 2 mounting screws.

\*3 Please contact SMC regarding the set nuts for the 25A-AR50(K) and 25A-AR60(K).

\* The 25A- series specifications and dimensions are the same as those of the standard model.

# Filter Regulator

# 25A-AW20-D to 25A-AW60-D

## Filter Regulator with Backflow Function

# 25A-AW20K-D to 25A-AW60K-D



### How to Order

**25A - AW** 30 K -   03 B -   - **D**

① ② ③ ④ ⑤ ⑥

• Series compatible with secondary batteries

- Semi-standard: Select one each for **a** to **d**.
- Semi-standard symbol: When more than one specification is required, indicate in alphanumeric order.  
Example) 25A-AW30K-03B-1N-D

|   |                        | Symbol            | Description  | ①                        |     |     |     |   |  |
|---|------------------------|-------------------|--|--------------------------|-----|-----|-----|---|--|
|   |                        |                   |  | Body size                |     |     |     |   |  |
|   |                        |                   |  | 20                       | 30  | 40  | 60  |   |  |
| ② | With backflow function | Nil               | Without backflow function  | ●                        | ●   | ●   | ●   |   |  |
|   |                        | K*1               | With backflow function   | ●                        | ●   | ●   | ●   |   |  |
|   |                        | +                 |  |                          |     |     |     |   |  |
| ③ | Pipe thread type       | Nil               | Rc   | ●                        | ●   | ●   | ●   |   |  |
|   |                        | N                 | NPT  | ●                        | ●   | ●   | ●   |   |  |
|   |                        | F                 | G  | ●                        | ●   | ●   | ●   |   |  |
|   |                        | +                 |  |                          |     |     |     |   |  |
| ④ | Port size              | 01                | 1/8  | ●                        | —   | —   | —   |   |  |
|   |                        | 02                | 1/4  | ●                        | ●   | ●   | —   |   |  |
|   |                        | 03                | 3/8  | —                        | ●   | ●   | —   |   |  |
|   |                        | 04                | 1/2  | —                        | —   | ●   | —   |   |  |
|   |                        | 06                | 3/4  | —                        | —   | ●   | ●   |   |  |
|   |                        | 10                | 1  | —                        | —   | —   | ●   |   |  |
|   |                        | +                 |  |                          |     |     |     |   |  |
| ⑤ | Option*2<br>Mounting   | Nil               | Without mounting option  | ●                        | ●   | ●   | ●   |   |  |
|   |                        | B*3               | With bracket   | ●                        | ●   | ●   | ●   |   |  |
|   |                        | H                 | With set nut (For panel fitting)                                   | ●                        | ●   | ●   | —   |   |  |
|   |                        | +                 |  |                          |     |     |     |   |  |
| ⑥ | Semi-standard<br>a     | Set pressure      | Nil  | 0.05 to 0.85 MPa setting | ●   | ●   | ●   | ● |  |
|   |                        |                   | 1*4  | 0.02 to 0.2 MPa setting  | ●   | ●   | ●   | ● |  |
|   |                        |                   |  | +                        |     |     |     |   |  |
|   |                        | Exhaust mechanism | Nil  | Relieving type           | ●   | ●   | ●   | ● |  |
|   |                        |                   | N  | Non-relieving type       | ●   | ●   | ●   | ● |  |
|   |                        |                   |  | +                        |     |     |     |   |  |
|   | Flow direction         | Nil               | Flow direction: Left to right                                      | ●                        | ●   | ●   | ●   |   |  |
|   |                        | R                 | Flow direction: Right to left                                      | ●                        | ●   | ●   | ●   |   |  |
|   |                        |                   | +  |                          |     |     |     |   |  |
|   | Unit                   | Nil               | Unit on product label: MPa, °C, Pressure gauge in SI units: MPa    | ●                        | ●   | ●   | ●   |   |  |
|   |                        | Z*5               | Unit on product label: psi, °F, Pressure gauge: MPa/psi dual scale | ○*5                      | ○*5 | ○*5 | ○*5 |   |  |

\*1 Set the inlet pressure to at least 0.05 MPa higher than the set pressure.

\*2 Options B and H are not assembled and supplied loose at the time of shipment.

\*3 The assembly consists of a bracket and set nuts

\*4 Pressure can be set higher than the specification pressure in some cases, but use pressure within the specification range.

\*5 ○ : For pipe thread type: NPT. This product is for overseas use only according to the New Measurement Act.

(The SI unit type is provided for use in Japan.)

### Bracket, Set Nut, Bowl Assembly Part Nos. for the 25A- Series

| Option             | Model           |                 |                 |                  |                 |
|--------------------|-----------------|-----------------|-----------------|------------------|-----------------|
|                    | 25A-AW20(K)-D   | 25A-AW30(K)-D   | 25A-AW40(K)-D   | 25A-AW40(K)-06-D | 25A-AW60(K)-D   |
| Bracket assembly*1 | 25A-AW23P-270AS | 25A-AR33P-270AS | 25A-AR43P-270AS |                  | 25A-AR54P-270AS |
| Set nut            | AR23P-260S      | AR33P-260S      | AR43P-260S      |                  |                 |
| Bowl assembly      | 25A-C2SF-D      | 25A-C3SF-D      | 25A-C4SF-D      |                  |                 |

\*1 The assembly consists of a bracket and set nuts.

\*2 For the 25A-AW60(K)-D, the assembly consists of an A and B bracket and 2 mounting screws.  
Please contact SMC regarding the set nuts for the 25A-AW60(K)-D.

\* The 25A- series specifications and dimensions are the same as those of the standard model.

For details, refer to the [Web Catalog](#).

# Filter Regulator

# 25A-AW20-B to 25A-AW60-B

## Filter Regulator with Backflow Function

# 25A-AW20K-B to 25A-AW60K-B



### How to Order

**25A - AW** 30 K -   03 B -   - **B**

① ② ③ ④ ⑤ ⑥

• Series compatible with secondary batteries

- Semi-standard: Select one each for **a** to **d**.
- Semi-standard symbol: When more than one specification is required, indicate in alphanumeric order.  
Example) 25A-AW30K-03B-1N-B

|   |                        | Symbol   | Description                      | ①         |     |     |    |  |
|---|------------------------|--|----------------------------------|-----------|-----|-----|----|--|
|   |                        |  |                                  | Body size |     |     |    |  |
|   |                        |  |                                  | 20        | 30  | 40  | 60 |  |
| ② | With backflow function | Nil  | Without backflow function        | ●         | ●   | ●   | ●  |  |
|   |                        | K  | With backflow function           | ●         | ●   | ●   | ●  |  |
| + |                        |  |                                  |           |     |     |    |  |
| ③ | Pipe thread type       | Nil  | Rc                               | ●         | ●   | ●   | ●  |  |
|   |                        | N  | NPT                              | ●         | ●   | ●   | ●  |  |
|   |                        | F  | G                                | ●         | ●   | ●   | ●  |  |
| + |                        |  |                                  |           |     |     |    |  |
| ④ | Port size              | 01   | 1/8                              | ●         | —   | —   | —  |  |
|   |                        | 02   | 1/4                              | ●         | ●   | ●   | —  |  |
|   |                        | 03   | 3/8                              | —         | ●   | ●   | —  |  |
|   |                        | 04   | 1/2                              | —         | —   | ●   | —  |  |
|   |                        | 06   | 3/4                              | —         | —   | ●   | ●  |  |
| + |                        |  |                                  |           |     |     |    |  |
| ⑤ | Option *1<br>Mounting  | Nil  | Without mounting option          | ●         | ●   | ●   | ●  |  |
|   |                        | B*2  | With bracket                     | ●         | ●   | ●   | ●  |  |
|   |                        | H  | With set nut (For panel fitting) | ●         | ●   | ●   | —  |  |
| + |                        |  |                                  |           |     |     |    |  |
| ⑥ | a                      | Nil  | 0.05 to 0.85 MPa setting         | ●         | ●   | ●   | ●  |  |
|   |                        | 1*3  | 0.02 to 0.2 MPa setting          | ●         | ●   | ●   | ●  |  |
|   | +                      |  |                                  |           |     |     |    |  |
|   | b                      | Nil  | Relieving type                   | ●         | ●   | ●   | ●  |  |
|   |                        | N  | Non-relieving type               | ●         | ●   | ●   | ●  |  |
|   | +                      |  |                                  |           |     |     |    |  |
|   | c                      | Nil  | Flow direction: Left to right    | ●         | ●   | ●   | ●  |  |
|   |                        | R  | Flow direction: Right to left    | ●         | ●   | ●   | ●  |  |
| + |                        |  |                                  |           |     |     |    |  |
| d | Nil                    | Name plate and caution plate for bowl in SI units: MPa           | ●                                | ●         | ●   | ●   |    |  |
|   | Z*4                    | Name plate and caution plate for bowl in imperial units: psi, °F | ○*4                              | ○*4       | ○*4 | ○*4 |    |  |

\*1 Options B and H are not assembled and supplied loose at the time of shipment.

\*2 The assembly consists of a bracket and set nuts (25A-AW20(K) to 25A-AW40(K)). Including 2 mounting screws for the 25A-AW60(K).

\*3 Pressure can be set higher than the specification pressure in some cases, but use pressure within the specification range.

\*4 ○ : For pipe thread type: NPT. This product is for overseas use only according to the New Measurement Act.

(The SI unit type is provided for use in Japan.)

### Bracket, Set Nut, Bowl Assembly Part Nos. for the 25A- Series

| Model              | 25A-AW20(K)-B   | 25A-AW30(K)-B   | 25A-AW40(K)-B   | 25A-AW60(K)-B     |
|--------------------|-----------------|-----------------|-----------------|-------------------|
| Option             |                 |                 |                 |                   |
| Bracket assembly*1 | 25A-AW23P-270AS | 25A-AR33P-270AS | 25A-AR43P-270AS | 25A-AW62P-270AS*2 |
| Set nut            | AR23P-260S      | AR33P-260S      | AR43P-260S      | —*3               |
| Bowl assembly      | 25A-C2SF-A      | 25A-C3SF-A      | 25A-C4SF-A      |                   |

\*1 The assembly consists of a bracket and set nuts.

\*2 The assembly consists of a bracket and 2 mounting screws.

\*3 Please contact SMC regarding the set nuts for the 25A-AW60(K).

\* The 25A- series specifications and dimensions are the same as those of the standard model.

For details, refer to the [Web Catalog](#).

# Mist Separator Regulator

# 25A-AWM30, AWM40-D

## Micro Mist Separator Regulator

# 25A-AWD30, AWD40-D



25A-AWM30-D 25A-AWD30-D

- 25A-AWM Series Nominal filtration rating: 0.3 μm
- 25A-AWD Series Nominal filtration rating: 0.01 μm

### How to Order

25A - AWM 30 - [ ] 03 B - [ ] - D

25A - AWD 30 - [ ] 03 B - [ ] - D

• Series compatible with secondary batteries

① ② ③ ④ ⑤

- Semi-standard: Select one each for a to d.
- Semi-standard symbol: When more than one specification is required, indicate in alphanumeric order.  
Example) 25A-AWM30-F03B-1NR-D

|   |                  | Symbol            | Description                    | ①                              |     |     |
|---|------------------|-------------------|--------------------------------|--------------------------------|-----|-----|
|   |                  |                   |                                | Body size                      |     |     |
|   |                  |                   |                                | 30                             | 40  |     |
| ② | Pipe thread type | Nil               | Rc                             | ●                              | ●   |     |
|   |                  | N                 | NPT                            | ●                              | ●   |     |
|   |                  | F                 | G                              | ●                              | ●   |     |
|   |                  | +                 |                                |                                |     |     |
| ③ | Port size        | 02                | 1/4                            | ●                              | ●   |     |
|   |                  | 03                | 3/8                            | ●                              | ●   |     |
|   |                  | 04                | 1/2                            | —                              | ●   |     |
|   |                  | +                 |                                |                                |     |     |
| ④ | *1<br>Mounting   | Nil               | Without mounting option        | ●                              | ●   |     |
|   |                  | B*2               | With bracket                   | ●                              | ●   |     |
|   |                  | H                 | With set nut (for panel mount) | ●                              | ●   |     |
|   |                  | +                 |                                |                                |     |     |
| ⑤ | a                | Set pressure*3    | Nil                            | 0.05 to 0.85 MPa setting       | ●   | ●   |
|   |                  |                   | 1                              | 0.05 to 0.2 MPa setting        | ●   | ●   |
|   |                  |                   | +                              |                                |     |     |
|   | b                | Exhaust mechanism | Nil                            | Relieving type                 | ●   | ●   |
|   |                  |                   | N                              | Non-relieving type             | ●   | ●   |
|   |                  |                   | +                              |                                |     |     |
|   | c                | Flow direction    | Nil                            | Flow direction: Left to right  | ●   | ●   |
|   |                  |                   | R                              | Flow direction: Right to left  | ●   | ●   |
|   |                  |                   | +                              |                                |     |     |
|   | d                | Unit              | Nil                            | Unit on product label: MPa, °C | ●   | ●   |
|   |                  |                   | Z*4                            | Unit on product label: psi, °F | ○*5 | ○*5 |

- \*1 Options B and H are not assembled and supplied loose at the time of shipment.
- \*2 The assembly consists of a bracket and set nuts.
- \*3 Pressure can be set higher than the specification pressure in some cases, but use pressure within the specification range.
- \*4 For the pipe thread type: NPT  
This product is for overseas use only according to the New Measurement Act.  
(The SI unit type is provided for use in Japan.)
- \*5 ○: For the pipe thread type: NPT only

### Bracket, Set Nut, Bowl Assembly Part Nos. for the 25A- Series

| Optional specifications    | Model                      |                            |
|----------------------------|----------------------------|----------------------------|
|                            | 25A-AWM30-D<br>25A-AWD30-D | 25A-AWM40-D<br>25A-AWD40-D |
| <b>Bracket assembly</b> *1 | 25A-AR33P-270AS            | 25A-AR43P-270AS            |
| <b>Set nut</b>             | AR33P-260S                 | AR43P-260S                 |
| <b>Bowl assembly</b>       | 25A-C3SF-D                 | 25A-C4SF-D                 |

\*1 The assembly consists of a bracket and set nuts.

\* The 25A- series specifications and dimensions are the same as those of the standard model.

For details, refer to the [Web Catalog](#).

# Soft Start-up Valve

# 25A-AV2000-A to 25A-AV5000-A



## How to Order

25A-AV 20 00 -   02 B - 1 D   B -   - A

Series compatible with secondary batteries\*7

· Select one each for options "a" and semi-standard options "b" and "c."  
· Option/Semi-standard symbol: When more than one specification is required, indicate in alphabetical order.  
Example) 25A-AV2000-N02B-1DB-RZ-A

\* CE/UKCA compliant: ●

|    | Electrical entry |              |               |
|----|------------------|--------------|---------------|
|    | Grommet          | DIN terminal | M12 connector |
| AC | —                | ●            | —             |
| DC | ●                | ●            | ●             |

|                                  | Symbol           | Description  | ① Body size         |     |     |     |   |
|----------------------------------|------------------|--|---------------------|-----|-----|-----|---|
|                                  |                  |  | 20                  | 30  | 40  | 50  |   |
| ② Thread type                    | Nil              | Rc   | ●                   | ●   | ●   | ●   |   |
|                                  | N                | NPT  | ●                   | ●   | ●   | ●   |   |
|                                  | F                | G  | ●                   | ●   | ●   | ●   |   |
| +                                |                  |  |                     |     |     |     |   |
| ③ Port size<br>1(P), 2(A)        | 02               | 1/4  | ●                   | —   | —   | —   |   |
|                                  | 03               | 3/8  | —                   | ●   | —   | —   |   |
|                                  | 04               | 1/2  | —                   | —   | ●   | —   |   |
|                                  | 06               | 3/4  | —                   | —   | —   | ●   |   |
|                                  | 10               | 1  | —                   | —   | —   | ●   |   |
| +                                |                  |  |                     |     |     |     |   |
| ④ Option<br>a                    | Nil              | Without mounting option  | ●                   | ●   | ●   | ●   |   |
|                                  | B                | With bracket   | ●                   | ●   | ●   | ●   |   |
| +                                |                  |  |                     |     |     |     |   |
| ⑤ Rated coil voltage             | AC<br>(50/60 Hz) | 1  | 100 VAC             | ●   | ●   | ●   | ● |
|                                  |                  | 2  | 200 VAC             | ●   | ●   | ●   | ● |
|                                  |                  | 3  | 110 VAC [115 VAC]*1 | ●   | ●   | ●   | ● |
|                                  |                  | 4  | 220 VAC [230 VAC]*1 | ●   | ●   | ●   | ● |
|                                  | DC               | 5  | 24 VDC              | ●   | ●   | ●   | ● |
|                                  |                  | 6  | 12 VDC              | ●   | ●   | ●   | ● |
| +                                |                  |  |                     |     |     |     |   |
| ⑥ Electrical entry               | G                | Grommet (Lead wire length: 300 mm)                             | ●                   | ●   | ●   | ●   |   |
|                                  | D                | Type D (DIN terminal/With connector)                           | ●                   | ●   | ●   | ●   |   |
|                                  | Y                | Type Y (DIN terminal/With connector)*2                         | ●                   | ●   | ●   | ●   |   |
|                                  | KO               | M12 connector (Without cable)                                  | ○*3                 | ○*3 | ○*3 | ○*3 |   |
| +                                |                  |  |                     |     |     |     |   |
| ⑦ Light/surge voltage suppressor | Nil              | None   | ●                   | ●   | ●   | ●   |   |
|                                  | Z                | With light/surge voltage suppressor                            | ○*4                 | ○*4 | ○*4 | ○*4 |   |
| +                                |                  |  |                     |     |     |     |   |
| ⑧ Manual override                | Nil              | Non-locking push type  | ●                   | ●   | ●   | ●   |   |
|                                  | B                | Push-turn locking slotted type                                 | ●                   | ●   | ●   | ●   |   |
|                                  | C                | Push-turn locking lever type                                   | ●                   | ●   | ●   | ●   |   |
| +                                |                  |  |                     |     |     |     |   |
| ⑨ Semi-standard<br>b             | Nil              | Flow direction: Left to right                                  | ●                   | ●   | ●   | ●   |   |
|                                  | R                | Flow direction: Right to left                                  | ●                   | ●   | ●   | ●   |   |
| +                                |                  |  |                     |     |     |     |   |
| c                                | Nil              | Unit on product label: MPa, Pressure gauge: MPa                | ●                   | ●   | ●   | ●   |   |
|                                  | Z*5              | Unit on product label: psi, Pressure gauge: MPa/psi dual scale | ○*6                 | ○*6 | ○*6 | ○*6 |   |

\*1 The 110 VAC and the 115 VAC are interchangeable. The 220 VAC and the 230 VAC are interchangeable as well.

The allowable voltage fluctuation is -15% to +5% of the rated voltage for the 115 VAC or the 230 VAC.

\*2 Type "Y" is a DIN terminal in compliance with EN-175301-803C (former DIN43650C).

\*3 When the electrical entry is "KO," only the DC specifications (5 or 6) can be selected for the rated coil voltage.

\*4 When it is "KO," only the "With light/surge voltage suppressor" option can be selected.

\*5 For the pipe thread type: NPT

This product is for overseas use only according to the New Measurement Act. (The SI unit type is provided for use in Japan.)

\*6 Pressure unit Z: For the pipe thread type: NPT only

\*7 Coils for pilot valve assemblies, connector pins, and lead wires are made of copper.

\* The 25A- series specifications and dimensions are the same as those of the standard model.

For details, refer to the [Web Catalog](#).

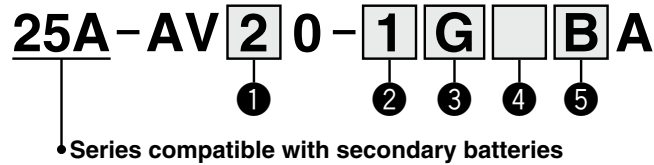


## Bracket/Option Part Nos., Pilot Valve Assembly/Replacement Parts for the 25A- Series

| Description          | Series                           |                 |                 |                 |
|----------------------|----------------------------------|-----------------|-----------------|-----------------|
|                      | 25A-AV2000-A                     | 25A-AV3000-A    | 25A-AV4000-A    | 25A-AV5000-A    |
| Bracket assembly*1   | 25A-AV22P-210AS                  | 25A-AV32P-210AS | 25A-AV42P-210AS | 25A-AV52P-210AS |
| Pilot valve assembly | Refer to the How to Order below. |                 |                 |                 |

\*1 Bracket: 1 pc., Mounting screw: 2 pcs. (3 pcs. for the 25A-AV5000-A)

### How to Order Pilot Valve Assembly



|          | Symbol                         | Description      | Applicable body size                   |                     |     |     |     |   |
|----------|--------------------------------|------------------|--|---------------------|-----|-----|-----|---|
|          |                                |                  | 20                                     | 30                  | 40  | 50  |     |   |
| <b>1</b> | Body size                      | <b>2</b>         | For the AV2000-A, AV3000-A             |                     |     |     |     |   |
|          |                                | <b>4</b>         | For the AV4000-A, AV5000-A             |                     |     |     |     |   |
| +        |                                |                  |  |                     |     |     |     |   |
| <b>2</b> | Rated coil voltage             | AC<br>(50/60 Hz) | <b>1</b>                               | 100 VAC             | ●   | ●   | ●   | ● |
|          |                                |                  | <b>2</b>                               | 200 VAC             | ●   | ●   | ●   | ● |
|          |                                |                  | <b>3</b>                               | 110 VAC [115 VAC]*1 | ●   | ●   | ●   | ● |
|          |                                | DC               | <b>4</b>                               | 220 VAC [230 VAC]*1 | ●   | ●   | ●   | ● |
|          |                                |                  | <b>5</b>                               | 24 VDC              | ●   | ●   | ●   | ● |
|          |                                |                  | <b>6</b>                               | 12 VDC              | ●   | ●   | ●   | ● |
| +        |                                |                  |  |                     |     |     |     |   |
| <b>3</b> | Electrical entry               | <b>G</b>         | Grommet (Lead wire length: 300 mm)     | ●                   | ●   | ●   | ●   |   |
|          |                                | <b>D</b>         | Type D (DIN terminal/With connector)   | ●                   | ●   | ●   | ●   |   |
|          |                                | <b>Y</b>         | Type Y (DIN terminal/With connector)*2 | ●                   | ●   | ●   | ●   |   |
|          |                                | <b>KO</b>        | M12 connector (Without cable)          | ○*3                 | ○*3 | ○*3 | ○*3 |   |
| +        |                                |                  |  |                     |     |     |     |   |
| <b>4</b> | Light/surge voltage suppressor | <b>Nil</b>       | None                                   | ●                   | ●   | ●   | ●   |   |
|          |                                | <b>Z</b>         | With light/surge voltage suppressor    | ○*4                 | ○*4 | ○*4 | ○*4 |   |
| +        |                                |                  |  |                     |     |     |     |   |
| <b>5</b> | Manual override                | <b>Nil</b>       | Non-locking push type                  | ●                   | ●   | ●   | ●   |   |
|          |                                | <b>B</b>         | Push-turn locking slotted type         | ●                   | ●   | ●   | ●   |   |
|          |                                | <b>C</b>         | Push-turn locking lever type           | ●                   | ●   | ●   | ●   |   |

\*1 The 110 VAC and the 115 VAC are interchangeable. The 220 VAC and the 230 VAC are interchangeable as well.  
The allowable voltage fluctuation is -15% to +5% of the rated voltage for the 115 VAC or the 230 VAC.

\*2 Type "Y" is a DIN terminal in compliance with EN-175301-803C (former DIN43650C).

\*3 When the electrical entry is "KO," only the DC specifications (5 or 6) can be selected for the rated coil voltage.

\*4 When it is "KO," only the "With light/surge voltage suppressor" option can be selected.



# Precision Regulator



# 25A-IR1000/2000/3000-A Series



## How to Order

25A-IR 1 0 0 0 -   01 B -   - A

1  
 2  
 3  
 4  
 5  
 6  
 7

- Option/Semi-standard: Select one each for **a**, **b**, and **c**.
- Option/Semi-standard symbol: When more than one specification is required, indicate in alphanumeric order.

|    |                    | Symbol                       | Description  | ① Body size  |   |   |   |
|----|--------------------|------------------------------|--|--|---|---|---|
|    |                    |                              |  | 1  | 2 | 3 |   |
| ②  | Set pressure range | 0                            | 0.005 to 0.2 MPa                                       | ●  | ● | — |   |
|    |                    |                              | 0.01 to 0.2 MPa  | —  | — | ● |   |
|    |                    | 1                            | 0.01 to 0.4 MPa  | ●  | ● | ● |   |
|    |                    | 2                            | 0.01 to 0.8 MPa  | ●  | ● | ● |   |
|    |                    | +                            |  |  |   |   |   |
| ③  | Exhaust direction  | 0                            | Bottom exhaust   | ●  | ● | ● |   |
|    |                    | 1                            | Front exhaust  | —  | — | ● |   |
|    |                    | 2                            | Rear exhaust   | —  | — | ● |   |
|    |                    | +                            |  |  |   |   |   |
| ④  | Pipe thread type   | Nil                          | Rc   | ●  | ● | ● |   |
|    |                    | N                            | NPT  | ●  | ● | ● |   |
|    |                    | F                            | G  | ●  | ● | ● |   |
|    |                    | +                            |  |  |   |   |   |
| ⑤  | Port size          | 01                           | 1/8  | ●  | — | — |   |
|    |                    | 02                           | 1/4  | —  | ● | ● |   |
|    |                    | 03                           | 3/8  | —  | — | ● |   |
|    |                    | 04                           | 1/2  | —  | — | ● |   |
|    |                    | +                            |  |  |   |   |   |
| ⑥  | a                  | Mounting                     | Nil  | Without mounting option                              | ● | ● | ● |
|    |                    |                              | B*2  | With bracket   | ● | ● | ● |
|    |                    |                              | H  | With hexagon panel nut (for panel mount)             | ● | ● | ● |
|    |                    |                              | +  |  |   |   |   |
|    | b                  | With digital pressure switch | EA   | NPN open collector 1 output                          | ● | ● | ● |
|    |                    |                              | EB   | PNP open collector 1 output                          | ● | ● | ● |
|    |                    |                              | EC   | NPN open collector 2 outputs + Analog voltage output | ● | ● | ● |
| ED |                    |                              | NPN open collector 2 outputs + Analog current output   | ●  | ● | ● |   |
|    |                    | +                            |  |  |   |   |   |
| c  | Flow direction     | Nil                          | Flow direction: Left to right                          | ●  | ● | ● |   |
|    |                    | R                            | Flow direction: Right to left                          | ●  | ● | ● |   |
|    |                    | +                            |  |  |   |   |   |
| ⑦  | d                  | Knob                         | Nil  | Upward   | ● | ● | ● |
|    |                    |                              | V  | Downward   | ● | ● | ● |
|    |                    | +                            |  |  |   |   |   |
| e  | Pressure unit*3    | Nil                          | Name plate and pressure gauge in imperial units: MPa   | ●  | ● | ● |   |
|    |                    | Z                            | Name plate and pressure gauge in imperial units: psi   | ●  | ● | ● |   |
|    |                    | ZA                           | Digital pressure switch: With unit conversion function | ●  | ● | ● |   |

\*1 Options are shipped together with the product but do not come assembled. B and H cannot be selected at the same time. The current bracket cannot be used for this product.

\*2 The assembly consists of a bracket and set nuts

\*3 See pressure unit table below.

|      | Pipe thread type | Name plate in imperial units | Pressure switch in imperial units                 | Sales*6         |
|------|------------------|------------------------------|---|-----------------|
|      |                  |                              | EA, EB, EC, ED                                    |                 |
| Nil  | Rc               | MPa                          | Fixed SI unit                                     | Japan, Overseas |
|      | NPT              |                              |   |                 |
|      | G                |                              |   |                 |
| Z*4  | Rc               | psi                          | With unit conversion function (Initial value psi) | Only overseas   |
|      | NPT              |                              |   |                 |
|      | G                |                              |   |                 |
| ZA*5 | Rc               | MPa                          | With unit conversion function                     | Only overseas   |
|      | NPT              |                              |   |                 |
|      | G                |                              |   |                 |

\*4 For pipe thread type: NPT

\*5 For options: EA, EB, EC, ED

\*6 According to the new Measurement Law, only the SI unit type is provided for use in Japan.

\* The 25A- series specifications and dimensions are the same as those of the standard model.

For details, refer to the [Web Catalog](#).

# Electro-Pneumatic Regulator

## 25A-ITV1000/2000/3000 Series



### How to Order



25A - ITV **2** **0** **1** **0** - **0** **1** **2** **S**

Series compatible with secondary batteries

Model

|   |           |
|---|-----------|
| 1 | 1000 type |
| 2 | 2000 type |
| 3 | 3000 type |

Pressure range

|   |         |
|---|---------|
| 1 | 0.1 MPa |
| 3 | 0.5 MPa |
| 5 | 0.9 MPa |

Power supply voltage

|   |              |
|---|--------------|
| 0 | 24 VDC       |
| 1 | 12 to 15 VDC |

Input signal

|    |                                       |
|----|---------------------------------------|
| 0  | Current type 4 to 20 mADC (Sink type) |
| 1  | Current type 0 to 20 mADC (Sink type) |
| 2  | Voltage type 0 to 5 VDC               |
| 3  | Voltage type 0 to 10 VDC              |
| 40 | 4 points preset input                 |

Monitor output

|     |  |
|-----|--|
| 1   | Analog output 1 to 5 VDC               |
| 2   | Switch output/NPN output               |
| 3   | Switch output/PNP output               |
| 4   | Analog output 4 to 20 mADC (Sink type) |
| Nil | None (For 4 points preset input)       |

Pressure display unit

|     |                     |
|-----|---------------------|
| Nil | MPa                 |
| 2*1 | kgf/cm <sup>2</sup> |
| 3   | bar                 |
| 4*1 | psi                 |
| 5   | kPa                 |

\*1 This product is for overseas use only according to the New Measurement Act. (The SI unit type is provided for use in Japan.)

Cable connector type

|   |                         |
|---|-------------------------|
| S | Straight type 3 m       |
| L | Right angle type 3 m    |
| N | Without cable connector |

\* A dedicated cable connector whose material was changed is used.

Bracket

|     |                 |
|-----|-----------------|
| Nil | Without bracket |
| B   | Flat bracket    |
| C   | L-bracket       |

\* The bracket is made with a special black chromium treatment. The bracket is shipped with the product.

Port size

|   |                             |
|---|-----------------------------|
| 1 | 1/8 (1000 type)             |
| 2 | 1/4 (1000, 2000, 3000 type) |
| 3 | 3/8 (2000, 3000 type)       |
| 4 | 1/2 (3000 type)             |

Thread type

|     |      |
|-----|------|
| Nil | Rc   |
| N   | NPT  |
| T   | NPTF |
| F   | G    |

\* Since the lead wires and electrical circuits are used, this product is not completely copper-free. Only the wetted parts are copper-free.

\* Copper and zinc materials are used for solenoid valve coils, connector pins, and lead wire substrate.

\* The 25A- series specifications and dimensions are the same as those of the standard model.

For details, refer to the [Web Catalog](#).

# Electronic Vacuum Regulator



# 25A-ITV209□ Series



## How to Order

25A-ITV209□-□□□□□□□□□□

Series compatible with secondary batteries

Pressure range  
9 -1.3 to 80 kPa

Power supply voltage  
0 24 VDC  
1 12 to 15 VDC

Input signal

|    |                                |
|----|--------------------------------|
| 0  | Current type 4 to 20 mADC      |
| 1  | Current type 0 to 20 mADC      |
| 2  | Voltage type 0 to 5 VDC        |
| 3  | Voltage type 0 to 10 VDC       |
| 40 | Preset input (Negative common) |

Monitor output

|     |  |
|-----|--|
| 1   | Analog output 1 to 5 VDC               |
| 2   | Switch output/NPN output               |
| 3   | Switch output/PNP output               |
| 4   | Analog output 4 to 20 mADC (Sink type) |
| Nil | None (For Preset input)                |

Pressure display unit  
5 kPa

Cable connector type

|   |                         |
|---|-------------------------|
| S | Straight type 3 m       |
| L | Right angle type 3 m    |
| N | Without cable connector |

\* A dedicated cable connector whose material was changed is used.

Bracket

|     |                 |
|-----|-----------------|
| Nil | Without bracket |
| B   | Flat bracket    |
| C   | L-bracket       |

\* The bracket is made with a special black chromium treatment. The bracket is shipped with the product.

Port size

|   |     |
|---|-----|
| 2 | 1/4 |
|---|-----|

Thread type

|     |      |
|-----|------|
| Nil | Rc   |
| N   | NPT  |
| T   | NPTF |
| F   | G    |

- \* Since the lead wires and electrical circuits are used, this product is not completely copper-free. Only the wetted parts are copper-free.
- \* Copper and zinc materials are used for solenoid valve coils, connector pins, and lead wire substrate.

- \* The 25A- series specifications and dimensions are the same as those of the standard model.

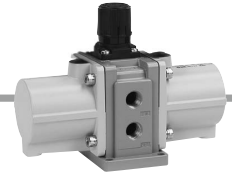
For details, refer to the [Web Catalog](#).



# Booster Regulator 25A-VBA Series



## How to Order



25A - VBA 40A - [ ] 04 [ ]

Series compatible with secondary batteries

| Body size |                            | Pressure increase ratio: Twice |
|-----------|----------------------------|--------------------------------|
| 10A       | 1/4", Handle-operated type |                                |
| 20A       | 3/8", Handle-operated type |                                |
| 40A       | 1/2", Handle-operated type |                                |

Thread type\*1

| Symbol | Thread type |
|--------|-------------|
| Nil    | Rc          |
| F      | G           |
| N      | NPT         |
| T      | NPTF        |

\*1 Thread types apply to the IN, OUT, and EXH ports of the VBA10A and to the IN, OUT, EXH, and gauge ports of the VBA20A and VBA40A. The gauge ports of the VBA10A are Rc thread type regardless of the thread type indication.

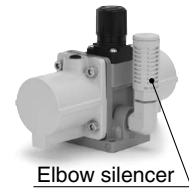
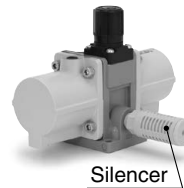
Option

| Symbol | Option                                |
|--------|---------------------------------------|
| Nil    | None                                  |
| N      | Silencer                              |
| S      | High-noise reduction silencer*1       |
| LN     | Elbow silencer*1                      |
| LS     | Elbow high-noise reduction silencer*1 |

\*1 Refer to "Combination of Thread Type and Options."  
\* Pressure gauge is not available as an option.

Port size

| Symbol | Port size | Applicable series |
|--------|-----------|-------------------|
| 02     | 1/4       | VBA10A            |
| 03     | 3/8       | VBA20A            |
| 04     | 1/2       | VBA40A            |



## Combination of Thread Type and Options

| Body size | Thread type | Option |   |   |    |    |
|-----------|-------------|--------|---|---|----|----|
|           |             | Nil    | N | S | LN | LS |
| 10A       | Nil         | ●      | ● | ● | ●  | ●  |
|           | F           | ●      | ● | ● | ●  | ●  |
|           | N           | ●      | ● | — | ●  | —  |
|           | T           | ●      | ● | — | ●  | —  |
| 20A       | Nil         | ●      | ● | ● |    |    |
|           | F           | ●      | ● | ● |    |    |
|           | N           | ●      | ● | ● |    |    |
|           | T           | ●      | ● | ● |    |    |
| 40A       | Nil         | ●      | ● | ● |    |    |
|           | F           | ●      | ● | ● |    |    |
|           | N           | ●      | ● | ● |    |    |
|           | T           | ●      | ● | ● |    |    |

## Caution

- Not compatible with a low dew point
- VBA10A: Due to the close proximity of the IN and OUT sides of the gauge port and the handle of the booster regulator, a G43-10-01-X300/G46-SRB pressure gauge cannot be mounted as it will interfere with the handle.  
VBA20A/40A: The G43-10-01-X300/G46-SRB pressure gauge cannot be mounted as the mounting pitch of the IN and OUT sides of the gauge port of the booster regulator is smaller than the diameter of the pressure gauge. In order to mount the pressure gauge, piping which does not cause any interference must be prepared separately.

## Air Tank Compatibility Chart

| Air tank     | Booster regulator |            |            |
|--------------|-------------------|------------|------------|
|              | 25A-VBA10A        | 25A-VBA20A | 25A-VBA40A |
| 25A-VBAT05A1 | ●                 | —          | —          |
| 25A-VBAT05S1 | ●                 | —          | —          |
| 25A-VBAT10A1 | ●                 | ●          | —          |
| 25A-VBAT10S1 | ●                 | ●          | —          |
| 25A-VBAT20A1 | —                 | ●          | ●          |
| 25A-VBAT20S1 | —                 | ●          | ●          |
| 25A-VBAT38A1 | —                 | ●          | ●          |
| 25A-VBAT38S1 | —                 | ●          | ●          |

\* Refer to page 251 for details on air tanks.

\* The 25A-series specifications and dimensions are the same as those of the standard model. For details, refer to the [Web Catalog](#).

# Air Tank

# 25A-VBAT Series



## How to Order



- For the booster regulator, use the 25A-VBA.
- It can be used alone as a tank.

**Standard product**  
(For Japanese market)

\* The thread type for each port is Rc.

**25A - VBAT 10 A 1**

### Tank internal capacity

| Symbol | Internal capacity |
|--------|-------------------|
| 05     | 5 L               |
| 10     | 10 L              |
| 20     | 20 L              |
| 38     | 38 L              |

### Material

| Symbol | Material             |
|--------|----------------------|
| A      | Carbon steel (SS400) |
| S      | Stainless steel      |

- \* Order drain valve (VBAT-V2) separately.
- \* Safety valve is not available as an option.

- Series compatible with secondary batteries

## ⚠ Caution

- When used as a single unit (not connected with a booster regulator) and pressurized at over 1 MPa at normal temperatures, the air tank falls under the scope of the “High Pressure Gas Safety Act” in Japan.

\* The 25A- series specifications and dimensions are the same as those of the standard model.

For details, refer to the [Web Catalog](#).

# Pressure Gauge for General Purpose

# **G43-10-01-X300**

RoHS



## How to Order

### G43-10-01-X300

• Internal/external parts copper-free type

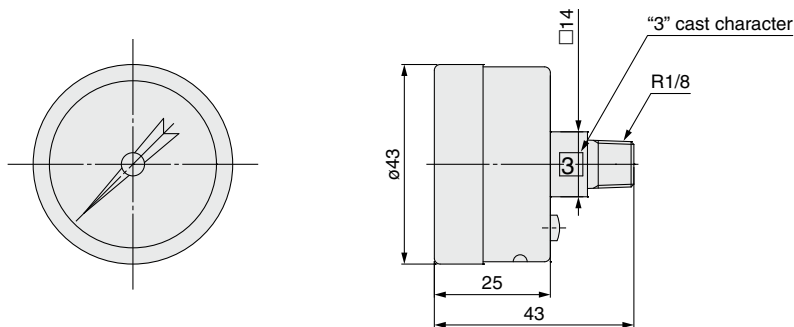
### Specifications

| Type           | Back side thread |
|----------------|------------------|
| Thread type    | R                |
| Pressure range | 0-1.0 MPa        |
| Accuracy       | ±3% F.S          |
| Weight         | 82 g             |

\* The dimensions and shape may differ in some parts from those of the standard product.

## Dimensions

G43-10-01-X300





# Pressure Gauge for Clean Regulator/ With Limit Indicator

## G46-SRB



### How to Order

Pressure gauge • **G 46** - **10** - **01** **SRB** - -

①      ②      ③      ④      ⑤      ⑥

|   |                       | Symbol                    | Description  | G46              |
|---|-----------------------|---------------------------|--|------------------|
|   |                       | +                         |  |                  |
| ① | Max. display pressure | <b>2</b>                  | 0.2 MPa  | ●                |
|   |                       | <b>4</b>                  | 0.4 MPa  | ●                |
|   |                       | <b>7</b>                  | 0.7 MPa  | ●                |
|   |                       | <b>10</b>                 | 1.0 MPa  | ●                |
|   |                       | <b>P2</b> <sup>(1)</sup>  | 0.2 MPa, 30 psi  | ○ <sup>(2)</sup> |
|   |                       | <b>P10</b> <sup>(1)</sup> | 1.0 MPa, 150 psi   | ○ <sup>(2)</sup> |
|   |                       | +                         |  |                  |
| ② | Connection thread     | <b>01</b>                 | R 1/8  | ●                |
|   |                       | <b>02</b>                 | R 1/4  | ●                |
|   |                       | +                         |  |                  |
| ③ | Option                | <b>Nil</b>                | —  | ●                |
|   |                       | <b>M</b> <sup>(3)</sup>   | With M5 (Female thread)  | ●                |
|   |                       | +                         |  |                  |
| ④ | Grade                 | <b>SRB</b>                | Component parts: General degreasing<br>Assembly: General production line                 | ●                |
|   |                       | +                         |  |                  |
| ⑤ | Attachment            | <b>Nil</b>                | Without cover ring assembly  | ●                |
|   |                       | <b>C</b>                  | Clear cover has no protrusion.<br>(Clear cover is irremovable.)                          | ●                |
|   |                       | <b>C2</b>                 | Clear cover has protrusion.<br>(Clear cover is removable.)<br>The wrench flats protrude. | ●                |
|   |                       | +                         |  |                  |
| ⑥ | Special specification | <b>Nil</b>                | —  | ●                |
|   |                       | <b>X30</b>                | Both MPa and psi   | ○ <sup>(2)</sup> |

Note 1) This symbol must be used with Special specification "X30."

Note 2) Under the New Measurement Law, products for overseas use only (SI unit type for use in Japan)

Note 3) To use the pressure gauge with M5 (female thread), attach the joint when piping the tube.  
For combinations with the special specification products, please consult SMC separately.

For details, refer to the [Web Catalog](#).

# Speed Controller with One-touch Fitting

## Stainless Steel Type Push-lock Type

Elbow Type/Universal Type

# AS-FG Series

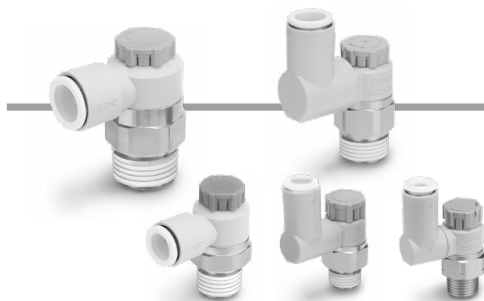
In-line Type

# AS-FG Series

This product (standard product) is a secondary battery compatible product. For details on specifications and dimensions, refer to the [Web Catalog](#).



## How to Order



### Applicable tubing O.D. \*1

| Metric size |         | Inch size |        |
|-------------|---------|-----------|--------|
| 02          | ø2      | 01        | ø1/8"  |
| 23          | ø3.2 *2 | 03        | ø5/32" |
| 04          | ø4      | 07        | ø1/4"  |
| 06          | ø6      |           |        |

\*1 For selecting applicable tubing O.D., refer to the "Model" on the [Web Catalog](#). The color of the release button is white (metric, inch).

\*2 Use ø1/8" tube.

**Body size**

|   |                       |
|---|-----------------------|
| 1 | M5 x 0.8<br>10-32 UNF |
|---|-----------------------|

**Port size**

|        |           |
|--------|-----------|
| M5     | M5 x 0.8  |
| U10/32 | 10-32 UNF |

**Body size 1**

**Body size 2/3/4**

AS 1 2 0 1 FG - M5 - 06 A

AS 2 2 0 1 FG - 01 - 06 S A

**Body size**

|   |          |
|---|----------|
| 2 | 1/8, 1/4 |
| 3 | 3/8      |
| 4 | 1/2      |

**Type**

|   |           |
|---|-----------|
| 2 | Elbow     |
| 3 | Universal |

**Control type \*1**

|   |           |
|---|-----------|
| 0 | Meter-out |
| 1 | Meter-in  |

\*1 Meter-out and meter-in types can be visually identified by color of the knob.  
Meter-out: Gray  
Meter-in: Light blue

### Stainless steel type (Stainless steel 303)

\* The material can be visually identified by color of the release button.  
Stainless steel type: White  
\* White is also used for inch size.

**Thread type**

|     |     |
|-----|-----|
| Nil | R   |
| N   | NPT |
| G   | G   |

**Port size**

|    |     |
|----|-----|
| 01 | 1/8 |
| 02 | 1/4 |
| 03 | 3/8 |
| 04 | 1/2 |

### Push-lock type

### Seal method

|     |                 |
|-----|-----------------|
| Nil | Without sealant |
| S   | With sealant    |

\* Face seal method is used for the G thread type.  
Select "Nil/Without sealant."  
Example) AS2201FG-G01-06A

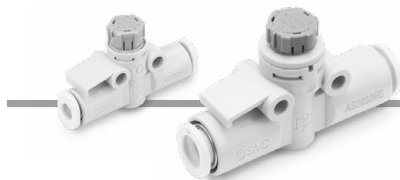
### Applicable tubing O.D. \*1

| Metric size |         | Inch size *3 |        |
|-------------|---------|--------------|--------|
| 23          | ø3.2 *2 | 01           | ø1/8"  |
| 04          | ø4      | 03           | ø5/32" |
| 06          | ø6      | 07           | ø1/4"  |
| 08          | ø8      | 09           | ø5/16" |
| 10          | ø10     | 11           | ø3/8"  |
| 12          | ø12     | 13           | ø1/2"  |
| 16          | ø16     |              |        |

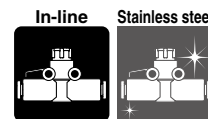
\*1 For selecting applicable tubing O.D., refer to the "Model" on the [Web Catalog](#). The color of the release button is white (metric, inch).

\*2 Use ø1/8" tube.

\*3 Only the metric size is available for the G thread type.



## How to Order



AS 200 2 FG - 06 A

**Body size**

|     |              |
|-----|--------------|
| 100 | M5 standard  |
| 200 | 1/8 standard |
| 205 | 1/4 standard |
| 300 | 3/8 standard |
| 400 | 1/2 standard |

With One-touch fittings

### Stainless steel type (Stainless steel 303)

\* The material can be visually identified by color of the release button.  
Stainless steel type: White  
\* White is also used for inch size.

### Applicable tubing O.D. \*1

| Metric size |         | Inch size |        |
|-------------|---------|-----------|--------|
| 23          | ø3.2 *2 | 01        | ø1/8"  |
| 04          | ø4      | 03        | ø5/32" |
| 06          | ø6      | 07        | ø1/4"  |
| 08          | ø8      | 09        | ø5/16" |
| 10          | ø10     | 11        | ø3/8"  |
| 12          | ø12     | 13        | ø1/2"  |

\*1 For selecting applicable tubing O.D., refer to the "Model" on the [Web Catalog](#).

\*2 Use ø1/8" tubing.

# Speed Controller with Indicator Stainless Steel Series

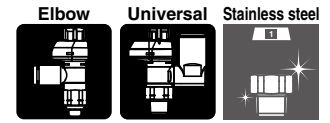
Elbow Type/Universal Type

## AS-FSG Series

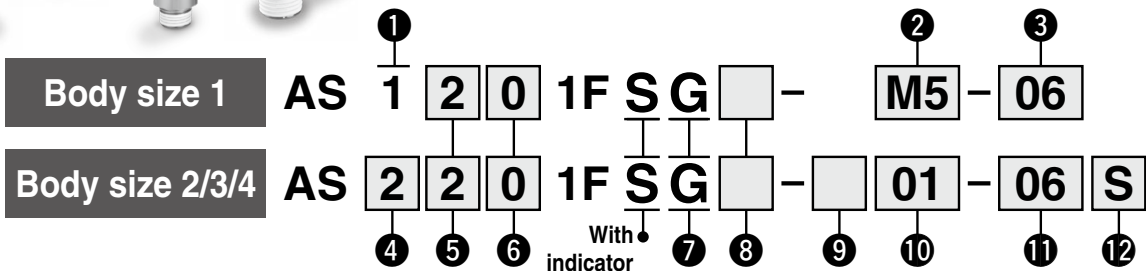
In-line Type

## AS-FSG Series

This product (standard product) is a secondary battery compatible product. For details on specifications and dimensions, refer to the [Web Catalog](#).



### How to Order



#### 1 Body size

|   |                       |
|---|-----------------------|
| 1 | M5 x 0.8<br>10-32 UNF |
|---|-----------------------|

#### 2 Port size

|        |           |
|--------|-----------|
| M5     | M5 x 0.8  |
| U10/32 | 10-32 UNF |

#### 6 Control type\*1

|   |           |
|---|-----------|
| 0 | Meter-out |
| 1 | Meter-in  |

\*1 Meter-out and meter-in types can be visually identified by color of the knob.  
Meter-out: Gray  
Meter-in: Light blue

#### 11 Applicable tubing O.D.\*1

| Metric size | Inch size*3 |
|-------------|-------------|
| 23          | ø3.2*2      |
| 04          | ø4          |
| 06          | ø6          |
| 08          | ø8          |
| 10          | ø10         |
| 12          | ø12         |
| 16          | ø16         |

#### 3 Applicable tubing O.D.\*1

| Metric size | Inch size |
|-------------|-----------|
| 02          | ø2        |
| 23          | ø3.2*2    |
| 04          | ø4        |
| 06          | ø6        |
| 01          | ø1/8"     |
| 03          | ø5/32"    |
| 07          | ø1/4"     |

\*1 For selecting applicable tubing O.D., refer to the "Model" on the [Web Catalog](#). Metric size and inch size types can be visually identified by color of the release button. Stainless steel type: White  
White is also used for inch size.

\*2 Use ø1/8" tubing.

#### 7 Stainless steel type

\* Metric size and inch size types can be visually identified by color of the release button. Stainless steel type: White  
White is also used for inch size.

#### 4 Body size

|   |          |
|---|----------|
| 2 | 1/8, 1/4 |
| 3 | 3/8      |
| 4 | 1/2      |

#### 5 Type

|   |           |
|---|-----------|
| 2 | Elbow     |
| 3 | Universal |

#### 9 Thread type

|     |     |
|-----|-----|
| Nil | R   |
| N   | NPT |
| G   | G   |

#### 10 Port size

|    |     |
|----|-----|
| 01 | 1/8 |
| 02 | 1/4 |
| 03 | 3/8 |
| 04 | 1/2 |

#### 12 Seal method

|     |                 |
|-----|-----------------|
| Nil | Without sealant |
| S   | With sealant    |

\* Face seal type is used for the G thread type. Select "Nil/Without sealant".  
Example) AS2201FSG-G01-06

#### 8 Indicator window direction

|     |      |  | Elbow | Universal |
|-----|------|--|-------|-----------|
| Nil | 0°   |  | •     | —         |
| 1   | 180° |  | •     | •         |
| 2   | 90°  |  | •     | —         |
| 3   | 270° |  | •     | —         |

\* Orientation of indicator direction is fixed when manufacturing, and cannot be changed by the user. In addition, the universal type is only available with 180° setting.



### How to Order



#### 1 Body size

|     |              |
|-----|--------------|
| 100 | M5 standard  |
| 200 | 1/8 standard |
| 205 | 1/4 standard |
| 300 | 3/8 standard |
| 400 | 1/2 standard |

#### 2 Stainless steel type (Stainless steel 303)

\* The material can be visually identified by color of the release button. Stainless steel type: White  
White is also used for inch size.

#### 4 Applicable tubing O.D.\*1

| Metric size | Inch size |
|-------------|-----------|
| 23          | ø3.2*2    |
| 04          | ø4        |
| 06          | ø6        |
| 08          | ø8        |
| 10          | ø10       |
| 12          | ø12       |
| 01          | ø1/8"     |
| 03          | ø5/32"    |
| 07          | ø1/4"     |
| 09          | ø5/16"    |
| 11          | ø3/8"     |
| 13          | ø1/2"     |

\*1 For selecting applicable tubing O.D., refer to the "Model" on the [Web Catalog](#).  
\*2 Use ø1/8" tubing.

#### 3 Indicator direction

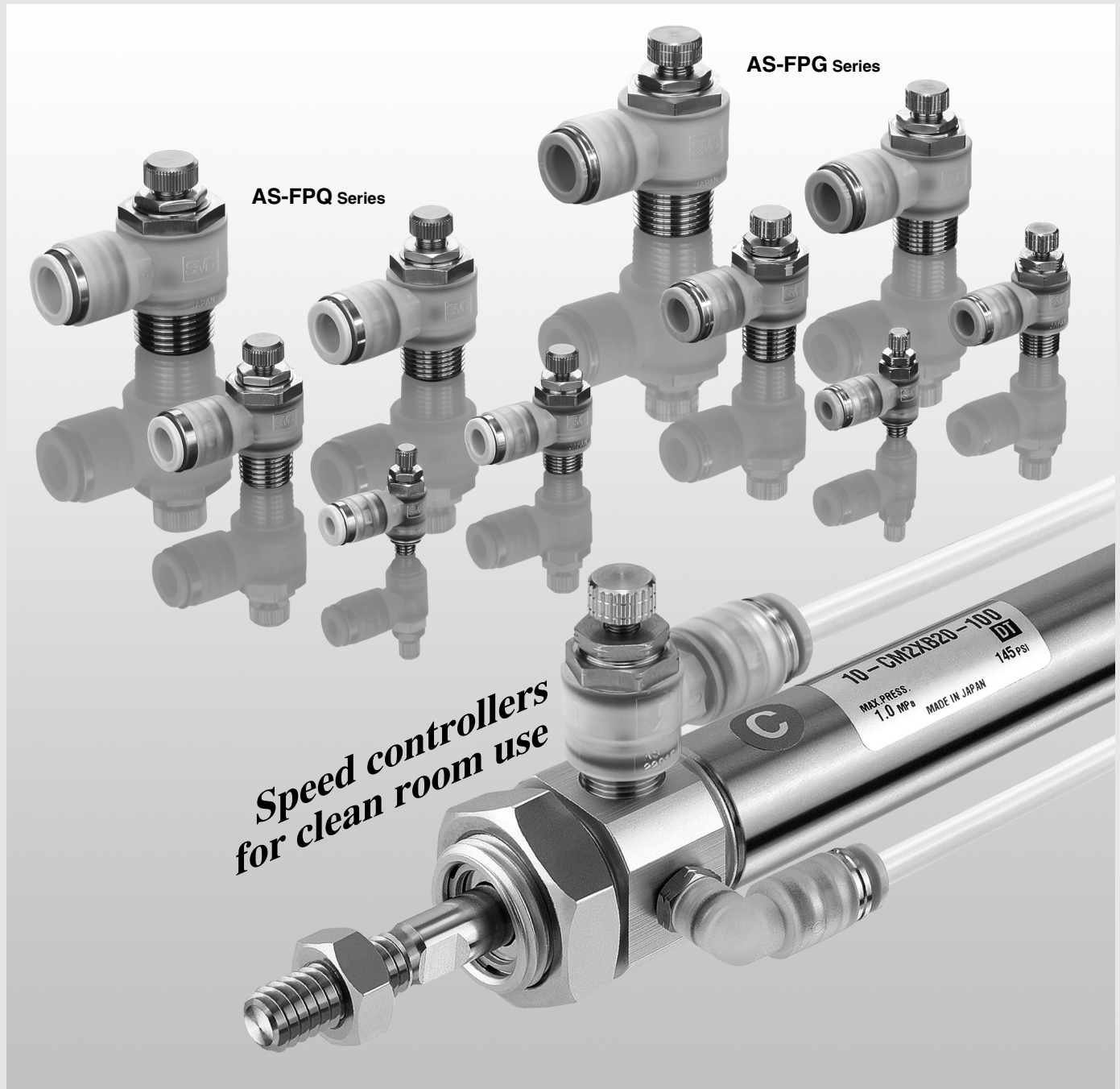
| Nil | 0°   |  | 2 | 90°  |
|-----|------|--|---|------|
| 1   | 180° |  | 3 | 270° |

# Clean Speed Controller with One-touch Fitting

This product (only the stainless steel metal parts type) is a secondary battery compatible product. For details, refer to the [Web Catalog](#).

## AS-FPQ/AS-FPG Series

RoHS



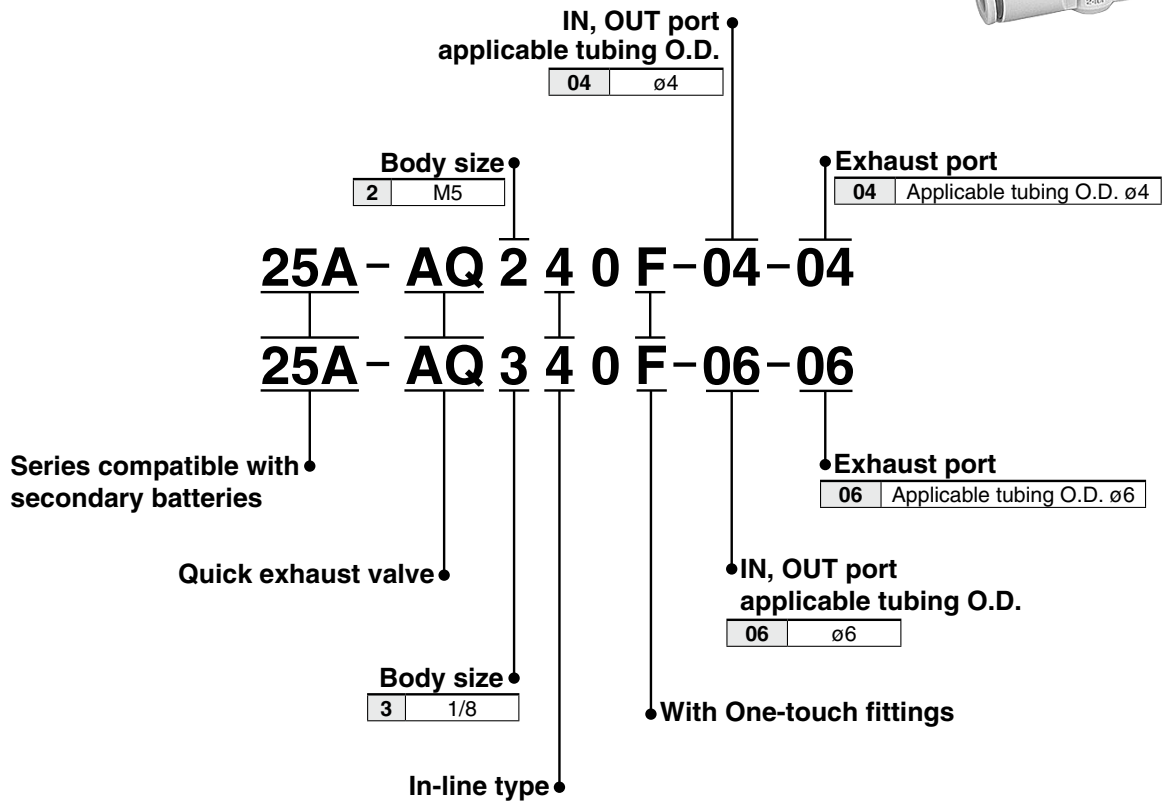
**AS-FPQ: Brass (electroless nickel plated) and  
AS-FPG: Stainless steel 304 are now available as a series.**

# Quick Exhaust Valve with One-touch Fittings

RoHS

# 25A-AQ240F/340F Series

## How to Order



\* The 25A- series specifications and dimensions are the same as those of the standard model.

For details, refer to the [Web Catalog](#).

# Check Valve with One-touch Fittings **25A-AKH Series**



## How to Order



**Straight type**

**25A - AKH 04 - 00**

Series compatible with secondary batteries

Applicable tubing O.D.  
Metric size

|    |     |
|----|-----|
| 04 | ø4  |
| 06 | ø6  |
| 08 | ø8  |
| 10 | ø10 |
| 12 | ø12 |

\* The 25A- series specifications and dimensions are the same as those of the standard model.

For details, refer to the [Web Catalog](#).



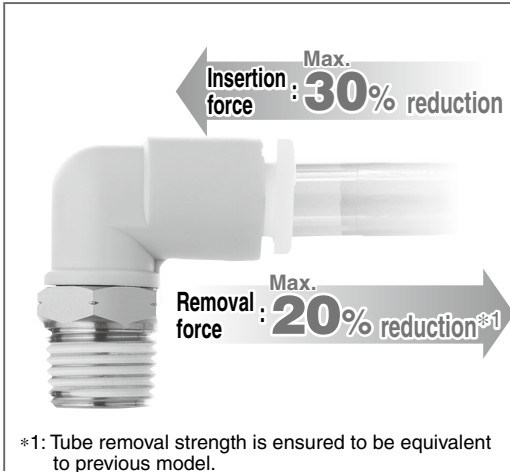
# One-touch Fittings Stainless Steel

## KQ2-G Series

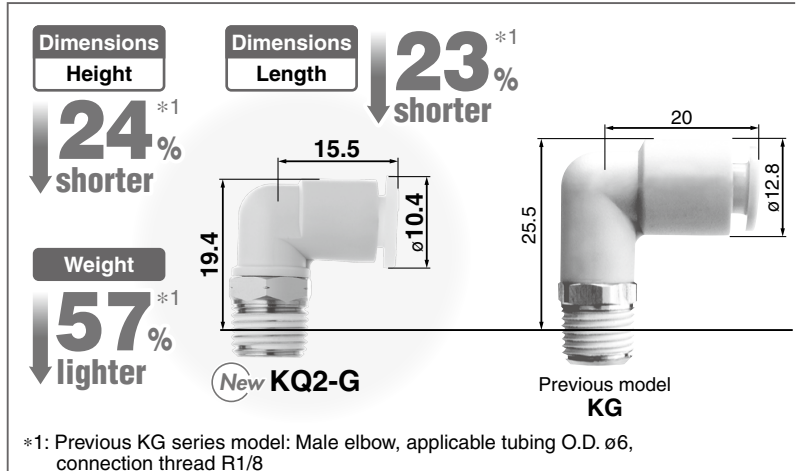
RoHS

Metal material: **Stainless steel 303**

### Improved tube insertion/removal



### Compact and lightweight



Body type: total of **27** models

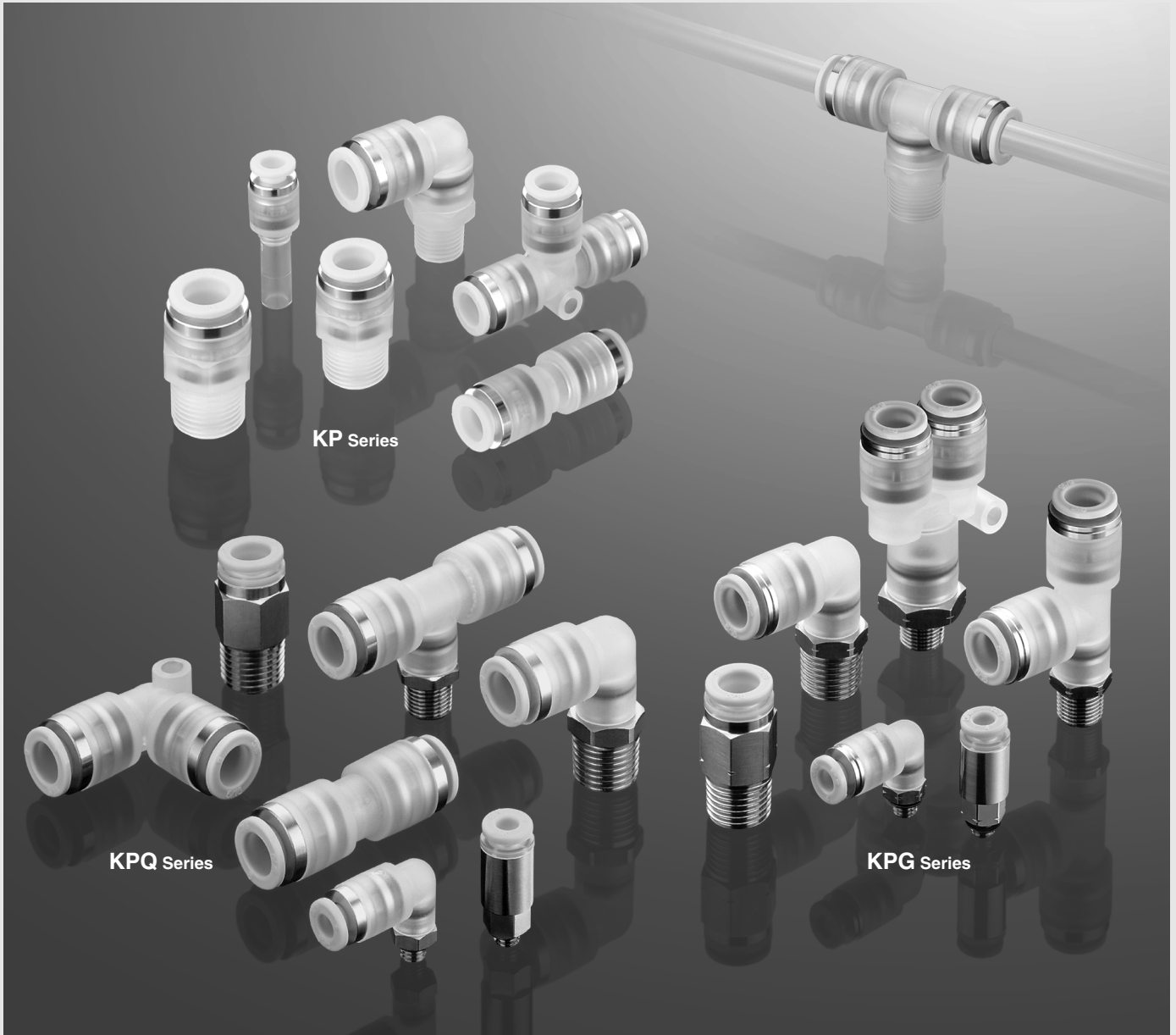




This product (only the stainless steel metal parts type) is a secondary battery compatible product. For details, refer to the [Web Catalog](#).

# Clean One-touch Fittings

## KP/KPQ/KPG Series



# Stainless Steel 316 Fittings

**KQG2 Series**

RoHS

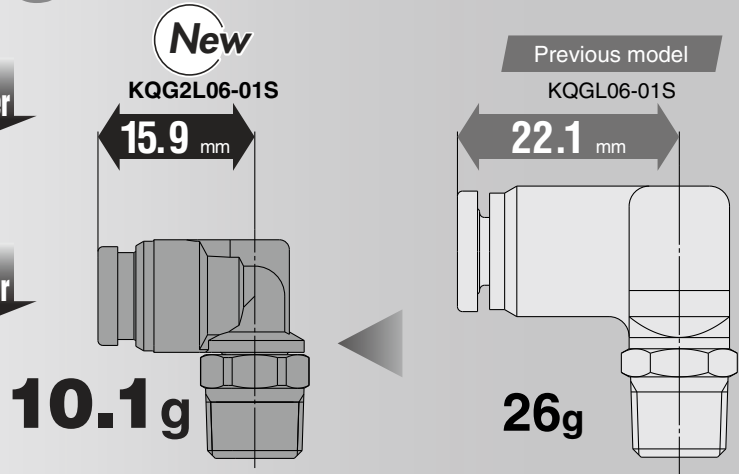
## Compact and Light



Approx. **30%** **Shorter**  
\* KQG2L06-01S



Approx. **62%** **Lighter**  
\* KQG2L06-01S



### Material

# Stainless steel 316

Seal parts: Special FKM

Fluid temperature

**-5 to 150°C**

Applicable tubing

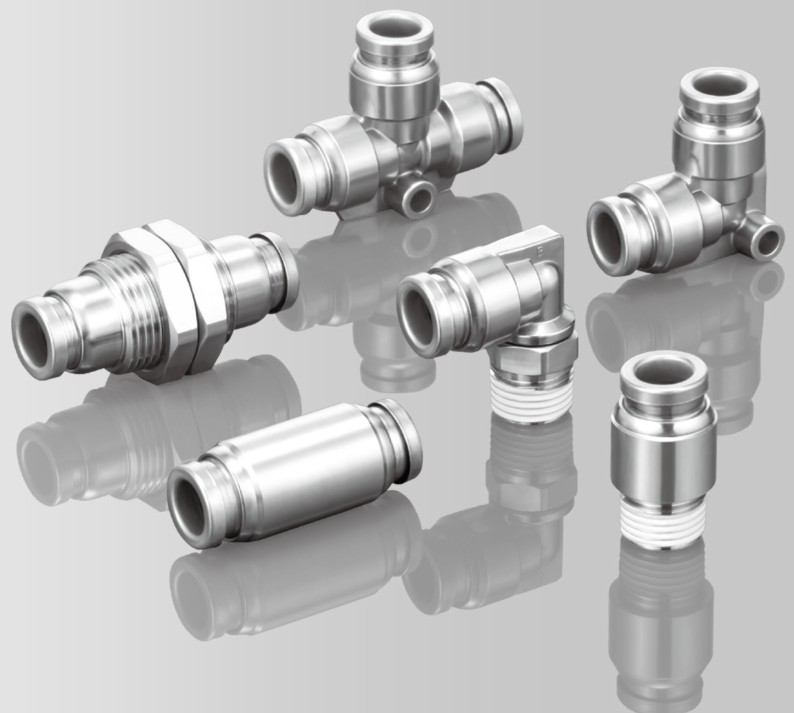
**Metric size, Inch size**

Connection thread

**M, R, Rc, UNF, NPT**

- Grease-free/Can be used with steam.
- Certified to meet current Food Sanitation Law standards.

(Component materials have met apparatuses and container-packages standards.)



# Stainless Steel 316 Fittings

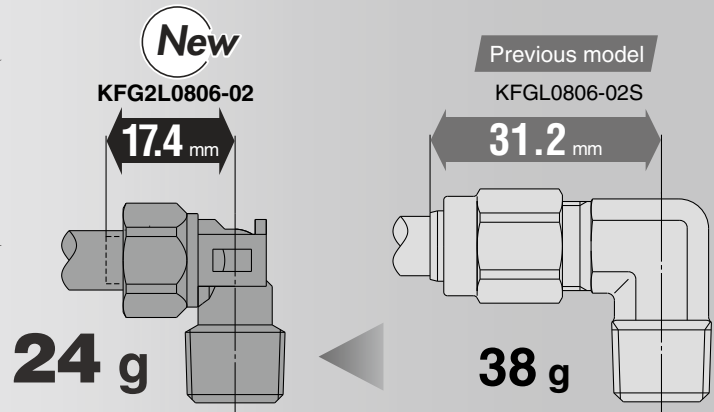
**KFG2 Series**

RoHS

## Compact and Light

Dimensions **Approx. 44% Shorter**  
\* KFG2L0806-02

Weight **Approx. 37% Lighter**  
\* KFG2L0806-02



### Material

# Stainless steel 316

Rubber material is not used.  
(Except swivel elbow)

- Grease-free/Can be used with steam.
- Certified to meet current Food Sanitation Law standards.  
(Component materials have met apparatuses and container-packages standards.)

Fluid temperature

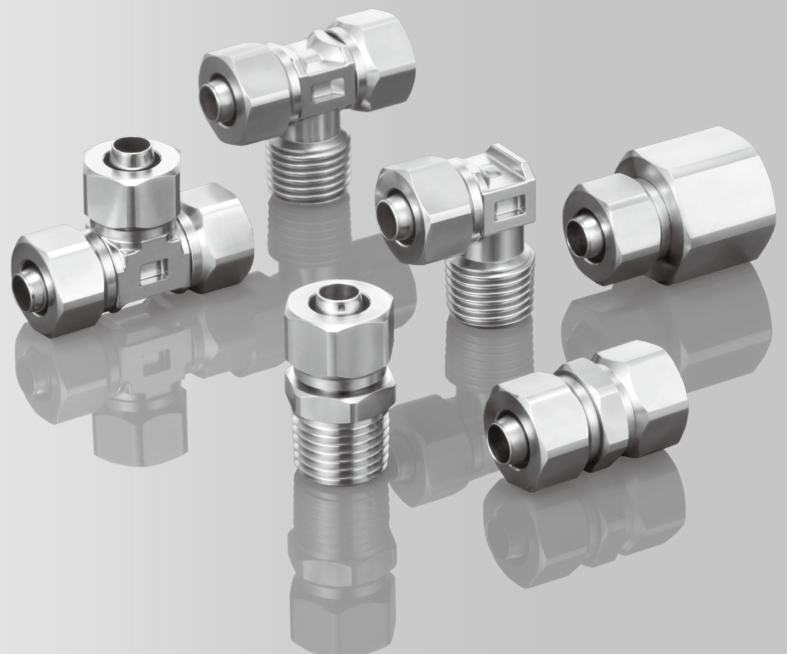
**-65 to 260°C**  
(Swivel elbow: -5 to 150°C)

Applicable tubing

**Metric size, Inch size**

Connection thread

**R, Rc, NPT**



# Miniature Fittings Stainless Steel 316

## MS Series

Applicable Tubes:  $\varnothing 3.2$ ,  $\varnothing 4$ ,  $\varnothing 6$  Connection Thread: M5, R 1/8

RoHS

This product (standard product) is a secondary battery compatible product. For details, refer to the [Web Catalog](#).

For use in corrosive environments  
Stainless steel 316

Compact piping space

Tube has a large retaining force. Hose nipple assures easy installation and removal.

Line up various types

Possible for special tubing in the same direction. Accepts many types of plastic tubing

Hose nipple and hose elbow

Accepts nylon, soft nylon, and polyurethane tubing.



Made to Order  
(Refer to the [Web Catalog](#) for details.)

### Hose nipple

#### Barb

Configuration for easy insertion into the tube  
Holds the tube tightly.

#### Body

Stainless steel 316

#### Gasket

Low tightening torque  
Tight seal

#### Tube

Possible for combination use of nylon tubing and polyurethane tubing.

#### Cap nut

Certainly hold the tube by manual clamping  
Easy removal of tube by loosening  
Stainless steel 316

### Barb fitting

#### Barb

Configuration for easy insertion into the tube  
Holds the tube tightly.

#### Body

Stainless steel 316

#### Tube

#### Gasket

Low tightening torque  
Tight seal

### Specifications

| Applicable tubing material           | Nylon   | Soft nylon  | Polyurethane   | PFA (1)  | FEP (2)  | Modified PTFE (3)  | Wear resistant polyurethane (4)                                  |
|--------------------------------------|---|---|--|--|--|--|--|
| Applicable tubing O.D./I.D.          | $\varnothing 4/\varnothing 2.5$<br>$\varnothing 6/\varnothing 4$      | $\varnothing 3.18/\varnothing 2.18$<br>$\varnothing 4/\varnothing 2.5$<br>$\varnothing 6/\varnothing 4$ | $\varnothing 3.18/\varnothing 2$<br>$\varnothing 4/\varnothing 2.5$<br>$\varnothing 6/\varnothing 4$ | $\varnothing 4/\varnothing 2.5$<br>$\varnothing 6/\varnothing 4$ | $\varnothing 4/\varnothing 2.5$<br>$\varnothing 6/\varnothing 4$ | $\varnothing 4/\varnothing 2.5$<br>$\varnothing 6/\varnothing 4$ | $\varnothing 4/\varnothing 2.5$<br>$\varnothing 6/\varnothing 4$ |
| Fluid                                | Air, N <sub>2</sub> , Water (5, 6, 7)                                 |   |  |  |  |  |  |
| Maximum operating pressure (at 20°C) | 1.5 MPa   | 1 MPa   | 0.8 MPa  | 1 MPa  | 1.5 MPa  | 1.4 MPa  | 0.8 MPa  |
| Ambient and fluid temperature        | -5 to 60°C, Water: 0 to 40°C (No freezing)                            |   |  |  |  |  |  |
| Connection size                      | M5, R1/8  |   |  | M5   |  |  |  |
| Thread                               | JIS B0205 (Metric fine thread)<br>JIS B0203 (Taper thread for piping) |   |  | JIS B0205, Class 2<br>(Metric fine thread)                       |  |  |  |

Note 1), Note 2), Note 3), Note 4) Applicable only for hose nipple type.

Note 5) Barb fitting, barb elbow and barb tee are not compatible with water.

Note 6) Deionized water is not recommended for use as it may affect the material used in the fittings.

In addition, it is known to degrade the water quality.

Note 7) As the universal nipple comes with grease, it cannot be used when N<sub>2</sub> is used as clean, dry air.

### Principal Parts Material

| Material | Body                | Gasket               |
|----------|---------------------|----------------------|
|          | Stainless steel 316 | PVC, Nylon 66, GF30% |

# Rectangular Multi-connector

# 25A-KDM Series

No. of Connecting Tubes: 20



## How to Order

**25A - KDM 20 - 06**

Series compatible with secondary batteries •

No. of connecting tubes •

• Tubing O.D.

### Metric size

| Symbol    | Size | Color of release button |
|-----------|------|-------------------------|
| <b>23</b> | ø3.2 | Blue                    |
| <b>04</b> | ø4   |                         |
| <b>06</b> | ø6   |                         |

### Inch size

| Symbol    | Size   | Color of release button |
|-----------|--------|-------------------------|
| <b>01</b> | ø1/8"  | Red                     |
| <b>03</b> | ø5/32" |                         |
| <b>07</b> | ø1/4"  |                         |

### Applicable Tubing

|                 |   |
|-----------------|---|
| Tubing material | FEP, PFA, Nylon, Soft nylon, Polyurethane |
|-----------------|---|

\* The 25A- series specifications and dimensions are the same as those of the standard model.

For details, refer to the [Web Catalog](#).

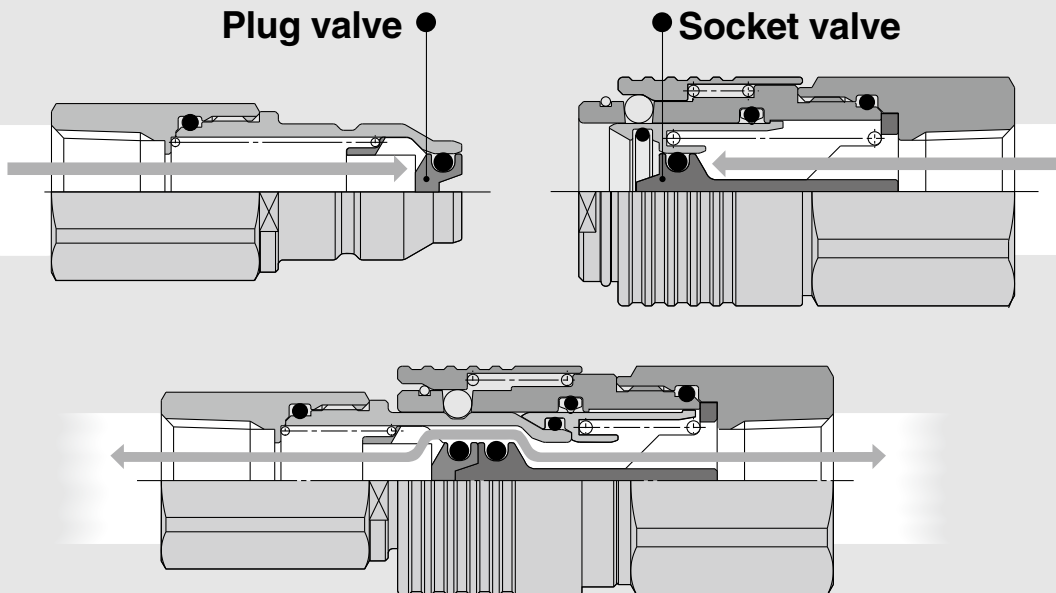
# S Couplers Stainless steel type

**KKA Series**

RoHS



- **Body material: Stainless steel 304**  
**Seal material: Fluororubber (Special FKM)**
- **Both plug and socket have an integral check valve.**  
Available with and without check valves depending on the operating conditions.
- **Reduces liquid dripping when the plug and socket are uncoupled.**  
Liquid dripping: 0.02 to 0.77 cm<sup>3</sup> at each removal  
Aeration: 0.1 to 2.7 cm<sup>3</sup> at each removal



- **Non-greased specification (standard)**  
Allows smooth installation and removal even without grease
  - O-ring: Fluorine coated
  - Sliding parts of plug and socket: Fluorine coated is used.
- **Fluid: Water, Air**
- **Operating temperature range: -5 to 150°C**

Note) This product should not be used with steam.





This product (standard product) is a secondary battery compatible product. For details, refer to the [Web Catalog](#).

## Nylon Tubing T

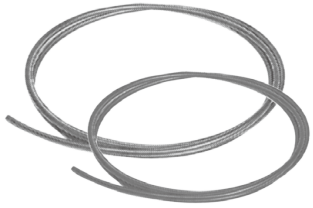


- General pneumatic tubing
- Max. operating pressure: 3.0 MPa (T0604, at 20°C)

| Series | Tubing O.D.                 |                                      | Color                                     | Fluid   |
|--------|-----------------------------|--------------------------------------|---|---|
|        | Metric size                 | Inch size                            |   |   |
| T/TIA  | ø4, ø6, ø8, ø10<br>ø12, ø16 | ø1/8", ø3/16", ø1/4"<br>ø3/8", ø1/2" | Black, White, Red, Blue,<br>Yellow, Green | Air, Water<br>Turbine oil class 1<br>(ISO VG32)*1 |

\*1 Refer to the catalog for more information on using the product.

## Soft Nylon Tubing TS

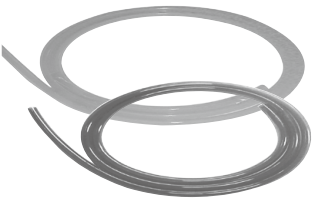


- Max. operating pressure: 1.7 MPa (TS0604, at 20°C)

| Series  | Tubing O.D.                 |                                      | Color                                     | Fluid   |
|---------|-----------------------------|--------------------------------------|---|---|
|         | Metric size                 | Inch size                            |   |   |
| TS/TISA | ø4, ø6, ø8, ø10<br>ø12, ø16 | ø1/8", ø3/16", ø1/4"<br>ø3/8", ø1/2" | Black, White, Red, Blue,<br>Yellow, Green | Air, Water<br>Turbine oil class 1<br>(ISO VG32)*1 |

\*1 Refer to the catalog for more information on using the product.

## Polyurethane Tubing TU



- Max. operating pressure: 0.8 MPa (at 20°C)
- Made to Order  
100 m reel/Longer length reel/20 m roll (-X4)  
Compatible with the Food Sanitation Law/FDA (U.S. Food and Drug Administration)/  
Complies with the EU No 10/2011 dissolution test

| Series  | Tubing O.D.                     |                                      | Color  | Fluid      |
|---------|---------------------------------|--------------------------------------|--|------------|
|         | Metric size                     | Inch size                            |  |            |
| TU/TIUB | ø2, ø4, ø6, ø8<br>ø10, ø12, ø16 | ø1/8", ø3/16", ø1/4"<br>ø3/8", ø1/2" | Black, White, Red, Blue, Yellow, Green,<br>Clear, Orange, and more (Total 29 colors) | Air, Water |

## Antistatic Soft Nylon Tubing TAS



- Max. operating pressure: 1.2 MPa (at 20°C)
- For preventing static electricity

| Series | Tubing O.D.                |  | Color | Fluid |
|--------|----------------------------|--|-------|-------|
|        | Metric size                |  |       |       |
| TAS    | ø3.2, ø4, ø6, ø8, ø10, ø12 |  | Black | Air   |

## Antistatic Polyurethane Tubing TAU



- Max. operating pressure: 0.9 MPa (at 20°C)
- For preventing static electricity

| Series | Tubing O.D.                |  | Color | Fluid |
|--------|----------------------------|--|-------|-------|
|        | Metric size                |  |       |       |
| TAU    | ø3.2, ø4, ø6, ø8, ø10, ø12 |  | Black | Air   |

This product (standard product) is a secondary battery compatible product. For details, refer to the [Web Catalog](#).

## Fluoropolymer Tubing TL/TIL



- Max. operating pressure: 1.0 MPa (at 20°C)
- Operating temperature (fixed usage): -65 to 260°C
- Food Sanitation Law compliant
- Complies with the FDA (Food and Drug Administration) § 177.1550 dissolution test

| Series | Tubing O.D.                 |  | Color       |
|--------|-----------------------------|--|-------------|
|        | Metric size                 | Inch size  |             |
| TL/TIL | ø4, ø6, ø8, ø10<br>ø12, ø19 | ø1/8", ø3/16", ø1/4"<br>ø3/8", ø1/2", ø3/4", ø1" | Translucent |

## FEP Tubing (Fluoropolymer) TH/TH



- Max. operating pressure: 2.3 MPa (at 20°C)\*1
- Food Sanitation Law compliant
- Complies with the FDA (Food and Drug Administration) § 177.1550 dissolution test
- Operating temperature (fixed usage): Air, Inert gas: -65 to 200°C  
Water: 0 to 100°C (No freezing)

\*1 This may vary according to size.

| Series | Tubing O.D.          |   | Color                         |
|--------|----------------------|---|-------------------------------|
|        | Metric size          | Inch size                                 |                               |
| TH/TH  | ø4, ø6, ø8, ø10, ø12 | ø1/8", ø3/16", ø1/4", ø3/8", ø1/2", ø3/4" | Translucent, Black, Red, Blue |

## Soft Fluoropolymer Tubing TD/TID



- Max. operating pressure: 1.6 MPa (at 20°C)\*1
- Food Sanitation Law compliant
- Complies with the FDA (Food and Drug Administration) § 177.1550 dissolution test
- Operating temperature (fixed usage): Air, Inert gas: -65 to 260°C  
Water: 0 to 100°C (No freezing)

\*1 This may vary according to size.

| Series | Tubing O.D.          |                                    | Color       |
|--------|----------------------|------------------------------------|-------------|
|        | Metric size          | Inch size                          |             |
| TD/TID | ø4, ø6, ø8, ø10, ø12 | ø1/8", ø3/16", ø1/4", ø3/8", ø1/2" | Translucent |

## Soft Polyolefin Tubing TPS



- Max. operating pressure (at 20°C): 0.7 MPa (ø4 to ø12)
- Complies with the FDA (Food and Drug Administration) § 175.300 dissolution test (White, Blue, Yellow only)

| Series | Applicable tubing O.D. | Color                                  | Fluid            |
|--------|------------------------|--|------------------|
| TPS    | ø4, ø6, ø8, ø10, ø12   | Black, White, Red, Blue, Yellow, Green | Air, Water, etc. |

## Moisture Control Tube IDK



- Prevents condensation in piping for small cylinders/air grippers
- Diffuses water vapor in the piping to the outside
- All you have to do is install the moisture control tube. Additional power supplies and works are not necessary.

| Series                    | O.D./I.D. [mm] | Effective length [mm] | Applicable fittings |
|---------------------------|----------------|-----------------------|---------------------|
| IDK02 (Linear shape)      | 2/1.2          | 100<br>200            | KQ2                 |
| IDK04 (Linear shape)      | 4/2.5          |                       | KQ2                 |
| IDK06 (Linear shape)      | 6/4            |                       | KQ2                 |
| IDK04-100-C1 (Coil shape) | 4/2.5          | 100                   | KQ2                 |

1 Output

# 3-Screen Display High-Precision Digital Pressure Switch

# 25A-ZSE20(F)/ISE20 Series

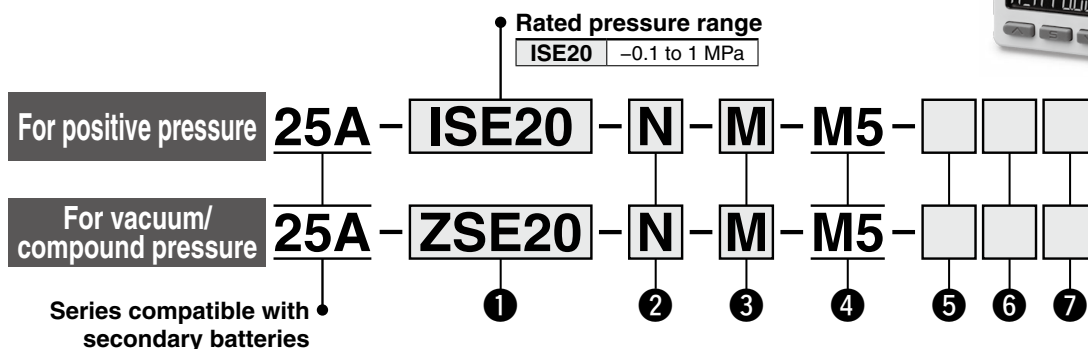


RoHS

IP40



## How to Order



### ① Rated pressure range

| Symbol | Description     |
|--------|-----------------|
| ZSE20  | 0 to -101 kPa   |
| ZSE20F | -100 to 100 kPa |

### ② Output specification

| Symbol | Description                 |
|--------|-----------------------------|
| N      | NPN open collector 1 output |
| P      | PNP open collector 1 output |

### ③ Unit specification

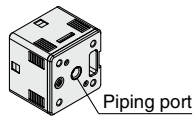
| Symbol | Description                                    |
|--------|--|
| Nil    | Units selection function*1                     |
| M      | SI unit only*2                                 |
| P      | Units selection function (Initial value psi)*1 |

\*1 Under the New Measurement Act, switches with the units selection function are not permitted for use in Japan.

\*2 Fixed unit: kPa, MPa

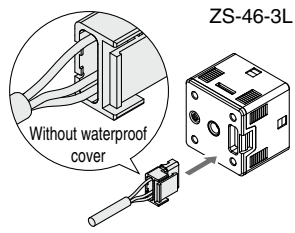
### ④ Piping specification

| Symbol | Description      |
|--------|------------------|
| M5     | M5 female thread |



### ⑤ Option 1

| Symbol | Description                                      |
|--------|--|
| Nil    | Without lead wire                                |
| L      | Lead wire with connector (3-core, 2 m lead wire) |



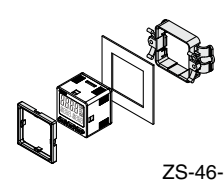
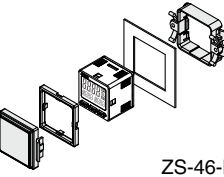
### ⑦ Option 3

| Symbol | Operation manual*1 | Calibration certificate*1 |
|--------|--------------------|---------------------------|
| Nil    | ○                  | —                         |
| Y      | —                  | —                         |
| K      | ○                  | ○                         |
| T      | —                  | ○                         |

\*1 All texts are in both English and Japanese.

### ⑥ Option 2

| Symbol | Description                                  |
|--------|--|
| Nil    | None   |
| B      | Panel mount adapter                          |
| D      | Panel mount adapter + Front protection cover |

## Options/Part Nos.

When only optional parts are required, order with the part numbers listed below.

| Description                                  | Part no. | Note   |
|--|----------|--|
| Panel mount adapter                          | ZS-46-B  | —  |
| Panel mount adapter + Front protection cover | ZS-46-D  | —  |
| Lead wire with connector                     | ZS-46-3L | 3-core, 2 m, Non-waterproof (Without waterproof cover) |
| Front protection cover                       | ZS-27-01 | —  |

\* The 25A-series specifications and dimensions are the same as those of the standard model.

For details, refer to the [Web Catalog](#).

2 Outputs + Analog Output (Voltage/Current)



# 3-Screen Display High-Precision Digital Pressure Switch

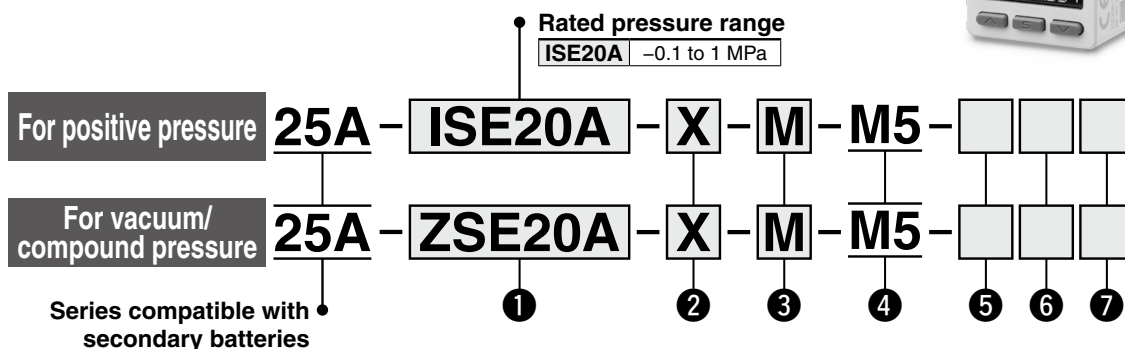
RoHS

IP40

# 25A-ZSE20A(F)/ISE20A Series



## How to Order



### ① Rated pressure range

|         |                 |
|---------|-----------------|
| ZSE20A  | 0 to -101 kPa   |
| ZSE20AF | -100 to 100 kPa |

### ② Output specification

| Symbol | Description   |
|--------|---|
| R      | NPN open collector 2 outputs + Analog voltage output *1 |
| S      | NPN open collector 2 outputs + Analog current output *1 |
| T      | PNP open collector 2 outputs + Analog voltage output *1 |
| V      | PNP open collector 2 outputs + Analog current output *1 |
| X      | NPN open collector 2 outputs + Copy function            |
| Y      | PNP open collector 2 outputs + Copy function            |

\*1 Can be switched to auto-shift or copy function

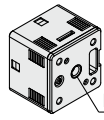
### ③ Unit specification

| Symbol | Description                                     |
|--------|---|
| Nil    | Units selection function *1                     |
| M      | SI unit only *2                                 |
| P      | Units selection function (Initial value psi) *1 |

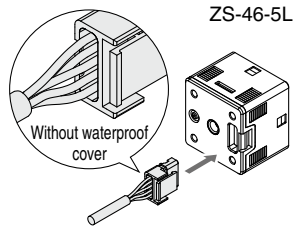
\*1 Under the New Measurement Act, switches with the units selection function are not permitted for use in Japan.

\*2 Fixed unit: kPa, MPa

### ④ Piping specification

| Symbol | Description   |
|--------|---|
| M5     | M5 female thread<br> |

### ⑤ Option 1

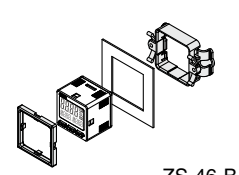
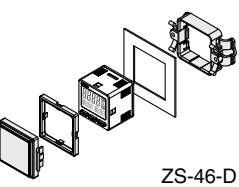
| Symbol | Description   |
|--------|---|
| Nil    | Without lead wire   |
| J      | Lead wire with connector (5-core, 2 m lead wire)<br> |

### ⑦ Option 3

| Symbol | Operation manual *1 | Calibration certificate *1 |
|--------|---------------------|----------------------------|
| Nil    | ○                   | —                          |
| Y      | —                   | —                          |
| K      | ○                   | ○                          |
| T      | —                   | ○                          |

\*1 All texts are in both English and Japanese.

### ⑥ Option 2

| Symbol | Description   |
|--------|---|
| Nil    | None  |
| B      | Panel mount adapter<br>                          |
| D      | Panel mount adapter + Front protection cover<br> |

## Options/Part Nos.

When only optional parts are required, order with the part numbers listed below.

| Description                                  | Part no. | Note   |
|--|----------|--|
| Panel mount adapter                          | ZS-46-B  | —  |
| Panel mount adapter + Front protection cover | ZS-46-D  | —  |
| Lead wire with connector                     | ZS-46-5L | 5-core, 2 m, Non-waterproof (Without waterproof cover) |
| Front protection cover                       | ZS-27-01 | —  |

\* The 25A-series specifications and dimensions are the same as those of the standard model.

For details, refer to the [Web Catalog](#).

2 Outputs + Analog Output (Voltage/Current)



# 3-Screen Display High-Precision Digital Pressure Switch

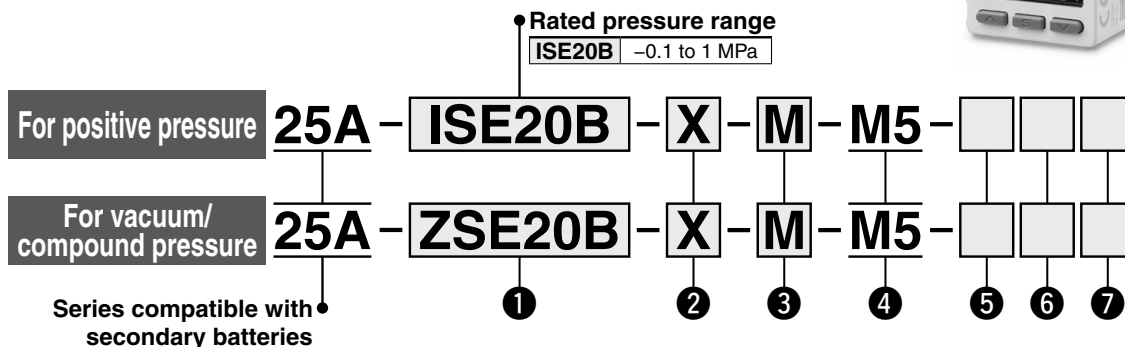
RoHS

IP65

# 25A-ZSE20B(F)/ISE20B Series



## How to Order



### ① Rated pressure range

| Symbol  | Description     |
|---------|-----------------|
| ZSE20B  | 0 to -101 kPa   |
| ZSE20BF | -100 to 100 kPa |

### ② Output specification

| Symbol | Description   |
|--------|---|
| R      | NPN open collector 2 outputs + Analog voltage output *1 |
| S      | NPN open collector 2 outputs + Analog current output *1 |
| T      | PNP open collector 2 outputs + Analog voltage output *1 |
| V      | PNP open collector 2 outputs + Analog current output *1 |
| X      | NPN open collector 2 outputs + Copy function            |
| Y      | PNP open collector 2 outputs + Copy function            |

\*1 Can be switched to auto-shift or copy function

### ③ Unit specification

| Symbol | Description                                     |
|--------|---|
| Nil    | Units selection function *1                     |
| M      | SI unit only *2                                 |
| P      | Units selection function (Initial value psi) *1 |

\*1 Under the New Measurement Act, switches with the units selection function are not permitted for use in Japan.

\*2 Fixed unit: kPa, MPa

### ④ Piping specification

| Symbol | Description      |
|--------|------------------|
| M5     | M5 female thread |

### ⑤ Option 1

| Symbol | Description   |
|--------|---|
| Nil    | Without lead wire   |
| W      | Lead wire with connector (5-core, 2 m lead wire, With waterproof cover) |

### ⑦ Option 3

| Symbol | Operation manual *1 | Calibration certificate *1 |
|--------|---------------------|----------------------------|
| Nil    | ○                   | —                          |
| Y      | —                   | —                          |
| K      | ○                   | ○                          |
| T      | —                   | ○                          |

\*1 All texts are in both English and Japanese.

### ⑥ Option 2

| Symbol | Description                                  |
|--------|--|
| Nil    | None   |
| B      | Panel mount adapter                          |
| D      | Panel mount adapter + Front protection cover |

## Options/Part Nos.

When only optional parts are required, order with the part numbers listed below.

| Description                                  | Part no. | Note  |
|--|----------|---|
| Panel mount adapter                          | ZS-46-B  | —   |
| Panel mount adapter + Front protection cover | ZS-46-D  | —   |
| Lead wire with connector                     | ZS-46-5F | 5-core, 2 m, Waterproof (With waterproof cover) |
| Front protection cover                       | ZS-27-01 | —   |

\* The 25A-series specifications and dimensions are the same as those of the standard model.

For details, refer to the [Web Catalog](#).

2 Outputs + Analog Output (Voltage/Current)



# 3-Screen Display High-Precision Digital Pressure Switch for General Fluids

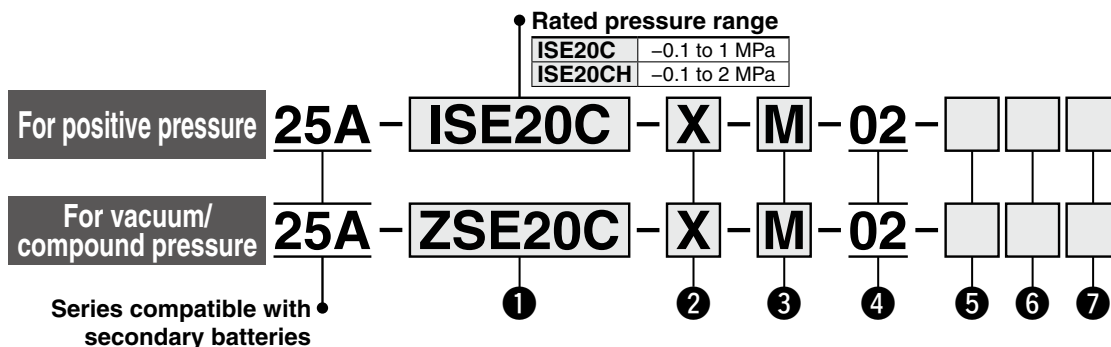
RoHS

IP65

# 25A-ZSE20C(F)/ISE20C(H) Series



## How to Order



### 1 Rated pressure range

|         |                 |
|---------|-----------------|
| ZSE20C  | 0 to -101 kPa   |
| ZSE20CF | -100 to 100 kPa |

### 2 Output specification

| Symbol | Description  |
|--------|--|
| R      | NPN open collector 2 outputs + Analog voltage output*1 |
| S      | NPN open collector 2 outputs + Analog current output*1 |
| T      | PNP open collector 2 outputs + Analog voltage output*1 |
| V      | PNP open collector 2 outputs + Analog current output*1 |
| X      | NPN open collector 2 outputs + Copy function           |
| Y      | PNP open collector 2 outputs + Copy function           |

\*1 Can be switched to auto-shift or copy function

### 3 Unit specification

| Symbol | Description                                    |
|--------|--|
| Nil    | Units selection function*1                     |
| M      | SI unit only*2                                 |
| P      | Units selection function (Initial value psi)*1 |

\*1 Under the New Measurement Act, switches with the units selection function are not permitted for use in Japan.

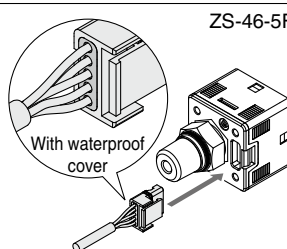
\*2 Fixed unit: kPa, MPa

### 4 Piping specification

| Symbol | Description               |
|--------|---------------------------|
| 02     | R1/4 (M5 female threaded) |

### 5 Option 1

| Symbol | Description   |
|--------|---|
| Nil    | Without lead wire   |
| W      | Lead wire with connector, 5-core (2 m lead wire, With waterproof cover) |



ZS-46-5F

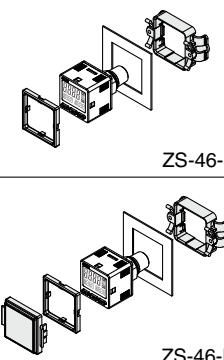
### 7 Option 3

| Symbol | Operation manual*1 | Calibration certificate*1 |
|--------|--------------------|---------------------------|
| Nil    | ○                  | —                         |
| Y      | —                  | —                         |
| K      | ○                  | ○                         |
| T      | —                  | ○                         |

\*1 All texts are in both English and Japanese.

### 6 Option 2

| Symbol | Description                                  |
|--------|--|
| Nil    | None   |
| B      | Panel mount adapter                          |
| D      | Panel mount adapter + Front protection cover |



ZS-46-B  
ZS-46-D

## Options/Part Nos.

When only optional parts are required, order with the part numbers listed below.

| Description                                  | Part no. | Note  |
|--|----------|---|
| Panel mount adapter                          | ZS-46-B  | Rear ported                                     |
| Panel mount adapter + Front protection cover | ZS-46-D  | Rear ported                                     |
| Lead wire with connector                     | ZS-46-5F | 5-core, 2 m, Waterproof (With waterproof cover) |
| Front protection cover                       | ZS-27-01 | Rear ported                                     |

\* The 25A-series specifications and dimensions are the same as those of the standard model.

For details, refer to the [Web Catalog](#).



# 2-Color Display Digital Flow Switch 25A-PF2M7 Series



## How to Order

25A - PF2M7 10 [ ] - C6 - A W - M [ ] [ ]

Series compatible with secondary batteries

Integrated display

1 2 3 4 5 6 7 8



### 1 Rated flow range

|    |                 |    |                 |
|----|-----------------|----|-----------------|
| 01 | 0.01 to 1 L/min | 25 | 0.3 to 25 L/min |
| 02 | 0.02 to 2 L/min | 50 | 0.5 to 50 L/min |
| 05 | 0.05 to 5 L/min | 11 | 1 to 100 L/min  |
| 10 | 0.1 to 10 L/min | 21 | 2 to 200 L/min  |

### 2 Piping entry direction

| Symbol | Piping entry direction | Rated flow range |   |   |    |    |    |     |     |
|--------|------------------------|------------------|---|---|----|----|----|-----|-----|
|        |                        | 1                | 2 | 5 | 10 | 25 | 50 | 100 | 200 |
| Nil    | Straight               | ●                | ● | ● | ●  | ●  | ●  | ●   | ●   |
| L      | Rear ported            | ●                | ● | ● | ●  | ●  | ●  | ●   | ●   |

### 3 Port size

| Symbol | Port size | Rated flow range |   |   |    |    |    |     |     |
|--------|-----------|------------------|---|---|----|----|----|-----|-----|
|        |           | 1                | 2 | 5 | 10 | 25 | 50 | 100 | 200 |
| 01     | Rc1/8     | ●                | ● | ● | ●  | ●  | ●  | —   | —   |
| N1     | NPT1/8    | ●                | ● | ● | ●  | ●  | ●  | —   | —   |
| F1     | G1/8      | ●                | ● | ● | ●  | ●  | ●  | —   | —   |
| 02     | Rc1/4     | —                | — | — | —  | —  | —  | ●   | ●   |
| N2     | NPT1/4    | —                | — | — | —  | —  | —  | ●   | ●   |
| F2     | G1/4      | —                | — | — | —  | —  | —  | ●   | ●   |
| C6     | ø6        | ●                | ● | ● | ●  | ●  | ●  | —   | —   |
| C8     | ø8        | —                | — | — | —  | —  | —  | ●   | ●   |

### Piping variations

| With One-touch fitting | Female thread                 |
|------------------------|-------------------------------|
| <b>C6, C8</b>          | <b>01, 02, N1, N2, F1, F2</b> |
| Straight               | Straight                      |
| Rear ported            | Rear ported                   |

### 4 Output specification

| Symbol | OUT1 | OUT2                                 |
|--------|------|--------------------------------------|
| A      | NPN  | NPN                                  |
| B      | PNP  | PNP                                  |
| C      | NPN  | Analog 1 to 5 V ⇔ Analog 0 to 10 V*1 |
| D      | NPN  | Analog 4 to 20 mA                    |
| E      | PNP  | Analog 1 to 5 V ⇔ Analog 0 to 10 V*1 |
| F      | PNP  | Analog 4 to 20 mA                    |

\*1 1 to 5 V or 0 to 10 V can be selected by pressing the button.  
The default setting is 1 to 5 V.

### 5 Option 1

**W**

Lead wire with connector (2 m)  
+  
Connector cover (Silicone rubber)

ZS-33-F

ZS-33-D +

\* Interchangeable with the existing PFM7 series

### 6 Unit specification

|     |                           |
|-----|---------------------------|
| M   | SI unit only*2            |
| Nil | Unit selection function*3 |

\*2 Fixed unit: Instantaneous flow: L/min  
Accumulated flow: L

\*3 This product is for overseas use only.  
(The SI unit type is provided for use in Japan in accordance with the New Measurement Act.)  
The unit can be changed.  
Instantaneous flow: L/min ⇔ cfm  
Accumulated flow: L ⇔ ft<sup>3</sup>

### 8 Calibration certificate\*4

|     |      |
|-----|------|
| Nil | None |
| A   | Yes  |

\*4 Made to order  
The certificate is in both English and Japanese.

### 7 Option 2

| Nil             | R  | T   |
|-----------------|--|---|
| Without bracket | Bracket (For the type without a flow adjustment valve)<br><b>25A-ZS-33-M</b> | Panel mount adapter (For the type without a flow adjustment valve)<br><b>ZS-33-2J</b> |
|                 | <p>With 2 tapping screws (3 x 6)</p>   | <p>Panel mount adapter<br/>Panel mount adapter B<br/>Panel<br/>Mounting bracket</p>   |
|                 | * Interchangeable with the existing PFM series                               |   |

\* Options are shipped together with the product but do not come assembled.

\* The 25A-series specifications and dimensions are the same as those of the standard model.

For details, refer to the [Web Catalog](#).



# 25A-PF2M7-L Series

## How to Order



**25A - PF2M7 10** - **C6** - **L** **W** - **M**

Series compatible with secondary batteries

Integrated display

1 2 3 4 5 6 7 8

### 1 Rated flow range

|           |                 |           |                 |
|-----------|-----------------|-----------|-----------------|
| <b>01</b> | 0.01 to 1 L/min | <b>25</b> | 0.3 to 25 L/min |
| <b>02</b> | 0.02 to 2 L/min | <b>50</b> | 0.5 to 50 L/min |
| <b>05</b> | 0.05 to 5 L/min | <b>11</b> | 1 to 100 L/min  |
| <b>10</b> | 0.1 to 10 L/min | <b>21</b> | 2 to 200 L/min  |

### 2 Piping entry direction

| Symbol     | Piping entry direction | Rated flow range |   |   |    |    |    |     |     |
|------------|------------------------|------------------|---|---|----|----|----|-----|-----|
|            |                        | 1                | 2 | 5 | 10 | 25 | 50 | 100 | 200 |
| <b>Nil</b> | Straight               | ●                | ● | ● | ●  | ●  | ●  | ●   | ●   |
| <b>L</b>   | Rear ported            | ●                | ● | ● | ●  | ●  | ●  | ●   | ●   |

### 3 Port size

| Symbol    | Port size | Rated flow range |   |   |    |    |    |     |     |
|-----------|-----------|------------------|---|---|----|----|----|-----|-----|
|           |           | 1                | 2 | 5 | 10 | 25 | 50 | 100 | 200 |
| <b>01</b> | Rc1/8     | ●                | ● | ● | ●  | ●  | ●  | —   | —   |
| <b>N1</b> | NPT1/8    | ●                | ● | ● | ●  | ●  | ●  | —   | —   |
| <b>F1</b> | G1/8      | ●                | ● | ● | ●  | ●  | ●  | —   | —   |
| <b>02</b> | Rc1/4     | —                | — | — | —  | —  | —  | ●   | ●   |
| <b>N2</b> | NPT1/4    | —                | — | — | —  | —  | —  | ●   | ●   |
| <b>F2</b> | G1/4      | —                | — | — | —  | —  | —  | ●   | ●   |
| <b>C6</b> | ø6        | ●                | ● | ● | ●  | ●  | ●  | —   | —   |
| <b>C8</b> | ø8        | —                | — | — | —  | —  | —  | ●   | ●   |

### Piping variations

| With One-touch fitting | Female thread                 |
|------------------------|-------------------------------|
| <b>C6, C8</b>          | <b>01, 02, N1, N2, F1, F2</b> |
| Straight               | Straight                      |
| Rear ported            | Rear ported                   |

### 4 Output specification

| Symbol    | OUT1                | OUT2                                    |
|-----------|---------------------|---|
| <b>L</b>  | IO-Link/<br>NPN/PNP | —                                       |
| <b>L2</b> | IO-Link/<br>NPN/PNP | NPN/PNP/External input                  |
| <b>L3</b> | IO-Link/<br>NPN/PNP | Analog 1 to 5 V ⇔<br>Analog 0 to 10 V*1 |
| <b>L4</b> | IO-Link/<br>NPN/PNP | Analog 4 to 20 mA                       |

\*1 1 to 5 V or 0 to 10 V can be selected by pressing the button.  
The default setting is 1 to 5 V.

### 5 Option 1

**W**

Lead wire with connector (2 m)  
+  
Connector cover (Silicone rubber)

**ZS-33-F**  
**ZS-33-D**

\* Interchangeable with the existing PFM7 series

### 6 Unit specification

|            |                           |
|------------|---------------------------|
| <b>M</b>   | SI unit only*2            |
| <b>Nil</b> | Unit selection function*3 |

\*2 Fixed unit: Instantaneous flow: L/min  
Accumulated flow: L

\*3 This product is for overseas use only.  
(The SI unit type is provided for use in Japan in accordance with the New Measurement Act.)  
The unit can be changed.  
Instantaneous flow: L/min ⇔ cfm  
Accumulated flow: L ⇔ ft<sup>3</sup>

### 8 Calibration certificate\*4

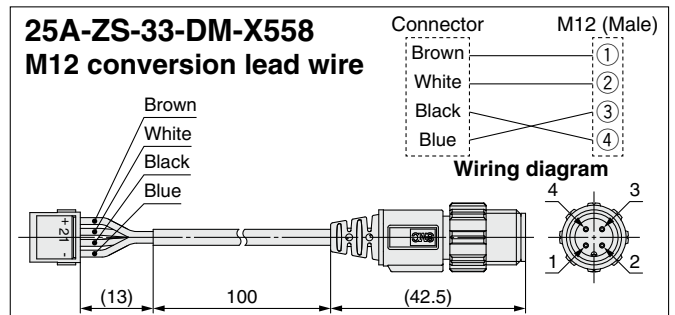
|            |      |
|------------|------|
| <b>Nil</b> | None |
| <b>A</b>   | Yes  |

\*4 Made to order  
The certificate is in both English and Japanese.

### 7 Option 2

| Nil             | R  | T   |
|-----------------|--|---|
|                 | Bracket (For the type without a flow adjustment valve)<br><b>25A-ZS-33-M</b>               | Panel mount adapter (For the type without a flow adjustment valve)<br><b>ZS-33-2J</b> |
| Without bracket | <p>With 2 tapping screws (3 x 6)</p> <p>* Interchangeable with the existing PFM series</p> | <p>Panel mount adapter B</p> <p>Panel</p> <p>Mounting bracket</p>                     |

\* Options are shipped together with the product but do not come assembled.



\* The 25A-series specifications and dimensions are the same as those of the standard model.

For details, refer to the [Web Catalog](#).

# 2-Color Display

# Digital Flow Switch

Integrated display



# 25A-PFM7 Series



## How to Order

Integrated display

25A - PFM7 10 - C6 - A - M - W

Series compatible with secondary batteries

Type  
7 Integrated display

Rated flow range (Flow rate range)

|    |                        |
|----|------------------------|
| 10 | 0.2 to 10 (5) L/min    |
| 25 | 0.5 to 25 (12.5) L/min |
| 50 | 1 to 50 (25) L/min     |
| 11 | 2 to 100 (50) L/min    |

\* ( ): Fluid: CO<sub>2</sub>

Port size

| Symbol | Description                  | Flow rate range |    |    |    |
|--------|------------------------------|-----------------|----|----|----|
|        |                              | 10              | 25 | 50 | 11 |
| 01     | Rc1/8                        | ●               | ●  | ●  | —  |
| 02     | Rc1/4                        | —               | —  | —  | ●  |
| N01    | NPT1/8                       | ●               | ●  | ●  | —  |
| N02    | NPT1/4                       | —               | —  | —  | ●  |
| F01    | G1/8                         | ●               | ●  | ●  | —  |
| F02    | G1/4                         | —               | —  | —  | ●  |
| C6     | ø6 One-touch fitting         | ●               | ●  | ●  | ●  |
| C8     | ø8 (5/16") One-touch fitting | —               | ●  | ●  | ●  |

Piping entry direction

|     |          |
|-----|----------|
| Nil | Straight |
| L   | Bottom   |

Output specifications

|   |   |
|---|---|
| A | 2 NPN outputs                               |
| B | 2 PNP outputs                               |
| C | 1 NPN output + Analog output (1 to 5 V)     |
| D | 1 NPN output + Analog output (4 to 20 mA)   |
| E | 1 PNP output + Analog output (1 to 5 V)     |
| F | 1 PNP output + Analog output (4 to 20 mA)   |
| G | 1 NPN output + External input <sup>*3</sup> |
| H | 1 PNP output + External input <sup>*3</sup> |

<sup>\*3</sup> User can select from accumulated value external reset, auto-shift and auto-shift zero.

Unit specifications

|     |  |
|-----|--|
| Nil | With unit switching function <sup>*2</sup> |
| M   | Fixed SI unit <sup>*1</sup>                |

<sup>\*1</sup> Fixed unit: Instantaneous flow: L/min  
Accumulated flow: L

<sup>\*2</sup> This product is for overseas use only. (The SI unit type is provided for use in Japan in accordance with the New Measurement Act.)

Option 1  
W Lead wire with connector (2 m) + Rubber cover for connector (Silicon rubber)

Calibration certificate

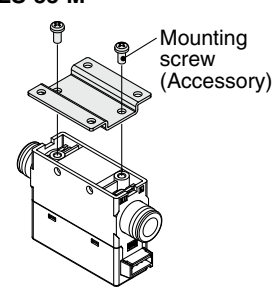
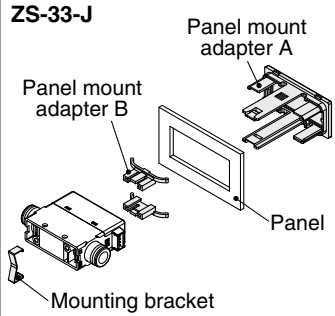
|     |                              |
|-----|------------------------------|
| Nil | None                         |
| A   | With calibration certificate |

<sup>\*</sup> The certificate is written in both English and Japanese. Other languages are available as specials.

Operation manual

|     |  |
|-----|--|
| Nil | With operation manual (Japanese and English) |
| N   | None   |

Option 2

|     |  |
|-----|--|
| Nil | None   |
| R   | Bracket<br>(For the type without a flow adjustment valve)<br><b>25A-ZS-33-M</b><br>         |
| T   | Panel mount adapter<br>(For the type without a flow adjustment valve)<br><b>ZS-33-J</b><br> |

\* The 25A- series specifications and dimensions are the same as those of the standard model.

\* Digital flow switch with flow adjustment valve is not standard product. It can be supplied as Made-to-Order separately.

For details, refer to the [Web Catalog](#).

# 2-Color Display



## Digital Flow Switch Remote sensor unit



# 25A-PFM5 Series



### How to Order

Remote sensor unit **25A - PFM5 10 - C6** - **1** - **W**

Series compatible with secondary batteries

**5** Remote sensor unit

Type

Rated flow range (Flow rate range)

|           |                        |
|-----------|------------------------|
| <b>10</b> | 0.2 to 10 (5) L/min    |
| <b>25</b> | 0.5 to 25 (12.5) L/min |
| <b>50</b> | 1 to 50 (25) L/min     |
| <b>11</b> | 2 to 100 (50) L/min    |

\* ( ): Fluid: CO<sub>2</sub>

Piping entry direction

|            |          |
|------------|----------|
| <b>Nil</b> | Straight |
| <b>L</b>   | Bottom   |

Output specification

| No.      | Description                | Applicable display unit |
|----------|----------------------------|-------------------------|
| <b>1</b> | Analog output (1 to 5 V)   | 25A-PFM30□              |
| <b>2</b> | Analog output (4 to 20 mA) | 25A-PFM31□              |

Calibration certificate

|            |                              |
|------------|------------------------------|
| <b>Nil</b> | None                         |
| <b>A</b>   | With calibration certificate |

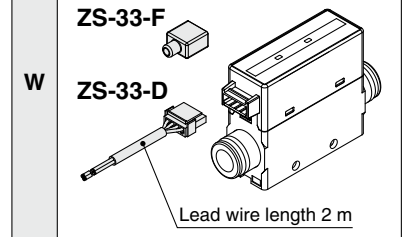
\* The certificate is written in both English and Japanese. Other languages are available as specials.

Operation manual

|            |  |
|------------|--|
| <b>Nil</b> | With operation manual (Japanese and English) |
| <b>N</b>   | None   |

Option 1

With lead wire with connector (2 m) + Rubber cover for connector (silicon rubber)



Option 2

| Nil  | R  | T  |
|------|--|--|
| None | <p>Bracket (For the type without a flow adjustment valve)<br/><b>25A-ZS-33-M</b></p> | <p>Panel mount adapter (For the type without a flow adjustment valve)<br/><b>ZS-33-J</b></p> |

Port size

| Symbol     | Description                  | Flow rate range |    |    |    |
|------------|------------------------------|-----------------|----|----|----|
|            |                              | 10              | 25 | 50 | 11 |
| <b>01</b>  | Rc1/8                        | ●               | ●  | ●  |    |
| <b>02</b>  | Rc1/4                        |                 |    |    | ●  |
| <b>N01</b> | NPT1/8                       | ●               | ●  | ●  |    |
| <b>N02</b> | NPT1/4                       |                 |    |    | ●  |
| <b>F01</b> | G1/8*1                       | ●               | ●  | ●  |    |
| <b>F02</b> | G1/4*1                       |                 |    |    | ●  |
| <b>C6</b>  | ø6 One-touch fitting         | ●               | ●  | ●  | ●  |
| <b>C8</b>  | ø8 (5/16") One-touch fitting |                 | ●  | ●  | ●  |

\*1 ISO 228-1 compliant

Options are shipped together with the product but do not come assembled.

### Piping Variations

|                                     | With One-touch fittings (C6, C8) |            | Female thread (01, 02, N01, N02, F01, F02) |            |
|-------------------------------------|----------------------------------|------------|--|------------|
|                                     | Straight (Nil)                   | Bottom (L) | Straight (Nil)                             | Bottom (L) |
| Without flow adjustment valve (Nil) |                                  |            |  |            |

\* The 25A-series specifications and dimensions are the same as those of the standard model. For details, refer to the [Web Catalog](#).

For 25A-PFM5



RoHS

# Flow Sensor Monitor

# 25A-PFM3 Series



## How to Order

### Output specification

|   |                                   |
|---|-----------------------------------|
| 0 | 2 NPN outputs + 1 to 5 V output   |
| 1 | 2 NPN outputs + 4 to 20 mA output |
| 2 | 2 NPN outputs + External input*1  |
| 3 | 2 PNP outputs + 1 to 5 V output   |
| 4 | 2 PNP outputs + 4 to 20 mA output |
| 5 | 2 PNP outputs + External input*1  |

\*1 User can select from accumulated value external reset, auto-shift and auto-shift zero.

### Operation manual

|     |  |
|-----|--|
| Nil | With operation manual (Japanese and English) |
| N   | None   |

### Calibration certificate

|     |                              |
|-----|------------------------------|
| Nil | None                         |
| A   | With calibration certificate |

\* The certificate is written in both English and Japanese. Other languages are available as specials.

**25A - PFM3 0 0 - M L**

Series compatible with secondary batteries

### Type

|   |                     |
|---|---------------------|
| 3 | Remote display unit |
|---|---------------------|

### Input specification

| Symbol | Content       | Applicable remote type sensor unit |
|--------|---------------|------------------------------------|
| 0      | Voltage input | 25A-PFM5□□-□-1-□                   |
| 1      | Current input | 25A-PFM5□□-□-2-□                   |

### Unit specification

|     |                                |
|-----|--------------------------------|
| Nil | With unit switching function*1 |
| M   | Fixed SI unit*2                |

\*1 Under the New Measurement Act, flow sensor monitors with the unit switching function are not permitted for use in Japan.

\*2 Fixed unit: Instantaneous flow: L/min  
Accumulated flow: L

### Option 1

|     |                               |
|-----|-------------------------------|
| Nil | None                          |
| L   | Power supply/Output connector |

\* The cable does not come connected, but it is shipped together with the product.

### Option 3

|     |                       |
|-----|-----------------------|
| Nil | None                  |
| F   | With sensor connector |

\* The connector does not come connected, but it is shipped together with the product.

### Option 2

|     |  |
|-----|--|
| Nil | None   |
| B   | Panel mount adapter                          |
| D   | Panel mount adapter + Front protective cover |

\* Options are shipped together with the product but do not come assembled.

## Options/Part Nos.

| Description                                  | Part no.  | Note  |
|--|-----------|-------|
| Power supply/Output connector (2 m)          | ZS-28-A   |       |
| Sensor connector                             | ZS-28-C-1 | 1 pc. |
| Panel mount adapter                          | ZS-46-B   |       |
| Panel mount adapter + Front protective cover | ZS-46-D   |       |

\* The 25A- series specifications and dimensions are the same as those of the standard model.

For details, refer to the [Web Catalog](#).

# 2-Color Display



RoHS

## Digital Flow Switch

# 25A-PFMB7 Series



### How to Order

**25A - PFMB7** **501** - **04** - **A** **W** - **M**

Series compatible with secondary batteries

Rated flow range (Flow rate range)

|            |                  |
|------------|------------------|
| <b>501</b> | 5 to 500 L/min   |
| <b>102</b> | 10 to 1000 L/min |
| <b>202</b> | 20 to 2000 L/min |

Thread type

|          |      |
|----------|------|
| Nil      | Rc   |
| <b>N</b> | NPT  |
| <b>F</b> | G *1 |

\*1 ISO 228 compliant

Port size

|           | Port size | Rated flow range |            |            |
|-----------|-----------|------------------|------------|------------|
|           |           | <b>501</b>       | <b>102</b> | <b>202</b> |
| <b>04</b> | 1/2       | ●                | ●          | —          |
| <b>06</b> | 3/4       | —                | —          | ●          |

Output specification

|             | OUT1 | OUT2              | Applicable monitor unit model |
|-------------|------|-------------------|-------------------------------|
| <b>A</b>    | NPN  | NPN               | —                             |
| <b>B</b>    | PNP  | PNP               | —                             |
| <b>C</b>    | NPN  | Analog 1 to 5 V   | PFG300 series                 |
| <b>D</b>    | NPN  | Analog 4 to 20 mA | PFG310 series                 |
| <b>E</b> *1 | PNP  | Analog 1 to 5 V   | PFG300 series                 |
| <b>F</b> *1 | PNP  | Analog 4 to 20 mA | PFG310 series                 |
| <b>G</b> *1 | NPN  | External input *2 | —                             |
| <b>H</b> *1 | PNP  | External input *2 | —                             |

\*1 Made to order

\*2 Accumulated flow value, peak/bottom flow value can be reset by external signal input.

Option 1

**W**

Lead wire with connector (2 m)  
+  
Rubber cover for connector (Silicone rubber)

**ZS-33-F**

**ZS-33-D**

\* When only optional parts are required, refer to Option 1/Part Nos. below.

Option 1/Part Nos.

| Option                         | Part no.       | Qty. | Note           |
|--------------------------------|----------------|------|----------------|
| Lead wire with connector       | <b>ZS-33-D</b> | 1    | Lead wire: 2 m |
| Rubber cover (Silicone rubber) | <b>ZS-33-F</b> | 1    | For connector  |

Calibration certificate \*1

|             |                              |
|-------------|------------------------------|
| Nil         | None                         |
| <b>A</b> *2 | With calibration certificate |

\*1 The certificate is written in both English and Japanese.

\*2 Made to order

Option 2

| Nil        | R            |
|------------|--------------|
| No bracket | With bracket |

\* Options are shipped together with the product but do not come assembled. When only optional parts are required, refer to Option 2/Part Nos. below.

Unit specification

|          |                             |
|----------|-----------------------------|
| <b>M</b> | SI unit only *1             |
| Nil      | Units selection function *2 |

\*1 Fixed unit: Instantaneous flow: L/min  
Accumulated flow: L

\*2 This product is for overseas use only according to the New Measurement Act. (The SI unit type is provided for use in Japan.)

The unit can be changed. Instantaneous flow: L/min ⇔ ft<sup>3</sup>  
Accumulated flow: L ⇔ ft<sup>3</sup>

Option 2/Part Nos.

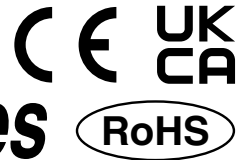
| Option                             | Part no.           | Qty. | Note                          |
|------------------------------------|--------------------|------|-------------------------------|
| Bracket (for PFMB7201)             | <b>25A-ZS-33-M</b> | 1    | With 2 tapping screws (3 x 6) |
| Panel mount adapter (for PFMB7201) | <b>ZS-33-J</b>     | 1    |                               |
| Bracket (for PFMB7501/7102)        | <b>25A-ZS-42-C</b> | 1    | With 4 tapping screws (3 x 6) |
| Bracket (for PFMB7202)             | <b>25A-ZS-42-D</b> | 1    | With 4 tapping screws (3 x 6) |

\* The 25A-series specifications and dimensions are the same as those of the standard model. For details, refer to the [Web Catalog](#).

**Body Ported Type**

**3-Color Display Digital Flow Switch**

**25A-PF3A7□H Series**



**How to Order**

**25A - PF3A 7 03 H - 10 - CS - M**

• Series compatible with secondary batteries

• Type

|   |                    |
|---|--------------------|
| 7 | Integrated display |
|---|--------------------|

• Rated flow range

|    |                    |
|----|--------------------|
| 03 | 30 to 3000 L/min   |
| 06 | 60 to 6000 L/min   |
| 12 | 120 to 12000 L/min |

• Large flow type

• Thread type

|     |     |
|-----|-----|
| Nil | Rc  |
| N   | NPT |
| F*1 | G   |

\*1 ISO 1179-1 compliant

• Port size

| Symbol | Port size | Rated flow range |    |    |
|--------|-----------|------------------|----|----|
|        |           | 03               | 06 | 12 |
| 10     | 1         | ●                | —  | —  |
| 14     | 1 1/2     | —                | ●  | —  |
| 20     | 2         | —                | —  | ●  |

• Calibration certificate\*8

|     |      |
|-----|------|
| Nil | None |
| A*9 | Yes  |

\*8 The certificate is in both English and Japanese.

\*9 Made to order

• Unit specification

|     |                            |
|-----|----------------------------|
| Nil | Units selection function*6 |
| M   | SI units only*7            |

\*6 This product is for overseas use only. (The SI unit type is provided for use in Japan in accordance with the New Measurement Act.)

\*7 Fixed units: Instantaneous flow: L/min  
Accumulated flow: L

• Options

|     |   |
|-----|---|
| Nil | With lead wire with M12 connector (3 m)*5 |
| N   | Without lead wire with M12 connector      |

\*5 Options are shipped together with the product but do not come assembled.

• Output specification

| Symbol | OUT | FUNC*2                                     | Applicable monitor unit model |
|--------|-----|--|-------------------------------|
| CS     | NPN | Analog voltage output*3 ⇔ External input*4 | PFG300 series                 |
| DS     | NPN | Analog current output ⇔ External input*4   | PFG310 series                 |
| ES     | PNP | Analog voltage output*3 ⇔ External input*4 | PFG300 series                 |
| FS     | PNP | Analog current output ⇔ External input*4   | PFG310 series                 |

\*2 Analog output or external input can be selected by pressing the buttons. Analog output is set as default setting.

\*3 1 to 5 V or 0 to 10 V can be selected by pressing the button. The default setting is 1 to 5 V.

\*4 The accumulated value, peak value, and bottom value can be reset.

**Option/Part No.**

When only optional parts are required, order with the part number listed below.

| Part no.        | Option                       | Note        |
|-----------------|------------------------------|-------------|
| 90-ZS-37-A-X258 | Lead wire with M12 connector | Length: 3 m |

\* The 25A- series specifications and dimensions are the same as those of the standard model.

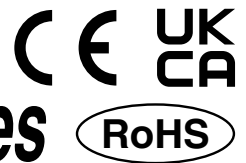
For details, refer to the [Web Catalog](#).



Body Ported Type  IO-Link

3-Color Display Digital Flow Switch

25A-PF3A7□H-L Series



How to Order

25A - PF3A 7 03 H - □ 10 - L □ - M □

Series compatible with secondary batteries

Type

|   |                    |
|---|--------------------|
| 7 | Integrated display |
|---|--------------------|

Rated flow range

|    |                    |
|----|--------------------|
| 03 | 30 to 3000 L/min   |
| 06 | 60 to 6000 L/min   |
| 12 | 120 to 12000 L/min |

Large flow type

Thread type

|     |     |
|-----|-----|
| Nil | Rc  |
| N   | NPT |
| F*1 | G   |

\*1 ISO 1179-1 compliant

Port size

| Symbol | Port size | Rated flow range |    |    |
|--------|-----------|------------------|----|----|
|        |           | 03               | 06 | 12 |
| 10     | 1         | ●                | —  | —  |
| 14     | 1 1/2     | —                | ●  | —  |
| 20     | 2         | —                | —  | ●  |

Calibration certificate\*8

|     |      |
|-----|------|
| Nil | None |
| A*9 | Yes  |

\*8 The certificate is in both English and Japanese.

\*9 Made to order

Unit specification

|     |                            |
|-----|----------------------------|
| Nil | Units selection function*6 |
| M   | SI units only*7            |

\*6 This product is for overseas use only. (The SI unit type is provided for use in Japan in accordance with the New Measurement Act.)

\*7 Fixed units: Instantaneous flow: L/min  
Accumulated flow: L

Options

|     |   |
|-----|---|
| Nil | With lead wire with M12 connector (3 m)*5 |
| N   | Without lead wire with M12 connector      |

\*5 Options are shipped together with the product but do not come assembled.

Output specification

| Symbol | OUT                          | FUNC*2  | Applicable monitor unit model |
|--------|------------------------------|---|-------------------------------|
| L      | IO-Link: Switch output (N/P) | —   | —                             |
| L3     | IO-Link: Switch output (N/P) | Analog voltage output*3<br>⇔ External input*4 | PFG300 series                 |
| L4     | IO-Link: Switch output (N/P) | Analog current output<br>⇔ External input*4   | PFG310 series                 |

\*2 Analog output or external input can be selected by pressing the buttons. Analog output is set as default setting.

Output symbol "L" cannot be used as the FUNC terminal is not connected.

\*3 1 to 5 V or 0 to 10 V can be selected by pressing the button. The default setting is 1 to 5 V.

\*4 The accumulated value, peak value, and bottom value can be reset.

Options/Part Nos.

When only optional parts are required, order with the part numbers listed below.

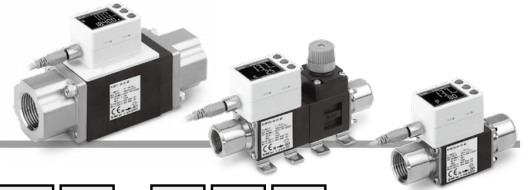
| Part no.        | Option                       | Note        |
|-----------------|------------------------------|-------------|
| 90-ZS-37-A-X258 | Lead wire with M12 connector | Length: 3 m |

\* The 25A- series specifications and dimensions are the same as those of the standard model.

For details, refer to the [Web Catalog](#).



# 25A-PF3W7-Z Series



## How to Order

25A - PF3W 7 04 [ ] - [ ] 03 - AT [ ] - M [ ] [ ] Z

Series compatible with secondary batteries

1 2 3 4 5 6 7 8 9 10

### 1 Type

7 Integrated display

### 2 Rated flow range (Flow range)

| Symbol | Rated flow range |
|--------|------------------|
| 04     | 0.5 to 4 L/min   |
| 20     | 2 to 16 L/min    |
| 40     | 5 to 40 L/min    |
| 11     | 10 to 100 L/min  |

### 3 Flow adjustment valve

| Symbol | With/without flow adjustment valve | Rated flow range |    |    |    |
|--------|------------------------------------|------------------|----|----|----|
|        |                                    | 04               | 20 | 40 | 11 |
| Nil    | None                               | ●                | ●  | ●  | ●  |
| S      | Yes                                | ●                | ●  | ●  | —  |

\* 100 L/min type with flow adjustment valve is not available.

\* The flow adjustment valve of this product is not suitable for applications which require constant adjustment of flow rate.

### 4 Thread type

| Nil | Rc  |
|-----|-----|
| N   | NPT |
| F   | G*1 |

\*1 ISO 228 compliant

### 5 Port size

| Symbol | Port size | Rated flow range |    |    |    |
|--------|-----------|------------------|----|----|----|
|        |           | 04               | 20 | 40 | 11 |
| 03     | 3/8       | ●                | ●  | —  | —  |
| 04     | 1/2       | —                | ●  | ●  | —  |
| 06     | 3/4       | —                | —  | ●  | ●  |
| 10     | 1/1       | —                | —  | —  | ●  |

### 7 Lead wire (Option)

| Nil                                    | N                                   |
|--|-------------------------------------|
| With lead wire with M8 connector (3 m) | Without lead wire with M8 connector |
|  |                                     |

### 6 Output specification/Temperature sensor

| Symbol | OUT1      | OUT2                |                      | Temperature sensor      |
|--------|-----------|---------------------|----------------------|-------------------------|
|        | Flow rate | Flow rate           | Temperature          |                         |
| A      | NPN       | NPN                 | —                    | None                    |
| B      | PNP       | PNP                 | —                    |                         |
| C      | NPN       | Analog 1 to 5 V     | —                    |                         |
| D      | NPN       | Analog 4 to 20 mA   | —                    |                         |
| E      | PNP       | Analog 1 to 5 V     | —                    |                         |
| F      | PNP       | Analog 4 to 20 mA   | —                    |                         |
| G      | NPN       | External input*1    | —                    |                         |
| H      | PNP       | External input*1    | —                    |                         |
| AT     | NPN       | (NPN)               | *2 NPN               | With temperature sensor |
| BT     | PNP       | (PNP)               | *2 PNP               |                         |
| CT     | NPN       | (Analog 1 to 5 V)   | *2 Analog 1 to 5 V   |                         |
| DT     | NPN       | (Analog 4 to 20 mA) | *2 Analog 4 to 20 mA |                         |
| ET     | PNP       | (Analog 1 to 5 V)   | *2 Analog 1 to 5 V   |                         |
| FT     | PNP       | (Analog 4 to 20 mA) | *2 Analog 4 to 20 mA |                         |

\*1 External input: The accumulated value, peak value, and bottom value can be reset.

\*2 For units with temperature sensor, only OUT2 can be set as either temperature output or flow rate output. Setting when shipped is for temperature output.

### 8 Integrated display/Unit specification

| Symbol | Instantaneous flow | Accumulated flow | Temperature |
|--------|--------------------|------------------|-------------|
| M      | L/min              | L                | °C          |
| G      | gal/min            | gal              | °C          |
| F      | gal/min            | gal              | °F          |
| J      | L/min              | L                | °F          |

\* Under the New Measurement Act, units other than SI (symbol "M") cannot be used in Japan.

\* G, F, J: Made to order

Reference: 1 [L/min] ↔ 0.2642 [gal/min]

1 [gal/min] ↔ 3.785 [L/min]

°F = 9/5°C + 32

### 9 Bracket (Option)

| Nil | None         |
|-----|--------------|
| R   | With bracket |
|     |              |

### 10 Calibration certificate (Only for flow rate)

| Nil | None                         |
|-----|------------------------------|
| A   | With calibration certificate |

\* The certificate is written in both Japanese and English.

Units with temperature sensor can only display the flow rate.

## Options/Part Nos.

When only optional parts are required, order with the part numbers listed below.

| Description                 | Part no.    | Qty. | Note  |
|-----------------------------|-------------|------|---|
| Bracket*1                   | 25A-ZS-40-K | 1    | For PF3W704/720/504/520 With 4 tapping screws (3 x 8) |
|                             | 25A-ZS-40-L | 1    | For PF3W740/540 With 4 tapping screws (3 x 8)         |
|                             | 25A-ZS-40-M | 1    | For PF3W711/511 With 4 tapping screws (4 x 10)        |
| Lead wire with M8 connector | 25A-ZS-40-A | 1    | Lead wire length: 3 m                                 |

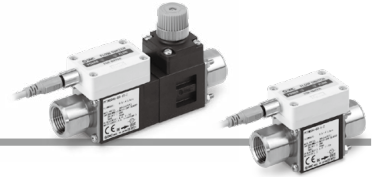
\*1 For units with flow adjustment valve, 2 brackets are required.

\* The 25A-series specifications and dimensions are the same as those of the standard model.

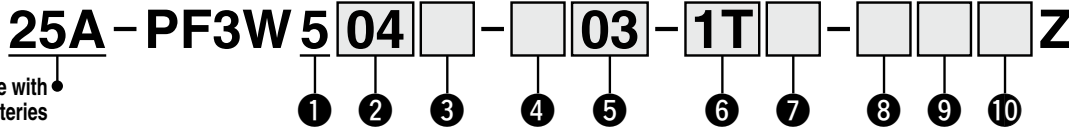
For details, refer to the [Web Catalog](#).

3-Color Display Digital Flow Switch for Water RoHS

# 25A-PF3W5-Z Series



## How to Order



Series compatible with secondary batteries

### 1 Type

|   |                    |
|---|--------------------|
| 5 | Remote sensor unit |
|---|--------------------|

### 2 Rated flow range (Flow range)

| Symbol | Rated flow range |
|--------|------------------|
| 04     | 0.5 to 4 L/min   |
| 20     | 2 to 16 L/min    |
| 40     | 5 to 40 L/min    |
| 11     | 10 to 100 L/min  |

### 3 Flow adjustment valve

| Symbol | With/without flow adjustment valve | Rated flow range |    |    |    |
|--------|------------------------------------|------------------|----|----|----|
|        |                                    | 04               | 20 | 40 | 11 |
| Nil    | None                               | ●                | ●  | ●  | ●  |
| S      | Yes                                | ●                | ●  | ●  | —  |

\* 100 L/min type with flow adjustment valve is not available.

\* The flow adjustment valve of this product is not suitable for applications which require constant adjustment of flow rate.

### 4 Thread type

| Nil | Rc  |
|-----|-----|
| N   | NPT |
| F   | G*1 |

\*1 ISO 228 compliant

### 5 Port size

| Symbol | Port size | Rated flow range |    |    |    |
|--------|-----------|------------------|----|----|----|
|        |           | 04               | 20 | 40 | 11 |
| 03     | 3/8       | ●                | ●  | —  | —  |
| 04     | 1/2       | —                | ●  | ●  | —  |
| 06     | 3/4       | —                | —  | ●  | ●  |
| 10     | 1/1       | —                | —  | —  | ●  |

### 6 Output specification/Temperature sensor

| Symbol | OUT1              | OUT2            | Temperature sensor      |
|--------|-------------------|-----------------|-------------------------|
|        | Flow rate         | Temperature     |                         |
| 1      | Analog 1 to 5 V   | —               | None                    |
| 2      | Analog 4 to 20 mA | —               |                         |
| 1T     | Analog 1 to 5 V   | Analog 1 to 5 V | With temperature sensor |

\* To use in combination with remote monitor (PF3W3 series), select analog output of 1 to 5 V of flow rate (output symbol “-1” or “-1T”).

### 7 Lead wire (Option)

|     |  |
|-----|--|
| Nil | With lead wire with M8 connector (3 m) |
| N   | Without lead wire with M8 connector    |

### 8 Remote sensor unit/Unit printed on label

| Symbol | Instantaneous flow | Temperature |
|--------|--------------------|-------------|
| Nil    | L/min              | °C          |
| G*1    | L/min (gal/min)    | °C/°F       |

\*1 Under the New Measurement Act, units other than SI (symbol “Nil”) cannot be used in Japan.

\* G: Made to order

Reference: 1 [L/min] ↔ 0.2642 [gal/min]  
 1 [gal/min] ↔ 3.785 [L/min]  
 °F = 9/5°C + 32

### 9 Bracket (Option)

|     |              |
|-----|--------------|
| Nil | None         |
| R   | With bracket |

### 10 Calibration certificate (Only for flow rate)

|     |                              |
|-----|------------------------------|
| Nil | None                         |
| A   | With calibration certificate |

\* The certificate is written in both Japanese and English.

Units with temperature sensor can only display the flow rate.

## Options/Part Nos.

When only optional parts are required, order with the part numbers listed below.

| Description                 | Part no.    | Qty. | Note  |
|-----------------------------|-------------|------|---|
| Bracket*1                   | 25A-ZS-40-K | 1    | For PF3W704/720/504/520 With 4 tapping screws (3 x 8) |
|                             | 25A-ZS-40-L | 1    | For PF3W740/540 With 4 tapping screws (3 x 8)         |
|                             | 25A-ZS-40-M | 1    | For PF3W711/511 With 4 tapping screws (4 x 10)        |
| Lead wire with M8 connector | 25A-ZS-40-A | 1    | Lead wire length: 3 m                                 |

\*1 For units with flow adjustment valve, 2 brackets are required.

\* The 25A-series specifications and dimensions are the same as those of the standard model.

For details, refer to the [Web Catalog](#).

# 3-color display

## Digital Flow Switch for Water

# 25A-PF3W Series



### How to Order

#### Remote sensor unit

#### Output specification/ Temperature sensor

| Symbol | OUT1              | OUT2            | Temperature sensor |
|--------|-------------------|-----------------|--------------------|
|        | Flow rate         | Temperature     |                    |
| 1      | Analog 1 to 5 V   | —               | None               |
| 2      | Analog 4 to 20 mA | —               |                    |
| 1T     | Analog 1 to 5 V   | Analog 1 to 5 V |                    |

\* To use in combination with remote monitor (PF3W3 series), select analog output of 1 to 5 V of flow rate (output symbol "1" or "1T").

#### Remote sensor unit/Unit printed on label

| Symbol | Instantaneous flow rate | Temperature |
|--------|-------------------------|-------------|
| Nil    | L/min                   | °C          |
| G*1    | L/min (gal/min)         | °C/°F       |

\*1 Under the New Measurement Act, units other than SI (symbol: "Nil") cannot be used in Japan.  
 \* G: Made to Order  
 Reference: 1 [L/min] ↔ 0.2642 [gal/min]  
 1 [gal/min] ↔ 3.785 [L/min]  
 °F = 9/5°C + 32



Remote sensor unit

Integrated display

Series compatible with secondary batteries



#### Rated flow range (Flow range)

| Symbol | Rated flow range |
|--------|------------------|
| 04     | 0.5 to 4 L/min   |
| 20     | 2 to 16 L/min    |
| 40     | 5 to 40 L/min    |
| 11     | 10 to 100 L/min  |
| 21     | 50 to 250 L/min  |

#### Flow adjustment valve

| Symbol | With/without flow adjustment valve | Rated flow rate |    |    |    |    |
|--------|------------------------------------|-----------------|----|----|----|----|
|        |                                    | 04              | 20 | 40 | 11 | 21 |
| Nil    | None                               | ●               | ●  | ●  | ●  | ●  |
| S      | Yes                                | ●               | ●  | ●  | —  | —  |

\* 100 and 250 L/min types with flow adjustment valves are not available.  
 \* The flow adjustment valve of this product is not suitable for applications which require constant adjustment of flow rate.

\* The 25A-series specifications and dimensions are the same as those of the standard model.  
 For details, refer to the [Web Catalog](#).

\*1 External input: The accumulated value, peak value, and bottom value can be reset.

\*2 For units with temperature sensor, OUT2 can be set as either temperature output or flow rate output. Setting when shipped is for temperature output.

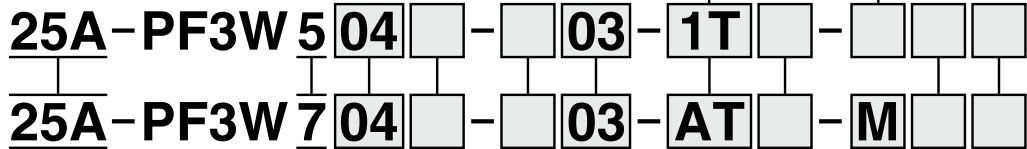
| Symbol | OUT1      | OUT2                |                       | Temperature sensor      |
|--------|-----------|---------------------|-----------------------|-------------------------|
|        | Flow rate | Flow rate           | Temperature           |                         |
| A      | NPN       | NPN                 | —                     | None                    |
| B      | PNP       | PNP                 | —                     |                         |
| C      | NPN       | Analog 1 to 5 V     | —                     |                         |
| D      | NPN       | Analog 4 to 20 mA   | —                     |                         |
| E      | PNP       | Analog 1 to 5 V     | —                     |                         |
| F      | PNP       | Analog 4 to 20 mA   | —                     |                         |
| G      | NPN       | External input*1    | —                     |                         |
| H      | PNP       | External input*1    | —                     |                         |
| AT     | NPN       | (NPN)               | ↔*2 NPN               | With temperature sensor |
| BT     | PNP       | (PNP)               | ↔*2 PNP               |                         |
| CT     | NPN       | (Analog 1 to 5 V)   | ↔*2 Analog 1 to 5 V   |                         |
| DT     | NPN       | (Analog 4 to 20 mA) | ↔*2 Analog 4 to 20 mA |                         |
| ET     | PNP       | (Analog 1 to 5 V)   | ↔*2 Analog 1 to 5 V   |                         |
| FT     | PNP       | (Analog 4 to 20 mA) | ↔*2 Analog 4 to 20 mA |                         |

### Options/Part Nos.

When only optional parts are required, order with the part numbers listed below.

| Description                 | Part no     | Qty. | Note  |
|-----------------------------|-------------|------|---|
| Bracket*1                   | 25A-ZS-40-K | 1    | For PF3W704/720/504/520 With 4 tapping screws (3 x 8) |
|                             | 25A-ZS-40-L | 1    | For PF3W740/540 With 4 tapping screws (3 x 8)         |
|                             | 25A-ZS-40-M | 1    | For PF3W711/511 With 4 tapping screws (4 x 10)        |
| Lead wire with M8 connector | 25A-ZS-40-A | 1    | Lead wire length (3 m)                                |

\*1 For units with flow adjustment valve, 2 brackets are required.



#### Type

|   |                    |
|---|--------------------|
| 5 | Remote sensor unit |
| 7 | Integrated display |

#### Thread type

|     |     |
|-----|-----|
| Nil | Rc  |
| N   | NPT |
| F   | G   |

#### Port size

| Symbol | Port size | Rated flow range |    |    |    |    |
|--------|-----------|------------------|----|----|----|----|
|        |           | 04               | 20 | 40 | 11 | 21 |
| 03     | 3/8       | ●                | ●  | —  | —  | —  |
| 04     | 1/2       | —                | ●  | ●  | —  | —  |
| 06     | 3/4       | —                | —  | ●  | ●  | —  |
| 10     | 1/1       | —                | —  | —  | ●  | —  |
| 12     | 1 1/4     | —                | —  | —  | —  | ●  |
| 14     | 1 1/2     | —                | —  | —  | —  | ●  |

#### Integrated display

#### Output specification/ Temperature sensor

#### Calibration certificate (Only flow sensor)

|     |                              |
|-----|------------------------------|
| Nil | None                         |
| A   | With calibration certificate |

\* The certificate is written in both English and Japanese. Integrated display type with temperature sensor can only display flow rate.

#### Bracket (Option)

| Nil | None    |
|-----|---------|
| R   | Bracket |
|     |         |

\* With bracket is not available for 250 L/min type.

#### Integrated display/Unit specification

| Symbol | Instantaneous flow rate | Accumulated flow | Temperature |
|--------|-------------------------|------------------|-------------|
| M      | L/min                   | L                | °C          |
| G      | gal/min                 | gal              | °C          |
| F      | gal/min                 | gal              | °F          |
| J      | L/min                   | L                | °F          |

\* Under the New Measurement Act, units other than SI (symbol: "M") cannot be used in Japan.

\* G, F, J: Made to Order  
 Reference: 1 [L/min] ↔ 0.2642 [gal/min]  
 1 [gal/min] ↔ 3.785 [L/min]  
 °F = 9/5°C + 32

#### Lead wire (Option)

| Nil                                    | N                                   |
|--|-------------------------------------|
| With lead wire with M8 connector (3 m) | Without lead wire with M8 connector |
|  |                                     |

\* The 25A-series specifications and dimensions are the same as those of the standard model.

For details, refer to the [Web Catalog](#).

# 3-color display

## Digital Flow Switch for PVC Piping

# 25A-PF3W Series



### How to Order

#### Remote sensor unit

#### Output specification

| Symbol | OUT1              |
|--------|-------------------|
| 1      | Analog 1 to 5 V   |
| 2      | Analog 4 to 20 mA |

\* To use in combination with remote monitor (PF3W3 series), select analog output of 1 to 5 V of flow rate (output symbol "-1").



#### Remote sensor unit/Unit printed on label

| Symbol | Instantaneous flow rate |
|--------|-------------------------|
| Nil    | L/min                   |
| G*1    | L/min (gal/min)         |

\*1 Under the New Measurement Act, units other than SI (symbol: "Nil") cannot be used in Japan.

\* G: Made to Order

Reference: 1 [L/min] ↔ 0.2642 [gal/min]  
1 [gal/min] ↔ 3.785 [L/min]

#### Calibration certificate (Only flow sensor)

| Nil | None                         |
|-----|------------------------------|
| A   | With calibration certificate |

\* The certificate is written in both English and Japanese.

#### Remote sensor unit

**25A - PF3W 5 11 - U 25 - 1**

#### Integrated display

**25A - PF3W 7 11 - U 25 - A**

Series compatible with secondary batteries



#### Type

|   |                    |
|---|--------------------|
| 5 | Remote sensor unit |
| 7 | Integrated display |

#### Rated flow range (Flow range)

| Symbol | Rated flow range |
|--------|------------------|
| 11     | 10 to 100 L/min  |
| 21     | 30 to 250 L/min  |

#### Connection type

|   |          |
|---|----------|
| U | PVC pipe |
|---|----------|

#### PVC pipe O.D.

| Symbol | Port size | Rated flow range |    | Pipe O.D.*1 |
|--------|-----------|------------------|----|-------------|
|        |           | 11               | 21 |             |
| 25     | 25A       | ●                | —  | 32 mm       |
| 30     | 30A       | —                | ●  | 38 mm       |

\*1 JIS K 6742 equivalent

#### Integrated display Output specification

| Symbol | OUT1 | OUT2              |
|--------|------|-------------------|
| A      | NPN  | NPN               |
| B      | PNP  | PNP               |
| C      | NPN  | Analog 1 to 5 V   |
| D      | NPN  | Analog 4 to 20 mA |
| E      | PNP  | Analog 1 to 5 V   |
| F      | PNP  | Analog 4 to 20 mA |
| G      | NPN  | External input*1  |
| H      | PNP  | External input*1  |

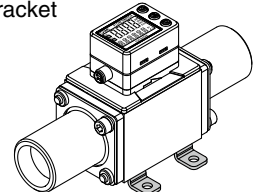
\* The 25A- series specifications and dimensions are the same as those of the standard model.

For details, refer to the [Web Catalog](#).

\*1 External input: The accumulated value, peak value, and bottom value can be reset.

#### Bracket (Option)

| Nil | None    |
|-----|---------|
| R   | Bracket |



\* With bracket is not available for 250 L/min type.

#### Integrated display/Unit specification

| Symbol | Instantaneous flow rate | Accumulated flow |
|--------|-------------------------|------------------|
| M      | L/min                   | L                |
| G      | gal/min                 | gal              |

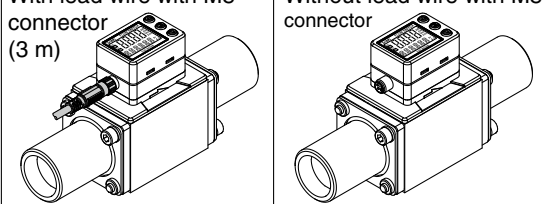
\* Under the New Measurement Act, units other than SI (symbol: "M") cannot be used in Japan.

\* G: Made to Order

Reference: 1 [L/min] ↔ 0.2642 [gal/min]  
1 [gal/min] ↔ 3.785 [L/min]

#### Lead wire

| Nil                                    | N                                   |
|--|-------------------------------------|
| With lead wire with M8 connector (3 m) | Without lead wire with M8 connector |



### Options/Part Nos.

When only optional parts are required, order with the part numbers listed below.

| Description                 | Part no.    | Qty. | Note   |
|-----------------------------|-------------|------|--|
| Bracket                     | 25A-ZS-40-M | 1    | For PF3W711/511 With 4 tapping screws (4 x 10) |
| Lead wire with M8 connector | 25A-ZS-40-A | 1    | Lead wire length (3 m)                         |

\* The 25A- series specifications and dimensions are the same as those of the standard model.

For details, refer to the [Web Catalog](#).

For 25A-PF3W5(-Z)

3-Color Display



Digital Flow Monitor for Water



# 25A-PF3W Series



## How to Order

**25A-PF3W 30 A** - **M V C**

Series compatible with secondary batteries

Type

**3** Remote monitor unit

For remote sensor units, select the analog output 1 to 5 V type.  
Applicable sensors: PF3W5□□-□□-1(T)

### Output specification

| Symbol   | OUT1              | OUT2              |
|----------|-------------------|-------------------|
| <b>A</b> | NPN               | NPN               |
| <b>B</b> | PNP               | PNP               |
| <b>C</b> | NPN               | Analog 1 to 5 V   |
| <b>D</b> | NPN               | Analog 4 to 20 mA |
| <b>E</b> | PNP               | Analog 1 to 5 V   |
| <b>F</b> | PNP               | Analog 4 to 20 mA |
| <b>G</b> | NPN               | External input    |
| <b>H</b> | PNP               | External input    |
| <b>J</b> | Analog 1 to 5 V   | Analog 1 to 5 V   |
| <b>K</b> | Analog 4 to 20 mA | Analog 4 to 20 mA |

In combination with remote sensor unit with temperature sensor, only OUT2 can be set for temperature sensor output.

### Lead wire

|            |   |
|------------|---|
| <b>Nil</b> | With power supply/output connection lead wire (2 m)<br> |
| <b>N</b>   | Without power supply/output connection lead wire        |

The lead wire does not come connected, but it is shipped together with the product.

### Remote monitor unit/Unit specification

| Symbol   | Instantaneous flow | Accumulated flow | Temperature |
|----------|--------------------|------------------|-------------|
| <b>M</b> | L/min              | L                | °C          |
| <b>G</b> | gal/min            | gal              | °C          |
| <b>F</b> | gal/min            | gal              | °F          |
| <b>J</b> | L/min              | L                | °F          |

\* Under the New Measurement Act, units other than SI (symbol "M") cannot be used in Japan.

\* G, F, J: Made to order

Reference: 1 [L/min] ↔ 0.2642 [gal/min]  
1 [gal/min] ↔ 3.785 [L/min]  
°F = 9/5°C + 32

### Calibration certificate (Only flow monitor)

|            |                              |
|------------|------------------------------|
| <b>Nil</b> | None                         |
| <b>A</b>   | With calibration certificate |

\* The certificate is written in both Japanese and English.

### Option 2

|            |                              |
|------------|------------------------------|
| <b>Nil</b> | None                         |
| <b>C</b>   | Sensor connector (1 pc.)<br> |

The connector does not come connected, but it is shipped together with the product.

### Option 1

|            |  |
|------------|--|
| <b>Nil</b> | None   |
| <b>T</b>   | Panel mount adapter<br>                          |
| <b>V</b>   | Front protective cover + Panel mount adapter<br> |

## Options/Part Nos.

When only optional parts are required, order with the part numbers listed below.

| Description                                  | Part no.           | Note                                       |
|--|--------------------|--|
| Panel mount adapter                          | <b>25A-ZS-26-B</b> | With waterproof seal and screws            |
| Front protective cover + Panel mount adapter | <b>25A-ZS-26-C</b> | With waterproof seal and screws            |
| Front protective cover only                  | <b>ZS-26-01</b>    | Separately order panel mount adapter, etc. |
| Power supply/output connection lead wire     | <b>ZS-40-W</b>     | Lead wire length: 2 m                      |
| Sensor connector (e-con)                     | <b>ZS-28-CA-4</b>  | 1 pc.                                      |
| Lead wire with connector for copying         | <b>ZS-40-Y</b>     | Connect up to 10 copy destination units    |

\* The 25A- series specifications and dimensions are the same as those of the standard model. For details, refer to the [Web Catalog](#).



For **Water**  
**Air**  
**Oil**

# Direct Operated 2-Port Solenoid Valve 25A-JSX Series

CE UKCA  
Differs depending on the voltage and electrical entry. For details, refer to table 8 below.

RoHS

## How to Order



25A-JSX **2** **1**-**S** **N** **302** **R**-**5** **G**-**D**-**B**

Series compatible with secondary batteries

### 1 Size

| Symbol | Size |
|--------|------|
| 1      | 10   |
| 2      | 20   |
| 3      | 30   |

### 2 Valve type

| Symbol | Valve type            |
|--------|-----------------------|
| 1      | N.C.  2(OUT)<br>1(IN) |

### 3 Body material

| Symbol | Body material   |
|--------|-----------------|
| S      | Stainless steel |

### 8 Electrical entry

| Symbol | Electrical entry   | Size |    |    | CE/UKCA-compliant |
|--------|--|------|----|----|-------------------|
|        |  | 10   | 20 | 30 |                   |
| G      | Grommet*1  | ●    | ●  | ●  | 24 VDC            |
|        |  | ●    | ●  | ●  | 12 VDC            |
| GS     | Grommet with PCB (With surge voltage suppressor)*2                       | ●    | ●  | ●  | 100 VAC           |
|        |  | ●    | ●  | ●  | 24 VDC            |
|        |  | ●    | ●  | ●  | 12 VDC            |
|        |  | ●    | ●  | ●  | 48 VAC            |
| CS     | Conduit (With surge voltage suppressor)                                  | —    | ●  | ●  | 24 VAC            |
|        |  | —    | ●  | ●  | All voltages      |
| DS     | DIN terminal (With surge voltage suppressor)                             | ●    | ●  | ●  | All voltages      |
| DZ     | DIN terminal with light (With surge voltage suppressor)                  | ●    | ●  | ●  | All voltages      |
| DN     | DIN terminal without connector (With surge voltage suppressor)           | ●    | ●  | ●  | All voltages      |
| WN     | M12 connector/ Without connector cable (With surge voltage suppressor)*3 | ●    | ●  | ●  | All voltages      |

### 4 Seal material

| Symbol | Seal material |
|--------|---------------|
| N      | NBR           |
| F      | FKM           |
| E      | EPDM          |

### 5 Orifice diameter and port size

| Symbol | Orifice diameter [mmø] | Port size | Size |    |    |
|--------|------------------------|-----------|------|----|----|
|        |                        |           | 10   | 20 | 30 |
| 101    | 1.6                    | 1/8       | ●    | —  | —  |
| 201    | 2.4                    | 1/8       | ●    | —  | —  |
| 301    | 3.2                    | 1/8       | —    | ●  | —  |
| 302    |                        | 1/4       | —    | ●  | —  |
| 303    | 3/8                    | —         | ●    | —  |    |
| 402    | 4.0                    | 1/4       | —    | ●  | ●  |
| 403    |                        | 3/8       | —    | ●  | ●  |
| 502    | 5.6                    | 1/4       | —    | ●  | ●  |
| 503    |                        | 3/8       | —    | ●  | ●  |
| 702    | 7.1                    | 1/4       | —    | ●  | ●  |
| 703    |                        | 3/8       | —    | ●  | ●  |

### 6 Thread type

| Symbol | Thread type |
|--------|-------------|
| R      | Rc          |
| N      | NPT         |
| F      | G           |

### 7 Rated voltage

| Symbol | Rated voltage | Symbol | Rated voltage |
|--------|---------------|--------|---------------|
| 1      | 100 VAC       | 7      | 240 VAC       |
| 2      | 200 VAC       | 8      | 48 VAC        |
| 3      | 120 (110) VAC | B      | 24 VAC        |
| 4      | 220 VAC       | J      | 230 VAC       |

### 9 Oil-free option

| Symbol | Option   |
|--------|----------|
| Nil    | None     |
| D      | Oil-free |

### 10 Option

| Symbol | Option                           |
|--------|----------------------------------|
| Nil    | None                             |
| B      | With bracket*1 (Stainless steel) |

### DC

| Symbol | Rated voltage |
|--------|---------------|
| 5      | 24 VDC        |
| 6      | 12 VDC        |

\*1 Refer to the **Web Catalog** for bracket assembly part nos.

\*1 DC voltage only

\*2 Although it is possible to manufacture products of any voltage, only the voltages listed in the table are CE/UKCA compliant.

\*3 The cable for the M12 connector is not included, so be sure to order it separately. In addition, note that the JSX cable part number in the "Option" section of the **Web Catalog** is not compatible with products with secondary battery specifications.

## Flow Rate Characteristics

| Size | Port size | Orifice diameter [mmø] | Flow rate characteristics*1  |      |      |            |               |     | Max. operating pressure differential [MPa] | Model | Weight*2 [g]<br>Stainless steel body*3 |
|------|-----------|------------------------|------------------------------|------|------|------------|---------------|-----|--|-------|--|
|      |           |                        | Air                          |      |      | Water, Oil |               |     |  |       |  |
|      |           |                        | C [dm <sup>3</sup> /(s·bar)] | b    | Cv   | Kv         | Conversion Cv |     |  |       |  |
| 10   | 1/8       | 1.6                    | 0.36                         | 0.58 | 0.08 | 0.07       | 0.08          | 0.9 | 25A-JSX11-S□101                            | 160   |  |
|      |           | 2.4                    | 0.62                         | 0.45 | 0.15 | 0.13       | 0.15          | 0.4 | 25A-JSX11-S□201                            | 160   |  |
| 20   | 1/8       | 3.2                    | 1.35                         | 0.48 | 0.35 | 0.30       | 0.35          | 0.7 | 25A-JSX21-S□301                            | 320   |  |
|      |           | 3.2                    | 1.35                         | 0.48 | 0.35 | 0.30       | 0.35          | 0.7 | 25A-JSX21-S□302                            | 320   |  |
|      |           | 4.0                    | 2.02                         | 0.48 | 0.52 | 0.45       | 0.52          | 0.3 | 25A-JSX21-S□402                            | 320   |  |
|      |           | 5.6                    | 2.62                         | 0.43 | 0.73 | 0.63       | 0.73          | 0.2 | 25A-JSX21-S□502                            | 320   |  |
|      | 3/8       | 7.1                    | 3.15                         | 0.44 | 0.88 | 0.76       | 0.88          | 0.1 | 25A-JSX21-S□702                            | 320   |  |
|      |           | 3.2                    | 1.35                         | 0.48 | 0.35 | 0.30       | 0.35          | 0.7 | 25A-JSX21-S□303                            | 320   |  |
|      |           | 4.0                    | 2.02                         | 0.48 | 0.52 | 0.45       | 0.52          | 0.3 | 25A-JSX21-S□403                            | 320   |  |
|      |           | 5.6                    | 2.62                         | 0.43 | 0.73 | 0.63       | 0.73          | 0.2 | 25A-JSX21-S□503                            | 320   |  |
| 30   | 1/4       | 7.1                    | 3.15                         | 0.44 | 0.88 | 0.76       | 0.88          | 0.1 | 25A-JSX21-S□703                            | 320   |  |
|      |           | 4.0                    | 2.02                         | 0.48 | 0.52 | 0.45       | 0.52          | 1.0 | 25A-JSX31-S□402                            | 450   |  |
|      |           | 5.6                    | 2.62                         | 0.43 | 0.73 | 0.63       | 0.73          | 0.5 | 25A-JSX31-S□502                            | 450   |  |
|      |           | 7.1                    | 3.15                         | 0.44 | 0.88 | 0.76       | 0.88          | 0.2 | 25A-JSX31-S□702                            | 450   |  |
|      | 3/8       | 4.0                    | 2.02                         | 0.48 | 0.52 | 0.45       | 0.52          | 1.0 | 25A-JSX31-S□403                            | 450   |  |
|      |           | 5.6                    | 2.62                         | 0.43 | 0.73 | 0.63       | 0.73          | 0.5 | 25A-JSX31-S□503                            | 450   |  |
|      |           | 7.1                    | 3.15                         | 0.44 | 0.88 | 0.76       | 0.88          | 0.2 | 25A-JSX31-S□703                            | 450   |  |
|      |           | 7.1                    | 3.15                         | 0.44 | 0.88 | 0.76       | 0.88          | 0.2 | 25A-JSX31-S□703                            | 450   |  |

\*1 The flow rate characteristics of this product vary.

\*2 The values were calculated based on the combination of an Rc or NPT thread and a grommet. Add 20 g for the grommet type with PCB, 70 g for the conduit type, 50 g for the DIN terminal type, and 15 g for the M12 connector type.

\*3 Add 30 g for the G thread (port size 3/8) type.

## Applicable Fluid Checklist

| Applicable fluid | Seal material |     |      |
|------------------|---------------|-----|------|
|                  | NBR           | FKM | EPDM |
| Air              | ●             | ●   | ●    |
| Water            | ●             | ●   | ●    |
| Oil              | —             | ●   | —    |

\* The list shows the compatibility between general fluids and the seal materials. Consider the operating environment and application sufficiently before selecting the seal material. Fluid and component compatibility should be checked before use. If something is not clear, please contact SMC.

# Direct Operated 2-Port Solenoid Valve

## 25A-JSX Series

For **Air**

CE UKCA  
Differs depending on the voltage and electrical entry. For details, refer to table 8 below.

RoHS

### How to Order

25A-JSX **2** **1** - **A** **N** **302** **R** - **5** **G** - **D** - **B**

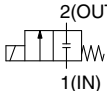
• Series compatible with secondary batteries



#### 1 Size

| Symbol | Size |
|--------|------|
| 2      | 20   |
| 3      | 30   |








#### 2 Valve type

| Symbol | Valve type   |
|--------|--|
| 1      | N.C.  |

#### 3 Body material

| Symbol | Body material |
|--------|---------------|
| A      | Aluminum      |

#### 8 Electrical entry

| Symbol | Electrical entry  | Image   | Size |    | CE/UKCA-compliant |
|--------|---|---|------|----|-------------------|
|        |   |   | 20   | 30 |                   |
| G      | Grommet*1   |    | ●    | ●  | 24 VDC            |
|        |   |   | ●    | ●  | 12 VDC            |
| GS     | Grommet with PCB (With surge voltage suppressor)*2                      |    | ●    | ●  | 100 VAC           |
|        |   |   | ●    | ●  | 24 VDC            |
|        |   |   | ●    | ●  | 12 VDC            |
|        |   |   | ●    | ●  | 48 VAC            |
| CS     | Conduit (With surge voltage suppressor)                                 |   | ●    | ●  | 24 VAC            |
|        |   |   | ●    | ●  | All voltages      |
| DS     | DIN terminal (With surge voltage suppressor)                            |  | ●    | ●  | All voltages      |
|        |   |   | ●    | ●  | All voltages      |
| DZ     | DIN terminal with light (With surge voltage suppressor)                 |  | ●    | ●  | All voltages      |
|        |   |   | ●    | ●  | All voltages      |
| DN     | DIN terminal without connector (With surge voltage suppressor)          |  | ●    | ●  | All voltages      |
|        |   |   | ●    | ●  | All voltages      |
| WN     | M12 connector/Without connector cable (With surge voltage suppressor)*3 |  | ●    | ●  | All voltages      |
|        |   |   | ●    | ●  | All voltages      |

#### 4 Seal material

| Symbol | Seal material |
|--------|---------------|
| N      | NBR           |
| F      | FKM           |

#### 5 Orifice diameter and port size

| Symbol | Orifice diameter [mmø] | Port size | Size |    |
|--------|------------------------|-----------|------|----|
|        |                        |           | 20   | 30 |
| 301    | 3                      | 1/8       | ●    | —  |
| 302    |                        | 1/4       | ●    | —  |
| 402    | 4                      | 1/4       | —    | ●  |
| 403    |                        | 3/8       | —    | ●  |
| 501    | 5                      | 1/8       | ●    | —  |
| 502    |                        | 1/4       | ●    | —  |
| 702    | 7                      | 1/4       | —    | ●  |
| 703    |                        | 3/8       | —    | ●  |

#### 6 Thread type

| Symbol | Thread type |
|--------|-------------|
| R      | Rc          |
| N      | NPT         |
| F      | G           |

#### 7 Rated voltage

| AC     |               |        |               | DC     |               |
|--------|---------------|--------|---------------|--------|---------------|
| Symbol | Rated voltage | Symbol | Rated voltage | Symbol | Rated voltage |
| 1      | 100 VAC       | 7      | 240 VAC       | 5      | 24 VDC        |
| 2      | 200 VAC       | 8      | 48 VAC        | 6      | 12 VDC        |
| 3      | 120 (110) VAC | B      | 24 VAC        |        |               |
| 4      | 220 VAC       | J      | 230 VAC       |        |               |

#### 9 Oil-free option

| Symbol | Option   |
|--------|----------|
| Nil    | None     |
| D      | Oil-free |

#### 10 Option

| Symbol | Option         |
|--------|----------------|
| Nil    | None           |
| B      | With bracket*1 |

\*1 Bracket assembly part nos.  
For size 20: 90-VX021N-12A  
For size 30: 90-VX022N-12A

\*1 DC voltage only

\*2 Although it is possible to manufacture products of any voltage, only the voltages listed in the table are CE/UKCA compliant.

\*3 The cable for the M12 connector is not included, so be sure to order it separately. In addition, note that the JSX cable part number in the "Option" section of the **Web Catalog** is not compatible with products with secondary battery specifications.

## Flow Rate Characteristics

### Aluminum Body Type

| Size | Port size | Orifice diameter [mmø] | Flow rate characteristics*1  |      |      | Max. operating pressure differential [MPa] | Model           | Weight*2 [g] |
|------|-----------|------------------------|------------------------------|------|------|--|-----------------|--------------|
|      |           |                        | C [dm <sup>3</sup> /(s·bar)] | b    | Cv   |  |                 |              |
| 20   | 1/8, 1/4  | 3                      | 1.41                         | 0.54 | 0.35 | 0.7  | 25A-JSX21-A□30□ | 240          |
|      |           | 5                      | 1.66                         | 0.54 | 0.52 | 0.2  | 25A-JSX21-A□50□ | 240          |
| 30   | 1/4, 3/8  | 4                      | 1.57                         | 0.59 | 0.52 | 1.0  | 25A-JSX31-A□40□ | 400          |
|      |           | 7                      | 3.02                         | 0.53 | 0.88 | 0.2  | 25A-JSX31-A□70□ | 400          |

\*1 The flow rate characteristics of this product vary.

\*2 Indicates case of grommet type

Add 20 g for the grommet type with PCB, 70 g for the conduit type, 50 g for the DIN terminal type, and 15 g for the M12 connector type.



For **Water**

**Air**

**Oil**

High Flow/ Power Saving Type

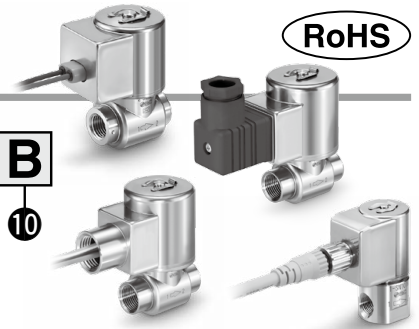
Direct Operated 2-Port Solenoid Valve

**25A-JSX□□U Series**

CE UK CA  
Differs depending on the voltage and electrical entry. For details, refer to table 8 below.

The dimensions are the same as those of the standard JSX series model. Refer to the **Web Catalog** for details.

**How to Order**



RoHS

**25A-JSX** **2** **1** **U** - **S** **N** **403** **R** - **5** **GS** - **D** - **B**

Series compatible with secondary batteries

1 2 3 4 5 6 7 8 9 10  
U High flow type

**1 Size**

| Symbol | Size |
|--------|------|
| 1      | 10   |
| 2      | 20   |
| 3      | 30   |

**2 Valve type**

| Symbol | Valve type            |
|--------|-----------------------|
| 1      | N.C.  2(OUT)<br>1(IN) |

**3 Body material**

| Symbol | Body material   |
|--------|-----------------|
| S      | Stainless steel |

**8 Electrical entry**

| Symbol | Electrical entry  | Size |    |    | CE/UKCA-compliant |
|--------|---|------|----|----|-------------------|
|        |   | 10   | 20 | 30 |                   |
| GS     | Grommet with PCB (With surge voltage suppressor)                        | ●    | ●  | ●  | 24 VDC<br>12 VDC  |
| CS     | Conduit (With surge voltage suppressor)                                 | —    | ●  | ●  |                   |
| DS     | DIN terminal (With surge voltage suppressor)                            | ●    | ●  | ●  |                   |
| DZ     | DIN terminal with light (With surge voltage suppressor)                 | ●    | ●  | ●  |                   |
| DN     | DIN terminal without connector (With surge voltage suppressor)          | ●    | ●  | ●  |                   |
| WN     | M12 connector/Without connector cable*1 (With surge voltage suppressor) | ●    | ●  | ●  |                   |

**4 Seal material**

| Symbol | Seal material |
|--------|---------------|
| N      | NBR           |
| F      | FKM           |
| E      | EPDM          |

**5 Orifice diameter and port size**

| Symbol | Orifice diameter [mmø] | Port size | Size |    |    |
|--------|------------------------|-----------|------|----|----|
|        |                        |           | 10   | 20 | 30 |
| 201    | 2.4                    | 1/8       | ●    | —  | —  |
| 402    | 4.0                    | 1/4       | —    | ●  | —  |
| 403    |                        | 3/8       | —    | ●  | —  |
| 702    | 7.1                    | 1/4       | —    | ●  | ●  |
| 703    |                        | 3/8       | —    | ●  | ●  |

**6 Thread type**

| Symbol | Thread type |
|--------|-------------|
| R      | Rc          |
| N      | NPT         |
| F      | G           |

**7 Rated voltage**

| Symbol | Rated voltage |
|--------|---------------|
| 5      | 24 VDC        |
| 6      | 12 VDC        |

**9 Oil-free option**

| Symbol | Option   |
|--------|----------|
| Nil    | None     |
| D      | Oil-free |

**10 Option**

| Symbol | Option                           |
|--------|----------------------------------|
| Nil    | None                             |
| B      | With bracket*1 (Stainless steel) |

\*1 Refer to the **Web Catalog** for bracket assembly part nos.

\*1 The cable for the M12 connector is not included, so be sure to order it separately. In addition, note that the JSX cable part number in the "Option" section of the **Web Catalog** is not compatible with products with secondary battery specifications.  
\* A grommet type is not available.

**Flow Rate Characteristics**

| Size | Port size | Orifice diameter [mmø] | Flow rate characteristics*1 |      |      |            |               |     | Max. operating pressure differential [MPa] | Model | Weight*2 [g] |
|------|-----------|------------------------|-----------------------------|------|------|------------|---------------|-----|--|-------|--------------|
|      |           |                        | Air                         |      |      | Water, Oil |               |     |  |       |              |
|      |           |                        | C                           | b    | Cv   | Kv         | Conversion Cv |     |  |       |              |
| 10   | 1/8       | 2.4                    | 0.62                        | 0.45 | 0.15 | 0.13       | 0.15          | 0.9 | 25A-JSX11U-S□201                           | 180   |              |
|      |           | 4.0                    | 2.02                        | 0.48 | 0.52 | 0.45       | 0.52          | 1.0 | 25A-JSX21U-S□402                           | 340   |              |
| 20   | 1/4       | 7.1                    | 3.15                        | 0.44 | 0.88 | 0.76       | 0.88          | 0.4 | 25A-JSX21U-S□702                           | 340   |              |
|      |           | 4.0                    | 2.02                        | 0.48 | 0.52 | 0.45       | 0.52          | 1.0 | 25A-JSX21U-S□403                           | 340   |              |
|      | 3/8       | 7.1                    | 3.15                        | 0.44 | 0.88 | 0.76       | 0.88          | 0.4 | 25A-JSX21U-S□703                           | 340   |              |
|      |           | 4.0                    | 2.02                        | 0.48 | 0.52 | 0.45       | 0.52          | 1.0 | 25A-JSX31U-S□702                           | 470   |              |
| 30   | 3/8       | 7.1                    | 3.15                        | 0.44 | 0.88 | 0.76       | 0.88          | 0.8 | 25A-JSX31U-S□702                           | 470   |              |
|      |           | 4.0                    | 2.02                        | 0.48 | 0.52 | 0.45       | 0.52          | 1.0 | 25A-JSX31U-S□703                           | 470   |              |

\*1 The flow rate characteristics of this product vary.  
\*2 The values were calculated based on the combination of an Rc or NPT thread and a grommet with PCB. Add 50 g for the conduit type, 30 g for the DIN terminal type, and -5 g for the M12 connector type.  
\*3 Add 30 g for the G thread (port size 3/8) type.

**Applicable Fluid Checklist**

| Applicable fluid | Seal material |     |      |
|------------------|---------------|-----|------|
|                  | NBR           | FKM | EPDM |
| Air              | ●             | ●   | ●    |
| Water            | ●             | ●   | ●    |
| Oil              | —             | ●   | —    |

\* The list shows the compatibility between general fluids and the seal materials. Consider the operating environment and application sufficiently before selecting the seal material. Fluid and component compatibility should be checked before use. If something is not clear, please contact SMC.

# Direct Operated 2-Port Solenoid Valve

## 25A-VX21/22/23 Series

 For Air Single Unit



### How to Order (Single Unit)



25A - VX2 1 0 A A

Series compatible with secondary batteries

Fluid

0 For air

#### Size/Valve type

| Symbol | Size   | Valve type       | Symbol | Body material | Port size            | Orifice diameter     |   |
|--------|--------|------------------|--------|---------------|----------------------|----------------------|---|
| 1      | Size 1 | Single unit N.C. | A      | Aluminum      | 1/8                  | 2                    |   |
|        |        |                  | B      |               |                      | 3                    |   |
|        |        |                  | C      |               |                      | 5                    |   |
|        |        |                  | D      |               |                      | 1/4                  | 2 |
|        |        |                  | E      |               |                      |                      | 3 |
|        |        |                  | F      | 5             |                      |                      |   |
|        |        |                  | H      | Resin         | ø6 One-touch fitting | 2                    |   |
|        |        |                  | J      |               |                      | 3                    |   |
|        |        |                  | K      |               |                      | 5                    |   |
|        |        |                  | L      |               |                      | ø8 One-touch fitting | 2 |
| M      | 3      |                  |        |               |                      |                      |   |
| N      | 5      |                  |        |               |                      |                      |   |

| Symbol | Size   | Valve type       | Symbol | Body material | Port size            | Orifice diameter      |
|--------|--------|------------------|--------|---------------|----------------------|-----------------------|
| 2      | Size 2 | Single unit N.C. | A      | Aluminum      | 1/4                  | 4                     |
|        |        |                  | B      |               |                      | 7                     |
|        |        |                  | D      |               |                      | 3/8                   |
|        |        |                  | E      | 7             |                      |                       |
|        |        |                  | H      | Resin         | ø8 One-touch fitting |                       |
|        |        |                  | J      |               |                      | 7                     |
|        |        |                  | L      |               |                      | ø10 One-touch fitting |
|        |        |                  | M      | 7             |                      |                       |

| Symbol | Size   | Valve type       | Symbol | Body material         | Port size | Orifice diameter      |
|--------|--------|------------------|--------|-----------------------|-----------|-----------------------|
| 3      | Size 3 | Single unit N.C. | A      | Aluminum              | 1/4       | 5                     |
|        |        |                  | B      |                       |           | 8                     |
|        |        |                  | C      |                       |           | 10                    |
|        |        |                  | D      |                       | 3/8       | 5                     |
|        |        |                  | E      |                       |           | 8                     |
|        |        |                  | F      |                       |           | 10                    |
|        |        |                  | G      | 1/2                   | 10        |                       |
|        |        |                  | H      |                       | Resin     | ø10 One-touch fitting |
|        |        |                  | J      | 8                     |           |                       |
|        |        |                  | K      | 10                    |           |                       |
|        |        |                  | L      | ø12 One-touch fitting |           |                       |
|        |        |                  | M      |                       | 8         |                       |
|        |        |                  | N      |                       | 10        |                       |

For other special options, refer to the standard products.

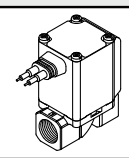
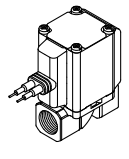
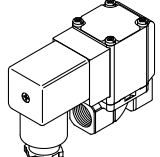
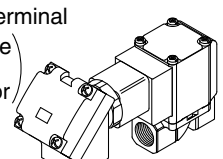
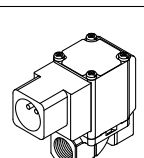
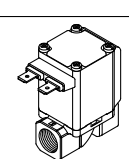
|                             |         |  |
|-----------------------------|---------|--|
| Special voltage             | 24 VAC  | Low concentration ozone resistant (Seal material: FKM)             |
|                             | 48 VAC  |  |
|                             | 220 VAC |  |
|                             | 240 VAC |  |
|                             | 12 VDC  |  |
| DIN terminal with light     |         | With bracket (Aluminum body only)                                  |
| Conduit terminal with light |         | Mounting holes on the bottom side of the body (Aluminum body only) |
| Without DIN connector       |         | Special electrical entry direction                                 |

\* Using the oil-free specification in a low dew point environment may result in the reduced service life of the product. Please monitor the actual device in a low dew point environment in order to determine the actual service life of the product.

#### Common Specifications

|                      |         |
|----------------------|---------|
| Valve type           | N.C.    |
| Seal material        | NBR     |
| Coil insulation type | Class B |
| Thread type          | Rc      |

#### Voltage/Electrical entry

| Symbol | Voltage                               | Electrical entry   |
|--------|---------------------------------------|--|
| A      | 24 VDC                                | Grommet    |
| B      | 100 VAC                               | Grommet (With surge voltage suppressor)           |
| C      | 110 VAC                               |  |
| D      | 200 VAC                               |  |
| E      | 230 VAC                               | DIN terminal (With surge voltage suppressor)      |
| F      | 24 VDC                                |  |
| G      | 24 VDC                                |  |
| H      | 100 VAC                               |  |
| J      | 110 VAC                               |  |
| K      | 200 VAC                               | Conduit terminal (With surge voltage suppressor)  |
| L      | 230 VAC                               |  |
| M      | 24 VDC                                |  |
| N      | 100 VAC                               |  |
| P      | 110 VAC                               | Conduit (With surge voltage suppressor)           |
| Q      | 200 VAC                               |  |
| R      | 230 VAC                               |  |
| S      | 24 VDC                                |  |
| T      | 100 VAC                               |  |
| U      | 110 VAC                               |  |
| V      | 200 VAC                               |  |
| W      | 230 VAC                               |  |
| Y      | 24 VDC                                | Flat terminal                                     |
| Z      | Other voltages and electrical options |  |

\* The 25A- series specifications and dimensions are the same as those of the standard model.

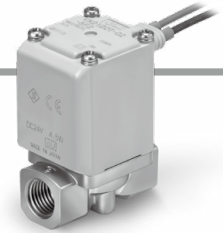
For details, refer to the [Web Catalog](#).

# Direct Operated 2-Port Solenoid Valve

## 25A-VX21/22/23 Series

 For Water Single Unit

 For Medium Vacuum Single Unit



### How to Order (Single Unit)

**25A - VX2 1 4 H A**

Series compatible with secondary batteries

Fluid

|   |                   |
|---|-------------------|
| 2 | For water         |
| 4 | For medium vacuum |

#### Size/Valve type

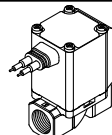
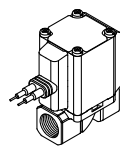
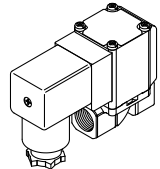
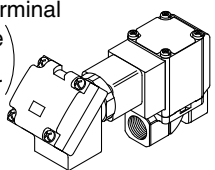
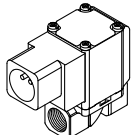
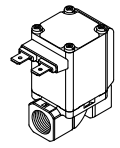
#### Body material/Port size/Orifice diameter

| Symbol | Size   | Valve type       | Symbol | Body material   | Port size | Orifice diameter |    |
|--------|--------|------------------|--------|-----------------|-----------|------------------|----|
| 1      | Size 1 | Single unit N.C. | H      | Stainless steel | 1/8       | 2                |    |
|        |        |                  | J      |                 |           | 3                |    |
|        |        |                  | K      |                 |           | 5                |    |
|        |        |                  | L      |                 | 1/4       | 2                |    |
|        |        |                  | M      |                 |           | 3                |    |
|        |        |                  | N      |                 |           | 5                |    |
| 2      | Size 2 | Single unit N.C. | H      | Stainless steel | 1/4       | 4                |    |
|        |        |                  | J      |                 |           | 7                |    |
|        |        |                  | L      |                 | 3/8       | 4                |    |
|        |        |                  | M      |                 |           | 7                |    |
| 3      | Size 3 | Single unit N.C. | H      | Stainless steel | 1/4       | 5                |    |
|        |        |                  | J      |                 |           | 8                |    |
|        |        |                  | K      |                 |           | 10               |    |
|        |        |                  | L      |                 |           | 5                |    |
|        |        |                  | M      |                 | 3/8       | 8                |    |
|        |        |                  | N      |                 |           | 10               |    |
|        |        |                  | P      |                 |           | 1/2              | 10 |
|        |        |                  |        |                 |           |                  |    |

#### Common Specifications

|                      |                         |
|----------------------|-------------------------|
| Valve type           | N.C.                    |
| Seal material        | NBR (For water)         |
|                      | FKM (For medium vacuum) |
| Coil insulation type | Class B                 |
| Thread type          | Rc                      |

#### Voltage/Electrical entry

| Symbol | Voltage                               | Electrical entry   |
|--------|---------------------------------------|--|
| A      | 24 VDC                                | Grommet    |
| B      | 100 VAC                               | Grommet (With surge voltage suppressor)           |
| C      | 110 VAC                               |  |
| D      | 200 VAC                               |  |
| E      | 230 VAC                               |  |
| F      | 24 VDC                                | DIN terminal (With surge voltage suppressor)      |
| G      | 24 VDC                                |  |
| H      | 100 VAC                               |  |
| J      | 110 VAC                               |  |
| K      | 200 VAC                               |  |
| L      | 230 VAC                               | Conduit terminal (With surge voltage suppressor)  |
| M      | 24 VDC                                |  |
| N      | 100 VAC                               |  |
| P      | 110 VAC                               |  |
| Q      | 200 VAC                               | Conduit (With surge voltage suppressor)           |
| R      | 230 VAC                               |  |
| S      | 24 VDC                                |  |
| T      | 100 VAC                               |  |
| U      | 110 VAC                               |  |
| V      | 200 VAC                               | Flat terminal                                     |
| W      | 230 VAC                               |  |
| Y      | 24 VDC                                |  |
| Z      | Other voltages and electrical options |  |

#### For other special options, refer to the standard products.

|                             |         |  |
|-----------------------------|---------|--|
| Special voltage             | 24 VAC  | Applicable to deionized water (Seal material: FKM)<br>Seal material: EPDM<br>Oil-free<br>G thread<br>NPT thread<br>With bracket<br>Mounting holes on the bottom side of the body<br>Special electrical entry direction |
|                             | 48 VAC  |  |
|                             | 220 VAC |  |
|                             | 240 VAC |  |
|                             | 12 VDC  |  |
| DIN terminal with light     |         |  |
| Conduit terminal with light |         |  |
| Without DIN connector       |         |  |

\* Using the oil-free specification in a low dew point environment may result in the reduced service life of the product. Please monitor the actual device in a low dew point environment in order to determine the actual service life of the product.

\* The 25A- series specifications and dimensions are the same as those of the standard model.

For details, refer to the [Web Catalog](#).

# Pilot Operated 2-Port Solenoid Valve For Air

# 25A-VXD Series



## How to Order

**25A - VXD2 3 0 A A**

Series compatible with secondary batteries

Fluid

0 For Air

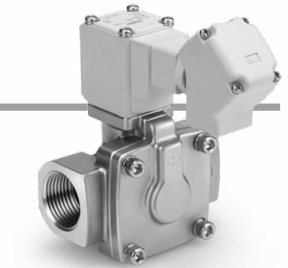
### Size—Valve type

| Symbol | Size | Valve type | Symbol | Body material   | Port size | Orifice diameter |
|--------|------|------------|--------|-----------------|-----------|------------------|
| 3      | 8A   | N.C.       | A      | Aluminum        | 1/4       | 10               |
|        | 10A  | N.O.       |        |                 | 3/8       |                  |
|        | 15A  |            |        |                 | 1/2       |                  |
| 4      | 10A  | N.C.       | J      | Stainless steel | 3/8       | 15               |
|        | 15A  | N.O.       |        |                 | 1/2       |                  |
| 5      | 20A  | N.C.       | M      | Stainless steel | 3/4       | 20               |
|        |      | N.O.       |        |                 |           |                  |
| 6      | 25A  | N.C.       | P      | Stainless steel | 1         | 25               |
|        |      | N.O.       |        |                 |           |                  |

### Body material/Port size/Orifice diameter

### Voltage/Electrical entry

| Symbol | Voltage | Electrical entry                                    |   |
|--------|---------|---|---|
| A      | 24 VDC  | Grommet   |   |
|        | B       | 100 VAC   | Grommet<br>(With surge voltage suppressor)      |
|        |         | 110 VAC   |   |
|        |         | 200 VAC   |   |
|        | C       | 230 VAC   | DIN terminal<br>(With surge voltage suppressor) |
|        | D       | 24 VDC  |   |
| E      | 24 VDC  |   |   |
| F      | 100 VAC | Conduit terminal<br>(With surge voltage suppressor) |   |
|        | 110 VAC |   |   |
|        | 200 VAC |   |   |
| G      | 24 VDC  | Conduit<br>(With surge voltage suppressor)          |   |
|        | 100 VAC |   |   |
|        | 110 VAC |   |   |
| H      | 200 VAC | Flat terminal                                       |   |
|        | 230 VAC |   |   |
|        | 24 VDC  |   |   |
| I      | 100 VAC | Other special options                               |   |
|        | 110 VAC |   |   |
|        | 200 VAC |   |   |



### Common Specifications

|                      |         |
|----------------------|---------|
| Seal material        | NBR     |
| Coil insulation type | Class B |
| Thread type          | Rc      |

All other special options are the same as those of the standard model.

|  |         |
|--|---------|
| Special voltage  | 24 VAC  |
|  | 48 VAC  |
|  | 220 VAC |
|  | 240 VAC |
|  | 12 VDC  |
| DIN terminal with light                                |         |
| Conduit terminal with light                            |         |
| Without DIN connector                                  |         |
| Low concentration ozone resistant (Seal material: FKM) |         |
| Seal material: EPDM                                    |         |
| Oil-free   |         |
| G thread   |         |
| NPT thread   |         |
| With bracket   |         |
| Special electrical entry direction                     |         |

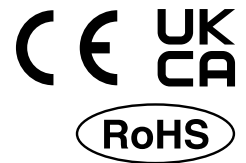
\* Using the oil-free specification in a low dew point environment may result in the reduced service life of the product. Please monitor the actual device in a low dew point environment in order to determine the actual service life of the product.

\* The 25A- series specifications and dimensions are the same as those of the standard model.

For details, refer to the [Web Catalog](#).

# Pilot Operated 2-Port Solenoid Valve For Water

# 25A-VXD Series



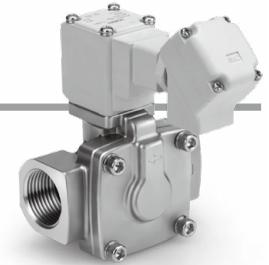
## How to Order

**25A - VXD2 3 2 D A**

Series compatible with secondary batteries

Fluid

2 For Water



### Common Specifications

|                      |         |
|----------------------|---------|
| Seal material        | NBR     |
| Coil insulation type | Class B |
| Thread type          | Rc      |

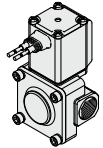
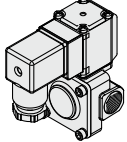
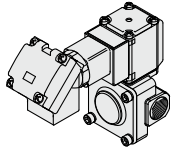
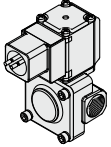

### Size—Valve type

| Symbol | Size | Valve type |
|--------|------|------------|
| 3      | 8A   | N.C.       |
|        | 10A  | N.O.       |
| A      | 15A  |            |
| 4      | 10A  | N.C.       |
|        | B    | 15A        |
| 5      | 20A  | N.C.       |
|        |      | C          |
| 6      | 25A  | N.C.       |
|        |      | D          |

### Body material/Port size/Orifice diameter

| Symbol | Body material   | Port size | Orifice diameter |     |
|--------|-----------------|-----------|------------------|-----|
| D      | Stainless steel | 1/4       | 10               |     |
|        |                 | E         |                  | 3/8 |
|        |                 | F         |                  | 1/2 |
| J      | Stainless steel | 3/8       | 15               |     |
|        |                 | K         |                  | 1/2 |
| M      | Stainless steel | 3/4       | 20               |     |
|        |                 | P         |                  | 1   |

### Voltage/Electrical entry

| Symbol | Voltage                              | Electrical entry   |         |
|--------|--------------------------------------|--|---------|
| A      | 24 VDC                               | Grommet<br>  |         |
|        | B                                    |  | 100 VAC |
|        | C                                    |  | 110 VAC |
|        | D                                    |  | 200 VAC |
|        | E                                    |  | 230 VAC |
|        | F                                    |  | 24 VDC  |
| G      | 24 VDC                               | DIN terminal<br>(With surge voltage suppressor)<br>     |         |
|        | H                                    |  | 100 VAC |
|        | J                                    |  | 110 VAC |
|        | K                                    |  | 200 VAC |
| L      | 230 VAC                              | Conduit terminal<br>(With surge voltage suppressor)<br> |         |
| M      | 24 VDC                               |  |         |
| N      | 100 VAC                              |  |         |
| P      | 110 VAC                              |  |         |
| Q      | 200 VAC                              |  |         |
| R      | 230 VAC                              |  |         |
| S      | 24 VDC                               | Conduit<br>(With surge voltage suppressor)<br>          |         |
|        | T                                    |  | 100 VAC |
|        | U                                    |  | 110 VAC |
|        | V                                    |  | 200 VAC |
| W      | 230 VAC                              | Flat terminal<br>                                       |         |
| Y      | 24 VDC                               |  |         |
| Z      | Other voltages and electrical option |  |         |

All other special options are the same as those of the standard model.

|  |         |
|--|---------|
| Special voltage                                    | 24 VAC  |
|  | 48 VAC  |
|  | 220 VAC |
|  | 240 VAC |
|  | 12 VDC  |
| DIN terminal with light                            |         |
| Conduit terminal with light                        |         |
| Without DIN connector                              |         |
| Applicable to deionized water (Seal material: FKM) |         |
| Seal material: EPDM                                |         |
| Oil-free   |         |
| G thread   |         |
| NPT thread   |         |
| With bracket                                       |         |
| Special electrical entry direction                 |         |

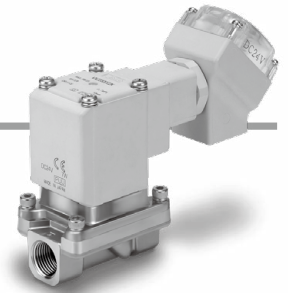
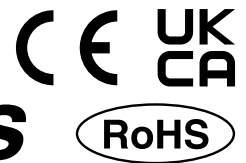
\* Using the oil-free specification in a low dew point environment may result in the reduced service life of the product. Please monitor the actual device in a low dew point environment in order to determine the actual service life of the product.

\* The 25A- series specifications and dimensions are the same as those of the standard model.

For details, refer to the [Web Catalog](#).

# Zero Differential Pressure Type Pilot Operated 2-Port Solenoid Valve/For Air

# 25A-VXZ Series



## How to Order (Single Unit)

**25A - VXZ2 3 0 A A**

Series compatible with secondary batteries

Fluid

0 For Air

### Common Specifications

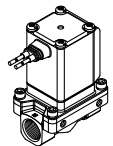
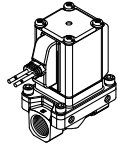
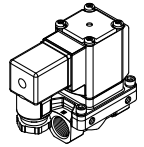
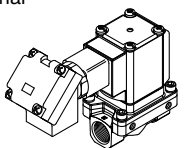
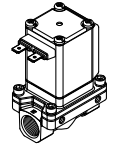
|                      |         |
|----------------------|---------|
| Seal material        | NBR     |
| Coil insulation type | Class B |
| Thread type          | Rc      |

### Size/Valve type

| Symbol   | Body size | Valve type | Symbol   | Body material   | Port size | Orifice diameter |
|----------|-----------|------------|----------|-----------------|-----------|------------------|
| <b>3</b> | 10A       | N.C.       | <b>A</b> | Aluminum        | 1/4       | 10               |
| <b>A</b> |           | N.O.       | <b>B</b> |                 | 3/8       |                  |
| <b>4</b> | 15A       | N.C.       | <b>G</b> | Stainless steel | 1/2       | 15               |
| <b>B</b> |           | N.O.       |          |                 |           |                  |
| <b>5</b> | 20A       | N.C.       | <b>J</b> | Stainless steel | 3/4       | 20               |
| <b>C</b> |           | N.O.       |          |                 |           |                  |
| <b>6</b> | 25A       | N.C.       | <b>L</b> | Stainless steel | 1         | 25               |
| <b>D</b> |           | N.O.       |          |                 |           |                  |

### Body material/Port size/Orifice diameter

### Voltage/Electrical entry

| Symbol   | Voltage        | Electrical entry   |
|----------|----------------|--|
| <b>A</b> | 24 VDC         | Grommet    |
| <b>B</b> | 100 VAC        | Grommet (With surge voltage suppressor)           |
| <b>C</b> | 110 VAC        |  |
| <b>D</b> | 200 VAC        |  |
| <b>E</b> | 230 VAC        |  |
| <b>F</b> | 24 VDC         | DIN terminal (With surge voltage suppressor)      |
| <b>G</b> | 24 VDC         |  |
| <b>H</b> | 100 VAC        |  |
| <b>J</b> | 110 VAC        |  |
| <b>K</b> | 200 VAC        |  |
| <b>L</b> | 230 VAC        | Conduit terminal (With surge voltage suppressor)  |
| <b>M</b> | 24 VDC         |  |
| <b>N</b> | 100 VAC        |  |
| <b>P</b> | 110 VAC        |  |
| <b>Q</b> | 200 VAC        |  |
| <b>R</b> | 230 VAC        |  |
| <b>S</b> | 24 VDC         |  |
| <b>T</b> | 100 VAC        |  |
| <b>U</b> | 110 VAC        |  |
| <b>V</b> | 200 VAC        |  |
| <b>W</b> | 230 VAC        |  |
| <b>Y</b> | 24 VDC         | Flat terminal                                     |
| <b>Z</b> | Other voltages |  |

All other special options are the same as those of the standard model.

|  |         |
|--|---------|
| Special voltage  | 24 VAC  |
|  | 48 VAC  |
|  | 220 VAC |
|  | 240 VAC |
|  | 12 VDC  |
| DIN terminal with light                                |         |
| Conduit terminal with light                            |         |
| Without DIN connector                                  |         |
| Low concentration ozone resistant (Seal material: FKM) |         |
| Seal material: EPDM                                    |         |
| Oil-free   |         |
| G thread   |         |
| NPT thread   |         |
| With bracket (Standard for resin body)                 |         |
| Special electrical entry direction                     |         |

\* Using the oil-free specification in a low dew point environment may result in the reduced service life of the product. Please monitor the actual device in a low dew point environment in order to determine the actual service life of the product.

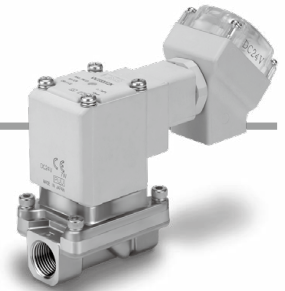
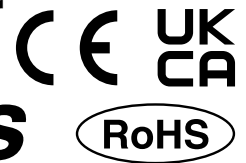
\* The 25A- series specifications and dimensions are the same as those of the standard model.

For details, refer to the [Web Catalog](#).



# Zero Differential Pressure Type Pilot Operated 2-Port Solenoid Valve/For Water

# 25A-VXZ Series



## How to Order (Single Unit)

**25A - VXZ2 3 2 C A**

Series compatible with secondary batteries

Fluid

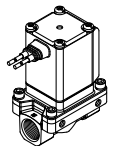
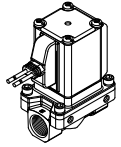
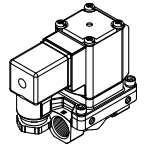
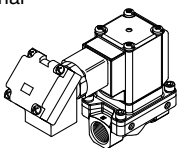
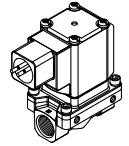
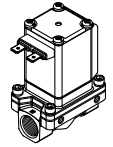
2 For Water

### Size/Valve type

| Symbol   | Body size | Valve type | Symbol   | Body material   | Port size | Orifice diameter |
|----------|-----------|------------|----------|-----------------|-----------|------------------|
| <b>3</b> | 10A       | N.C.       | <b>C</b> | Stainless steel | 1/4       | 10               |
| <b>A</b> |           | N.O.       | <b>D</b> |                 | 3/8       |                  |
| <b>4</b> | 15A       | N.C.       | <b>G</b> | Stainless steel | 1/2       | 15               |
| <b>B</b> |           | N.O.       |          |                 |           |                  |
| <b>5</b> | 20A       | N.C.       | <b>J</b> | Stainless steel | 3/4       | 20               |
| <b>C</b> |           | N.O.       |          |                 |           |                  |
| <b>6</b> | 25A       | N.C.       | <b>L</b> | Stainless steel | 1         | 25               |
| <b>D</b> |           | N.O.       |          |                 |           |                  |

### Body material/Port size/Orifice diameter

### Voltage/Electrical entry

| Symbol   | Voltage        | Electrical entry   |
|----------|----------------|--|
| <b>A</b> | 24 VDC         | Grommet    |
| <b>B</b> | 100 VAC        | Grommet (With surge voltage suppressor)           |
| <b>C</b> | 110 VAC        |  |
| <b>D</b> | 200 VAC        |  |
| <b>E</b> | 230 VAC        |  |
| <b>F</b> | 24 VDC         | DIN terminal (With surge voltage suppressor)      |
| <b>G</b> | 24 VDC         |  |
| <b>H</b> | 100 VAC        |  |
| <b>J</b> | 110 VAC        |  |
| <b>K</b> | 200 VAC        | Conduit terminal (With surge voltage suppressor)  |
| <b>L</b> | 230 VAC        |  |
| <b>M</b> | 24 VDC         |  |
| <b>N</b> | 100 VAC        |  |
| <b>P</b> | 110 VAC        | Conduit (With surge voltage suppressor)           |
| <b>Q</b> | 200 VAC        |  |
| <b>R</b> | 230 VAC        |  |
| <b>S</b> | 24 VDC         |  |
| <b>T</b> | 100 VAC        | Flat terminal                                     |
| <b>U</b> | 110 VAC        |  |
| <b>V</b> | 200 VAC        |  |
| <b>W</b> | 230 VAC        |  |
| <b>Y</b> | 24 VDC         |  |
| <b>Z</b> | Other voltages |  |

All other special options are the same as those of the standard model.

|  |         |
|--|---------|
| Special voltage                                    | 24 VAC  |
|  | 48 VAC  |
|  | 220 VAC |
|  | 240 VAC |
|  | 12 VDC  |
| DIN terminal with light                            |         |
| Conduit terminal with light                        |         |
| Without DIN connector                              |         |
| Applicable to deionized water (Seal material: FKM) |         |
| Seal material: EPDM                                |         |
| Oil-free   |         |
| G thread   |         |
| NPT thread   |         |
| With bracket                                       |         |
| Special electrical entry direction                 |         |

\* Using the oil-free specification in a low dew point environment may result in the reduced service life of the product. Please monitor the actual device in a low dew point environment in order to determine the actual service life of the product.

\* The 25A- series specifications and dimensions are the same as those of the standard model.

For details, refer to the [Web Catalog](#).



# Diaphragm Valve for Ultra High Purity Air Operated Type

RoHS

# AZ3542 & 4542 □ 25A Series

- Suitable for UHP gas supply line
- Body material: 316L SS
- Pneumatically actuated normally closed



## How to Order

AZ **3** **542 S** **2P** **MV4** **MV4** **25A**

(Inlet) (Outlet)

### Size

| Code | Cv   |
|------|------|
| 3    | 0.29 |
| 4    | 0.5  |

### Model

| Code | Status                 | Maximum operating pressure |
|------|------------------------|----------------------------|
| 542  | Normally closed (N.C.) | 125 psig (0.9 MPa)         |

### Material

| Code | Body material |
|------|---------------|
| S    | 316L SS       |

### Ports

| Code | Ports   | Connection |
|------|---------|------------|
| 2P   | 2 ports | Machined   |
| 2PW  |         | Welded     |

- Series compatible with secondary batteries

### Connections

| Code | Connections                   | Size Port | AZ3 |     | AZ4 |     |
|------|-------------------------------|-----------|-----|-----|-----|-----|
|      |                               |           | 2P  | 2PW | 2P  | 2PW |
| MV4  | 1/4 inch face seal (Male) *1) |           | ●   | ●   | ●   | ●   |
| FV4  | 1/4 inch face seal (Female)   |           |     | ●   |     | ●   |
| TW4  | 1/4 inch tube weld            |           | ●   | ●   |     |     |
| MV6  | 3/8 inch face seal (Male) *1) |           |     |     | ●   | ●   |
| FV6  | 3/8 inch face seal (Female)   |           |     |     |     | ●   |
| TW6  | 3/8 inch tube weld            |           |     |     | ●   | ●   |
| TW8  | 1/2 inch tube weld            |           |     |     | ●   |     |

●: Only available with the same type fittings inlet and outlet.

\* 1) Fixed fitting (no rotating nut)

## Specifications

| Operating Parameters | AZ3542 □ 25A | AZ4542 □ 25A |
|----------------------|--------------|--------------|
| Weight               | 0.26 kg *1)  |              |

\*1) Weight for AZ3542S2PMV4MV4 including individual boxed weight. It may vary depending on connections or options.

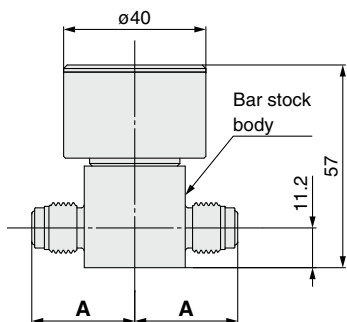
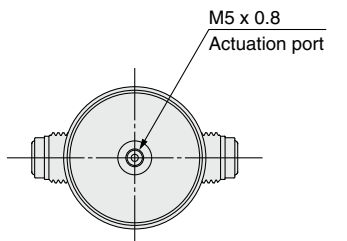
\* Some parts have sizes and shapes that are different from the standard products.

For details, refer to the [Web Catalog](#).

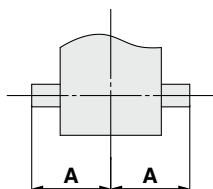
## Dimensions

### AZ3542 & 4542

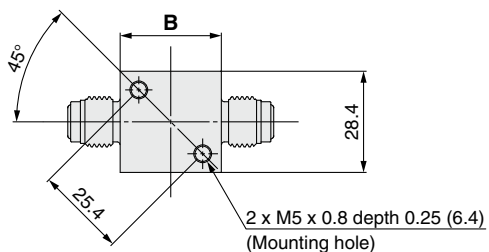
Ports: 2P (Machined)



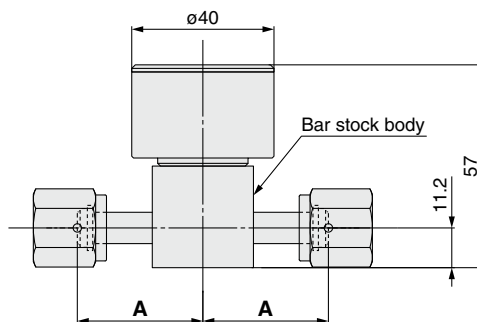
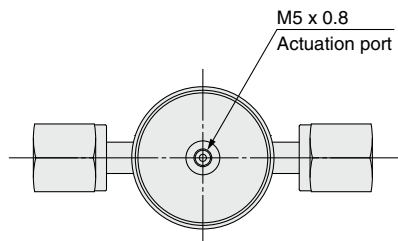
Connections: MV □



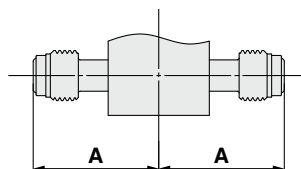
Connections: TW □



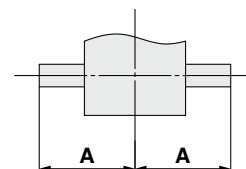
Ports: 2PW (Welded)



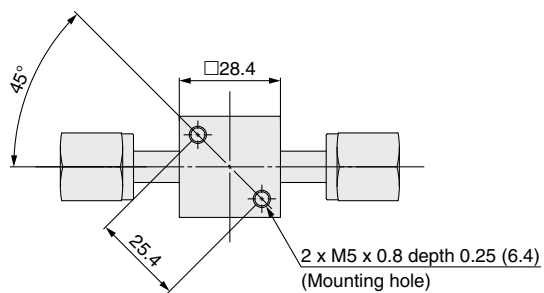
Connections: FV □



Connections: MV □



Connections: TW □



| Ports            | Connections | A            | B               |
|------------------|-------------|--------------|-----------------|
| 2P<br>(Machined) | MV4         | 1.14 (29.0)  | 1.12 sq. (28.4) |
|                  | TW4         | 0.875 (22.2) |                 |
|                  | MV6         | 1.5 (38.1)   | 1.48 sq. (37.6) |
|                  | TW6         | 0.875 (22.2) | 1.12 sq. (28.4) |
|                  | TW8         | 1.125 (28.6) |                 |

| Ports           | Connections | A           |
|-----------------|-------------|-------------|
| 2PW<br>(Welded) | MV4         | 1.39 (35.3) |
|                 | FV4         |             |
|                 | TW4         | 1.06 (26.9) |
|                 | MV6         | 1.93 (49.0) |
|                 | FV6         |             |
|                 | TW6         |             |

# Diaphragm Valves for General Applications Air Operated Type

RoHS

## AK3542 & 4542 25A Series

- Body material: 316 SS
- Normally closed



### How to Order

AK **3** 542 S 2P **4T** **4T** 25A

(Inlet) (Outlet)

#### Size

| Code | Cv   |
|------|------|
| 3    | 0.29 |
| 4    | 0.5  |

#### Model

| Code | Status                 | Maximum operating pressure |
|------|------------------------|----------------------------|
| 542  | Normally closed (N.C.) | 125 psig (0.9 MPa)         |

#### Material

| Code | Body material |
|------|---------------|
| S    | 316 SS        |

#### Ports

| Code | Ports   |
|------|---------|
| 2P   | 2 ports |

- Series compatible with secondary batteries

#### Connections

| Code | Connections          | AK3 | AK4 |
|------|----------------------|-----|-----|
| 4T   | 1/4 inch compression | ●   | —   |
| 4BR  | Rc 1/4               |     |     |
| 4BRN | R 1/4                |     |     |
| 4    | NPT 1/4 female       |     |     |
| 4N   | NPT 1/4 male         | —   | ●   |
| 6T   | 3/8 inch compression |     |     |
| 6BR  | Rc 3/8               |     |     |
| 6BRN | R 3/8                |     |     |
| 6    | NPT 3/8 female       |     |     |
| 6N   | NPT 3/8 male         |     |     |

Note) Only available with same type fittings inlet and outlet.

\* Specifications and dimensions are the same as those of the standard model.

For details, refer to the [Web Catalog](#).

### ● Copper (Cu) and zinc (Zn) free\*1

\*1 Excludes motors, cables, controllers/drivers

### ● Compatible with dew points as low as $-70^{\circ}\text{C}$

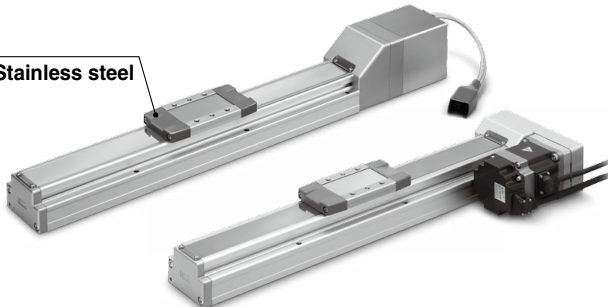
Uses grease compatible with low dew points

## High Rigidity and High Precision Slider Type 25A-LEKFS

Battery-less Absolute (Step Motor 24 VDC) **p. 298-3**

#### Bolts

Material: **Stainless steel**



AC Servo Motor **p. 298-7, 298-8**

Motorless Type **p. 298-9**

|   | Size |    |    |    | High performance |
|---|------|----|----|----|------------------|
|   | 16   | 25 | 32 | 40 |                  |
| Battery-less absolute (Step motor 24 VDC) | ●    | ●  | ●  | ●  | ●                |
| AC servo motor                            |      | ●  | ●  | ●  |                  |
| Motorless                                 |      | ●  | ●  | ●  |                  |

\* Copper and zinc materials are used for the motors, cables, controllers/drivers, and auto switch magnets.

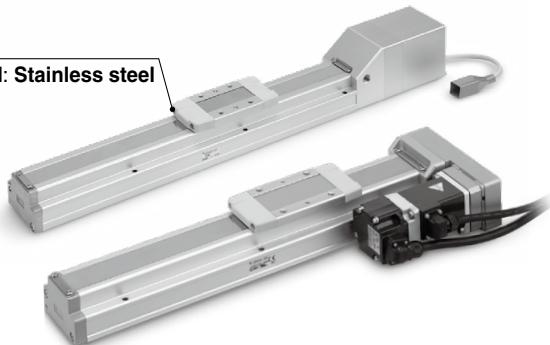
## Slider Type Ball Screw Drive/25A-LEFS

Battery-less Absolute (Step Motor 24 VDC) **p. 298-10**

Incremental (Step Motor 24 VDC) Incremental (Servo Motor 24 VDC) **p. 299**

#### Bolts

Material: **Stainless steel**



AC Servo Motor **p. 303, 304**

Motorless Type **p. 304-1**

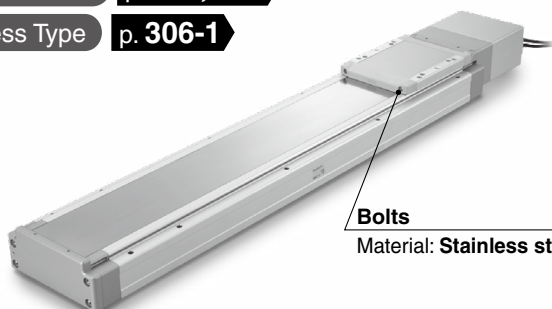
|   | Size |    |    |    | High performance |
|---|------|----|----|----|------------------|
|   | 16   | 25 | 32 | 40 |                  |
| Battery-less absolute (Step motor 24 VDC) | ●    | ●  | ●  | ●  | ●                |
| Incremental (Step motor 24 VDC)           | ●    | ●  | ●  | ●  | ●                |
| Incremental (Servo motor 24 VDC)          | ●    | ●  |    |    |                  |
| AC servo motor                            |      | ●  | ●  | ●  |                  |
| Motorless                                 |      | ●  | ●  | ●  |                  |

\* Copper and zinc materials are used for the motors, cables, controllers/drivers, and auto switch magnets.

## High Rigidity Slider Type Ball Screw Drive/25A-LEJS

AC Servo Motor **p. 305, 306**

Motorless Type **p. 306-1**



#### Bolts

Material: **Stainless steel**

|                | Size |    |
|----------------|------|----|
|                | 40   | 63 |
| AC servo motor | ●    | ●  |
| Motorless      | ●    | ●  |

\* Copper and zinc materials are used for the motors, cables, controllers/drivers, and auto switch magnets.

### Rod Type/25A-LEY

Battery-less Absolute (Step Motor 24 VDC) **p. 306-2**

Incremental (Step Motor 24 VDC) **p. 307**

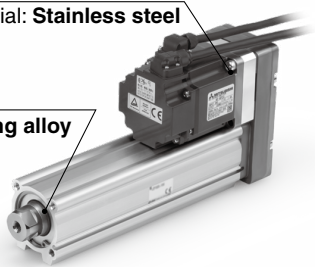
Incremental (Servo Motor 24 VDC)



AC Servo Motor **p. 311, 313**

**Bolts**  
Material: **Stainless steel**

**Bushing**  
Material: **Steel bearing alloy**



|   | Size |    |    |    | High performance |
|---|------|----|----|----|------------------|
|   | 16   | 25 | 32 | 40 |                  |
| Battery-less absolute (Step motor 24 VDC) | ●    | ●  | ●  | ●  | ●                |
| Incremental (Step motor 24 VDC)           | ●    | ●  | ●  | ●  | ●                |
| Incremental (Servo motor 24 VDC)          | ●    | ●  |    |    |                  |
| AC servo motor                            |      | ●  | ●  |    |                  |
| Motorless                                 |      | ●  | ●  |    |                  |

\* Copper and zinc materials are used for the motors, cables, controllers/drivers.

### Guide Rod Type/25A-LEYG

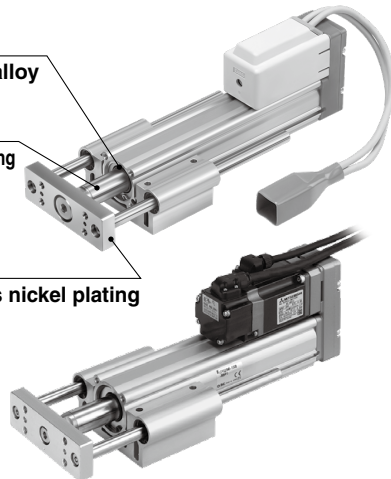
Battery-less Absolute (Step Motor 24 VDC) **p. 314-4**

Incremental (Step Motor 24 VDC) **Incremental (Servo Motor 24 VDC) p. 314-2**

**Bushing (ø50 to ø100)**  
Material: **Steel bearing alloy**

**Piston rod**  
Surface treatment: **Hard chrome plating**

**Plate**  
Surface treatment: **Electroless nickel plating**



AC Servo Motor **p. 314-6, 314-8**

Motorless Type **p. 314-10**

|   | Size |    |    |    |
|---|------|----|----|----|
|   | 16   | 25 | 32 | 40 |
| Battery-less absolute (Step motor 24 VDC) | ●    | ●  | ●  | ●  |
| Incremental (Step motor 24 VDC)           | ●    | ●  | ●  | ●  |
| Incremental (Servo motor 24 VDC)          | ●    | ●  |    |    |
| AC servo motor                            |      | ●  | ●  |    |
| Motorless                                 |      | ●  | ●  |    |

\* Copper and zinc materials are used for the motors, cables, controllers/drivers.



Battery-less Absolute (Step Motor 24 VDC)

# High Rigidity and High Precision

## Slider Type Secondary Battery Compatible 25A-LEKFS Series 25A-LEKFS16, 25, 32, 40



For details, refer to the Web Catalog.



### How to Order

**25A-LEKFS** 32   E A - 300   - R1 CD17T

Series compatible with secondary batteries

① ② ③ ④ ⑤ ⑥ ⑦ ⑧

#### ① Size

|    |
|----|
| 16 |
| 25 |
| 32 |
| 40 |

#### ② Motor mounting position

|     |                     |
|-----|---------------------|
| Nil | In-line             |
| R   | Right side parallel |
| L   | Left side parallel  |

#### ③ Motor type

|   |   |
|---|---|
| E | Battery-less absolute (Step motor 24 VDC) |
|---|---|

#### ④ Lead [mm]

| Symbol | 25A-LEKFS16 | 25A-LEKFS25 | 25A-LEKFS32 | 25A-LEKFS40 |
|--------|-------------|-------------|-------------|-------------|
| H      | —           | 20          | 24          | 30          |
| A      | 10          | 12          | 16          | 20          |
| B      | 5           | 6           | 8           | 10          |

#### ⑤ Stroke\*1

| Size | Stroke |     |     |     |     |     |     |     |     |     |     |     |     |     |      |      |      |
|------|--------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|------|------|------|
|      | 50     | 100 | 150 | 200 | 250 | 300 | 350 | 400 | 450 | 500 | 600 | 700 | 800 | 900 | 1000 | 1100 | 1200 |
| 16   | ●      | ●   | ●   | ●   | ●   | ●   | ●   | ●   | ●   | ●   | —   | —   | —   | —   | —    | —    | —    |
| 25   | ●      | ●   | ●   | ●   | ●   | ●   | ●   | ●   | ●   | ●   | ●   | ●   | ●   | —   | —    | —    | —    |
| 32   | ●      | ●   | ●   | ●   | ●   | ●   | ●   | ●   | ●   | ●   | ●   | ●   | ●   | ●   | ●    | —    | —    |
| 40   | —      | —   | ●   | ●   | ●   | ●   | ●   | ●   | ●   | ●   | ●   | ●   | ●   | ●   | ●    | ●    | ●    |

#### ⑥ Motor option

|     |                |
|-----|----------------|
| Nil | Without option |
| B   | With lock      |

#### ⑦ Actuator cable type/length

| Robotic cable [m] |      |    |      |
|-------------------|------|----|------|
| Nil               | None | R8 | 8*2  |
| R1                | 1.5  | RA | 10*2 |
| R3                | 3    | RB | 15*2 |
| R5                | 5    | RC | 20*2 |

Solid state auto switches should be ordered separately.  
[Click here](#) for auto switch details.

#### Applicable auto switches

D-M9N(V)-900, D-M9P(V)-900, D-M9B(V)-900  
D-M9NW(V)-900, D-M9PW(V)-900, D-M9BW(V)-900

#### Replacement Parts/Grease Pack

| Applied portion                 | Order no.       |
|---------------------------------|-----------------|
| Ball screw                      | GR-D-005 (5 g)  |
| Rail guide                      | GR-D-010 (10 g) |
| Dust seal band (Back side only) |                 |

\* Copper and zinc materials are used for the motors, cables, controllers/drivers, and auto switch magnets.

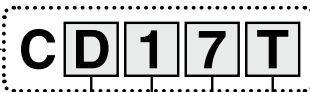
\* The 25A- series specifications and dimensions are the same as those of the standard model.

For details, refer to the [Web Catalog](#).



## 8 Controller

|       |                    |
|-------|--------------------|
| Nil   | Without controller |
| C□1□□ | With controller    |



### Interface (Communication protocol/Input/Output)

| Symbol | Type                 | Number of axes, Special specification |                       |
|--------|----------------------|---------------------------------------|-----------------------|
|        |                      | Standard                              | With STO sub-function |
| 5      | Parallel input (NPN) | ●                                     |                       |
| 6      | Parallel input (PNP) | ●                                     |                       |
| E      | EtherCAT             | ●                                     | ●                     |
| 9      | EtherNet/IP™         | ●                                     | ●                     |
| P      | PROFINET             | ●                                     | ●                     |
| D      | DeviceNet®           | ●                                     |                       |
| L      | IO-Link              | ●                                     | ●                     |
| M      | CC-Link              | ●                                     |                       |

### Mounting

|     |                |
|-----|----------------|
| 7   | Screw mounting |
| 8*3 | DIN rail       |

### Number of axes, Special specification

| Symbol | Number of axes | Specification         |
|--------|----------------|-----------------------|
| 1      | Single axis    | Standard              |
| F      | Single axis    | With STO sub-function |

### Communication plug connector, I/O cable\*4

| Symbol | Type                                       | Applicable interface                         |
|--------|--|--|
| Nil    | Without accessory                          | —  |
| S      | Straight type communication plug connector | DeviceNet®                                   |
| T      | T-branch type communication plug connector | CC-Link Ver. 1.10                            |
| 1      | I/O cable (1.5 m)                          | Parallel input (NPN)<br>Parallel input (PNP) |
| 3      | I/O cable (3 m)                            |  |
| 5      | I/O cable (5 m)                            |  |

- \*1 Please contact SMC for non-standard strokes as they are produced as special orders.
- \*2 Produced upon receipt of order
- \*3 The DIN rail is not included. It must be ordered separately.

- \*4 Select "Nil" for anything other than DeviceNet®, CC-Link, or parallel input. Select "Nil," "S," or "T" for DeviceNet® or CC-Link. Select "Nil," "1," "3," or "5" for parallel input.

## ⚠ Caution

### [CE/UKCA-compliant products]

EMC compliance was tested by combining the electric actuator LEKFS series and the controller JXC series.

The EMC depends on the configuration of the customer's control panel and the relationship with other electrical equipment and wiring. Therefore, compliance with the EMC directive cannot be certified for SMC components incorporated into the customer's equipment under actual operating conditions. As a result, it is necessary for the customer to verify compliance with the EMC directive for the machinery and equipment as a whole.

### [Precautions relating to differences in controller versions]

When the JXC series is to be used in combination with the battery-less absolute encoder, use a controller that is version V3.4 or S3.4 or higher. For details, refer to the **Web Catalog**.

### [UL-certified products]

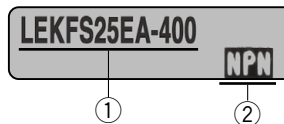
The JXC series controllers used in combination with electric actuators are UL certified.

## The actuator and controller are sold as a package.

Confirm that the combination of the controller and actuator is correct.

### <Check the following before use.>

- ① Check the actuator label for the model number (after "25A-"). This number should match that of the controller/driver.
- ② Parallel input (NPN or PNP)



- \* Refer to the Operation Manual for using the products. Please download it via our website: <https://www.smcworld.com>

## ■ Trademark

EtherNet/IP® is a registered trademark of ODVA, Inc.

DeviceNet® is a registered trademark of ODVA, Inc.

EtherCAT® is registered trademark and patented technology, licensed by Beckhoff Automation GmbH, Germany.

| Type                     | Step data input type                      | EtherCAT direct input type | EtherCAT direct input type with STO sub-function | EtherNet/IP™ direct input type | EtherNet/IP™ direct input type with STO sub-function | PROFINET direct input type | PROFINET direct input type with STO sub-function | DeviceNet® direct input type | IO-Link direct input type | IO-Link direct input type with STO sub-function | CC-Link direct input type |
|--------------------------|---|----------------------------|--|--------------------------------|--|----------------------------|--|------------------------------|---------------------------|---|---------------------------|
|                          |   |                            |  |                                |  |                            |  |                              |                           |   |                           |
| Series                   | JXC51<br>JXC61                            | JXCE1                      | JXCEF  | JXC91                          | JXC9F  | JXCP1                      | JXC PF   | JXCD1                        | JXCL1                     | JXCLF   | JXCM1                     |
| Features                 | Parallel I/O                              | EtherCAT direct input      | EtherCAT direct input with STO sub-function      | EtherNet/IP™ direct input      | EtherNet/IP™ direct input with STO sub-function      | PROFINET direct input      | PROFINET direct input with STO sub-function      | DeviceNet® direct input      | IO-Link direct input      | IO-Link direct input with STO sub-function      | CC-Link direct input      |
| Compatible motor         | Battery-less absolute (Step motor 24 VDC) |                            |  |                                |  |                            |  |                              |                           |   |                           |
| Max. number of step data | 64 points                                 |                            |  |                                |  |                            |  |                              |                           |   |                           |
| Power supply voltage     | 24 VDC                                    |                            |  |                                |  |                            |  |                              |                           |   |                           |

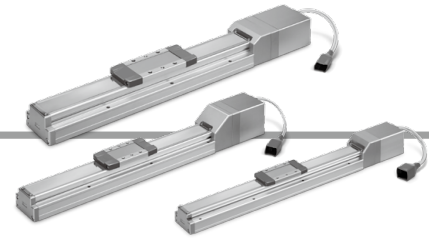
# High Performance

## High Rigidity and High Precision Slider Type

Secondary Battery Compatible

# 25A-LEKFS□G Series

25A-LEKFS25, 32, 40



### How to Order

**25A-LEKFS** **25** **□** **G** **B** - **200** **□** - **R1** **C5H73**

Series compatible with secondary batteries

① ② ③ ④ ⑤ ⑥ ⑦ ⑧

For details on controllers, refer to the next page.

#### ① Size

|    |
|----|
| 25 |
| 32 |
| 40 |

#### ② Motor mounting position

|     |                     |
|-----|---------------------|
| Nil | In-line             |
| R   | Right side parallel |
| L   | Left side parallel  |

#### ③ Motor type

| Symbol | Type                                     | Applicable size |             |             | Compatible controllers                    |
|--------|--|-----------------|-------------|-------------|---|
|        |  | 25A-LEKFS25     | 25A-LEKFS32 | 25A-LEKFS40 |   |
| G      | High performance (Battery-less absolute) | ●               | ●           | ●           | JXC5H<br>JXC6H<br>JXCEH<br>JXC9H<br>JXCPH |

#### ④ Lead [mm]

| Symbol | 25A-LEKFS25 | 25A-LEKFS32 | 25A-LEKFS40 |
|--------|-------------|-------------|-------------|
| H      | 20          | 24          | 30          |
| A      | 12          | 16          | 20          |
| B      | 6           | 8           | 10          |

#### ⑤ Stroke\*1 [mm]

| Stroke      | Note |   |
|-------------|------|---|
|             | Size | Applicable stroke   |
| 50 to 800   | 25   | 50, 100, 150, 200, 250, 300, 350, 400, 450, 500, 550, 600, 650, 700, 750, 800                         |
| 50 to 1000  | 32   | 50, 100, 150, 200, 250, 300, 350, 400, 450, 500, 550, 600, 650, 700, 750, 800, 850, 900, 950, 1000    |
| 150 to 1200 | 40   | 150, 200, 250, 300, 350, 400, 450, 500, 550, 600, 650, 700, 750, 800, 850, 900, 950, 1000, 1100, 1200 |

#### ⑥ Motor option

|     |                |
|-----|----------------|
| Nil | Without option |
| B   | With lock      |

#### ⑦ Actuator cable type/length

| Robotic cable [m] |      |    |      |
|-------------------|------|----|------|
| Nil               | None | R8 | 8*2  |
| R1                | 1.5  | RA | 10*2 |
| R3                | 3    | RB | 15*2 |
| R5                | 5    | RC | 20*2 |

#### Applicable Stroke Table

| Size | Stroke |     |     |     |     |     |     |     |     |     |     |     |     |     |      |      |      |
|------|--------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|------|------|------|
|      | 50     | 100 | 150 | 200 | 250 | 300 | 350 | 400 | 450 | 500 | 600 | 700 | 800 | 900 | 1000 | 1100 | 1200 |
| 25   | ●      | ●   | ●   | ●   | ●   | ●   | ●   | ●   | ●   | ●   | ●   | ●   | ●   | —   | —    | —    | —    |
| 32   | ●      | ●   | ●   | ●   | ●   | ●   | ●   | ●   | ●   | ●   | ●   | ●   | ●   | ●   | ●    | —    | —    |
| 40   | —      | —   | ●   | ●   | ●   | ●   | ●   | ●   | ●   | ●   | ●   | ●   | ●   | ●   | ●    | ●    | ●    |

Solid state auto switches should be ordered separately. [Click here](#) for auto switch details.

#### Applicable auto switches

D-M9N(V)-900, D-M9P(V)-900, D-M9B(V)-900  
D-M9NW(V)-900, D-M9PW(V)-900, D-M9BW(V)-900

#### Replacement Parts/Grease Pack

| Applied portion                 | Order no.       |
|---------------------------------|-----------------|
| Ball screw                      | GR-D-005 (5 g)  |
| Rail guide                      | GR-D-010 (10 g) |
| Dust seal band (Back side only) |                 |

\* Copper and zinc materials are used for the motors, cables, controllers/drivers, and auto switch magnets.

\* The 25A- series specifications and dimensions are the same as those of the standard model.

For details, refer to the [Web Catalog](#).

**8 Controller**

|       |                    |
|-------|--------------------|
| Nil   | Without controller |
| C□H□□ | With controller    |



**Controller type**

|   |                         |
|---|-------------------------|
| 5 | Parallel I/O (NPN) type |
| 6 | Parallel I/O (PNP) type |
| E | EtherCAT                |
| 9 | EtherNet/IP™            |
| P | PROFINET                |

**Mounting**

|     |                |
|-----|----------------|
| 7   | Screw mounting |
| 8*3 | DIN rail       |

**Number of axes/Special specification**

|   |                              |
|---|------------------------------|
| H | 1 axis/High performance type |
|---|------------------------------|

**I/O cable length**

|     |               |
|-----|---------------|
| Nil | Without cable |
| 1   | 1.5 m         |
| 3   | 3 m           |
| 5   | 5 m           |

- \*1 Please contact SMC for non-standard strokes as they are produced as special orders.
- \*2 Produced upon receipt of order
- \*3 The DIN rail is not included. It must be ordered separately.

**Caution**

**[CE/UKCA-compliant products]**

EMC compliance was tested by combining the electric actuator LEF series and the controller JXC series.

The EMC depends on the configuration of the customer's control panel and the relationship with other electrical equipment and wiring. Therefore, compliance with the EMC directive cannot be certified for SMC components incorporated into the customer's equipment under actual operating conditions. As a result, it is necessary for the customer to verify compliance with the EMC directive for the machinery and equipment as a whole.

**Trademark**

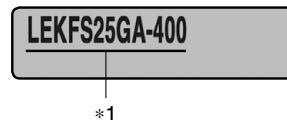
EtherNet/IP® is a registered trademark of ODVA, Inc.  
 EtherCAT® is registered trademark and patented technology, licensed by Beckhoff Automation GmbH, Germany.

**The actuator and controller are sold as a package.**

Confirm that the combination of the controller and actuator is correct.

**<Check the following before use.>**

- \*1 Check the actuator label for the model number (after "25A-"). This number should match that of the controller/driver.

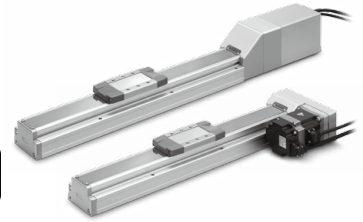


\* Refer to the Operation Manual for using the products.  
 Please download it via our website: <https://www.smcworld.com>

| Type                     | Step data input type | EtherCAT direct input type | EtherNet/IP™ direct input type | PROFINET direct input type |
|--------------------------|----------------------|----------------------------|--------------------------------|----------------------------|
|                          |                      |                            |                                |                            |
| Series                   | JXC5H<br>JXC6H       | JXCEH                      | JXC9H                          | JXC9H                      |
| Features                 | Parallel I/O         | EtherCAT direct input      | EtherNet/IP™ direct input      | PROFINET direct input      |
| Compatible motor         | Step motor 24 VDC    |                            |                                |                            |
| Max. number of step data | 64 points            |                            |                                |                            |
| Power supply voltage     | 24 VDC               |                            |                                |                            |

# High Rigidity and High Precision Slider Type Ball Screw Drive **25A-LEKFS Series** 25A-LEKFS25, 32, 40

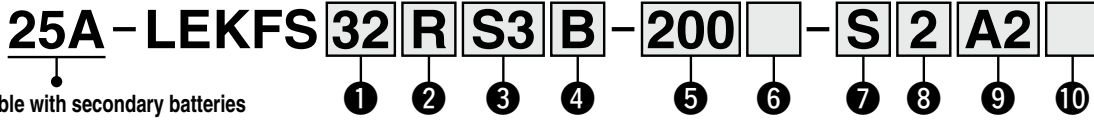
Secondary Battery Compatible



LECY Series ▶ p. 298-6



## How to Order



Series compatible with secondary batteries

### ① Size

|    |
|----|
| 25 |
| 32 |
| 40 |

### ② Motor mounting position

|     |                     |
|-----|---------------------|
| Nil | In-line             |
| R   | Right side parallel |
| L   | Left side parallel  |

### ③ Motor type

| Symbol | Type                              | Output [W] | ① Size | ⑨ Driver type | Compatible drivers |
|--------|-----------------------------------|------------|--------|---------------|--------------------|
| S2*1   | AC servo motor                    | 100        | 25     | A1/A2         | LECSA□-S1          |
| S3     | (Incremental encoder)             | 200        | 32     | A1/A2         | LECSA□-S3          |
| S4     |                                   | 400        | 40     | A2            | LECSA2-S4          |
| T6*2   | AC servo motor (Absolute encoder) | 100        | 25     | B2            | LECSB2-T5          |
| T7     |                                   |            |        | C2            | LECS2-T5           |
|        |                                   |            |        | S2            | LECSS2-T5          |
|        |                                   |            |        | B2            | LECSB2-T7          |
| T8     | C2                                | LECS2-T7   |        |               |                    |
|        | S2                                | LECSS2-T7  |        |               |                    |
|        | B2                                | LECSB2-T8  |        |               |                    |
| T8     |                                   | 400        | 40     | C2            | LECS2-T8           |
|        |                                   |            |        | S2            | LECSS2-T8          |

\*1 For motor type S2, the compatible driver part number suffix is S1.

\*2 For motor type T6, the compatible driver part number is LECS□2-T5.

### ④ Lead [mm]

| Symbol | 25A-LEKFS25 | 25A-LEKFS32 | 25A-LEKFS40 |
|--------|-------------|-------------|-------------|
| H      | 20          | 24          | 30          |
| A      | 12          | 16          | 20          |
| B      | 6           | 8           | 10          |

### ⑤ Stroke [mm]

|      |      |
|------|------|
| 50   | 50   |
| to   | to   |
| 1200 | 1200 |

\* For details, refer to the applicable stroke table below.

### ⑥ Motor option

|     |                |
|-----|----------------|
| Nil | Without option |
| B   | With lock      |

### ⑦ Cable type\*1 \*2

|     |                                |
|-----|--------------------------------|
| Nil | Without cable                  |
| S   | Standard cable                 |
| R   | Robotic cable (Flexible cable) |

\*1 A motor cable and encoder cable are included with the product. (A lock cable is also included if motor option "B: With lock" is selected.)

\*2 Standard cable entry direction is "(B) Counter axis side." For the right/left side parallel motor types of the ball screw drive, the cable entry direction is "(A) Axis side." (For details, refer to the [Web Catalog](#).)

### ⑧ Cable length\*1 [m]

|     |               |
|-----|---------------|
| Nil | Without cable |
| 2   | 2             |
| 5   | 5             |
| A   | 10            |

\*1 The length of the encoder, motor and lock cables are the same.

### ⑨ Driver type

|     | Compatible drivers | Power supply voltage [V] | Size |    |    |
|-----|--------------------|--------------------------|------|----|----|
|     |                    |                          | 25   | 32 | 40 |
| Nil | Without driver     | —                        | ●    | ●  | ●  |
| A1  | LECSA1-S□          | 100 to 120               | ●    | ●  | —  |
| A2  | LECSA2-S□          | 200 to 230               | ●    | ●  | ●  |
| B2  | LECSB2-T□          | 200 to 240               | ●    | ●  | ●  |
| C2  | LECS2-T□           | 200 to 230               | ●    | ●  | ●  |
| S2  | LECSS2-T□          | 200 to 240               | ●    | ●  | ●  |

\* When a driver type is selected, a cable is included. Select the cable type and cable length. Example) S2S2: Standard cable (2 m) + Driver (LECSS2) S2: Standard cable (2 m) Nil: Without cable and driver

### ⑩ I/O cable length [m]\*1

|     |                                |
|-----|--------------------------------|
| Nil | Without cable                  |
| H   | Without cable (Connector only) |
| 1   | 1.5                            |

\*1 When "Nil: Without driver" is selected for the driver type, only "Nil: Without cable" can be selected. Refer to the [Web Catalog](#) if an I/O cable is required.

**Solid state auto switches should be ordered separately.**  
[Click here for auto switch details.](#)

### Applicable auto switches

D-M9N(V)-900, D-M9P(V)-900, D-M9B(V)-900  
D-M9NW(V)-900, D-M9PW(V)-900, D-M9BW(V)-900

## Applicable Stroke Table

| Size | Stroke |     |     |     |     |     |     |     |     |     |     |     |     |     |      |      |      |
|------|--------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|------|------|------|
|      | 50     | 100 | 150 | 200 | 250 | 300 | 350 | 400 | 450 | 500 | 600 | 700 | 800 | 900 | 1000 | 1100 | 1200 |
| 25   | ●      | ●   | ●   | ●   | ●   | ●   | ●   | ●   | ●   | ●   | ●   | ●   | ●   | —   | —    | —    | —    |
| 32   | ●      | ●   | ●   | ●   | ●   | ●   | ●   | ●   | ●   | ●   | ●   | ●   | ●   | ●   | ●    | —    | —    |
| 40   | —      | —   | ●   | ●   | ●   | ●   | ●   | ●   | ●   | ●   | ●   | ●   | ●   | ●   | ●    | ●    | ●    |

\* Please contact SMC for non-standard strokes as they are produced as special orders.

## Compatible Drivers

| Driver type              | Pulse input type/<br>Positioning type                | Pulse input type                       | CC-Link direct input type       | SSCNET III/H type         |
|--------------------------|--|--|---------------------------------|---------------------------|
|                          |  |  |                                 |                           |
| Series                   | LECSA  | LECSB-T                                | LECS2-T                         | LECSS-T                   |
| Number of point tables   | Up to 7  | Up to 255                              | Up to 255 (2 stations occupied) | —                         |
| Pulse input              | ○  | ○                                      | —                               | —                         |
| Applicable network       | —  | —                                      | CC-Link                         | SSCNET III/H              |
| Control encoder          | Incremental 17-bit encoder                           | Absolute 22-bit encoder                | Absolute 18-bit encoder         | Absolute 22-bit encoder   |
| Communication function   | USB communication                                    | USB communication, RS422 communication | RS422 communication             | USB communication         |
| Power supply voltage [V] | 100 to 120 VAC (50/60 Hz), 200 to 230 VAC (50/60 Hz) | 200 to 240 VAC (50/60 Hz)              | 200 to 230 VAC (50/60 Hz)       | 200 to 240 VAC (50/60 Hz) |

## Replacement Parts/Grease Pack

| Applied portion                 | Order no.                         |
|---------------------------------|-----------------------------------|
| Ball screw                      | GR-D-005 (5 g)<br>GR-D-010 (10 g) |
| Rail guide                      |                                   |
| Dust seal band (Back side only) |                                   |

\* Copper and zinc materials are used for the motors, cables, controllers/drivers, and auto switch magnets.

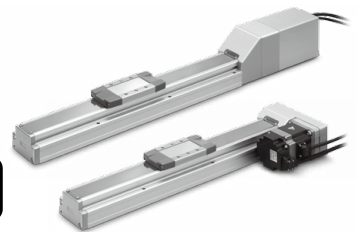
\* The 25A- series specifications and dimensions are the same as those of the standard model.

For details, refer to the [Web Catalog](#).

# High Rigidity and High Precision Slider Type

## Ball Screw Drive Secondary Battery Compatible

### 25A-LEKFS Series 25A-LEKFS25, 32, 40



For details, refer to the Web Catalog.

**LECS** Series ▶ p. 298-5

### How to Order

**25A-LEKFS** 32 R V7 B - 200 B - S 3 M2  

Series compatible with secondary batteries

**1 Size**

|    |
|----|
| 25 |
| 32 |
| 40 |

**2 Motor mounting position**

|     |                     |
|-----|---------------------|
| Nil | In-line             |
| R   | Right side parallel |
| L   | Left side parallel  |

**3 Motor type**

| Symbol | Type                              | Output [W] | 1 Size | 9 Driver type | Compatible drivers |
|--------|-----------------------------------|------------|--------|---------------|--------------------|
| V6*1   | AC servo motor (Absolute encoder) | 100        | 25     | M2            | LECYM2-V5          |
| V7     |                                   | 200        | 32     | U2            | LECYU2-V5          |
| V8     |                                   | 400        | 40     | M2            | LECYM2-V7          |
|        |                                   |            |        | U2            | LECYU2-V7          |
|        |                                   |            |        | M2            | LECYM2-V8          |
|        |                                   |            |        | U2            | LECYU2-V8          |

\*1 For motor type V6, the compatible driver part number suffix is V5.

**4 Lead [mm]**

| Symbol | 25A-LEKFS25 | 25A-LEKFS32 | 25A-LEKFS40 |
|--------|-------------|-------------|-------------|
| H      | 20          | 24          | 30          |
| A      | 12          | 16          | 20          |
| B      | 6           | 8           | 10          |

**5 Stroke [mm]**

|      |      |
|------|------|
| 50   | 50   |
| to   | to   |
| 1200 | 1200 |

**6 Motor option**

|     |                |
|-----|----------------|
| Nil | Without option |
| B   | With lock      |

**7 Cable type**

|     |                                |
|-----|--------------------------------|
| Nil | Without cable                  |
| S   | Standard cable                 |
| R   | Robotic cable (Flexible cable) |

**8 Actuator cable length [m]**

| Nil | Without cable |
|-----|---------------|
| 3   | 3             |
| 5   | 5             |
| A   | 10            |
| C   | 20            |

**9 Driver type**

|     | Compatible drivers | Power supply voltage [V] |
|-----|--------------------|--------------------------|
| Nil | Without driver     | —                        |
| M2  | LECYM2-V□          | 200 to 230               |
| U2  | LECYU2-V□          | 200 to 230               |

\* When a driver type is selected, a cable is included. Select the cable type and cable length.

**10 I/O cable length [m]\*1**

|     |                                |
|-----|--------------------------------|
| Nil | Without cable                  |
| H   | Without cable (Connector only) |
| 1   | 1.5                            |

\*1 When "Nil: Without driver" is selected for the driver type, only "Nil: Without cable" can be selected. Refer to the **Web Catalog** if an I/O cable is required.

**Solid state auto switches should be ordered separately.**  
[Click here for auto switch details.](#)

**Applicable auto switches**  
D-M9N(V)-900, D-M9P(V)-900, D-M9B(V)-900, D-M9NW(V)-900, D-M9PW(V)-900, D-M9BW(V)-900

**Applicable Stroke Table**

●: Standard

| Size | Stroke |     |     |     |     |     |     |     |     |     |     |     |     |     |      |      |      |
|------|--------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|------|------|------|
|      | 50     | 100 | 150 | 200 | 250 | 300 | 350 | 400 | 450 | 500 | 600 | 700 | 800 | 900 | 1000 | 1100 | 1200 |
| 25   | ●      | ●   | ●   | ●   | ●   | ●   | ●   | ●   | ●   | ●   | ●   | ●   | ●   | —   | —    | —    | —    |
| 32   | ●      | ●   | ●   | ●   | ●   | ●   | ●   | ●   | ●   | ●   | ●   | ●   | ●   | ●   | ●    | —    | —    |
| 40   | —      | —   | ●   | ●   | ●   | ●   | ●   | ●   | ●   | ●   | ●   | ●   | ●   | ●   | ●    | ●    | ●    |

\* Please contact SMC for non-standard strokes as they are produced as special orders.

**Compatible Drivers**

| Driver type              | MECHATROLINK-II type                    | MECHATROLINK-III type |
|--------------------------|---|-----------------------|
|                          |   |                       |
| Series                   | LECYM                                   | LECYU                 |
| Applicable network       | MECHATROLINK-II                         | MECHATROLINK-III      |
| Control encoder          | Absolute 20-bit encoder                 |                       |
| Communication device     | USB communication, RS-422 communication |                       |
| Power supply voltage [V] | 200 to 230 VAC (50/60 Hz)               |                       |

**Replacement Parts/Grease Pack**

| Applied portion                 | Order no.                         |
|---------------------------------|-----------------------------------|
| Ball screw                      | GR-D-005 (5 g)<br>GR-D-010 (10 g) |
| Rail guide                      |                                   |
| Dust seal band (Back side only) |                                   |

\* Copper and zinc materials are used for the motors, cables, controllers/drivers, and auto switch magnets.  
\* The 25A-series specifications and dimensions are the same as those of the standard model.

For details, refer to the **Web Catalog**.

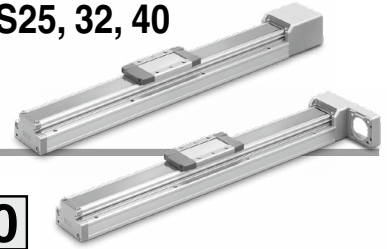


# Electric Actuator/ High Rigidity and High Precision Slider Type Ball Screw Drive

Secondary Battery Compatible

RoHS

## 25A-LEKFS Series 25A-LEKFS25, 32, 40



### How to Order

**25A - LEKFS 32 [ ] NZ A - 300**

Series compatible with secondary batteries

**1 Size**

|    |
|----|
| 25 |
| 32 |
| 40 |

**2 Motor mounting position**

|     |                     |
|-----|---------------------|
| Nil | In-line             |
| R   | Right side parallel |
| L   | Left side parallel  |

**3 Mounting type**

|     |
|-----|
| NZ  |
| NY  |
| NX  |
| NW  |
| NV  |
| NU  |
| NT  |
| NM1 |
| NM2 |
| NM3 |

**4 Lead [mm]**

| Symbol | 25A-LEKFS25 | 25A-LEKFS32 | 25A-LEKFS40 |
|--------|-------------|-------------|-------------|
| H      | 20          | 24          | 30          |
| A      | 12          | 16          | 20          |
| B      | 6           | 8           | 10          |

**5 Stroke [mm]**

|      |      |
|------|------|
| 50   | 50   |
| to   | to   |
| 1200 | 1200 |

\* Refer to the applicable stroke table.

Solid state auto switches should be ordered separately.  
Click here for auto switch details.

**Applicable auto switches**

D-M9N(V)-900, D-M9P(V)-900, D-M9B(V)-900  
D-M9NW(V)-900, D-M9PW(V)-900, D-M9BW(V)-900

**Replacement Parts/Grease Pack**

| Applied portion                 | Order no.       |
|---------------------------------|-----------------|
| Ball screw                      | GR-D-005 (5 g)  |
| Rail guide                      | GR-D-010 (10 g) |
| Dust seal band (Back side only) |                 |

**Applicable Stroke Table**

●: Standard

| Size | Stroke |     |     |     |     |     |     |     |     |     |     |     |     |     |      |      |      |
|------|--------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|------|------|------|
|      | 50     | 100 | 150 | 200 | 250 | 300 | 350 | 400 | 450 | 500 | 600 | 700 | 800 | 900 | 1000 | 1100 | 1200 |
| 25   | ●      | ●   | ●   | ●   | ●   | ●   | ●   | ●   | ●   | ●   | ●   | ●   | ●   | —   | —    | —    | —    |
| 32   | ●      | ●   | ●   | ●   | ●   | ●   | ●   | ●   | ●   | ●   | ●   | ●   | ●   | ●   | ●    | —    | —    |
| 40   | —      | —   | ●   | ●   | ●   | ●   | ●   | ●   | ●   | ●   | ●   | ●   | ●   | ●   | ●    | ●    | ●    |

**Compatible Motors and Mounting Types\*5**

| Applicable motor model                    |                        | Size/Mounting type |    |    |     |     |                |                |       |    |    |                     |    |                  |                  |                |  |
|---|------------------------|--------------------|----|----|-----|-----|----------------|----------------|-------|----|----|---------------------|----|------------------|------------------|----------------|--|
| Manufacturer                              | Series                 | 25                 |    |    |     |     |                |                | 32/40 |    |    |                     |    |                  |                  |                |  |
|   |                        | NZ                 | NY | NX | NM1 | NM2 | NM3            | NZ             | NY    | NX | NW | NV                  | NU | NT               | NM1              | NM2            |  |
| Mitsubishi Electric Corporation           | MELSERVO JN/J4/J5      | ●                  | —  | —  | —   | —   | —              | ●              | —     | —  | —  | —                   | —  | —                | —                | —              |  |
| YASKAWA Electric Corporation              | Σ-V/7/X                | ●*4                | —  | —  | —   | —   | —              | ●              | —     | —  | —  | —                   | —  | —                | —                | —              |  |
| SANYO DENKI CO., LTD.                     | SANMOTION R            | ●                  | —  | —  | —   | —   | —              | ●              | —     | —  | —  | —                   | —  | —                | —                | —              |  |
| OMRON Corporation                         | OMNUC G5/1S            | ●                  | —  | —  | —   | —   | —              | ●              | —     | —  | —  | —                   | —  | —                | —                | —              |  |
| Panasonic Corporation                     | MINAS A5/A6            | ●<br>(MHMF only)   | ●  | —  | —   | —   | —              | —              | ●     | —  | —  | —                   | —  | —                | —                | —              |  |
| FANUC CORPORATION                         | βis (-B)               | ●                  | —  | —  | —   | —   | —              | ●<br>(β1 only) | —     | —  | ●  | —                   | —  | —                | —                | —              |  |
| NIDEC SANKYO CORPORATION                  | S-FLAG                 | ●                  | —  | —  | —   | —   | —              | ●              | —     | —  | —  | —                   | —  | —                | —                | —              |  |
| KEYENCE CORPORATION                       | SV/SV2                 | ●*4                | —  | —  | —   | —   | —              | ●              | —     | —  | —  | —                   | —  | —                | —                | —              |  |
| FUJI ELECTRIC CO., LTD.                   | ALPHA7                 | ●                  | —  | —  | —   | —   | —              | ●              | —     | —  | —  | —                   | —  | —                | —                | —              |  |
| MinebeaMitsumi Inc.                       | Hybrid stepping motors | —                  | —  | —  | —   | ●*1 | —              | —              | —     | —  | —  | —                   | —  | —                | —                | ●*2            |  |
| Shinano Kenshi Co., Ltd.                  | CSB-BZ                 | —                  | —  | —  | —   | ●*1 | —              | —              | —     | —  | —  | —                   | —  | —                | —                | —              |  |
| ORIENTAL MOTOR Co., Ltd.                  | α STEP AR/AZ           | —                  | —  | —  | —   | —   | ●<br>(46 only) | —              | —     | —  | —  | —                   | —  | —                | —                | —              |  |
| FASTECH Co., Ltd.                         | Ezi-SERVO              | —                  | —  | —  | —   | ●   | —              | —              | —     | —  | —  | —                   | —  | —                | —                | ●*2            |  |
| Rockwell Automation, Inc. (Allen-Bradley) | Kinetix MP/VP/TL       | ●<br>(TL only)     | —  | —  | —   | —   | —              | —              | —     | —  | —  | ●*1<br>(MP/VP only) | —  | —                | —                | ●<br>(TL only) |  |
| Beckhoff Automation GmbH                  | AM 30/31/80/81         | ●                  | —  | —  | —   | —   | —              | —              | —     | —  | —  | ●*1<br>(80/81 only) | —  | ●*1<br>(30 only) | ●*2<br>(31 only) | —              |  |
| Siemens AG                                | SIMOTICS S-1FK7        | —                  | —  | ●  | —   | —   | —              | —              | —     | —  | —  | ●*1                 | —  | —                | —                | —              |  |
| Delta Electronics, Inc.                   | ASDA-A2                | ●                  | —  | —  | —   | —   | —              | ●              | —     | —  | —  | —                   | —  | —                | —                | —              |  |
| ANCA Motion                               | AMD2000                | ●                  | —  | —  | —   | —   | —              | ●              | —     | —  | —  | —                   | —  | —                | —                | —              |  |

\*1 Motor mounting position: In-line only \*2 Only size 32 is available when the motor mounting position is right (or left) side parallel. \*3 Motor mounting position: Right (or left) side parallel only  
\*4 For some motors, the connector may protrude from the motor body. Be sure to check for interference with the mounting surface before selecting a motor.  
\*5 The compatible motors and mounting types are typical examples. Select the mounting type after referring to the "Motor Mounting, Applicable Motor Dimensions" tables on the "Dimensions" pages.

\* The auto switch magnet contains copper and/or zinc.  
\* The 25A- series specifications and dimensions are the same as those of the standard model.

For details, refer to the [Web Catalog](#).





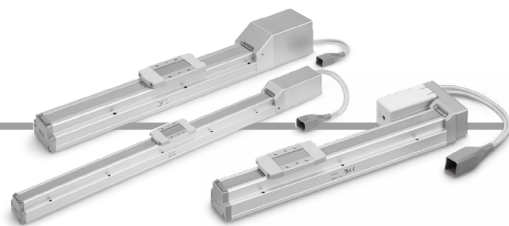
# Slider Type Ball Screw Drive

Secondary Battery Compatible

## 25A-LEFS Series 25A-LEFS16, 25, 32, 40



\* For details, refer to the Web Catalog.



### How to Order

**25A - LEFS** **H** **25** **R** **E** **B** - **200** **K** - **R1** **CD17T**

Series compatible with secondary batteries

- 1
- 2
- 3
- 4
- 5
- 6
- 7
- 8
- 9
- 10

For details on controllers, refer to the next page.

#### 1 Accuracy

|     |                     |
|-----|---------------------|
| Nil | Basic type          |
| H   | High-precision type |

#### 2 Size

|    |
|----|
| 16 |
| 25 |
| 32 |
| 40 |

#### 3 Motor mounting position

|     |                     |
|-----|---------------------|
| Nil | In-line             |
| R   | Right side parallel |
| L   | Left side parallel  |

#### 4 Motor type

|   |   |
|---|---|
| E | Battery-less absolute (Step motor 24 VDC) |
|---|---|

#### 5 Lead [mm]

| Symbol | 25A-LEFS16 | 25A-LEFS25 | 25A-LEFS32 | 25A-LEFS40 |
|--------|------------|------------|------------|------------|
| H      | —          | 20         | 24         | 30         |
| A      | 10         | 12         | 16         | 20         |
| B      | 5          | 6          | 8          | 10         |

#### 6 Stroke\*1 [mm]

| Stroke      | Note |   |
|-------------|------|---|
|             | Size | Applicable stroke   |
| 50 to 500   | 16   | 50, 100, 150, 200, 250, 300, 350, 400, 450, 500   |
| 50 to 800   | 25   | 50, 100, 150, 200, 250, 300, 350, 400, 450, 500, 550, 600, 650, 700, 750, 800                         |
| 50 to 1000  | 32   | 50, 100, 150, 200, 250, 300, 350, 400, 450, 500, 550, 600, 650, 700, 750, 800, 850, 900, 950, 1000    |
| 150 to 1200 | 40   | 150, 200, 250, 300, 350, 400, 450, 500, 550, 600, 650, 700, 750, 800, 850, 900, 950, 1000, 1100, 1200 |

#### 7 Motor option

|     |                |
|-----|----------------|
| Nil | Without option |
| B   | With lock      |

#### 8 Positioning pin hole

|     |                         |  |
|-----|-------------------------|--|
| Nil | Housing B bottom*2      |  |
| K   | Body bottom 2 locations |  |

#### 9 Actuator cable type/length

| Robotic cable [m] |      |    |      |
|-------------------|------|----|------|
| Nil               | None | R8 | 8*3  |
| R1                | 1.5  | RA | 10*3 |
| R3                | 3    | RB | 15*3 |
| R5                | 5    | RC | 20*3 |

#### Replacement Parts/Grease Pack

| Applied portion | Order no.       |
|-----------------|-----------------|
| Ball screw      | GR-D-005 (5 g)  |
| Rail guide      | GR-D-010 (10 g) |

\* Copper and zinc materials are used for the motors, cables, controllers/drivers.  
\* The 25A- series specifications and dimensions are the same as those of the standard model.

For details, refer to the [Web Catalog](#).

# Slider Type/Ball Screw Drive **25A-LEFS Series**

Battery-less Absolute (Step Motor 24 VDC)

Secondary Battery Compatible

## ⑩ Controller

|       |                    |
|-------|--------------------|
| Nil   | Without controller |
| C□1□□ | With controller    |



### Interface (Communication protocol/Input/Output)

| Symbol | Type                 | Number of axes, Special specification |                       |
|--------|----------------------|---------------------------------------|-----------------------|
|        |                      | Standard                              | With STO sub-function |
| 5      | Parallel input (NPN) | ●                                     |                       |
| 6      | Parallel input (PNP) | ●                                     |                       |
| E      | EtherCAT             | ●                                     | ●                     |
| 9      | EtherNet/IP™         | ●                                     | ●                     |
| P      | PROFINET             | ●                                     | ●                     |
| D      | DeviceNet®           | ●                                     |                       |
| L      | IO-Link              | ●                                     | ●                     |
| M      | CC-Link              | ●                                     |                       |

### Mounting

|     |                |
|-----|----------------|
| 7   | Screw mounting |
| 8*4 | DIN rail       |

### Number of axes, Special specification

| Symbol | Number of axes | Specification         |
|--------|----------------|-----------------------|
| 1      | Single axis    | Standard              |
| F      | Single axis    | With STO sub-function |

### Communication plug connector, I/O cable\*5

| Symbol | Type                                       | Applicable interface                         |
|--------|--|--|
| Nil    | Without accessory                          | —  |
| S      | Straight type communication plug connector | DeviceNet®                                   |
| T      | T-branch type communication plug connector | CC-Link Ver. 1.10                            |
| 1      | I/O cable (1.5 m)                          | Parallel input (NPN)<br>Parallel input (PNP) |
| 3      | I/O cable (3 m)                            |  |
| 5      | I/O cable (5 m)                            |  |

- \*1 Please contact SMC for non-standard strokes as they are produced as special orders.
- \*2 Refer to the body mounting example on the **Web Catalog** for the mounting method.
- \*3 Produced upon receipt of order
- \*4 The DIN rail is not included. It must be ordered separately.

- \*5 Select "Nil" for anything other than DeviceNet®, CC-Link, or parallel input.  
Select "Nil," "S," or "T" for DeviceNet® or CC-Link.  
Select "Nil," "1," "3," or "5" for parallel input.

## ⚠ Caution

### [CE/UKCA-compliant products]

EMC compliance was tested by combining the electric actuator LEF series and the controller JXC series.

The EMC depends on the configuration of the customer's control panel and the relationship with other electrical equipment and wiring. Therefore, compliance with the EMC directive cannot be certified for SMC components incorporated into the customer's equipment under actual operating conditions. As a result, it is necessary for the customer to verify compliance with the EMC directive for the machinery and equipment as a whole.

### [Precautions relating to differences in controller versions]

When the JXC series is to be used in combination with the battery-less absolute encoder, use a controller that is version V3.4 or S3.4 or higher. For details, refer to the **Web Catalog**.

### [UL certification]

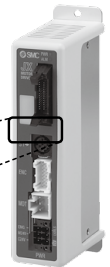
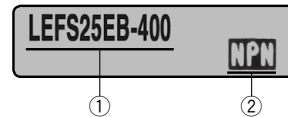
The JXC series controllers used in combination with electric actuators are UL certified.

## The actuator and controller are sold as a package.

Confirm that the combination of the controller and actuator is correct.

### <Check the following before use.>

- ① Check the actuator label for the model number (after "25A-"). This number should match that of the controller/driver.
- ② Check that the Parallel I/O configuration matches (NPN or PNP).



- \* Refer to the Operation Manual for using the products.  
Please download it via our website: <https://www.smcworld.com>

| Type                     | Step data input type                      | EtherCAT direct input type | EtherCAT direct input type with STO sub-function | EtherNet/IP™ direct input type | EtherNet/IP™ direct input type with STO sub-function | PROFINET direct input type | PROFINET direct input type with STO sub-function | DeviceNet® direct input type | IO-Link direct input type | IO-Link direct input type with STO sub-function | CC-Link direct input type |
|--------------------------|---|----------------------------|--|--------------------------------|--|----------------------------|--|------------------------------|---------------------------|---|---------------------------|
|                          |   |                            |  |                                |  |                            |  |                              |                           |   |                           |
| Series                   | JXC51<br>JXC61                            | JXCE1                      | JXCEF  | JXC91                          | JXC9F  | JXCP1                      | JXCPF  | JXCD1                        | JXCL1                     | JXCLF   | JXCM1                     |
| Features                 | Parallel I/O                              | EtherCAT direct input      | EtherCAT direct input with STO sub-function      | EtherNet/IP™ direct input      | EtherNet/IP™ direct input with STO sub-function      | PROFINET direct input      | PROFINET direct input with STO sub-function      | DeviceNet® direct input      | IO-Link direct input      | IO-Link direct input with STO sub-function      | CC-Link direct input      |
| Compatible motor         | Battery-less absolute (Step motor 24 VDC) |                            |  |                                |  |                            |  |                              |                           |   |                           |
| Max. number of step data | 64 points                                 |                            |  |                                |  |                            |  |                              |                           |   |                           |
| Power supply voltage     | 24 VDC                                    |                            |  |                                |  |                            |  |                              |                           |   |                           |

# Slider Type

## Ball Screw Drive

Secondary Battery Compatible



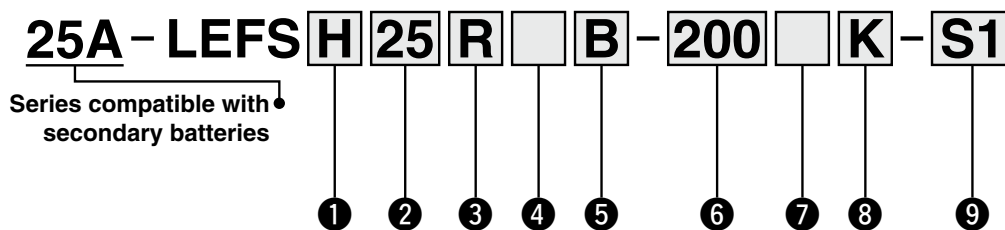
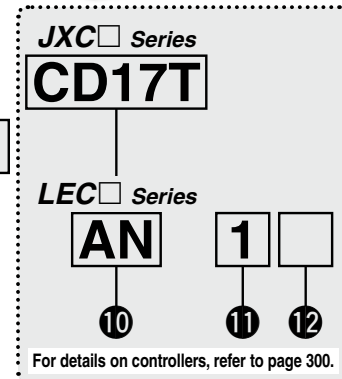
Refer to the "CE/UKCA/UL-compliance List" in the Web Catalog.

# 25A-LEFS Series 25A-LEFS16, 25, 32, 40

RoHS

Refer to the Web Catalog for model selection.

### How to Order



#### 1 Accuracy

|     |                     |
|-----|---------------------|
| Nil | Basic type          |
| H   | High-precision type |

#### 2 Size

|    |
|----|
| 16 |
| 25 |
| 32 |
| 40 |

#### 3 Motor mounting position

|     |                     |
|-----|---------------------|
| Nil | In-line             |
| R   | Right side parallel |
| L   | Left side parallel  |

#### 5 Lead [mm]

| Symbol | 25A-LEFS16 | 25A-LEFS25 | 25A-LEFS32 | 25A-LEFS40 |
|--------|------------|------------|------------|------------|
| H      | —          | 20         | 24         | 30         |
| A      | 10         | 12         | 16         | 20         |
| B      | 5          | 6          | 8          | 10         |

#### 4 Motor type

| Symbol | Type                      | Applicable size |            |            |            | Compatible controllers/drivers   |
|--------|---------------------------|-----------------|------------|------------|------------|--|
|        |                           | 25A-LEFS16      | 25A-LEFS25 | 25A-LEFS32 | 25A-LEFS40 |  |
| Nil    | Step motor (Servo/24 VDC) | ●               | ●          | ●          | ●          | JXC51 JXCEF<br>JXC61 JXC9F<br>JXCE1 JXCPF<br>JXC91 JXCLF<br>JXCP1<br>JXCD1 LECP1<br>JXCL1 LECPA<br>JXCM1 |
| A      | Servo motor (24 VDC)      | ●               | ●          | —          | —          | LECA6  |

#### 6 Stroke\*1 [mm]

| Stroke      | Size | Note  |  |  |  |
|-------------|------|---|--|--|--|
|             |      | Applicable stroke   |  |  |  |
| 50 to 500   | 16   | 50, 100, 150, 200, 250, 300, 350, 400, 450, 500   |  |  |  |
| 50 to 800   | 25   | 50, 100, 150, 200, 250, 300, 350, 400, 450, 500, 550, 600, 650, 700, 750, 800                         |  |  |  |
| 50 to 1000  | 32   | 50, 100, 150, 200, 250, 300, 350, 400, 450, 500, 550, 600, 650, 700, 750, 800, 850, 900, 950, 1000    |  |  |  |
| 150 to 1200 | 40   | 150, 200, 250, 300, 350, 400, 450, 500, 550, 600, 650, 700, 750, 800, 850, 900, 950, 1000, 1100, 1200 |  |  |  |

#### 7 Motor option

|     |                |
|-----|----------------|
| Nil | Without option |
| B   | With lock      |

#### 8 Positioning pin hole

|     |                         |  |
|-----|-------------------------|--|
| Nil | Housing B bottom*2      |  |
| K   | Body bottom 2 locations |  |

#### 9 Actuator cable type/length\*4

| Standard cable [m] |       | Robotic cable [m] |     |    |      |
|--------------------|-------|-------------------|-----|----|------|
| Nil                | None  | R1                | 1.5 | RA | 10*3 |
| S1                 | 1.5*6 | R3                | 3   | RB | 15*3 |
| S3                 | 3*6   | R5                | 5   | RC | 20*3 |
| S5                 | 5*6   | R8                | 8*3 |    |      |

#### Replacement Parts/Grease Pack

| Applied portion | Order no.       |
|-----------------|-----------------|
| Ball screw      | GR-D-005 (5 g)  |
| Rail guide      | GR-D-010 (10 g) |

\* Copper and zinc materials are used for the motors, cables, controllers/drivers.

\* The 25A- series specifications and dimensions are the same as those of the standard model.

For details, refer to the Web Catalog.

# Slider Type Ball Screw Drive **25A-LEFS Series**

Incremental (Step Motor 24 VDC)

Incremental (Servo Motor 24 VDC)

Secondary Battery Compatible

## JXC Series (For details, refer to page 301.)

### 10 Controller

|       |                    |
|-------|--------------------|
| Nil   | Without controller |
| C□1□□ | With controller    |

**C D 1 7 T**

### Interface (Communication protocol/Input/Output)

| Symbol | Type                 | Number of axes, Special specification |                       |
|--------|----------------------|---------------------------------------|-----------------------|
|        |                      | Standard                              | With STO sub-function |
| 5      | Parallel input (NPN) | ●                                     |                       |
| 6      | Parallel input (PNP) | ●                                     |                       |
| E      | EtherCAT             | ●                                     | ●                     |
| 9      | EtherNet/IP™         | ●                                     | ●                     |
| P      | PROFINET             | ●                                     | ●                     |
| D      | DeviceNet®           | ●                                     |                       |
| L      | IO-Link              | ●                                     | ●                     |
| M      | CC-Link              | ●                                     |                       |

### Mounting

|      |                |
|------|----------------|
| 7    | Screw mounting |
| 8*10 | DIN rail       |

### Number of axes, Special specification

| Symbol | Number of axes | Specification         |
|--------|----------------|-----------------------|
| 1      | Single axis    | Standard              |
| F      | Single axis    | With STO sub-function |

### Communication plug connector, I/O cable\*11

| Symbol | Type                                       | Applicable interface                         |
|--------|--|--|
| Nil    | Without accessory                          | —  |
| S      | Straight type communication plug connector | DeviceNet®                                   |
| T      | T-branch type communication plug connector | CC-Link Ver. 1.10                            |
| 1      | I/O cable (1.5 m)                          | Parallel input (NPN)<br>Parallel input (PNP) |
| 3      | I/O cable (3 m)                            |  |
| 5      | I/O cable (5 m)                            |  |



## LEC Series (For details, refer to page 301.)

**AN 1**

⑩ ⑪ ⑫

### 10 Controller/Driver type\*5

|     |                           |                        |
|-----|---------------------------|------------------------|
| Nil | Without controller/driver |                        |
| 6N  | <b>LECA6</b>              | NPN                    |
| 6P  |                           | (Step data input type) |
| 1N  | <b>LECP1</b> *6           | NPN                    |
| 1P  |                           | (Programless type)     |
| AN  | <b>LECPA</b> *6 *7        | NPN                    |
| AP  |                           | (Pulse input type)     |

### 11 I/O cable length\*8

|     |  |  |
|-----|--|--|
| Nil | Without cable (Without communication plug connector) |  |
| 1   | 1.5 m  |  |
| 3   | 3 m*9  |  |
| 5   | 5 m*9  |  |

### 12 Controller/Driver mounting

|     |                |
|-----|----------------|
| Nil | Screw mounting |
| D   | DIN rail*10    |



- \*1 Please contact SMC for non-standard strokes as they are produced as special orders.
- \*2 Refer to the body mounting example in the **Web Catalog** for the mounting method.
- \*3 Produced upon receipt of order (Robotic cable only)
- \*4 The standard cable should only be used on fixed parts. For use on moving parts, select the robotic cable. Refer to the **Web Catalog** if only the actuator cable is required.
- \*5 For details on controllers/drivers and compatible motors, refer to the compatible controllers/drivers on the next page.
- \*6 Only available for the motor type "Step motor"
- \*7 When pulse signals are open collector, order the current limiting resistor (LEC-PA-R-□) separately. (Refer to the **Web Catalog**.)

- \*8 When "Without controller/driver" is selected for controller/driver types, I/O cable cannot be selected. If an I/O cable is required, order the cable separately for each series. (For details, refer to the **Web Catalog**.)
- \*9 When "Pulse input type" is selected for controller/driver types, pulse input usable only with differential. Only 1.5 m cables usable with open collector
- \*10 The DIN rail is not included. It must be ordered separately.
- \*11 Select "Nil" for anything other than DeviceNet®, CC-Link, or parallel input. Select "Nil," "S," or "T" for DeviceNet® or CC-Link. Select "Nil," "1," "3," or "5" for parallel input.

## ⚠ Caution

### [CE/UKCA-compliant products]

- ① EMC compliance was tested by combining the electric actuator LEF series and the controller LEC/JXC series. The EMC depends on the configuration of the customer's control panel and the relationship with other electrical equipment and wiring. Therefore, compliance with the EMC directive cannot be certified for SMC components incorporated into the customer's equipment under actual operating conditions. As a result, it is necessary for the customer to verify compliance with the EMC directive for the machinery and equipment as a whole.
- ② For the incremental (servo motor 24 VDC) specification, EMC compliance was tested by installing a noise filter set (LEC-NFA). Refer to the **Web Catalog** for the noise filter set. Refer to the LECA series Operation Manual for installation.

### [UL-compliant products (For the LEC series)]

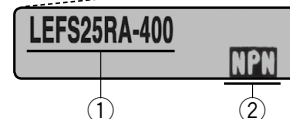
When compliance with UL is required, the electric actuator and controller/driver should be used with a UL1310 Class 2 power supply.

## The actuator and controller/driver are sold as a package.

Confirm that the combination of the controller/driver and actuator is correct.

### <Check the following before use.>

- ① Check the actuator label for the model number (after "25A-"). This number should match that of the controller/driver.
- ② Check that the Parallel I/O configuration matches (NPN or PNP).



\* Refer to the Operation Manual for using the products. Please download it via our website: <https://www.smcworld.com>





# 25A-LEFS Series











Incremental (Step Motor 24 VDC)

Incremental (Servo Motor 24 VDC)

Secondary Battery Compatible

## Compatible Controllers/Drivers

| Type                     | Step data input type  | Step data input type  | Programless type  | Pulse input type  |
|--------------------------|---|---|---|---|
|                          |  |  |  |  |
| Series                   | <b>JXC51<br/>JXC61</b>  | <b>LECA6</b>  | <b>LECP1</b>  | <b>LECPA</b>  |
| Features                 | Parallel I/O  | Parallel I/O  | Capable of setting up operation (step data) without using a PC or teaching box    | Operation by pulse signals  |
| Compatible motor         | Step motor (Servo/24 VDC)   | Servo motor (24 VDC)  | Step motor (Servo/24 VDC)   |   |
| Max. number of step data | 64 points   |   | 14 points   | —   |
| Power supply voltage     | 24 VDC  |   |   |   |

| Type                     | EtherCAT direct input type  | EtherCAT direct input type with STO sub-function                                    | EtherNet/IP™ direct input type  | EtherNet/IP™ direct input type with STO sub-function                                | PROFINET direct input type  | PROFINET direct input type with STO sub-function                                    | DeviceNet® direct input type  | IO-Link direct input type   | IO-Link direct input type with STO sub-function                                       | CC-Link direct input type   |
|--------------------------|---|---|---|---|---|---|---|---|---|---|
|                          |  |  |  |  |  |  |  |  |  |  |
| Series                   | <b>JXCE1</b>  | <b>JXCEF</b>  | <b>JXC91</b>  | <b>JXC9F</b>  | <b>JXCP1</b>  | <b>JXCPF</b>  | <b>JXCD1</b>  | <b>JXCL1</b>  | <b>JXCLF</b>  | <b>JXCM1</b>  |
| Features                 | EtherCAT direct input   | EtherCAT direct input with STO sub-function   | EtherNet/IP™ direct input   | EtherNet/IP™ direct input with STO sub-function                                     | PROFINET direct input   | PROFINET direct input with STO sub-function   | DeviceNet® direct input   | IO-Link direct input  | IO-Link direct input with STO sub-function  | CC-Link direct input  |
| Compatible motor         | Step motor (Servo/24 VDC)   |   |   |   |   |   |   |   |   |   |
| Max. number of step data | 64 points   |   |   |   |   |   |   |   |   |   |
| Power supply voltage     | 24 VDC  |   |   |   |   |   |   |   |   |   |





Battery-less Absolute (Step Motor 24 VDC)

# High Performance Slider Type

## Ball Screw Drive

Secondary Battery Compatible

### 25A-LEFS□G Series

25A-LEFS16, 25, 32, 40



\* For details, refer to the Web Catalog.



### How to Order

**25A - LEFS** **H** **25** **□** **G** **B** - **200** **□** **K** - **R1** **C5H73**

Series compatible with secondary batteries

① ② ③ ④ ⑤ ⑥ ⑦ ⑧ ⑨ ⑩

For details on controllers, refer to the next page.

#### ① Accuracy

|     |                     |
|-----|---------------------|
| Nil | Basic type          |
| H   | High-precision type |

#### ② Size

|    |
|----|
| 16 |
| 25 |
| 32 |
| 40 |

#### ③ Motor mounting position

|     |                     |
|-----|---------------------|
| Nil | In-line             |
| R   | Right side parallel |
| L   | Left side parallel  |

#### ④ Motor type

| Symbol | Type                                     | Applicable size |            |            |            | Compatible controllers                    |
|--------|--|-----------------|------------|------------|------------|---|
|        |  | 25A-LEFS16      | 25A-LEFS25 | 25A-LEFS32 | 25A-LEFS40 |   |
| G      | High performance (Battery-less absolute) | ●               | ●          | ●          | ●          | JXC5H<br>JXC6H<br>JXCEH<br>JXC9H<br>JXCPH |

#### ⑤ Lead [mm]

| Symbol | 25A-LEFS16 | 25A-LEFS25 | 25A-LEFS32 | 25A-LEFS40 |
|--------|------------|------------|------------|------------|
| H      | —          | 20         | 24         | 30         |
| A      | 10         | 12         | 16         | 20         |
| B      | 5          | 6          | 8          | 10         |

#### ⑥ Stroke\*1 [mm]

| Stroke      | Size | Note  |
|-------------|------|---|
|             |      | Applicable stroke   |
| 50 to 500   | 16   | 50, 100, 150, 200, 250, 300, 350, 400, 450, 500   |
| 50 to 800   | 25   | 50, 100, 150, 200, 250, 300, 350, 400, 450, 500, 550, 600, 650, 700, 750, 800                         |
| 50 to 1000  | 32   | 50, 100, 150, 200, 250, 300, 350, 400, 450, 500, 550, 600, 650, 700, 750, 800, 850, 900, 950, 1000    |
| 150 to 1200 | 40   | 150, 200, 250, 300, 350, 400, 450, 500, 550, 600, 650, 700, 750, 800, 850, 900, 950, 1000, 1100, 1200 |

#### ⑦ Motor option

|     |                |
|-----|----------------|
| Nil | Without option |
| B   | With lock      |

#### ⑧ Positioning pin hole

|     |                         |  |
|-----|-------------------------|--|
| Nil | Housing B bottom*2      |  |
| K   | Body bottom 2 locations |  |

#### ⑨ Actuator cable type/length

| Robotic cable [m] |      |    |      |
|-------------------|------|----|------|
| Nil               | None | R8 | 8*3  |
| R1                | 1.5  | RA | 10*3 |
| R3                | 3    | RB | 15*3 |
| R5                | 5    | RC | 20*3 |

\* Copper and zinc materials are used for the motors, cables, controllers/drivers.  
\* The 25A- series specifications and dimensions are the same as those of the standard model.

For details, refer to the [Web Catalog](#).

#### Replacement Parts/Grease Pack

| Applied portion | Order no.       |
|-----------------|-----------------|
| Ball screw      | GR-D-005 (5 g)  |
| Rail guide      | GR-D-010 (10 g) |



**High Performance**  
**Slider Type/Ball Screw Drive 25A-LEFS□G Series**

Battery-less Absolute (Step Motor 24 VDC)

Secondary Battery Compatible

**⑩ Controller**

|       |                    |
|-------|--------------------|
| Nil   | Without controller |
| C□H□□ | With controller    |



**Controller type**

|   |                         |
|---|-------------------------|
| 5 | Parallel I/O (NPN) type |
| 6 | Parallel I/O (PNP) type |
| E | EtherCAT                |
| 9 | EtherNet/IP™            |
| P | PROFINET                |

**Mounting**

|     |                |
|-----|----------------|
| 7   | Screw mounting |
| 8*4 | DIN rail       |

**Number of axes/Special specification**

|   |                              |
|---|------------------------------|
| H | 1 axis/High performance type |
|---|------------------------------|

**I/O cable length**

|     |               |
|-----|---------------|
| Nil | Without cable |
| 1   | 1.5 m         |
| 3   | 3 m           |
| 5   | 5 m           |

- \*1 Please contact SMC for non-standard strokes as they are produced as special orders.
- \*2 For details on the mounting method, refer to page 280.
- \*3 Produced upon receipt of order
- \*4 The DIN rail is not included. It must be ordered separately.

**⚠ Caution**

**[CE/UKCA-compliant products]**

EMC compliance was tested by combining the electric actuator LEF series and the controller JXC series.

The EMC depends on the configuration of the customer's control panel and the relationship with other electrical equipment and wiring. Therefore, compliance with the EMC directive cannot be certified for SMC components incorporated into the customer's equipment under actual operating conditions. As a result, it is necessary for the customer to verify compliance with the EMC directive for the machinery and equipment as a whole.

**■ Trademark**

EtherNet/IP® is a registered trademark of ODVA, Inc.  
 EtherCAT® is registered trademark and patented technology, licensed by Beckhoff Automation GmbH, Germany.

**The actuator and controller are sold as a package.**

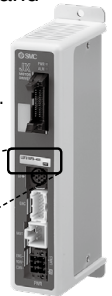
Confirm that the combination of the controller and actuator is correct.

**<Check the following before use.>**

- \*1 Check the actuator label for the model number (after "25A-"). This number should match that of the controller/driver.



\*1



- \* Refer to the Operation Manual for using the products. Please download it via our website: <https://www.smcworld.com>

| Type                            | Step data input type   | EtherCAT direct input type | EtherNet/IP™ direct input type | PROFINET direct input type |
|---------------------------------|------------------------|----------------------------|--------------------------------|----------------------------|
|                                 |                        |                            |                                |                            |
| <b>Series</b>                   | <b>JXC5H<br/>JXC6H</b> | <b>JXCEH</b>               | <b>JXC9H</b>                   | <b>JXCPH</b>               |
| <b>Features</b>                 | Parallel I/O           | EtherCAT direct input      | EtherNet/IP™ direct input      | PROFINET direct input      |
| <b>Compatible motor</b>         | Step motor 24 VDC      |                            |                                |                            |
| <b>Max. number of step data</b> | 64 points              |                            |                                |                            |
| <b>Power supply voltage</b>     | 24 VDC                 |                            |                                |                            |

Incremental (Step Motor 24 VDC)

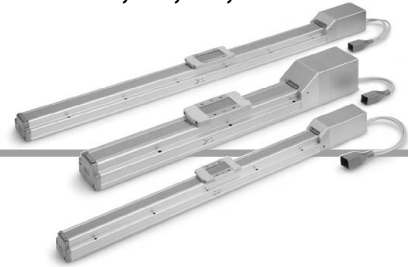
# High Performance Slider Type

## Ball Screw Drive Secondary Battery Compatible



### 25A-LEFS□F Series 25A-LEFS16, 25, 32, 40

**RoHS**



### How to Order

**25A-LEFS** H 25 □ F B - 200 □ K - S1 C5H73

Series compatible with secondary batteries

① ② ③ ④ ⑤ ⑥ ⑦ ⑧ ⑨ ⑩

For details on controllers, refer to the next page.

#### ① Accuracy

|            |                     |
|------------|---------------------|
| <b>Nil</b> | Basic type          |
| <b>H</b>   | High-precision type |

#### ② Size

|           |
|-----------|
| <b>16</b> |
| <b>25</b> |
| <b>32</b> |
| <b>40</b> |

#### ③ Motor mounting position

|            |         |
|------------|---------|
| <b>Nil</b> | In-line |
|------------|---------|

#### ④ Motor type

| Symbol   | Type                                 | Applicable size |            |            |            | Compatible controllers                    |
|----------|--------------------------------------|-----------------|------------|------------|------------|---|
|          |                                      | 25A-LEFS16      | 25A-LEFS25 | 25A-LEFS32 | 25A-LEFS40 |   |
| <b>F</b> | High performance (Step motor 24 VDC) | ●               | ●          | ●          | ●          | JXC5H<br>JXC6H<br>JXCEH<br>JXC9H<br>JXCPH |

#### ⑤ Lead [mm]

| Symbol   | 25A-LEFS16 | 25A-LEFS25 | 25A-LEFS32 | 25A-LEFS40 |
|----------|------------|------------|------------|------------|
| <b>H</b> | —          | 20         | 24         | 30         |
| <b>A</b> | 10         | 12         | 16         | 20         |
| <b>B</b> | 5          | 6          | 8          | 10         |

#### ⑥ Stroke\*1[mm]

| Stroke             | Note      |   |
|--------------------|-----------|---|
|                    | Size      | Applicable stroke   |
| <b>50 to 500</b>   | <b>16</b> | 50, 100, 150, 200, 250, 300, 350, 400, 450, 500   |
| <b>50 to 800</b>   | <b>25</b> | 50, 100, 150, 200, 250, 300, 350, 400, 450, 500, 550, 600, 650, 700, 750, 800                         |
| <b>50 to 1000</b>  | <b>32</b> | 50, 100, 150, 200, 250, 300, 350, 400, 450, 500, 550, 600, 650, 700, 750, 800, 850, 900, 950, 1000    |
| <b>150 to 1200</b> | <b>40</b> | 150, 200, 250, 300, 350, 400, 450, 500, 550, 600, 650, 700, 750, 800, 850, 900, 950, 1000, 1100, 1200 |

#### ⑦ Motor option

|            |                |
|------------|----------------|
| <b>Nil</b> | Without option |
| <b>B</b>   | With lock      |

#### ⑧ Positioning pin hole

|            |                         |  |
|------------|-------------------------|--|
| <b>Nil</b> | Housing B bottom*2      |  |
| <b>K</b>   | Body bottom 2 locations |  |

#### ⑨ Actuator cable type/length\*4

| Standard cable [m] |      | Robotic cable [m] |     |           |      |
|--------------------|------|-------------------|-----|-----------|------|
| <b>Nil</b>         | None | <b>R1</b>         | 1.5 | <b>RA</b> | 10*3 |
| <b>S1</b>          | 1.5  | <b>R3</b>         | 3   | <b>RB</b> | 15*3 |
| <b>S3</b>          | 3    | <b>R5</b>         | 5   | <b>RC</b> | 20*3 |
| <b>S5</b>          | 5    | <b>R8</b>         | 8*3 |           |      |

\* Copper and zinc materials are used for the motors, cables, controllers/drivers.  
\* The 25A- series specifications and dimensions are the same as those of the standard model.

For details, refer to the [Web Catalog](#).

#### Replacement Parts/Grease Pack

| Applied portion | Order no.       |
|-----------------|-----------------|
| Ball screw      | GR-D-005 (5 g)  |
| Rail guide      | GR-D-010 (10 g) |

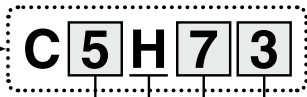
**High Performance**  
**Slider Type/Ball Screw Drive 25A-LEFS□F Series**

Incremental (Step Motor 24 VDC)

Secondary Battery Compatible

**⑩ Controller**

|       |                    |
|-------|--------------------|
| Nil   | Without controller |
| C□H□□ | With controller    |



**Interface (Communication protocol/Input/Output)**

|          |                    |
|----------|--------------------|
| <b>5</b> | Parallel I/O (NPN) |
| <b>6</b> | Parallel I/O (PNP) |
| <b>E</b> | EtherCAT           |
| <b>9</b> | EtherNet/IP™       |
| <b>P</b> | PROFINET           |

**Mounting**

|             |                |
|-------------|----------------|
| <b>7</b>    | Screw mounting |
| <b>8</b> *5 | DIN rail       |

**Number of axes/Special specification**

|          |                              |
|----------|------------------------------|
| <b>H</b> | 1 axis/High performance type |
|----------|------------------------------|

**Communication plug connector, I/O cable\*6**

| Symbol   | Type              | Applicable interface                         |
|----------|-------------------|--|
| Nil      | Without accessory | —  |
| <b>1</b> | I/O cable (1.5 m) | Parallel input (NPN)<br>Parallel input (PNP) |
| <b>3</b> | I/O cable (3 m)   |  |
| <b>5</b> | I/O cable (5 m)   |  |

- \*1 Please contact SMC for non-standard strokes as they are produced as special orders.
- \*2 For details on the mounting method, refer to page 280.
- \*3 Produced upon receipt of order (Robotic cable only)
- \*4 The standard cable should only be used on fixed parts.  
For use on moving parts, select the robotic cable.

- \*5 The DIN rail is not included. It must be ordered separately.
- \*6 Select "Nil" for anything other than parallel input.  
Select "Nil," "1," "3," or "5" for parallel input.

**⚠ Caution**

**[CE/UKCA-compliant products]**

EMC compliance was tested by combining the electric actuator LEF series and the controller JXC series.

The EMC depends on the configuration of the customer's control panel and the relationship with other electrical equipment and wiring. Therefore, compliance with the EMC directive cannot be certified for SMC components incorporated into the customer's equipment under actual operating conditions. As a result, it is necessary for the customer to verify compliance with the EMC directive for the machinery and equipment as a whole.

**■ Trademark**

EtherNet/IP® is a registered trademark of ODVA, Inc.  
EtherCAT® is registered trademark and patented technology, licensed by Beckhoff Automation GmbH, Germany.

**The actuator and controller are sold as a package.**

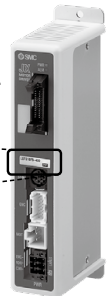
Confirm that the combination of the controller and actuator is correct.

**<Check the following before use.>**

- \*1 Check the actuator label for the model number (after "25A-").  
This number should match that of the controller/driver.



\*1



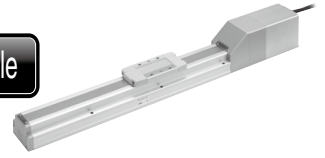
\* Refer to the Operation Manual for using the products.  
Please download it via our website: <https://www.smcworld.com>

**Compatible Controllers**

| Type                            | Step data input type   | EtherCAT direct input type | EtherNet/IP™ direct input type | PROFINET direct input type |
|---------------------------------|------------------------|----------------------------|--------------------------------|----------------------------|
|                                 |                        |                            |                                |                            |
| <b>Series</b>                   | <b>JXC5H<br/>JXC6H</b> | <b>JXCEH</b>               | <b>JXC9H</b>                   | <b>JXCPH</b>               |
| <b>Features</b>                 | Parallel I/O           | EtherCAT direct input      | EtherNet/IP™ direct input      | PROFINET direct input      |
| <b>Compatible motor</b>         | Step motor 24 VDC      | Step motor (Servo/24 VDC)  |                                |                            |
| <b>Max. number of step data</b> | 64 points              | 64 points                  |                                |                            |
| <b>Power supply voltage</b>     | 24 VDC                 | 24 VDC                     |                                |                            |

# Slider Type Ball Screw Drive

Secondary Battery Compatible



## 25A-LEFS Series 25A-LEFS25, 32, 40

Refer to the **Web Catalog** for model selection.



LECY□ Series ▶ p. 304

### How to Order

**25A-LEFS** **H** **32** **R** **S3** **B** - **200** **K** - **S** **2** **A2**

Series compatible with secondary batteries

#### 1 Accuracy

|     |                     |
|-----|---------------------|
| Nil | Basic type          |
| H   | High-precision type |

#### 2 Size

|    |
|----|
| 25 |
| 32 |
| 40 |

#### 3 Motor mounting position

|     |                     |
|-----|---------------------|
| Nil | In-line             |
| R   | Right side parallel |
| L   | Left side parallel  |

#### 5 Lead [mm]

| Symbol | 25A-LEFS25 | 25A-LEFS32 | 25A-LEFS40 |
|--------|------------|------------|------------|
| H      | 20         | 24         | 30         |
| A      | 12         | 16         | 20         |
| B      | 6          | 8          | 10         |

#### 6 Stroke [mm]

|            |            |
|------------|------------|
| 50 to 1200 | 50 to 1200 |
|------------|------------|

\* For details, refer to the applicable stroke table below.

#### 7 Motor option

|     |                |
|-----|----------------|
| Nil | Without option |
| B   | With lock      |

#### 4 Motor type

| Symbol | Type                                 | Output [W] | 2 Size    | 1 Driver type | Compatible drivers |
|--------|--------------------------------------|------------|-----------|---------------|--------------------|
| S2*1   | AC servo motor (Incremental encoder) | 100        | 25        | A1/A2         | LECSA□-S1          |
| S3     |                                      | 200        | 32        | A1/A2         | LECSA□-S3          |
| S4     |                                      | 400        | 40        | A2            | LECSA2-S4          |
| T6*2   | AC servo motor (Absolute encoder)    | 100        | 25        | B2            | LECSB2-T5          |
| T7     |                                      |            |           | C2            | LECSC2-T5          |
|        |                                      |            |           | S2            | LECSS2-T5          |
|        |                                      | B2         | LECSB2-T7 |               |                    |
| T8     |                                      | 200        | 32        | C2            | LECSC2-T7          |
|        |                                      |            |           | S2            | LECSS2-T7          |
|        | B2                                   |            |           | LECSB2-T8     |                    |
| T8     | 400                                  | 40         | C2        | LECSC2-T8     |                    |
|        |                                      |            | S2        | LECSS2-T8     |                    |

\*1 For motor type S2, the compatible driver part number suffix is S1.  
\*2 For motor type T6, the compatible driver part number is LECS□2-T5.

#### 8 Positioning pin hole

|     |                         |  |
|-----|-------------------------|--|
| Nil | Housing B bottom*1      |  |
| K   | Body bottom 2 locations |  |

\*1 Refer to the body mounting example for the mounting method. (Refer to the **Web Catalog**.)

#### 9 Cable type\*1 \*2

|     |                |
|-----|----------------|
| Nil | Without cable  |
| S   | Standard cable |
| R   | Robotic cable  |

\*1 A motor cable and encoder cable are included with the product. (A lock cable is also included if motor option "B: With lock" is selected.)  
\*2 Standard cable entry direction is  
· Parallel: (A) Axis side  
· In-line: (B) Counter axis side

#### 10 Cable length\*1 [m]

|     |               |
|-----|---------------|
| Nil | Without cable |
| 2   | 2             |
| 5   | 5             |
| A   | 10            |

\*1 The length of the encoder, motor, and lock cables are the same.

#### 11 Driver type

|     | Compatible drivers | Power supply voltage [V] | Size |    |    |
|-----|--------------------|--------------------------|------|----|----|
|     |                    |                          | 25   | 32 | 40 |
| Nil | Without driver     | —                        | ●    | ●  | ●  |
| A1  | LECSA1-S□          | 100 to 120               | ●    | ●  | —  |
| A2  | LECSA2-S□          | 200 to 230               | ●    | ●  | ●  |
| B2  | LECSB2-T□          | 200 to 240               | ●    | ●  | ●  |
| C2  | LECSC2-T□          | 200 to 230               | ●    | ●  | ●  |
| S2  | LECSS2-T□          | 200 to 240               | ●    | ●  | ●  |

\* When a driver type is selected, a cable is included. Select the cable type and cable length.  
Example) S2S2: Standard cable (2 m) + Driver (LECSS2)  
S2: Standard cable (2 m)  
Nil: Without cable and driver

#### 12 I/O cable length [m]\*3

|     |                                |
|-----|--------------------------------|
| Nil | Without cable                  |
| H   | Without cable (Connector only) |
| 1   | 1.5                            |

\*3 When "Nil: Without driver" is selected for the driver type, only "Nil: Without cable" can be selected. If an I/O cable is required, refer to the "Options" page in the **Web Catalog**.

#### Applicable Stroke Table

| Model      | Stroke [mm] |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |      |      |      |   |
|------------|-------------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|------|------|------|---|
|            | 50          | 100 | 150 | 200 | 250 | 300 | 350 | 400 | 450 | 500 | 550 | 600 | 650 | 700 | 750 | 800 | 850 | 900 | 950 | 1000 | 1100 | 1200 |   |
| 25A-LEFS25 | ●           | ●   | ●   | ●   | ●   | ●   | ●   | ●   | ●   | ●   | ●   | ●   | ●   | ●   | ●   | ●   | ●   | ●   | ●   | ●    | ●    | ●    | ● |
| 25A-LEFS32 | ●           | ●   | ●   | ●   | ●   | ●   | ●   | ●   | ●   | ●   | ●   | ●   | ●   | ●   | ●   | ●   | ●   | ●   | ●   | ●    | ●    | ●    | ● |
| 25A-LEFS40 | —           | —   | ●   | ●   | ●   | ●   | ●   | ●   | ●   | ●   | ●   | ●   | ●   | ●   | ●   | ●   | ●   | ●   | ●   | ●    | ●    | ●    | ● |

\* Please contact SMC for non-standard strokes as they are produced as special orders.

**Compatible Drivers**\*1 \* The 25A-series specifications and dimensions are the same as those of the standard model. For details, refer to the **Web Catalog**.

| Driver type              | Pulse input type/<br>Positioning type                  | Pulse input type                       | CC-Link direct<br>input type           | SSCNET III/H<br>type      |
|--------------------------|--|--|--|---------------------------|
| Series                   | LECSA  | LECSB-T                                | LECSA-T                                | LECSS-T                   |
| Number of point tables   | Up to 7  | Up to 255                              | Up to 255 (2 stations occupied)        | —                         |
| Pulse input              | ○  | ○                                      | —                                      | —                         |
| Applicable network       | —  | —                                      | CC-Link                                | SSCNET III/H              |
| Control encoder          | Incremental 17-bit encoder                             | Absolute 22-bit encoder                | Absolute 18-bit encoder                | Absolute 22-bit encoder   |
| Communication function   | USB communication                                      | USB communication, RS422 communication | USB communication, RS422 communication | USB communication         |
| Power supply voltage [V] | 100 to 120 VAC (50/60 Hz)<br>200 to 230 VAC (50/60 Hz) | 200 to 240 VAC (50/60 Hz)              | 200 to 230 VAC (50/60 Hz)              | 200 to 240 VAC (50/60 Hz) |

#### Replacement Parts/Grease Pack

| Applied portion | Order no.       |
|-----------------|-----------------|
| Ball screw      | GR-D-005 (5 g)  |
| Rail guide      | GR-D-010 (10 g) |

\*1 Copper and zinc materials are used for the motors, cables, controllers/drivers.

# Slider Type Ball Screw Drive

Secondary Battery Compatible

## 25A-LEFS Series 25A-LEFS25, 32, 40



Refer to the **Web Catalog** for model selection.

LECY □ Series ▶ p. 303

**CE** **UKCA** **RoHS**  
Refer to the "CE/UKCA/UL-compliance List" in the **Web Catalog**.

### How to Order

**25A-LEFS** **H** **32** **R** **V7** **B** - **200** **K** - **S** **2** **M2**

Series compatible with secondary batteries

| <b>1 Accuracy</b>  | <b>2 Size</b>       | <b>3 Motor mounting position</b> | <b>5 Lead [mm]</b> | <b>6 Stroke [mm]</b> | <b>7 Motor option</b>  |    |    |    |  |     |         |   |                     |   |                    |  |        |            |            |            |   |    |    |    |   |    |    |    |   |   |   |    |   |    |    |    |    |      |      |  |     |                |   |           |
|--|---------------------|----------------------------------|--------------------|----------------------|--|----|----|----|--|-----|---------|---|---------------------|---|--------------------|--|--------|------------|------------|------------|---|----|----|----|---|----|----|----|---|---|---|----|---|----|----|----|----|------|------|--|-----|----------------|---|-----------|
| <table border="1"> <tr><td>Nil</td><td>Basic type</td></tr> <tr><td>H</td><td>High-precision type</td></tr> </table> | Nil                 | Basic type                       | H                  | High-precision type  | <table border="1"> <tr><td>25</td></tr> <tr><td>32</td></tr> <tr><td>40</td></tr> </table> | 25 | 32 | 40 | <table border="1"> <tr><td>Nil</td><td>In-line</td></tr> <tr><td>R</td><td>Right side parallel</td></tr> <tr><td>L</td><td>Left side parallel</td></tr> </table> | Nil | In-line | R | Right side parallel | L | Left side parallel | <table border="1"> <tr><th>Symbol</th><th>25A-LEFS25</th><th>25A-LEFS32</th><th>25A-LEFS40</th></tr> <tr><td>H</td><td>20</td><td>24</td><td>30</td></tr> <tr><td>A</td><td>12</td><td>16</td><td>20</td></tr> <tr><td>B</td><td>6</td><td>8</td><td>10</td></tr> </table> | Symbol | 25A-LEFS25 | 25A-LEFS32 | 25A-LEFS40 | H | 20 | 24 | 30 | A | 12 | 16 | 20 | B | 6 | 8 | 10 | <table border="1"> <tr><td>50</td><td>50</td></tr> <tr><td>to</td><td>to</td></tr> <tr><td>1200</td><td>1200</td></tr> </table> | 50 | 50 | to | to | 1200 | 1200 | <table border="1"> <tr><td>Nil</td><td>Without option</td></tr> <tr><td>B</td><td>With lock</td></tr> </table> | Nil | Without option | B | With lock |
| Nil  | Basic type          |                                  |                    |                      |  |    |    |    |  |     |         |   |                     |   |                    |  |        |            |            |            |   |    |    |    |   |    |    |    |   |   |   |    |   |    |    |    |    |      |      |  |     |                |   |           |
| H  | High-precision type |                                  |                    |                      |  |    |    |    |  |     |         |   |                     |   |                    |  |        |            |            |            |   |    |    |    |   |    |    |    |   |   |   |    |   |    |    |    |    |      |      |  |     |                |   |           |
| 25   |                     |                                  |                    |                      |  |    |    |    |  |     |         |   |                     |   |                    |  |        |            |            |            |   |    |    |    |   |    |    |    |   |   |   |    |   |    |    |    |    |      |      |  |     |                |   |           |
| 32   |                     |                                  |                    |                      |  |    |    |    |  |     |         |   |                     |   |                    |  |        |            |            |            |   |    |    |    |   |    |    |    |   |   |   |    |   |    |    |    |    |      |      |  |     |                |   |           |
| 40   |                     |                                  |                    |                      |  |    |    |    |  |     |         |   |                     |   |                    |  |        |            |            |            |   |    |    |    |   |    |    |    |   |   |   |    |   |    |    |    |    |      |      |  |     |                |   |           |
| Nil  | In-line             |                                  |                    |                      |  |    |    |    |  |     |         |   |                     |   |                    |  |        |            |            |            |   |    |    |    |   |    |    |    |   |   |   |    |   |    |    |    |    |      |      |  |     |                |   |           |
| R  | Right side parallel |                                  |                    |                      |  |    |    |    |  |     |         |   |                     |   |                    |  |        |            |            |            |   |    |    |    |   |    |    |    |   |   |   |    |   |    |    |    |    |      |      |  |     |                |   |           |
| L  | Left side parallel  |                                  |                    |                      |  |    |    |    |  |     |         |   |                     |   |                    |  |        |            |            |            |   |    |    |    |   |    |    |    |   |   |   |    |   |    |    |    |    |      |      |  |     |                |   |           |
| Symbol   | 25A-LEFS25          | 25A-LEFS32                       | 25A-LEFS40         |                      |  |    |    |    |  |     |         |   |                     |   |                    |  |        |            |            |            |   |    |    |    |   |    |    |    |   |   |   |    |   |    |    |    |    |      |      |  |     |                |   |           |
| H  | 20                  | 24                               | 30                 |                      |  |    |    |    |  |     |         |   |                     |   |                    |  |        |            |            |            |   |    |    |    |   |    |    |    |   |   |   |    |   |    |    |    |    |      |      |  |     |                |   |           |
| A  | 12                  | 16                               | 20                 |                      |  |    |    |    |  |     |         |   |                     |   |                    |  |        |            |            |            |   |    |    |    |   |    |    |    |   |   |   |    |   |    |    |    |    |      |      |  |     |                |   |           |
| B  | 6                   | 8                                | 10                 |                      |  |    |    |    |  |     |         |   |                     |   |                    |  |        |            |            |            |   |    |    |    |   |    |    |    |   |   |   |    |   |    |    |    |    |      |      |  |     |                |   |           |
| 50   | 50                  |                                  |                    |                      |  |    |    |    |  |     |         |   |                     |   |                    |  |        |            |            |            |   |    |    |    |   |    |    |    |   |   |   |    |   |    |    |    |    |      |      |  |     |                |   |           |
| to   | to                  |                                  |                    |                      |  |    |    |    |  |     |         |   |                     |   |                    |  |        |            |            |            |   |    |    |    |   |    |    |    |   |   |   |    |   |    |    |    |    |      |      |  |     |                |   |           |
| 1200   | 1200                |                                  |                    |                      |  |    |    |    |  |     |         |   |                     |   |                    |  |        |            |            |            |   |    |    |    |   |    |    |    |   |   |   |    |   |    |    |    |    |      |      |  |     |                |   |           |
| Nil  | Without option      |                                  |                    |                      |  |    |    |    |  |     |         |   |                     |   |                    |  |        |            |            |            |   |    |    |    |   |    |    |    |   |   |   |    |   |    |    |    |    |      |      |  |     |                |   |           |
| B  | With lock           |                                  |                    |                      |  |    |    |    |  |     |         |   |                     |   |                    |  |        |            |            |            |   |    |    |    |   |    |    |    |   |   |   |    |   |    |    |    |    |      |      |  |     |                |   |           |

\* For details, refer to the applicable stroke table below.

#### 4 Motor type

| Symbol | Type                              | Output [W] | 2 Size | 1 Driver type | Compatible drivers |
|--------|-----------------------------------|------------|--------|---------------|--------------------|
| V6*1   | AC servo motor (Absolute encoder) | 100        | 25     | M2            | LECYM2-V5          |
| V7     |                                   |            |        | U2            | LECYU2-V5          |
| V8     |                                   |            |        | M2            | LECYM2-V7          |
|        |                                   |            | 32     | U2            | LECYU2-V7          |
|        |                                   |            | 40     | M2            | LECYM2-V8          |
|        |                                   |            |        | U2            | LECYU2-V8          |

\*1 For motor type V6, the compatible driver part number suffix is V5.

#### 8 Positioning pin hole

|     |                         |  |
|-----|-------------------------|--|
| Nil | Housing B bottom*1      |  |
| K   | Body bottom 2 locations |  |

\*1 Refer to the body mounting example in the **Web Catalog** for the mounting method.

#### 9 Cable type\*1 \*2

|     |                |
|-----|----------------|
| Nil | Without cable  |
| S   | Standard cable |
| R   | Robotic cable  |

\*1 A motor cable and encoder cable are included with the product. (A lock cable is also included if motor option "B: With lock" is selected.)

\*2 Standard cable entry direction is  
· Parallel: (A) Axis side  
· In-line: (B) Counter axis side

#### 10 Cable length\*1 [m]

|     |               |
|-----|---------------|
| Nil | Without cable |
| 3   | 3             |
| 5   | 5             |
| A   | 10            |
| C   | 20            |

\*1 The length of the encoder, motor, and lock cables are the same.

#### 11 Driver type

|     | Compatible drivers | Power supply voltage [V] |
|-----|--------------------|--------------------------|
| Nil | Without driver     | —                        |
| M2  | LECYM2-V□          | 200 to 230               |
| U2  | LECYU2-V□          | 200 to 230               |

#### 12 I/O cable length [m]\*3

|     |                                |
|-----|--------------------------------|
| Nil | Without cable                  |
| H   | Without cable (Connector only) |
| 1   | 1.5                            |

\*3 When "Nil: Without driver" is selected for the driver type, only "Nil: Without cable" can be selected. Refer to the **Web Catalog** if an I/O cable is required.

#### Applicable Stroke Table

●: Standard

| Model      | Stroke [mm] |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |      |      |      |   |
|------------|-------------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|------|------|------|---|
|            | 50          | 100 | 150 | 200 | 250 | 300 | 350 | 400 | 450 | 500 | 550 | 600 | 650 | 700 | 750 | 800 | 850 | 900 | 950 | 1000 | 1100 | 1200 |   |
| 25A-LEFS25 | ●           | ●   | ●   | ●   | ●   | ●   | ●   | ●   | ●   | ●   | ●   | ●   | ●   | ●   | ●   | ●   | ●   | —   | —   | —    | —    | —    | — |
| 25A-LEFS32 | ●           | ●   | ●   | ●   | ●   | ●   | ●   | ●   | ●   | ●   | ●   | ●   | ●   | ●   | ●   | ●   | ●   | ●   | ●   | ●    | ●    | —    | — |
| 25A-LEFS40 | —           | —   | ●   | ●   | ●   | ●   | ●   | ●   | ●   | ●   | ●   | ●   | ●   | ●   | ●   | ●   | ●   | ●   | ●   | ●    | ●    | ●    | ● |

\* Please contact SMC for non-standard strokes as they are produced as special orders.

\* The 25A- series specifications and dimensions are the same as those of the standard model.

For details, refer to the **Web Catalog**.

#### Compatible Drivers

| Driver type              | MECHATROLINK-II type                    | MECHATROLINK-III type |
|--------------------------|---|-----------------------|
|                          |   |                       |
| Series                   | LECYM                                   | LECYU                 |
| Applicable network       | MECHATROLINK-II                         | MECHATROLINK-III      |
| Control encoder          | Absolute 20-bit encoder                 |                       |
| Communication device     | USB communication, RS-422 communication |                       |
| Power supply voltage [V] | 200 to 230 VAC (50/60 Hz)               |                       |

\* Copper and zinc materials are used for the motors, cables, controllers/drivers.

#### Replacement Parts/Grease Pack

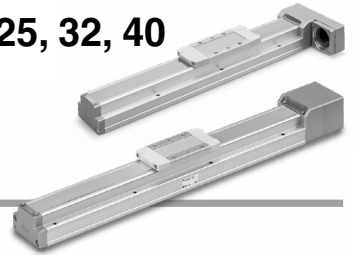
| Applied portion | Order no.       |
|-----------------|-----------------|
| Ball screw      | GR-D-005 (5 g)  |
| Rail guide      | GR-D-010 (10 g) |

# Electric Actuator/Slider Type Ball Screw Drive

Secondary Battery Compatible

RoHS

## 25A-LEFS Series 25A-LEFS25, 32, 40



### How to Order

25A-LEFS **H** **25** **R** **NZ** **A** - **100** **K**

Series compatible with secondary batteries

**1 Accuracy**

|     |                     |
|-----|---------------------|
| Nil | Basic type          |
| H   | High-precision type |

**2 Size**

|    |
|----|
| 25 |
| 32 |
| 40 |

**3 Motor mounting position**

|     |                     |
|-----|---------------------|
| Nil | In-line             |
| R   | Right side parallel |
| L   | Left side parallel  |

**4 Mounting type**

|    |     |     |
|----|-----|-----|
| NZ | NV  | NM2 |
| NY | NU  | NM3 |
| NX | NT  |     |
| NW | NM1 |     |

**5 Lead [mm]**

| Symbol | 25A-LEFS25 | 25A-LEFS32 | 25A-LEFS40 |
|--------|------------|------------|------------|
| H      | 20         | 24         | 30         |
| A      | 12         | 16         | 20         |
| B      | 6          | 8          | 10         |

**6 Stroke [mm]**

|      |      |
|------|------|
| 50   | 50   |
| to   | to   |
| 1200 | 1200 |

\* Refer to the applicable stroke table.

**7 Positioning pin hole**

|     |                         |  |
|-----|-------------------------|--|
| Nil | Housing B bottom*1      |  |
| K   | Body bottom 2 locations |  |

\*1 Refer to the body mounting example on the Web Catalog for the mounting method.

### Replacement Parts/Grease Pack

| Applied portion | Order no.       |
|-----------------|-----------------|
| Ball screw      | GR-D-005 (5 g)  |
| Rail guide      | GR-D-010 (10 g) |

### Applicable Stroke Table

● : Standard

| Model      | Stroke [mm] | 50 | 100 | 150 | 200 | 250 | 300 | 350 | 400 | 450 | 500 | 550 | 600 | 650 | 700 | 750 | 800 | 850 | 900 | 950 | 1000 | 1100 | 1200 |   |
|------------|-------------|----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|------|------|------|---|
| 25A-LEFS25 |             | ●  | ●   | ●   | ●   | ●   | ●   | ●   | ●   | ●   | ●   | ●   | ●   | ●   | ●   | ●   | ●   | ●   | —   | —   | —    | —    | —    | — |
| 25A-LEFS32 |             | ●  | ●   | ●   | ●   | ●   | ●   | ●   | ●   | ●   | ●   | ●   | ●   | ●   | ●   | ●   | ●   | ●   | ●   | ●   | ●    | ●    | —    | — |
| 25A-LEFS40 |             | —  | —   | ●   | ●   | ●   | ●   | ●   | ●   | ●   | ●   | ●   | ●   | ●   | ●   | ●   | ●   | ●   | ●   | ●   | ●    | ●    | ●    | ● |

\* Please contact SMC for non-standard strokes as they are produced as special orders.

\* The 25A-series specifications and dimensions are the same as those of the standard model.

### Compatible Motors and Mounting Types\*5

For details, refer to the Web Catalog.

| Applicable motor model                    |                        | Size/Mounting type |    |    |     |     |     |       |                |                |    |    |    |    |     |     |                     |   |                  |                  |   |                |     |
|---|------------------------|--------------------|----|----|-----|-----|-----|-------|----------------|----------------|----|----|----|----|-----|-----|---------------------|---|------------------|------------------|---|----------------|-----|
| Manufacturer                              | Series                 | 25                 |    |    |     |     |     | 32/40 |                |                |    |    |    |    |     |     |                     |   |                  |                  |   |                |     |
|   |                        | NZ                 | NY | NX | NM1 | NM2 | NM3 | NZ    | NY             | NX             | NW | NV | NU | NT | NM1 | NM2 |                     |   |                  |                  |   |                |     |
| Mitsubishi Electric Corporation           | MELSERVO JN/J4/J5      | ●                  | —  | —  | —   | —   | —   | ●     | —              | —              | —  | —  | —  | —  | —   | —   | —                   | — | —                | —                | — | —              | —   |
| YASKAWA Electric Corporation              | Σ-V/7/X                | ●*4                | —  | —  | —   | —   | —   | ●     | —              | —              | —  | —  | —  | —  | —   | —   | —                   | — | —                | —                | — | —              | —   |
| SANYO DENKI CO., LTD.                     | SANMOTION R            | ●                  | —  | —  | —   | —   | —   | ●     | —              | —              | —  | —  | —  | —  | —   | —   | —                   | — | —                | —                | — | —              | —   |
| OMRON Corporation                         | OMNUC G5/1S            | ●                  | —  | —  | —   | —   | —   | —     | ●              | —              | —  | —  | —  | —  | —   | —   | —                   | — | —                | —                | — | —              | —   |
| Panasonic Corporation                     | MINAS A5/A6            | ●<br>(MHMF only)   | ●  | —  | —   | —   | —   | —     | —              | ●              | —  | —  | —  | —  | —   | —   | —                   | — | —                | —                | — | —              | —   |
| FANUC CORPORATION                         | βis (-B)               | ●                  | —  | —  | —   | —   | —   | —     | —              | ●<br>(β1 only) | —  | —  | —  | ●  | —   | —   | —                   | — | —                | —                | — | —              | —   |
| NIDEC SANKYO CORPORATION                  | S-FLAG                 | ●                  | —  | —  | —   | —   | —   | —     | —              | ●              | —  | —  | —  | —  | —   | —   | —                   | — | —                | —                | — | —              | —   |
| KEYENCE CORPORATION                       | SV/SV2                 | ●*4                | —  | —  | —   | —   | —   | —     | —              | ●              | —  | —  | —  | —  | —   | —   | —                   | — | —                | —                | — | —              | —   |
| FUJI ELECTRIC CO., LTD.                   | ALPHA7                 | ●                  | —  | —  | —   | —   | —   | —     | —              | ●              | —  | —  | —  | —  | —   | —   | —                   | — | —                | —                | — | —              | —   |
| MinebeaMitsumi Inc.                       | Hybrid stepping motors | —                  | —  | —  | —   | ●*1 | —   | —     | —              | ●*3            | —  | —  | —  | —  | —   | —   | —                   | — | —                | —                | — | ●*2            | —   |
| Shinano Kenshi Co., Ltd.                  | CSB-BZ                 | —                  | —  | —  | —   | ●*1 | —   | —     | —              | ●*3            | —  | —  | —  | —  | —   | —   | —                   | — | —                | —                | — | —              | —   |
| ORIENTAL MOTOR Co., Ltd.                  | α STEP AR/AZ           | —                  | —  | —  | —   | —   | —   | —     | ●<br>(46 only) | —              | —  | —  | —  | —  | —   | —   | —                   | — | —                | —                | — | —              | ●*2 |
| FASTECH Co., Ltd.                         | Ezi-SERVO              | —                  | —  | —  | —   | ●   | —   | —     | —              | —              | —  | —  | —  | —  | —   | —   | —                   | — | —                | —                | — | ●*2            | —   |
| Rockwell Automation, Inc. (Allen-Bradley) | Kinetix MP/VP/TL       | ●<br>(TL only)     | —  | —  | —   | —   | —   | —     | —              | —              | —  | —  | —  | —  | —   | —   | ●*1<br>(MP/VP only) | — | —                | —                | — | ●<br>(TL only) | —   |
| Beckhoff Automation GmbH                  | AM 30/31/80/81         | ●                  | —  | —  | —   | —   | —   | —     | —              | —              | —  | —  | —  | —  | —   | —   | ●*1<br>(80/81 only) | — | ●*1<br>(30 only) | ●*2<br>(31 only) | — | —              | —   |
| Siemens AG                                | SIMOTICS S-1FK7        | —                  | —  | ●  | —   | —   | —   | —     | —              | —              | —  | —  | —  | —  | —   | —   | ●*1                 | — | —                | —                | — | —              | —   |
| Delta Electronics, Inc.                   | ASDA-A2                | ●                  | —  | —  | —   | —   | —   | —     | —              | —              | —  | —  | —  | —  | —   | —   | ●                   | — | —                | —                | — | —              | —   |
| ANCA Motion                               | AMD2000                | ●                  | —  | —  | —   | —   | —   | —     | —              | —              | —  | —  | —  | —  | —   | —   | ●                   | — | —                | —                | — | —              | —   |

\*1 Motor mounting position: In-line only \*2 Only size 32 is available when the motor mounting position is right (or left) side parallel. \*3 Motor mounting position: Right (or left) side parallel only

\*4 For some motors, the connector may protrude from the motor body. Be sure to check for interference with the mounting surface before selecting a motor.

\*5 The compatible motors and mounting types are typical examples. Select the mounting type after referring to the "Motor Mounting, Applicable Motor Dimensions" tables on the "Dimensions" pages.





# High Rigidity Slider Type Ball Screw Drive

Secondary Battery Compatible

## 25A-LEJS Series LEJS40, 63



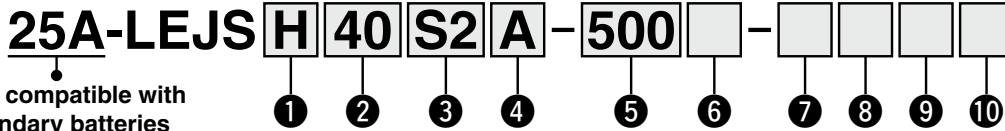
Refer to the **Web Catalog** for model selection.

LECY □ Series ▶ p. 306

### How to Order



Refer to the "CE/UKCA/UL-compliance List" in the Web Catalog.



#### 1 Accuracy

|     |                     |
|-----|---------------------|
| Nil | Basic type          |
| H   | High-precision type |

#### 2 Size

|    |
|----|
| 40 |
| 63 |

#### 3 Motor type

| Symbol | Type                                 | Output [W] | 2 Size    | 9 Driver type | Compatible drivers |
|--------|--------------------------------------|------------|-----------|---------------|--------------------|
| S2*1   | AC servo motor (Incremental encoder) | 100        | 40        | A1/A2         | LECSA□-S1          |
| S3     |                                      | 200        | 63        | A1/A2         | LECSA□-S3          |
| T6*2   | AC servo motor (Absolute encoder)    | 100        | 40        | B2            | LECSB2-T5          |
| T7     |                                      |            |           | 200           | 63                 |
|        |                                      | S2         | LECSS2-T5 |               |                    |
|        |                                      |            |           |               | B2                 |
|        |                                      |            |           | C2            | LECS2-T7           |
|        |                                      |            |           | S2            | LECSS2-T7          |

\*1 For motor type S2, the compatible driver part number suffix is S1.

\*2 For motor type T6, the compatible driver part number is LECS□2-T5.

#### 4 Lead [mm]

| Symbol | 25A-LEJS40 | 25A-LEJS63 |
|--------|------------|------------|
| H      | 24         | 30         |
| A      | 16         | 20         |
| B      | 8          | 10         |

#### 5 Stroke [mm]\*3

|             |  |
|-------------|--|
| 200 to 1500 | *3 Refer to the applicable stroke table for details. |
|-------------|--|

#### 6 Motor option

|     |                |
|-----|----------------|
| Nil | Without option |
| B   | With lock      |

#### 7 Cable type\*5, \*6, \*7

|     |                |
|-----|----------------|
| Nil | Without cable  |
| S   | Standard cable |
| R   | Robotic cable  |

\*6 A motor cable and encoder cable are included with the product. (A lock cable is also included if motor option "B: With lock" is selected.)

\*7 Standard cable entry direction is "(A) Axis side."

#### 8 Cable length [m]\*5, \*8

|     |               |
|-----|---------------|
| Nil | Without cable |
| 2   | 2             |
| 5   | 5             |
| A   | 10            |

\*8 The length of the motor, encoder, and lock cables are the same.

#### 9 Driver type\*5

|     | Compatible drivers | Power supply voltage [V] |
|-----|--------------------|--------------------------|
| Nil | Without driver     | —                        |
| A1  | LECSA1-S□          | 100 to 120               |
| A2  | LECSA2-S□          | 200 to 230               |
| B2  | LECSB2-T□          | 200 to 240               |
| C2  | LECS2-T□           | 200 to 230               |
| S2  | LECSS2-T□          | 200 to 240               |

\*5 When a driver type is selected, a cable is included. Select the cable type and cable length.

Example)

S2S2: Standard cable (2 m) + Driver (LECSS2)

S2: Standard cable (2 m)

Nil: Without cable and driver

#### 10 I/O cable length [m]\*9

|     |                                |
|-----|--------------------------------|
| Nil | Without cable                  |
| H   | Without cable (Connector only) |
| 1   | 1.5                            |

\*9 When "Nil: Without driver" is selected for the driver type, only "Nil: Without cable" can be selected.

Refer to the **Web Catalog** if an I/O cable is required.

#### Applicable Stroke Table\*4

●: Standard

| Model \ Stroke [mm] | 200 | 300 | 400 | 500 | 600 | 700 | 800 | 900 | 1000 | 1200 | 1500 |
|---------------------|-----|-----|-----|-----|-----|-----|-----|-----|------|------|------|
| 25A-LEJS40          | ●   | ●   | ●   | ●   | ●   | ●   | ●   | ●   | ●    | ●    | —    |
| 25A-LEJS63          | —   | ●   | ●   | ●   | ●   | ●   | ●   | ●   | ●    | ●    | ●    |

\*4 Please contact SMC for non-standard strokes as they are produced as special orders.

\* The 25A- series specifications and dimensions are the same as those of the standard model.

#### Compatible Drivers

For details, refer to the **Web Catalog**.

| Driver type              | Pulse input type/<br>Positioning type                        | Pulse input type                       | CC-Link direct<br>input type           | SSCNET III/H<br>type         |
|--------------------------|--|--|--|------------------------------|
|                          |  |  |  |                              |
| Series                   | LECSA  | LECSB-T                                | LECS2-T                                | LECSS-T                      |
| Number of point tables   | Up to 7  | Up to 255                              | Up to 255 (2 stations occupied)        | —                            |
| Pulse input              | ○  | ○                                      | —                                      | —                            |
| Applicable network       | —  | —                                      | CC-Link                                | SSCNET III/H                 |
| Control encoder          | Incremental<br>17-bit encoder                                | Absolute<br>22-bit encoder             | Absolute<br>18-bit encoder             | Absolute<br>22-bit encoder   |
| Communication function   | USB communication  | USB communication, RS422 communication | USB communication, RS422 communication | USB communication            |
| Power supply voltage [V] | 100 to 120 VAC<br>(50/60 Hz)<br>200 to 230 VAC<br>(50/60 Hz) | 200 to 240 VAC<br>(50/60 Hz)           | 200 to 230 VAC<br>(50/60 Hz)           | 200 to 240 VAC<br>(50/60 Hz) |

Solid state auto switches should be ordered separately.  
Click here for auto switch details.

#### Applicable auto switches

D-M9N(V)-900, D-M9P(V)-900, D-M9B(V)-900  
D-M9NW(V)-900, D-M9PW(V)-900,  
D-M9BW(V)-900

#### Replacement Parts/Grease Pack

| Applied portion                    | Order no.                         |
|------------------------------------|-----------------------------------|
| Ball screw                         | GR-D-005 (5 g)<br>GR-D-010 (10 g) |
| Linear guide                       |                                   |
| Dust seal band<br>(Back side only) |                                   |

\* Copper and zinc materials are used for the motors, cables, controllers/drivers, and auto switch magnets.

# High Rigidity Slider Type Ball Screw Drive

Secondary Battery Compatible

## 25A-LEJS Series LEJS40, 63

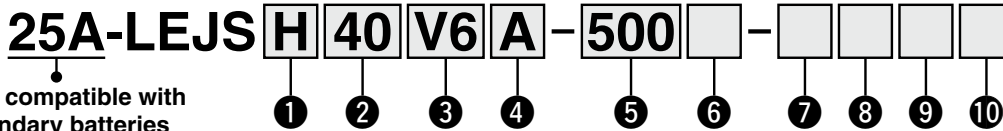


Refer to the **Web Catalog** for model selection.

LECS Series ▶ p. 305



### How to Order



Series compatible with secondary batteries

#### ① Accuracy

|     |                     |
|-----|---------------------|
| Nil | Basic type          |
| H   | High-precision type |

#### ② Size

|    |
|----|
| 40 |
| 63 |

#### ③ Motor type \*1

| Symbol | Type                              | Output [W] | ② Size | ⑨ Driver type | Compatible drivers*2 |
|--------|-----------------------------------|------------|--------|---------------|----------------------|
| V6     | AC servo motor (Absolute encoder) | 100        | 40     | M2            | LECYM2-V5            |
|        |                                   | 200        | 63     | U2            | LECYU2-V5            |
| V7     | AC servo motor (Absolute encoder) | 100        | 40     | M2            | LECYM2-V7            |
|        |                                   | 200        | 63     | U2            | LECYU2-V7            |

\*1 For motor type V6, the compatible driver part number suffix is V5.  
\*2 For details on the driver, refer to the **Web Catalog**.

#### ④ Lead [mm]

| Symbol | 25A-LEJS40 | 25A-LEJS63 |
|--------|------------|------------|
| H      | 24         | 30         |
| A      | 16         | 20         |
| B      | 8          | 10         |

#### ⑤ Stroke [mm]\*3

|             |  |
|-------------|--|
| 200 to 1500 | *3 Refer to the applicable stroke table for details. |
|-------------|--|

#### ⑥ Motor option

|     |                |
|-----|----------------|
| Nil | Without option |
| B   | With lock      |

#### ⑦ Cable type\*5, \*6, \*7

|     |                |
|-----|----------------|
| Nil | Without cable  |
| S   | Standard cable |
| R   | Robotic cable  |

\*6 A motor cable and encoder cable are included with the product. (A lock cable is also included if motor option "B: With lock" is selected.)  
\*7 Standard cable entry direction is "(A) Axis side."

#### ⑧ Cable length [m] \*5, \*8

|     |               |
|-----|---------------|
| Nil | Without cable |
| 3   | 3             |
| 5   | 5             |
| A   | 10            |
| C   | 20            |

\*8 The length of the motor, encoder, and lock cables are the same.

#### ⑨ Driver type \*5

|     | Compatible drivers | Power supply voltage [V] |
|-----|--------------------|--------------------------|
| Nil | Without driver     | —                        |
| M2  | LECYM2-V□          | 200 to 230               |
| U2  | LECYU2-V□          | 200 to 230               |

\*5 When a driver type is selected, a cable is included. Select the cable type and cable length.  
Example)  
S2S2: Standard cable (2 m) + Driver (LECSS2)  
S2: Standard cable (2 m)  
Nil: Without cable and driver

#### ⑩ I/O cable length [m]\*9

|     |                                |
|-----|--------------------------------|
| Nil | Without cable                  |
| H   | Without cable (Connector only) |
| 1   | 1.5                            |

\*9 When "Nil: Without driver" is selected for the driver type, only "Nil: Without cable" can be selected. Refer to the **Web Catalog** if an I/O cable is required.

#### Applicable Stroke Table\*4

| Model      | Stroke [mm] |     |     |     |     |     |     |     |      |      |      |   |
|------------|-------------|-----|-----|-----|-----|-----|-----|-----|------|------|------|---|
|            | 200         | 300 | 400 | 500 | 600 | 700 | 800 | 900 | 1000 | 1200 | 1500 |   |
| 25A-LEJS40 | ●           | ●   | ●   | ●   | ●   | ●   | ●   | ●   | ●    | ●    | ●    | — |
| 25A-LEJS63 | —           | ●   | ●   | ●   | ●   | ●   | ●   | ●   | ●    | ●    | ●    | ● |

\*4 Please contact SMC for non-standard strokes as they are produced as special orders.

Solid state auto switches should be ordered separately. [Click here](#) for details on applicable auto switch models.

#### Applicable auto switches

D-M9N(V)-900, D-M9P(V)-900, D-M9B(V)-900  
D-M9NW(V)-900, D-M9PW(V)-900, D-M9BW(V)-900

\* The 25A- series specifications and dimensions are the same as those of the standard model.

For details, refer to the **Web Catalog**.

#### Compatible Drivers

| Driver type              | MECHATROLINK-II type                    | MECHATROLINK-III type |
|--------------------------|---|-----------------------|
|                          |   |                       |
| Series                   | LECYM                                   | LECYU                 |
| Applicable network       | MECHATROLINK-II                         | MECHATROLINK-III      |
| Control encoder          | Absolute 20-bit encoder                 |                       |
| Communication device     | USB communication, RS-422 communication |                       |
| Power supply voltage [V] | 200 to 230 VAC (50/60 Hz)               |                       |

\* Copper and zinc materials are used for the motors, cables, controllers/drivers, and auto switch magnets.

#### Replacement Parts/Grease Pack

| Applied portion                 | Order no.                         |
|---------------------------------|-----------------------------------|
| Ball screw                      | GR-D-005 (5 g)<br>GR-D-010 (10 g) |
| Linear guide                    |                                   |
| Dust seal band (Back side only) |                                   |
|                                 |                                   |

# Electric Actuator/High Rigidity Slider Type Ball Screw Drive

Secondary Battery Compatible

RoHS

## 25A-LEJS Series 25A-LEJS40, 63



### How to Order

**25A-LEJS H 40 NZ A - 500**

Series compatible with secondary batteries

① ② ③ ④ ⑤

**① Accuracy**

|     |                     |
|-----|---------------------|
| Nil | Basic type          |
| H   | High-precision type |

**② Size**

|    |
|----|
| 40 |
| 63 |

**③ Mounting type**

|      |
|------|
| NZ   |
| NY   |
| NX   |
| NW*1 |
| NV*1 |
| NU*1 |
| NT*1 |

\*1 Size 63 only

**④ Lead [mm]**

| Symbol | 25A-LEJS40 | 25A-LEJS63 |
|--------|------------|------------|
| H      | 24         | 30         |
| A      | 16         | 20         |
| B      | 8          | 10         |

**⑤ Stroke [mm]**

|      |
|------|
| 200  |
| to   |
| 1500 |

\* For details, refer to the table below.

**Applicable Stroke Table**

| Model      | Stroke [mm] | ●: Standard |     |     |     |     |     |     |     |      |      |      |   |
|------------|-------------|-------------|-----|-----|-----|-----|-----|-----|-----|------|------|------|---|
|            |             | 200         | 300 | 400 | 500 | 600 | 700 | 800 | 900 | 1000 | 1200 | 1500 |   |
| 25A-LEJS40 |             | ●           | ●   | ●   | ●   | ●   | ●   | ●   | ●   | ●    | ●    | ●    | — |
| 25A-LEJS63 |             | —           | ●   | ●   | ●   | ●   | ●   | ●   | ●   | ●    | ●    | ●    | ● |

\* Please contact SMC for non-standard strokes as they are produced as special orders.

Solid state auto switches should be ordered separately. [Click here](#) for auto switch details.

**Applicable auto switches**

D-M9N(V)-900, D-M9P(V)-900, D-M9B(V)-900  
D-M9NW(V)-900, D-M9PW(V)-900, D-M9BW(V)-900

**Compatible Motors and Mounting Types\*2**

| Applicable motor model                    |                   | Size/Mounting type |    |    |                |    |    |                   |    |                |                |                |
|---|-------------------|--------------------|----|----|----------------|----|----|-------------------|----|----------------|----------------|----------------|
| Manufacturer                              | Series            | 40                 |    |    | 63             |    |    |                   |    |                |                |                |
|   |                   | NZ                 | NY | NX | NZ             | NY | NX | NW                | NV | NU             | NT             |                |
| Mitsubishi Electric Corporation           | MELSERVO JN/J4/J5 | ●                  | —  | —  | ●              | —  | —  | —                 | —  | —              | —              | —              |
| YASKAWA Electric Corporation              | Σ-V/7/X           | ●*1                | —  | —  | ●              | —  | —  | —                 | —  | —              | —              | —              |
| SANYO DENKI CO., LTD.                     | SANMOTION R       | ●                  | —  | —  | ●              | —  | —  | —                 | —  | —              | —              | —              |
| OMRON Corporation                         | OMNUC G5/1S       | ●                  | —  | —  | —              | ●  | —  | —                 | —  | —              | —              | —              |
| Panasonic Corporation                     | MINAS A5/A6       | ●<br>(MHMF only)   | ●  | —  | —              | ●  | —  | —                 | —  | —              | —              | —              |
| FANUC CORPORATION                         | βis (-B)          | ●                  | —  | —  | ●<br>(β1 only) | —  | —  | ●                 | —  | —              | —              | —              |
| NIDEC SANKYO CORPORATION                  | S-FLAG            | ●                  | —  | —  | ●              | —  | —  | —                 | —  | —              | —              | —              |
| KEYENCE CORPORATION                       | SV/SV2            | ●*1                | —  | —  | ●              | —  | —  | —                 | —  | —              | —              | —              |
| FUJI ELECTRIC CO., LTD.                   | ALPHA7            | ●                  | —  | —  | ●              | —  | —  | —                 | —  | —              | —              | —              |
| Rockwell Automation, Inc. (Allen-Bradley) | Kinetix MP/VP/TL  | ●<br>(TL only)     | —  | —  | —              | —  | —  | ●<br>(MP/VP only) | —  | —              | —              | ●<br>(TL only) |
| Beckhoff Automation GmbH                  | AM 30/31/80/81    | ●                  | —  | —  | —              | —  | —  | ●<br>(80/81 only) | —  | ●<br>(30 only) | ●<br>(31 only) | —              |
| Siemens AG                                | SIMOTICS S-1FK7   | —                  | —  | ●  | —              | —  | —  | ●                 | —  | —              | —              | —              |
| Delta Electronics, Inc.                   | ASDA-A2           | ●                  | —  | —  | ●              | —  | —  | —                 | —  | —              | —              | —              |
| ANCA Motion                               | AMD2000           | ●                  | —  | —  | ●              | —  | —  | —                 | —  | —              | —              | —              |

\*1 For some motors, the connector may protrude from the motor body. Be sure to check for interference with the mounting surface before selecting a motor.

\*2 The compatible motors and mounting types are typical examples. Select the mounting type after referring to the "Motor Mounting, Applicable Motor Dimensions" tables on the "Dimensions" pages.

**Replacement Parts/Grease Pack**

| Applied portion                 | Order no.       |
|---------------------------------|-----------------|
| Ball screw                      | GR-D-005 (5 g)  |
| Linear guide                    | GR-D-010 (10 g) |
| Dust seal band (Back side only) |                 |

\* The auto switch magnet contains copper and/or zinc.  
\* The 25A- series specifications and dimensions are the same as those of the standard model.

For details, refer to the [Web Catalog](#).



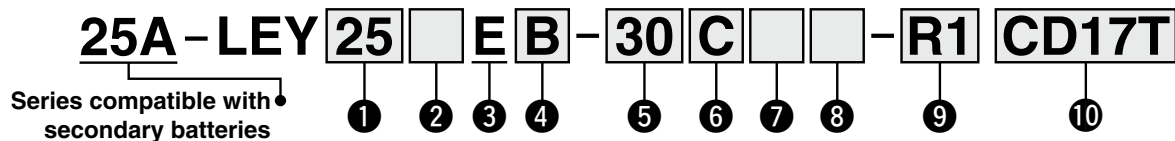
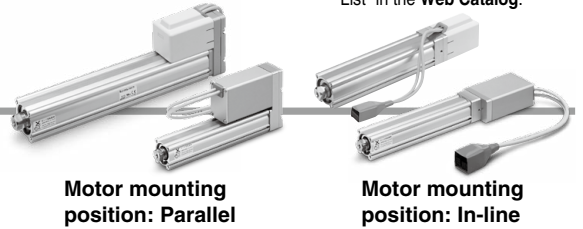
# Rod Type Secondary Battery Compatible

## 25A-LEY Series 25A-LEY16, 25, 32, 40



Refer to the "CE/UKCA/UL-compliance List" in the Web Catalog.

### How to Order



For details on controllers, refer to the next page.

#### 1 Size

|    |
|----|
| 16 |
| 25 |
| 32 |
| 40 |

#### 2 Motor mounting position/Motor cover direction

| Symbol | Motor mounting position | Motor cover direction |
|--------|-------------------------|-----------------------|
| Nil    | Top side parallel       | —                     |
| D      | In-line                 | —*1                   |
| D1     |                         | Left*2                |
| D2     |                         | Right*2               |
| D3     |                         | Top*2                 |
| D4     |                         | Bottom*2              |

#### 3 Motor type

|   |   |
|---|---|
| E | Battery-less absolute (Step motor 24 VDC) |
|---|---|

#### 4 Lead [mm]

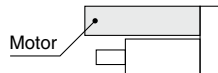
| Symbol | LEY16 | LEY25 | LEY32/40 |
|--------|-------|-------|----------|
| A      | 10    | 12    | 16       |
| B      | 5     | 6     | 8        |
| C      | 2.5   | 3     | 4        |

#### 5 Stroke\*3 [mm]

| Stroke    | Note  |   |
|-----------|-------|---|
|           | Size  | Applicable stroke                                   |
| 30 to 300 | 16    | 30, 50, 100, 150, 200, 250, 300                     |
| 30 to 400 | 25    | 30, 50, 100, 150, 200, 250, 300, 350, 400           |
| 30 to 500 | 32/40 | 30, 50, 100, 150, 200, 250, 300, 350, 400, 450, 500 |

#### 6 Motor option\*4

|   |                       |
|---|-----------------------|
| C | With motor cover      |
| W | With lock/motor cover |



#### 7 Rod end thread

|     |  |
|-----|--|
| Nil | Rod end female thread                            |
| M   | Rod end male thread (1 rod end nut is included.) |

#### 8 Mounting\*5

| Symbol | Type                              | Motor mounting position |         |
|--------|-----------------------------------|-------------------------|---------|
|        |                                   | Parallel                | In-line |
| Nil    | Ends tapped/ Body bottom tapped*6 | ●                       | ●       |
| L      | Foot                              | ●                       | —       |
| F      | Rod flange*6                      | ●*8                     | ●       |
| G      | Head flange*6                     | ●*9                     | —       |
| D      | Double clevis*7                   | ●                       | —       |

#### 9 Actuator cable type/length

| Robotic cable [m] |      |    |       |
|-------------------|------|----|-------|
| Nil               | None | R8 | 8*10  |
| R1                | 1.5  | RA | 10*10 |
| R3                | 3    | RB | 15*10 |
| R5                | 5    | RC | 20*10 |

#### Mounting Bracket Part Nos. for the 25A- Series

| Applicable size | Foot*1      | Flange      | Double clevis |
|-----------------|-------------|-------------|---------------|
| 16              | 25-LEY-L016 | 25-LEY-F016 | 25-LEY-D016   |
| 25              | 25-LEY-L025 | 25-LEY-F025 | 25-LEY-D025   |
| 32, 40          | 25-LEY-L032 | 25-LEY-F032 | 25-LEY-D032   |

\*1 When ordering foot brackets, order 2 pieces per actuator.

\*2 Parts included with each type of bracket are as follows.

Foot, Flange: Body mounting bolt, Double clevis: Clevis pin, Type C retaining ring for axis, Body mounting bolt

#### Replacement Parts/Grease Pack

| Applied portion | Order no.                         |
|-----------------|-----------------------------------|
| Piston rod      | GR-D-005 (5 g)<br>GR-D-010 (10 g) |

Solid state auto switches should be ordered separately. [Click here](#) for auto switch details.

#### Applicable auto switches

D-M9N(V)-900, D-M9P(V)-900, D-M9B(V)-900  
D-M9NW(V)-900, D-M9PW(V)-900, D-M9BW(V)-900

\* Copper and zinc materials are used for the motors, cables, controllers/drivers.

\* The 25A- series specifications and dimensions are the same as those of the standard model.

For details, refer to the [Web Catalog](#).

## ⑩ Controller

|       |                    |
|-------|--------------------|
| Nil   | Without controller |
| C□1□□ | With controller    |



### Interface (Communication protocol/Input/Output)

| Symbol | Type                 | Number of axes, Special specification |                       |
|--------|----------------------|---------------------------------------|-----------------------|
|        |                      | Standard                              | With STO sub-function |
| 5      | Parallel input (NPN) | ●                                     |                       |
| 6      | Parallel input (PNP) | ●                                     |                       |
| E      | EtherCAT             | ●                                     | ●                     |
| 9      | EtherNet/IP™         | ●                                     | ●                     |
| P      | PROFINET             | ●                                     | ●                     |
| D      | DeviceNet®           | ●                                     |                       |
| L      | IO-Link              | ●                                     | ●                     |
| M      | CC-Link              | ●                                     |                       |

### Mounting

|      |                |
|------|----------------|
| 7    | Screw mounting |
| 8*11 | DIN rail       |

### Number of axes, Special specification

| Symbol | Number of axes | Specification         |
|--------|----------------|-----------------------|
| 1      | Single axis    | Standard              |
| F      | Single axis    | With STO sub-function |

### Communication plug connector, I/O cable\*12

| Symbol | Type                                       | Applicable interface                         |
|--------|--|--|
| Nil    | Without accessory                          | —  |
| S      | Straight type communication plug connector | DeviceNet®                                   |
| T      | T-branch type communication plug connector | CC-Link Ver. 1.10                            |
| 1      | I/O cable (1.5 m)                          | Parallel input (NPN)<br>Parallel input (PNP) |
| 3      | I/O cable (3 m)                            |  |
| 5      | I/O cable (5 m)                            |  |

- \*1 Sizes 25, 32, and 40 only
- \*2 Size 16 only
- \*3 Please contact SMC for non-standard strokes as they are produced as special orders.
- \*4 When "With lock/motor cover" is selected for the top side parallel motor type, the motor body will stick out from the end of the body for size 16 with strokes of 50 mm or less and size 40 with strokes of 30 mm or less. Check for interference with workpieces before selecting a model.
- \*5 The mounting bracket is shipped together with the product but does not come assembled.
- \*6 For the horizontal cantilever mounting of the rod flange, head flange, or ends tapped types, use the actuator within the following stroke range.  
· 25A-LEY25: 200 or less · 25A-LEY32/40: 100 or less

- \*7 For the mounting of the double clevis type, use the actuator within the following stroke range.  
· 25A-LEY16: 100 or less · 25A-LEY25: 200 or less · 25A-LEY32/40: 200 or less
- \*8 The rod flange type is not available for the 25A-LEY16 with strokes of 50 mm or less and 25A-LEY40 with strokes of 30 mm or less, and motor option "With lock/motor cover."
- \*9 The head flange type is not available for the 25A-LEY32/40.
- \*10 Produced upon receipt of order
- \*11 The DIN rail is not included. It must be ordered separately.
- \*12 Select "Nil" for anything other than DeviceNet®, CC-Link, or parallel input.  
Select "Nil," "S," or "T" for DeviceNet® or CC-Link.  
Select "Nil," "1," "3," or "5" for parallel input.

## ⚠ Caution

### [CE/UKCA-compliant products]

EMC compliance was tested by combining the electric actuator LEY series and the controller JXC series.

The EMC depends on the configuration of the customer's control panel and the relationship with other electrical equipment and wiring. Therefore, compliance with the EMC directive cannot be certified for SMC components incorporated into the customer's equipment under actual operating conditions. As a result, it is necessary for the customer to verify compliance with the EMC directive for the machinery and equipment as a whole.

### [Precautions relating to differences in controller versions]

When the JXC series is to be used in combination with the battery-less absolute encoder, use a controller that is version V3.4 or S3.4 or higher. For details, refer to the **Web Catalog**.

### [UL certification]

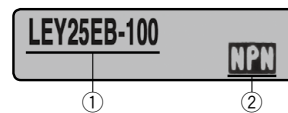
The JXC series controllers used in combination with electric actuators are UL certified.

## The actuator and controller are sold as a package.

Confirm that the combination of the controller and actuator is correct.

### <Check the following before use.>

- ① Check the actuator label for the model number (after "25A-"). This number should match that of the controller/driver.
- ② Check that the Parallel I/O configuration matches (NPN or PNP).



\* Refer to the Operation Manual for using the products.  
Please download it via our website: <https://www.smcworld.com>

| Type                     | Step data input type                      | EtherCAT direct input type | EtherCAT direct input type with STO sub-function | EtherNet/IP™ direct input type | EtherNet/IP™ direct input type with STO sub-function | PROFINET direct input type | PROFINET direct input type with STO sub-function | DeviceNet® direct input type | IO-Link direct input type | IO-Link direct input type with STO sub-function | CC-Link direct input type |
|--------------------------|---|----------------------------|--|--------------------------------|--|----------------------------|--|------------------------------|---------------------------|---|---------------------------|
|                          |   |                            |  |                                |  |                            |  |                              |                           |   |                           |
| Series                   | JXC51<br>JXC61                            | JXCE1                      | JXCEF  | JXC91                          | JXC9F  | JXCP1                      | JXCPF  | JXCD1                        | JXCL1                     | JXCLF   | JXCM1                     |
| Features                 | Parallel I/O                              | EtherCAT direct input      | EtherCAT direct input with STO sub-function      | EtherNet/IP™ direct input      | EtherNet/IP™ direct input with STO sub-function      | PROFINET direct input      | PROFINET direct input with STO sub-function      | DeviceNet® direct input      | IO-Link direct input      | IO-Link direct input with STO sub-function      | CC-Link direct input      |
| Compatible motor         | Battery-less absolute (Step motor 24 VDC) |                            |  |                                |  |                            |  |                              |                           |   |                           |
| Max. number of step data | 64 points                                 |                            |  |                                |  |                            |  |                              |                           |   |                           |
| Power supply voltage     | 24 VDC                                    |                            |  |                                |  |                            |  |                              |                           |   |                           |



Battery-less Absolute (Step Motor 24 VDC)

High Performance

Rod Type

Secondary Battery Compatible

25A-LEY□G Series 25A-LEY16, 25, 40

RoHS

CE UK CA c RU US  
Refer to the "CE/UKCA/UL-compliance List" in the Web Catalog.

How to Order



Motor mounting position:  
Parallel

Motor mounting position:  
In-line

25A-LEY 25 □ G B - 50 C □ □ - R1 C5H73

Series compatible with secondary batteries

1 2 3 4 5 6 7 8 9 10

For details on controllers, refer to page 306-5.

1 Size

|    |
|----|
| 16 |
| 25 |
| 40 |

2 Motor mounting position/  
Motor cover direction

| Symbol | Motor mounting position | Motor cover direction |
|--------|-------------------------|-----------------------|
| Nil    | Top side parallel       | —                     |
| D      | In-line                 | —*1                   |
| D1     |                         | Left side*2           |
| D2     |                         | Right side*2          |
| D3     |                         | Top side*2            |
| D4     |                         | Bottom side*2         |

3 Motor type

| Symbol | Type   | Compatible controllers              |
|--------|--|-------------------------------------|
| G      | High performance Battery-less absolute (Step motor 24 VDC) | JXC5H JXCEH<br>JXC6H JXC9H<br>JXCPH |

4 Lead [mm]

| Symbol | LEY16 | LEY25 | LEY40 |
|--------|-------|-------|-------|
| A      | 10    | 12    | 16    |
| B      | 5     | 6     | 8     |
| C      | 2.5   | 3     | 4     |

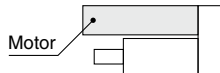
5 Stroke\*3 [mm]

|     |     |
|-----|-----|
| 30  | 30  |
| to  | to  |
| 500 | 500 |

\* For details, refer to the applicable stroke table below.

6 Motor option\*4

|   |                       |
|---|-----------------------|
| C | With motor cover      |
| W | With lock/motor cover |



7 Rod end thread

|     |  |
|-----|--|
| Nil | Rod end female thread                            |
| M   | Rod end male thread (1 rod end nut is included.) |

8 Mounting\*5

| Symbol | Type                                 | Motor mounting position |         |
|--------|--------------------------------------|-------------------------|---------|
|        |                                      | Parallel                | In-line |
| Nil    | Ends tapped/<br>Body bottom tapped*6 | ●                       | ●       |
| L      | Foot bracket                         | ●                       | —       |
| F      | Rod flange*6                         | ●*8                     | ●       |
| G      | Head flange*6                        | ●*9                     | —       |
| D      | Double clevis*7                      | ●                       | —       |

9 Actuator cable type/length

| Robotic cable |      |    |       | [m] |
|---------------|------|----|-------|-----|
| Nil           | None | R8 | 8*10  |     |
| R1            | 1.5  | RA | 10*10 |     |
| R3            | 3    | RB | 15*10 |     |
| R5            | 5    | RC | 20*10 |     |

Mounting Bracket Part Nos. for the 25A- Series

| Applicable size | Foot*1      | Flange      | Double clevis |
|-----------------|-------------|-------------|---------------|
| 16              | 25-LEY-L016 | 25-LEY-F016 | 25-LEY-D016   |
| 25              | 25-LEY-L025 | 25-LEY-F025 | 25-LEY-D025   |
| 40              | 25-LEY-L032 | 25-LEY-F032 | 25-LEY-D032   |

\*1 When ordering foot brackets, order 2 pieces per actuator.

\*2 Parts included with each type of bracket are as follows.

Foot, Flange: Body mounting bolt, Double clevis: Clevis pin, Type C retaining ring for axis, Body mounting bolt

Applicable Stroke Table

| Size | Stroke [mm] |    |     |     |     |     |     |     |     |     |     | Manufacturable stroke range |
|------|-------------|----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----------------------------|
|      | 30          | 50 | 100 | 150 | 200 | 250 | 300 | 350 | 400 | 450 | 500 |                             |
| 16   | ●           | ●  | ●   | ●   | ●   | ●   | ●   | —   | —   | —   | —   | 10 to 300                   |
| 25   | ●           | ●  | ●   | ●   | ●   | ●   | ●   | ●   | ●   | —   | —   | 15 to 400                   |
| 40   | ●           | ●  | ●   | ●   | ●   | ●   | ●   | ●   | ●   | ●   | ●   | 20 to 500                   |

Solid state auto switches should be ordered separately.  
[Click here](#) for auto switch details.

Applicable auto switches

D-M9N(V)-900, D-M9P(V)-900, D-M9B(V)-900  
D-M9NW(V)-900, D-M9PW(V)-900, D-M9BW(V)-900

Replacement Parts/Grease Pack

| Applied portion | Order no.                         |
|-----------------|-----------------------------------|
| Piston rod      | GR-D-005 (5 g)<br>GR-D-010 (10 g) |

\* Copper and zinc materials are used for the motors, cables, controllers/drivers.

\* The 25A- series specifications and dimensions are the same as those of the standard model.

For details, refer to the [Web Catalog](#).



**10 Controller**

|       |                    |
|-------|--------------------|
| Nil   | Without controller |
| C□H□□ | With controller    |



**Interface (Communication protocol/Input/Output)**

|   |                    |
|---|--------------------|
| 5 | Parallel I/O (NPN) |
| 6 | Parallel I/O (PNP) |
| E | EtherCAT           |
| 9 | EtherNet/IP™       |
| P | PROFINET           |

**Mounting**

|      |                |
|------|----------------|
| 7    | Screw mounting |
| 8*11 | DIN rail       |

**Number of axes/  
Special specification**

|   |                              |
|---|------------------------------|
| H | 1 axis/High performance type |
|---|------------------------------|

**Communication plug connector, I/O cable\*12**

| Symbol | Type              | Applicable interface                         |
|--------|-------------------|--|
| Nil    | Without accessory | —  |
| 1      | I/O cable (1.5 m) | Parallel input (NPN)<br>Parallel input (PNP) |
| 3      | I/O cable (3 m)   |  |
| 5      | I/O cable (5 m)   |  |

- \*1 Sizes 25 and 40 only
- \*2 Size 16 only
- \*3 Please contact SMC for non-standard strokes as they are produced as special orders.
- \*4 When "With lock/motor cover" is selected for the top side parallel motor type, the motor body will stick out from the end of the body for size 16 with strokes of 50 mm or less and size 40 with strokes of 30 mm or less. Check for interference with workpieces before selecting a model.
- \*5 The mounting bracket is shipped together with the product but does not come assembled.
- \*6 For the horizontal cantilever mounting of the rod flange, head flange, or ends tapped types, use the actuator within the following stroke range.  
· 25A-LEY25: 200 or less · 25A-LEY40: 100 or less

- \*7 For the mounting of the double clevis type, use the actuator within the following stroke range.  
· 25A-LEY16: 100 or less · 25A-LEY25: 200 or less  
· 25A-LEY40: 200 or less
- \*8 The rod flange type is not available for the 25A-LEY16 with strokes of 50 mm or less and 25A-LEY40 with strokes of 30 mm or less, and motor option "With lock/motor cover."
- \*9 The head flange type is not available for the 25A-LEY40.
- \*10 Produced upon receipt of order
- \*11 The DIN rail is not included. It must be ordered separately.
- \*12 Select "Nil" for anything other than parallel input.  
Select "Nil," "1," "3," or "5" for parallel input.

**⚠ Caution**

**[CE/UKCA-compliant products]**

EMC compliance was tested by combining the electric actuator LEY series and the controller JXC series.

The EMC depends on the configuration of the customer's control panel and the relationship with other electrical equipment and wiring. Therefore, compliance with the EMC directive cannot be certified for SMC components incorporated into the customer's equipment under actual operating conditions. As a result, it is necessary for the customer to verify compliance with the EMC directive for the machinery and equipment as a whole.

**■ Trademark**

EtherNet/IP® is a registered trademark of ODVA, Inc.  
EtherCAT® is registered trademark and patented technology, licensed by Beckhoff Automation GmbH, Germany.

**The actuator and controller are sold as a package.**

Confirm that the combination of the controller and actuator is correct.

**<Check the following before use.>**

- \*1 Check the actuator label for the model number (after "25A-"). This number should match that of the controller/driver.

**LEY25DGB-400**

\*1



\* Refer to the Operation Manual for using the products.  
Please download it via our website: <https://www.smcworld.com>

**Compatible Controllers**

| Type                            | Step data input type                      | EtherCAT direct input type | EtherNet/IP™ direct input type | PROFINET direct input type |
|---------------------------------|---|----------------------------|--------------------------------|----------------------------|
|                                 |   |                            |                                |                            |
| <b>Series</b>                   | <b>JXC5H<br/>JXC6H</b>                    | <b>JXCEH</b>               | <b>JXC9H</b>                   | <b>JXCPH</b>               |
| <b>Features</b>                 | Parallel I/O                              | EtherCAT direct input      | EtherNet/IP™ direct input      | PROFINET direct input      |
| <b>Compatible motor</b>         | Battery-less absolute (Step motor 24 VDC) |                            |                                |                            |
| <b>Max. number of step data</b> | 64 points                                 |                            |                                |                            |
| <b>Power supply voltage</b>     | 24 VDC                                    |                            |                                |                            |

Incremental (Step Motor 24 VDC)

High Performance

Rod Type Secondary Battery Compatible

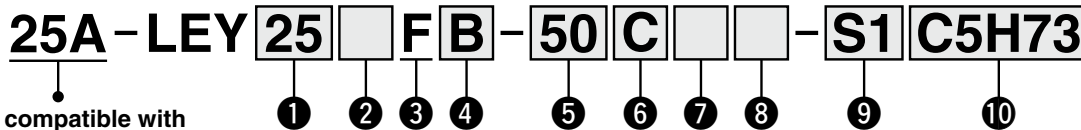
25A-LEY□F Series 25A-LEY16, 25, 40 **RoHS**



How to Order



Motor mounting position: Parallel Motor mounting position: In-line



Series compatible with secondary batteries

For details on controllers, refer to page 306-7.

1 Size

|    |
|----|
| 16 |
| 25 |
| 40 |

2 Motor mounting position/Motor cover direction

| Symbol | Motor mounting position | Motor cover direction |
|--------|-------------------------|-----------------------|
| Nil    | Top side parallel       | —                     |
| R      | Right side parallel     | —                     |
| L      | Left side parallel      | —                     |
| D      | In-line                 | —*1                   |
| D1     |                         | Left side*2           |
| D2     |                         | Right side*2          |
| D3     |                         | Top side*2            |
| D4     |                         | Bottom side*2         |

3 Motor type

| Symbol | Type                                 | Compatible controllers              |
|--------|--------------------------------------|-------------------------------------|
| F      | High performance (Step motor 24 VDC) | JXC5H JXCEH<br>JXC6H JXC9H<br>JXCPH |

4 Lead [mm]

| Symbol | LEY16 | LEY25 | LEY40 |
|--------|-------|-------|-------|
| A      | 10    | 12    | 16    |
| B      | 5     | 6     | 8     |
| C      | 2.5   | 3     | 4     |

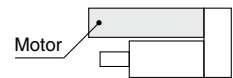
5 Stroke\*3[mm]

|     |     |
|-----|-----|
| 30  | 30  |
| to  | to  |
| 500 | 500 |

\* For details, refer to the applicable stroke table below.

6 Motor option\*4

|   |                       |
|---|-----------------------|
| C | With motor cover      |
| W | With lock/motor cover |



7 Rod end thread

|     |  |
|-----|--|
| Nil | Rod end female thread                            |
| M   | Rod end male thread (1 rod end nut is included.) |

8 Mounting\*5

| Symbol | Type                              | Motor mounting position |         |
|--------|-----------------------------------|-------------------------|---------|
|        |                                   | Parallel                | In-line |
| Nil    | Ends tapped/ Body bottom tapped*6 | ●                       | ●       |
| L      | Foot bracket                      | ●                       | —       |
| F      | Rod flange*6                      | ●*8                     | ●       |
| G      | Head flange*6                     | ●*9                     | —       |
| D      | Double clevis*7                   | ●                       | —       |

9 Actuator cable type/length

| Standard cable [m] |      | Robotic cable [m] |      |    |       |
|--------------------|------|-------------------|------|----|-------|
| Nil                | None | R1                | 1.5  | RA | 10*10 |
| S1                 | 1.5  | R3                | 3    | RB | 15*10 |
| S3                 | 3    | R5                | 5    | RC | 20*10 |
| S5                 | 5    | R8                | 8*10 |    |       |

Mounting Bracket Part Nos. for the 25A- Series

| Applicable size | Foot*1      | Flange      | Double clevis |
|-----------------|-------------|-------------|---------------|
| 16              | 25-LEY-L016 | 25-LEY-F016 | 25-LEY-D016   |
| 25              | 25-LEY-L025 | 25-LEY-F025 | 25-LEY-D025   |
| 40              | 25-LEY-L032 | 25-LEY-F032 | 25-LEY-D032   |

\*1 When ordering foot brackets, order 2 pieces per actuator.

\* Parts included with each type of bracket are as follows.

Foot, Flange: Body mounting bolt, Double clevis: Clevis pin, Type C retaining ring for axis, Body mounting bolt

Solid state auto switches should be ordered separately. [Click here](#) for auto switch details.

Applicable auto switches

D-M9N(V)-900, D-M9P(V)-900, D-M9B(V)-900  
D-M9NW(V)-900, D-M9PW(V)-900, D-M9BW(V)-900

Applicable Stroke Table

| Size | Stroke [mm] |    |     |     |     |     |     |     |     |     |     | Manufacturable stroke range |
|------|-------------|----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----------------------------|
|      | 30          | 50 | 100 | 150 | 200 | 250 | 300 | 350 | 400 | 450 | 500 |                             |
| 16   | ●           | ●  | ●   | ●   | ●   | ●   | ●   | —   | —   | —   | —   | 10 to 300                   |
| 25   | ●           | ●  | ●   | ●   | ●   | ●   | ●   | ●   | ●   | —   | —   | 15 to 400                   |
| 40   | ●           | ●  | ●   | ●   | ●   | ●   | ●   | ●   | ●   | ●   | ●   | 20 to 500                   |

Replacement Parts/Grease Pack

| Applied portion | Order no.                         |
|-----------------|-----------------------------------|
| Piston rod      | GR-D-005 (5 g)<br>GR-D-010 (10 g) |

\* Copper and zinc materials are used for the motors, cables, controllers/drivers.

\* The 25A- series specifications and dimensions are the same as those of the standard model.

For details, refer to the [Web Catalog](#).

### ⑩ Controller

|       |                    |
|-------|--------------------|
| Nil   | Without controller |
| C□H□□ | With controller    |



#### Interface (Communication protocol/Input/Output)

|   |                    |
|---|--------------------|
| 5 | Parallel I/O (NPN) |
| 6 | Parallel I/O (PNP) |
| E | EtherCAT           |
| 9 | EtherNet/IP™       |
| P | PROFINET           |

#### Mounting

|      |                |
|------|----------------|
| 7    | Screw mounting |
| 8*11 | DIN rail       |

#### Number of axes/Special specification

|   |                              |
|---|------------------------------|
| H | 1 axis/High performance type |
|---|------------------------------|

#### Communication plug connector, I/O cable\*12

| Symbol | Type              | Applicable interface                         |
|--------|-------------------|--|
| Nil    | Without accessory | —  |
| 1      | I/O cable (1.5 m) | Parallel input (NPN)<br>Parallel input (PNP) |
| 3      | I/O cable (3 m)   |  |
| 5      | I/O cable (5 m)   |  |

- \*1 Sizes 25 and 40 only
- \*2 Size 16 only
- \*3 Please contact SMC for non-standard strokes as they are produced as special orders.
- \*4 When "With lock/motor cover" is selected for the top/right/left side parallel motor types, the motor body will stick out from the end of the body for size 16 with strokes of 50 mm or less and size 40 with strokes of 30 mm or less. Check for interference with workpieces before selecting a model.
- \*5 The mounting bracket is shipped together with the product but does not come assembled.
- \*6 For the horizontal cantilever mounting of the rod flange, head flange, or ends tapped types, use the actuator within the following stroke range.  
 · 25A-LEY25: 200 or less · 25A-LEY40: 100 or less

- \*7 For the mounting of the double clevis type, use the actuator within the following stroke range.  
 · 25A-LEY16: 100 or less · 25A-LEY25: 200 or less  
 · 25A-LEY40: 200 or less
- \*8 The rod flange type is not available for the 25A-LEY16 with strokes of 50 mm or less and 25A-LEY40 with strokes of 30 mm or less, and motor option "With lock/motor cover."
- \*9 The head flange type is not available for the 25A-LEY40.
- \*10 Produced upon receipt of order
- \*11 The DIN rail is not included. It must be ordered separately.
- \*12 Select "Nil" for anything other than parallel input.  
 Select "Nil," "1," "3," or "5" for parallel input.

### ⚠ Caution

#### [CE/UKCA-compliant products]

EMC compliance was tested by combining the electric actuator LEY series and the controller JXC series.

The EMC depends on the configuration of the customer's control panel and the relationship with other electrical equipment and wiring. Therefore, compliance with the EMC directive cannot be certified for SMC components incorporated into the customer's equipment under actual operating conditions. As a result, it is necessary for the customer to verify compliance with the EMC directive for the machinery and equipment as a whole.

#### ■ Trademark

EtherNet/IP® is a registered trademark of ODVA, Inc.  
 EtherCAT® is registered trademark and patented technology, licensed by Beckhoff Automation GmbH, Germany.

### The actuator and controller are sold as a package.

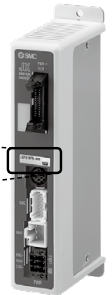
Confirm that the combination of the controller and actuator is correct.

#### <Check the following before use.>

- \*1 Check the actuator label for the model number (after "25A-").  
 This number should match that of the controller/driver.

LEY25DFB-400

\*1



- \* Refer to the Operation Manual for using the products.  
 Please download it via our website: <https://www.smcworld.com>

### Compatible Controllers

| Type                     | Step data input type | EtherCAT direct input type | EtherNet/IP™ direct input type | PROFINET direct input type |
|--------------------------|----------------------|----------------------------|--------------------------------|----------------------------|
|                          |                      |                            |                                |                            |
| Series                   | JXC5H<br>JXC6H       | JXCEH                      | JXC9H                          | JXCPH                      |
| Features                 | Parallel I/O         | EtherCAT direct input      | EtherNet/IP™ direct input      | PROFINET direct input      |
| Compatible motor         | Step motor 24 VDC    | Step motor (Servo/24 VDC)  |                                |                            |
| Max. number of step data | 64 points            | 64 points                  |                                |                            |
| Power supply voltage     | 24 VDC               | 24 VDC                     |                                |                            |

Incremental (Step Motor 24 VDC)

Incremental (Servo Motor 24 VDC)

# Rod Type

Secondary Battery Compatible

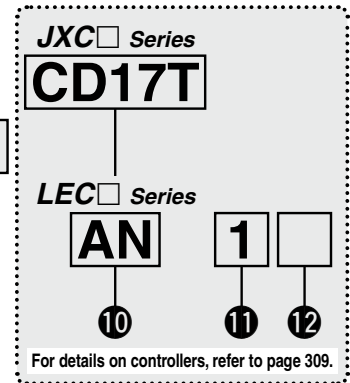
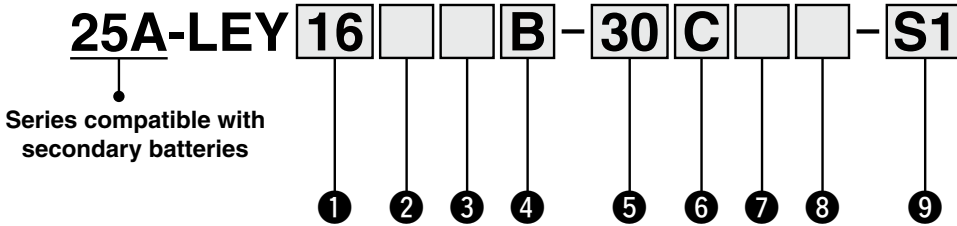
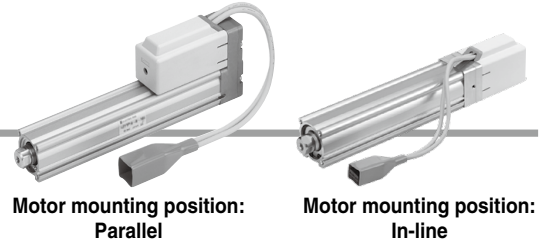


# 25A-LEY Series LEY16, 25, 32, 40

RoHS

Refer to the **Web Catalog** for model selection.

## How to Order



### 1 Size

|    |
|----|
| 16 |
| 25 |
| 32 |
| 40 |

### 2 Motor mounting position

|     |                     |
|-----|---------------------|
| Nil | Top side parallel   |
| R   | Right side parallel |
| L   | Left side parallel  |
| D   | In-line             |

### 3 Motor type

| Symbol | Type                      | Applicable size |       |          | Compatible controllers/<br>drivers  |
|--------|---------------------------|-----------------|-------|----------|---|
|        |                           | LEY16           | LEY25 | LEY32/40 |   |
| Nil    | Step motor (Servo/24 VDC) | ●               | ●     | ●        | JXC51 JXCD1 JXCPF<br>JXC61 JXCL1 JXCLF<br>JXCE1 JXCM1<br>JXC91 JXCEF LECP1<br>JXCP1 JXC9F LECPA |
| A      | Servo motor (24 VDC)      | ●               | ●     | —        | LECA6   |

### 4 Lead [mm]

| Symbol | LEY16 | LEY25 | LEY32/40 |
|--------|-------|-------|----------|
| A      | 10    | 12    | 16       |
| B      | 5     | 6     | 8        |
| C      | 2.5   | 3     | 4        |

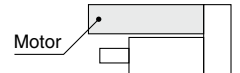
### 5 Stroke [mm]

|     |     |
|-----|-----|
| 30  | 30  |
| to  | to  |
| 500 | 500 |

\* For details, refer to the applicable stroke table below.

### 6 Motor option\*2

|   |                       |
|---|-----------------------|
| C | With motor cover      |
| W | With lock/motor cover |



### 7 Rod end thread

|     |  |
|-----|--|
| Nil | Rod end female thread                            |
| M   | Rod end male thread (1 rod end nut is included.) |

### 8 Mounting\*5

| Symbol | Type                             | Motor mounting position |         |
|--------|----------------------------------|-------------------------|---------|
|        |                                  | Parallel                | In-line |
| Nil    | Ends tapped/Body bottom tapped*6 | ●                       | ●       |
| L      | Foot                             | ●                       | —       |
| F      | Rod flange*6                     | ●*8                     | ●       |
| G      | Head flange*6                    | ●*9                     | —       |
| D      | Double clevis*7                  | ●                       | —       |

### 9 Actuator cable type/length\*11

| Standard cable [m] |        | Robotic cable [m] |      |    |       |
|--------------------|--------|-------------------|------|----|-------|
| Nil                | None   | R1                | 1.5  | RA | 10*10 |
| S1                 | 1.5*12 | R3                | 3    | RB | 15*10 |
| S3                 | 3*12   | R5                | 5    | RC | 20*10 |
| S5                 | 5*12   | R8                | 8*10 |    |       |

### Mounting Bracket Part Nos. for the 25A- Series\*4

| Applicable size   | Foot*3      | Flange      | Double clevis                                 |
|-------------------|-------------|-------------|---|
| 16                | 25-LEY-L016 | 25-LEY-F016 | 25-LEY-D016                                   |
| 25                | 25-LEY-L025 | 25-LEY-F025 | 25-LEY-D025                                   |
| 32, 40            | 25-LEY-L032 | 25-LEY-F032 | 25-LEY-D032                                   |
| Surface treatment | RAYDENT®    | RAYDENT®    | Coating (Size 16: Electroless nickel plating) |

Solid state auto switches should be ordered separately. [Click here](#) for details on applicable auto switch models.

### Applicable auto switches

D-M9N(V)-900, D-M9P(V)-900, D-M9B(V)-900  
D-M9NW(V)-900, D-M9PW(V)-900, D-M9BW(V)-900

### Applicable Stroke Table\*1

| Model        | Stroke [mm] | ●: Standard |    |     |     |     |     |     |     |     |     | Manufacturable stroke range |           |
|--------------|-------------|-------------|----|-----|-----|-----|-----|-----|-----|-----|-----|-----------------------------|-----------|
|              |             | 30          | 50 | 100 | 150 | 200 | 250 | 300 | 350 | 400 | 450 |                             | 500       |
| 25A-LEY16    |             | ●           | ●  | ●   | ●   | ●   | ●   | ●   | —   | —   | —   | —                           | 10 to 300 |
| 25A-LEY25    |             | ●           | ●  | ●   | ●   | ●   | ●   | ●   | ●   | —   | —   | —                           | 15 to 400 |
| 25A-LEY32/40 |             | ●           | ●  | ●   | ●   | ●   | ●   | ●   | ●   | ●   | ●   | ●                           | 20 to 500 |

\* The 25A- series specifications and dimensions are the same as those of the standard model.

For details, refer to the [Web Catalog](#).

## JXC Series (For details, refer to page 309.)



### 10 Controller

|       |                    |
|-------|--------------------|
| Nil   | Without controller |
| C□1□□ | With controller    |

**C D 1 7 T**

### Interface (Communication protocol/Input/Output)

| Symbol | Type                 | Number of axes, Special specification |                       |
|--------|----------------------|---------------------------------------|-----------------------|
|        |                      | Standard                              | With STO sub-function |
| 5      | Parallel input (NPN) | ●                                     |                       |
| 6      | Parallel input (PNP) | ●                                     |                       |
| E      | EtherCAT             | ●                                     | ●                     |
| 9      | EtherNet/IP™         | ●                                     | ●                     |
| P      | PROFINET             | ●                                     | ●                     |
| D      | DeviceNet®           | ●                                     |                       |
| L      | IO-Link              | ●                                     | ●                     |
| M      | CC-Link              | ●                                     |                       |

### Mounting

|      |                |
|------|----------------|
| 7    | Screw mounting |
| 8*17 | DIN rail       |

### Number of axes, Special specification

| Symbol | Number of axes | Specification         |
|--------|----------------|-----------------------|
| 1      | Single axis    | Standard              |
| F      | Single axis    | With STO sub-function |

### Communication plug connector, I/O cable\*18

| Symbol | Type                                       | Applicable interface                         |
|--------|--|--|
| Nil    | Without accessory                          | —  |
| S      | Straight type communication plug connector | DeviceNet®                                   |
| T      | T-branch type communication plug connector | CC-Link Ver. 1.10                            |
| 1      | I/O cable (1.5 m)                          | Parallel input (NPN)<br>Parallel input (PNP) |
| 3      | I/O cable (3 m)                            |  |
| 5      | I/O cable (5 m)                            |  |

## LEC Series (For details, refer to page 309.)

**A N 1 □**

10 11 12



### 10 Controller/Driver type\*12

| Nil | Without controller/driver |     |
|-----|---------------------------|-----|
| 6N  | LECA6                     | NPN |
| 6P  | (Step data input type)    | PNP |
| 1N  | LECP1*13                  | NPN |
| 1P  | (Programless type)        | PNP |
| AN  | LECPA*13 *14              | NPN |
| AP  | (Pulse input type)        | PNP |

### 11 I/O cable length\*15

| Nil | Without cable (Without communication plug connector) |
|-----|--|
| 1   | 1.5 m  |
| 3   | 3 m*16   |
| 5   | 5 m*16   |

### 12 Controller/Driver mounting

|     |                |
|-----|----------------|
| Nil | Screw mounting |
| D   | DIN rail*17    |

- \*1 Please contact SMC for non-standard strokes as they are produced as special orders.
- \*2 When "With lock" or "With lock/motor cover" is selected for the top/right/left side parallel motor types, the motor body will stick out from the end of the body for size 16/40 with strokes of 30 mm or less. Check for interference with workpieces before selecting a model.
- \*3 When ordering foot brackets, order 2 pieces per actuator.
- \*4 Parts included with each type of bracket are as follows.  
Foot, Flange: Body mounting bolt, Double clevis: Clevis pin, Type C retaining ring for axis, Body mounting bolt
- \*5 The mounting bracket is shipped together with the product but does not come assembled.
- \*6 For the horizontal cantilever mounting of the rod flange, head flange, or ends tapped types, use the actuator within the following stroke range.  
·LEY25: 200 mm or less ·LEY32/40: 100 mm or less
- \*7 For the mounting of the double clevis type, use the actuator within the following stroke range.  
·LEY16: 100 mm or less ·LEY25: 200 mm or less ·LEY32/40: 200 mm or less
- \*8 The rod flange type is not available for the LEY16/40 with a 30 mm stroke and motor option "With lock," "With lock/motor cover."
- \*9 The head flange type is not available for the LEY32/40.
- \*10 Produced upon receipt of order (Robotic cable only)

- \*11 The standard cable should only be used on fixed parts. For use on moving parts, select the robotic cable. Refer to the **Web Catalog** if only the actuator cable is required.
- \*12 For details on controllers/drivers and compatible motors, refer to the compatible controllers/drivers on the next page.
- \*13 Only available for the motor type "Step motor"
- \*14 When pulse signals are open collector, order the current limiting resistor (LEC-PA-R-□) separately. (Refer to the **Web Catalog**.)
- \*15 When "Without controller/driver" is selected for controller/driver types, I/O cable cannot be selected. If an I/O cable is required, order the cable separately for each series. (For details, refer to the **Web Catalog**.)
- \*16 When "Pulse input type" is selected for controller/driver types, pulse input usable only with differential. Only 1.5 m cables usable with open collector
- \*17 The DIN rail is not included. It must be ordered separately.
- \*18 Select "Nil" for anything other than DeviceNet®, CC-Link, or parallel input.  
Select "Nil," "S," or "T" for DeviceNet® or CC-Link.  
Select "Nil," "1," "3," or "5" for parallel input.

## ⚠ Caution

### [CE/UKCA-compliant products]

- ① EMC compliance was tested by combining the electric actuator LEY series and the controller LEC/JXC series.  
The EMC depends on the configuration of the customer's control panel and the relationship with other electrical equipment and wiring. Therefore, compliance with the EMC directive cannot be certified for SMC components incorporated into the customer's equipment under actual operating conditions. As a result, it is necessary for the customer to verify compliance with the EMC directive for the machinery and equipment as a whole.
- ② For the incremental (servo motor 24 VDC) specification, EMC compliance was tested by installing a noise filter set (LEC-NFA). Refer to the **Web Catalog** for the noise filter set. Refer to the LECA series Operation Manual for installation.

### [UL-compliant products (For the LEC series)]

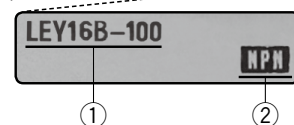
When compliance with UL is required, the electric actuator and controller/driver should be used with a UL1310 Class 2 power supply.

## The actuator and controller/driver are sold as a package.

Confirm that the combination of the controller/driver and actuator is correct.

### <Check the following before use.>

- ① Check the actuator label for the model number (after "25A-"). This number should match that of the controller/driver.
- ② Check that the Parallel I/O configuration matches (NPN or PNP).



\* Refer to the Operation Manual for using the products. Please download it via our website: <https://www.smcworld.com>







# 25A-LEY Series











Incremental (Step Motor 24 VDC)

Incremental (Servo Motor 24 VDC)

Secondary Battery Compatible

## Compatible Controllers/Drivers

| Type                     | Step data input type  | Step data input type  | Programless type  | Pulse input type  |
|--------------------------|---|---|---|---|
|                          |  |  |  |  |
| Series                   | <b>JXC51<br/>JXC61</b>  | <b>LECA6</b>  | <b>LECP1</b>  | <b>LECPA</b>  |
| Features                 | Parallel I/O  | Parallel I/O  | Capable of setting up operation (step data) without using a PC or teaching box    | Operation by pulse signals  |
| Compatible motor         | Step motor (Servo/24 VDC)   | Servo motor (24 VDC)  | Step motor (Servo/24 VDC)   |   |
| Max. number of step data | 64 points   |   | 14 points   | —   |
| Power supply voltage     | 24 VDC  |   |   |   |

| Type                     | EtherCAT direct input type  | EtherCAT direct input type with STO sub-function                                    | EtherNet/IP™ direct input type  | EtherNet/IP™ direct input type with STO sub-function                                | PROFINET direct input type  | PROFINET direct input type with STO sub-function                                    | DeviceNet® direct input type   | IO-Link direct input type   | IO-Link direct input type with STO sub-function                                       | CC-Link direct input type   |
|--------------------------|---|---|---|---|---|---|--|---|---|---|
|                          |  |  |  |  |  |  |  |  |  |  |
| Series                   | <b>JXCE1</b>  | <b>JXCEF</b>  | <b>JXC91</b>  | <b>JXC9F</b>  | <b>JXCP1</b>  | <b>JXCPF</b>  | <b>JXCD1</b>   | <b>JXCL1</b>  | <b>JXCLF</b>  | <b>JXCM1</b>  |
| Features                 | EtherCAT direct input   | EtherCAT direct input with STO sub-function   | EtherNet/IP™ direct input   | EtherNet/IP™ direct input with STO sub-function                                     | PROFINET direct input   | PROFINET direct input with STO sub-function   | DeviceNet® direct input  | IO-Link direct input  | IO-Link direct input with STO sub-function  | CC-Link direct input  |
| Compatible motor         | Step motor (Servo/24 VDC)   |   |   |   |   |   |  |   |   |   |
| Max. number of step data | 64 points   |   |   |   |   |   |  |   |   |   |
| Power supply voltage     | 24 VDC  |   |   |   |   |   |  |   |   |   |





# Rod Type

Secondary Battery Compatible



## 25A-LEY Series

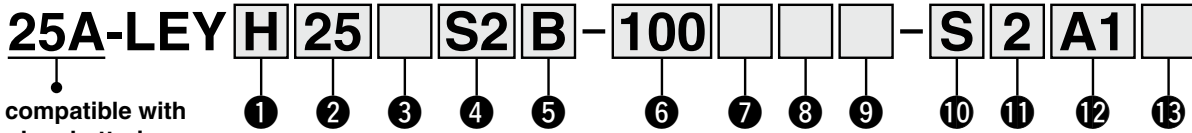
LEY25, 32 Size **25, 32**



LECY Series ▶ p. 313

Refer to the **Web Catalog** for model selection.

### How to Order



Series compatible with secondary batteries

#### 1 Accuracy

|     |                     |
|-----|---------------------|
| Nil | Basic type          |
| H   | High-precision type |

#### 2 Size

|    |
|----|
| 25 |
| 32 |

#### 3 Motor mounting position

|     |                     |
|-----|---------------------|
| Nil | Top side parallel   |
| R   | Right side parallel |
| L   | Left side parallel  |
| D   | In-line             |

#### 4 Motor type

| Symbol | Type                                 | Output [W] | 2 Size | 12 Driver type | Compatible drivers |
|--------|--------------------------------------|------------|--------|----------------|--------------------|
| S2*1   | AC servo motor (Incremental encoder) | 100        | 25     | A1/A2          | LECSA□-S1          |
| S3     |                                      | 200        | 32     | A1/A2          | LECSA□-S3          |
| T6*2   | AC servo motor (Absolute encoder)    | 100        | 25     | B2             | LECSB2-T5          |
| T7     |                                      |            |        | C2             | LECSC2-T5          |
|        |                                      | 200        | 32     | S2             | LECSS2-T5          |
| B2     |                                      |            |        | LECSB2-T7      |                    |
| C2     | LECSC2-T7                            |            |        |                |                    |
| S2     | LECSS2-T7                            |            |        |                |                    |

\*1 For motor type S2, the compatible driver part number suffix is S1.

\*2 For motor type T6, the compatible driver part number is LECS□2-T5.

\* For details on the driver, refer to the **Web Catalog**.

#### 5 Lead [mm]

| Symbol | LEY25 | LEY32*1 |
|--------|-------|---------|
| A      | 12    | 16 (20) |
| B      | 6     | 8 (10)  |
| C      | 3     | 4 (5)   |

\*1 The values shown in ( ) are the leads for the size 32 top/right/left side parallel motor types. (Equivalent leads which include the pulley ratio [1.25:1])

#### 6 Stroke [mm]

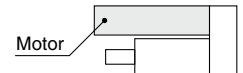
|     |     |
|-----|-----|
| 30  | 30  |
| to  | to  |
| 500 | 500 |

\* For details, refer to the applicable stroke table below.

#### 7 Motor option

|     |                |
|-----|----------------|
| Nil | Without option |
| B   | With lock*1    |

\*1 When "With lock" is selected for the top/right/left side parallel motor types, the motor body will stick out from the end of the body for size 25 with strokes of 30 mm or less. Check for interference with workpieces before selecting a model.



#### 8 Rod end thread

|     |  |
|-----|--|
| Nil | Rod end female thread                            |
| M   | Rod end male thread (1 rod end nut is included.) |

#### 9 Mounting\*1

| Symbol | Type                              | Motor mounting position |         |
|--------|-----------------------------------|-------------------------|---------|
|        |                                   | Parallel                | In-line |
| Nil    | Ends tapped/ Body bottom tapped*2 | ●                       | ●       |
| L      | Foot                              | ●                       | —       |
| F      | Rod flange*2                      | ●*4                     | ●       |
| G      | Head flange*2                     | ●*5                     | —       |
| D      | Double clevis*3                   | ●                       | —       |

\*1 The mounting bracket is shipped together with the product but does not come assembled.

\*2 For the horizontal cantilever mounting of the rod flange, head flange, or ends tapped types, use the actuator within the following stroke range.

- 25A-LEY25: 200 mm or less
- 25A-LEY32: 100 mm or less

\*3 For the mounting of the double clevis type, use the actuator within the following stroke range.

- 25A-LEY25: 200 mm or less
- 25A-LEY32: 200 mm or less

\*4 The rod flange type is not available for the 25A-LEY25 with a 30 mm stroke and motor option "With lock."

\*5 The head flange type is not available for the 25A-LEY32.

#### Mounting Bracket Part Nos. for the 25A- Series

| Applicable size   | Foot*1      | Flange      | Double clevis                                 |
|-------------------|-------------|-------------|---|
| 25                | 25-LEY-L025 | 25-LEY-F025 | 25-LEY-D025                                   |
| 32                | 25-LEY-L032 | 25-LEY-F032 | 25-LEY-D032                                   |
| Surface treatment | RAYDENT®    | RAYDENT®    | Coating (Size 16: Electroless nickel plating) |

\*1 When ordering foot brackets, order 2 pieces per actuator.

\* Parts included with each type of bracket are as follows.

Foot, Flange: Body mounting bolt, Double clevis: Clevis pin, Type C retaining ring for axis, Body mounting bolt

**Solid state auto switches should be ordered separately. Click here for details on applicable auto switch models.**

#### Applicable auto switches

D-M9N(V)-900, D-M9P(V)-900, D-M9B(V)-900  
D-M9NW(V)-900, D-M9PW(V)-900, D-M9BW(V)-900

#### Applicable Stroke Table

| Model     | Stroke [mm] | 30 | 50 | 100 | 150 | 200 | 250 | 300 | 350 | 400 | 450 | 500 | Manufacturable stroke range [mm] |
|-----------|-------------|----|----|-----|-----|-----|-----|-----|-----|-----|-----|-----|----------------------------------|
|           |             | ●  | ●  | ●   | ●   | ●   | ●   | ●   | ●   | ●   | ●   | ●   |                                  |
| 25A-LEY25 |             | ●  | ●  | ●   | ●   | ●   | ●   | ●   | ●   | ●   | —   | —   | 15 to 400                        |
| 25A-LEY32 |             | ●  | ●  | ●   | ●   | ●   | ●   | ●   | ●   | ●   | ●   | ●   | 20 to 500                        |

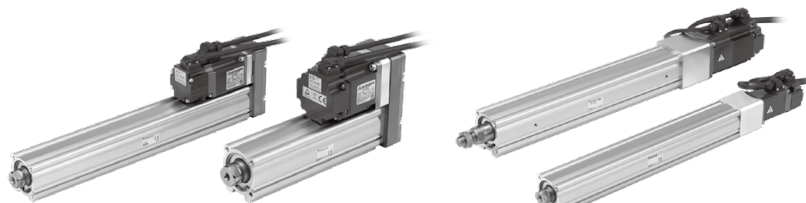
\* Please contact SMC for non-standard strokes as they are produced as special orders.

# Rod Type 25A-LEY Series

AC Servo Motor

Size 25, 32

Secondary Battery Compatible



Motor mounting position:  
Parallel

Motor mounting position:  
In-line

## 10 Cable type\*1 \*2

|     |                |
|-----|----------------|
| Nil | Without cable  |
| S   | Standard cable |
| R   | Robotic cable  |

\*1 A motor cable and encoder cable are included with the product. (A lock cable is also included if motor option "B: With lock" is selected.)

\*2 Standard cable entry direction is  
· Parallel: (A) Axis side  
· In-line: (B) Counter axis side

## 11 Cable length\*1 [m]

|     |               |
|-----|---------------|
| Nil | Without cable |
| 2   | 2             |
| 5   | 5             |
| A   | 10            |

\*1 The length of the encoder, motor, and lock cables are the same.

## 12 Driver type\*1

|     | Compatible drivers | Power supply voltage [V] |
|-----|--------------------|--------------------------|
| Nil | Without driver     | —                        |
| A1  | LECSA1-S□          | 100 to 120               |
| A2  | LECSA2-S□          | 200 to 230               |
| B2  | LECSB2-T□          | 200 to 240               |
| C2  | LECS2-T□           | 200 to 230               |
| S2  | LECSS2-T□          | 200 to 240               |

\*1 When a driver type is selected, a cable is included. Select the cable type and cable length.

Example)

S2S2: Standard cable (2 m) + Driver (LECSS2)

S2: Standard cable (2 m)

Nil: Without cable and driver

## 13 I/O cable length [m]\*1

|     |                                |
|-----|--------------------------------|
| Nil | Without cable                  |
| H   | Without cable (Connector only) |
| 1   | 1.5                            |





\*1 When "Nil: Without driver" is selected for the driver type, only "Nil: Without cable" can be selected.

Refer to the **Web Catalog** if an I/O cable is required.

\* The 25A- series specifications and dimensions are the same as those of the standard model.

For details, refer to the **Web Catalog**.

## Compatible Drivers

| Driver type              | Pulse input type/<br>Positioning type   | Pulse input type  | CC-Link direct input type   | SSCNET III/H type   |
|--------------------------|---|---|---|---|
|                          |  |  |  |  |
| Series                   | LECSA   | LECSB-T   | LECS2-T   | LECSS-T   |
| Number of point tables   | Up to 7   | Up to 255   | Up to 255 (2 stations occupied)   | —   |
| Pulse input              | ○   | ○   | —   | —   |
| Applicable network       | —   | —   | CC-Link   | SSCNET III/H  |
| Control encoder          | Incremental<br>17-bit encoder   | Absolute<br>22-bit encoder  | Absolute<br>18-bit encoder  | Absolute<br>22-bit encoder  |
| Communication function   | USB communication   | USB communication,<br>RS422 communication   | USB communication,<br>RS422 communication   | USB communication   |
| Power supply voltage [V] | 100 to 120 VAC (50/60 Hz)<br>200 to 230 VAC (50/60 Hz)                              | 200 to 240 VAC<br>(50/60 Hz)  | 200 to 230 VAC<br>(50/60 Hz)  | 200 to 240 VAC<br>(50/60 Hz)  |

\* Copper and zinc materials are used for the motors, cables, controllers/drivers.

# Rod Type Secondary Battery Compatible

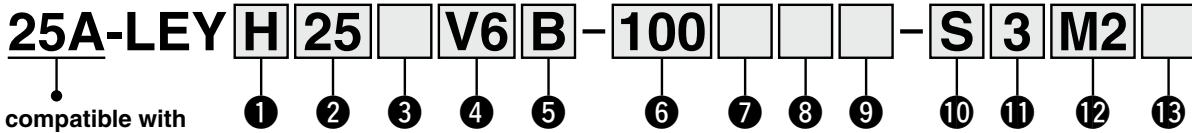
## 25A-LEY Series LEY25, 32 Size 25, 32



LECS Series ▶ p. 311

Refer to the **Web Catalog** for model selection.

### How to Order



Series compatible with secondary batteries

**1 Accuracy**

|     |                     |
|-----|---------------------|
| Nil | Basic type          |
| H   | High-precision type |

**2 Size**

|    |
|----|
| 25 |
| 32 |

**3 Motor mounting position**

|     |                     |
|-----|---------------------|
| Nil | Top side parallel   |
| R   | Right side parallel |
| L   | Left side parallel  |
| D   | In-line             |

**4 Motor type**

| Symbol | Type                              | Output [W] | 2 Size | 12 Driver type | Compatible drivers |
|--------|-----------------------------------|------------|--------|----------------|--------------------|
| V6*1   | AC servo motor (Absolute encoder) | 100        | 25     | M2             | LECYM2-V5          |
|        |                                   |            |        | U2             | LECYU2-V5          |
| V7     |                                   | 200        | 32     | M2             | LECYM2-V7          |
|        |                                   |            |        | U2             | LECYU2-V7          |

\*1 For motor type V6, the compatible driver part number suffix is V5.

**5 Lead [mm]**

| Symbol | 25A-LEY25 | 25A-LEY32*1 |
|--------|-----------|-------------|
| A      | 12        | 16 (20)     |
| B      | 6         | 8 (10)      |
| C      | 3         | 4 (5)       |

\*1 The values shown in ( ) are the leads for the size 32 top/right/left side parallel motor types. (Equivalent leads which include the pulley ratio [1.25:1])

**6 Stroke [mm]**

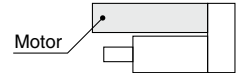
|     |     |
|-----|-----|
| 30  | 30  |
| to  | to  |
| 500 | 500 |

\* For details, refer to the applicable stroke table below.

**7 Motor option**

|     |                |
|-----|----------------|
| Nil | Without option |
| B   | With lock*1    |

\*1 When "With lock" is selected for the top/right/left side parallel motor types, the motor body will stick out from the end of the body for size 25 with strokes of 30 mm or less. Check for interference with workpieces before selecting a model.



**8 Rod end thread**

|     |  |
|-----|--|
| Nil | Rod end female thread                            |
| M   | Rod end male thread (1 rod end nut is included.) |

**9 Mounting\*1**

| Symbol | Type                              | Motor mounting position |         |
|--------|-----------------------------------|-------------------------|---------|
|        |                                   | Parallel                | In-line |
| Nil    | Ends tapped/ Body bottom tapped*2 | ●                       | ●       |
| L      | Foot                              | ●                       | —       |
| F      | Rod flange*2                      | ●*4                     | ●       |
| G      | Head flange*2                     | ●*5                     | —       |
| D      | Double clevis*3                   | ●                       | —       |

- \*1 The mounting bracket is shipped together with the product but does not come assembled.
- \*2 For the horizontal cantilever mounting of the rod flange, head flange, or ends tapped types, use the actuator within the following stroke range.
  - LEY25: 200 mm or less · LEY32: 100 mm or less
- \*3 For the mounting of the double clevis type, use the actuator within the following stroke range.
  - LEY25: 200 mm or less · LEY32: 200 mm or less
- \*4 The rod flange type is not available for the LEY25 with a 30 mm stroke and motor option "With lock."
- \*5 The head flange type is not available for the LEY32.

**Mounting Bracket Part Nos. for the 25A- Series**

| Applicable size   | Foot*1      | Flange      | Double clevis                                 |
|-------------------|-------------|-------------|---|
| 25                | 25-LEY-L025 | 25-LEY-F025 | 25-LEY-D025                                   |
| 32                | 25-LEY-L032 | 25-LEY-F032 | 25-LEY-D032                                   |
| Surface treatment | RAYDENT®    | RAYDENT®    | Coating (Size 16: Electroless nickel plating) |

\*1 When ordering foot brackets, order 2 pieces per actuator.  
 \* Parts included with each type of bracket are as follows.  
 Foot, Flange: Body mounting bolt, Double clevis: Clevis pin, Type C retaining ring for axis, Body mounting bolt

**Solid state auto switches should be ordered separately.**  
[Click here](#) for details on applicable auto switch models.

**Applicable auto switches**

D-M9N(V)-900, D-M9P(V)-900, D-M9B(V)-900  
 D-M9NW(V)-900, D-M9PW(V)-900, D-M9BW(V)-900

**Applicable Stroke Table**

| Model     | Stroke [mm] |    |    |     |     |     |     |     |     |     |     |     | Manufacturable stroke range [mm] |
|-----------|-------------|----|----|-----|-----|-----|-----|-----|-----|-----|-----|-----|----------------------------------|
|           |             | 30 | 50 | 100 | 150 | 200 | 250 | 300 | 350 | 400 | 450 | 500 |                                  |
| 25A-LEY25 |             | ●  | ●  | ●   | ●   | ●   | ●   | ●   | ●   | ●   | —   | —   | 15 to 400                        |
| 25A-LEY32 |             | ●  | ●  | ●   | ●   | ●   | ●   | ●   | ●   | ●   | ●   | ●   | 20 to 500                        |

\* Please contact SMC for non-standard strokes as they are produced as special orders.

# Rod Type **25A-LEY Series**

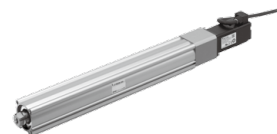
AC Servo Motor

Size **25, 32**

Secondary Battery Compatible



Motor mounting position:  
Parallel



Motor mounting position:  
In-line

## 10 Cable type\*1 \*2

|     |                |
|-----|----------------|
| Nil | Without cable  |
| S   | Standard cable |
| R   | Robotic cable  |

\*1 A motor cable and encoder cable are included with the product. (A lock cable is also included if motor option "B: With lock" is selected.)

\*2 Standard cable entry direction is  
 · Parallel: (A) Axis side  
 · In-line: (B) Counter axis side

## 11 Cable length [m]\*1

|     |               |
|-----|---------------|
| Nil | Without cable |
| 3   | 3             |
| 5   | 5             |
| A   | 10            |
| C   | 20            |

\*1 The length of the motor and encoder cables are the same. (For with lock)

## 12 Driver type\*1

|     | Compatible drivers | Power supply voltage [V] |
|-----|--------------------|--------------------------|
| Nil | Without driver     | —                        |
| M2  | LECYM2-V□          | 200 to 230               |
| U2  | LECYU2-V□          | 200 to 230               |

\*1 When a driver type is selected, a cable is included. Select the cable type and cable length.

## 13 I/O cable length [m]\*1

|     |                                |
|-----|--------------------------------|
| Nil | Without cable                  |
| H   | Without cable (Connector only) |
| 1   | 1.5                            |



\*1 When "Nil: Without driver" is selected for the driver type, only "Nil: Without cable" can be selected.

Refer to the **Web Catalog** if an I/O cable is required.

\* The 25A- series specifications and dimensions are the same as those of the standard model.

For details, refer to the **Web Catalog**.

## Compatible Drivers

| Driver type              | MECHATROLINK-II type  | MECHATROLINK-III type   |
|--------------------------|---|---|
|                          |  |  |
| Series                   | LECYM   | LECYU   |
| Applicable network       | MECHATROLINK-II   | MECHATROLINK-III  |
| Control encoder          | Absolute 20-bit encoder   |   |
| Communication device     | USB communication, RS-422 communication   |   |
| Power supply voltage [V] | 200 to 230 VAC (50/60 Hz)   |   |

\* Copper and zinc materials are used for the motors, cables, controllers/drivers.

Motorless Type

# Electric Actuator Rod Type

Secondary Battery Compatible



## 25A-LEY Series 25A-LEY25, 32

RoHS

### How to Order

25A-LEY H 25 [ ] NZ B - 100 [ ] [ ]

Series compatible with secondary batteries

**1 Accuracy**

|     |                     |
|-----|---------------------|
| Nil | Basic type          |
| H   | High-precision type |

**2 Size**

|    |
|----|
| 25 |
| 32 |

**3 Motor mounting position**

|     |                     |
|-----|---------------------|
| Nil | Top side parallel   |
| R   | Right side parallel |
| L   | Left side parallel  |
| D   | In-line             |

**4 Mounting type**

|    |     |
|----|-----|
| NZ | NU  |
| NY | NT  |
| NX | NM1 |
| NW | NM2 |
| NV | NM3 |

**5 Lead [mm]**

| Symbol | LEY25 | LEY32   |
|--------|-------|---------|
| A      | 12    | 16 (20) |
| B      | 6     | 8 (10)  |
| C      | 3     | 4 (5)   |

\* The values shown in ( ) are the leads for the top/right/left side parallel motor types. Except mounting type NM1 (Equivalent leads which include the pulley ratio [1.25:1])

**6 Stroke [mm]**

|     |     |
|-----|-----|
| 30  | 30  |
| to  | to  |
| 500 | 500 |

\* Refer to the applicable stroke table.

**7 Rod end thread**

|     |  |
|-----|--|
| Nil | Rod end female thread                            |
| M   | Rod end male thread (1 rod end nut is included.) |

**8 Mounting\*1**

| Symbol | Type                             | Motor mounting position |         |
|--------|----------------------------------|-------------------------|---------|
|        |                                  | Parallel                | In-line |
| Nil    | Ends tapped/Body bottom tapped*2 | ●                       | ●       |
| L      | Foot                             | ●                       | —       |
| F      | Rod flange*2                     | ●*4                     | —       |
| G      | Head flange*2                    | ●*5                     | —       |
| D      | Double clevis*3                  | ●                       | —       |

- \*1 The mounting bracket is shipped together with the product but does not come assembled.
- \*2 For the horizontal cantilever mounting with the ends tapped, rod flange, or head flange types, use the actuator within the following stroke range.
  - 25A-LEY25: 200 mm or less, 25A-LEY32: 100 mm or less
- \*3 For the mounting with the double clevis type, use the actuator within the following stroke range.
  - 25A-LEY25: 200 mm or less, 25A-LEY32: 200 mm or less
- \*4 If the stroke of the 25A-LEY25 is 30 mm or less, the rod flange may interfere with the motor.
- \*5 The head flange type is not available for the in-line type and the 25A-LEY32.

**Applicable Stroke Table**

| Stroke [mm] | 30 | 50 | 100 | 150 | 200 | 250 | 300 | 350 | 400 | 450 | 500 | Manufacturable stroke range |
|-------------|----|----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----------------------------|
| Model       |    |    |     |     |     |     |     |     |     |     |     |                             |
| LEY25       | ●  | ●  | ●   | ●   | ●   | ●   | ●   | ●   | ●   | —   | —   | 15 to 400                   |
| LEY32       | ●  | ●  | ●   | ●   | ●   | ●   | ●   | ●   | ●   | ●   | ●   | 20 to 500                   |

\* Please contact SMC for non-standard strokes as they are produced as special orders.

**Mounting Bracket Part Nos. for the 25A- Series**

| Applicable size | Foot*1      | Flange      | Double clevis |
|-----------------|-------------|-------------|---------------|
| 25              | 25-LEY-L025 | 25-LEY-F025 | 25-LEY-D025   |
| 32              | 25-LEY-L032 | 25-LEY-F032 | 25-LEY-D032   |

- \*1 When ordering foot brackets, order 2 pieces per actuator.
- \*2 Parts included with each type of bracket are as follows.
  - Foot, Flange: Body mounting bolt, Double clevis: Clevis pin, Type C retaining ring for axis, Body mounting bolt

**Compatible Motors and Mounting Types\*4**

| Applicable motor model                    |                        | Size/Mounting type |    |    |     |     |     |                   |    |    |    |    |    |    |     |             |   |
|---|------------------------|--------------------|----|----|-----|-----|-----|-------------------|----|----|----|----|----|----|-----|-------------|---|
| Manufacturer                              | Series                 | 25                 |    |    |     |     |     | 32                |    |    |    |    |    |    |     |             |   |
|   |                        | NZ                 | NY | NX | NM1 | NM2 | NM3 | NZ                | NY | NX | NW | NV | NU | NT | NM1 | NM2         |   |
| Mitsubishi Electric Corporation           | MELSERVO JN/J4/J5      | ●                  | —  | —  | —   | —   | —   | ●                 | —  | —  | —  | —  | —  | —  | —   | —           | — |
| YASKAWA Electric Corporation              | Σ-V/7/X                | ●*3                | —  | —  | —   | —   | —   | ●                 | —  | —  | —  | —  | —  | —  | —   | —           | — |
| SANYO DENKI CO., LTD.                     | SANMOTION R            | ●                  | —  | —  | —   | —   | —   | ●                 | —  | —  | —  | —  | —  | —  | —   | —           | — |
| OMRON Corporation                         | OMNUC G5/1S            | ●                  | —  | —  | —   | —   | —   | —                 | ●  | —  | —  | —  | —  | —  | —   | —           | — |
| Panasonic Corporation                     | MINAS A5/A6            | ● (MHMF only)      | ●  | —  | —   | —   | —   | —                 | ●  | —  | —  | —  | —  | —  | —   | —           | — |
| FANUC CORPORATION                         | βis (-B)               | ●                  | —  | —  | —   | —   | —   | ● (β1 only)       | —  | —  | ●  | —  | —  | —  | —   | —           | — |
| NIDEC SANKYO CORPORATION                  | S-FLAG                 | ●                  | —  | —  | —   | —   | —   | ●                 | —  | —  | —  | —  | —  | —  | —   | —           | — |
| KEYENCE CORPORATION                       | SV/SV2                 | ●*3                | —  | —  | —   | —   | —   | ●                 | —  | —  | —  | —  | —  | —  | —   | —           | — |
| FUJI ELECTRIC CO., LTD.                   | ALPHA7                 | ●                  | —  | —  | —   | —   | —   | ●                 | —  | —  | —  | —  | —  | —  | —   | —           | — |
| MinebeaMitsumi Inc.                       | Hybrid stepping motors | —                  | —  | —  | —   | —   | ●*1 | —                 | —  | —  | —  | —  | —  | —  | —   | —           | ● |
| Shinano Kenshi Co., Ltd.                  | CSB-BZ                 | —                  | —  | —  | —   | —   | ●*1 | —                 | —  | —  | —  | —  | —  | —  | —   | —           | — |
| ORIENTAL MOTOR Co., Ltd.                  | α STEP AR/AZ           | —                  | —  | —  | —   | —   | —   | ● AR/AZ (46 only) | —  | —  | —  | —  | —  | —  | —   | —           | ● |
| FASTECH Co., Ltd.                         | Ezi-SERVO              | —                  | —  | —  | —   | —   | ●   | —                 | —  | —  | —  | —  | —  | —  | —   | —           | ● |
| Rockwell Automation, Inc. (Allen-Bradley) | Kinetix MP/VP/TL       | ● (TL only)        | —  | —  | —   | —   | —   | —                 | —  | —  | —  | —  | —  | —  | —   | ● (TL only) | — |
| Beckhoff Automation GmbH                  | AM 30/31/80/81         | ●                  | —  | —  | —   | —   | —   | —                 | —  | —  | —  | —  | —  | —  | —   | —           | — |
| Siemens AG                                | SIMOTICS S-1FK7        | —                  | —  | ●  | —   | —   | —   | —                 | —  | —  | —  | —  | —  | —  | —   | —           | — |
| Delta Electronics, Inc.                   | ASDA-A2                | ●                  | —  | —  | —   | —   | —   | —                 | —  | —  | —  | —  | —  | —  | —   | —           | — |
| ANCA Motion                               | AMD2000                | ●                  | —  | —  | —   | —   | —   | —                 | —  | —  | —  | —  | —  | —  | —   | —           | — |

- \*1 Motor mounting position: In-line only \*2 Motor mounting position: Parallel only
- \*3 For some motors, the connector may protrude from the motor body. Be sure to check for interference with the mounting surface before selecting a motor.
- \*4 The compatible motors and mounting types are typical examples. Select the mounting type after referring to the "Motor Mounting, Applicable Motor Dimensions" tables on the "Dimensions" pages.

**Replacement Parts/Grease Pack**

| Applied portion | Order no.                         |
|-----------------|-----------------------------------|
| Piston rod      | GR-D-005 (5 g)<br>GR-D-010 (10 g) |

Solid state auto switches should be ordered separately. [Click here](#) for auto switch details.

**Applicable auto switches**  
D-M9N(V)-900, D-M9P(V)-900, D-M9B(V)-900  
D-M9NW(V)-900, D-M9PW(V)-900, D-M9BW(V)-900

\* The 25A- series specifications and dimensions are the same as those of the standard model.

For details, refer to the [Web Catalog](#).





Incremental (Step Motor 24 VDC)

Incremental (Servo Motor 24 VDC)

# Guide Rod Type

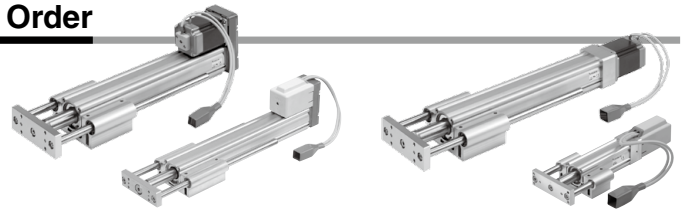
Secondary Battery Compatible

## 25A-LEYG Series 25A-LEYG16, 25, 32, 40



\* For details, refer to the Web Catalog.

### How to Order



Motor mounting position: Parallel

Motor mounting position: In-line

25A-LEYG 16 M [ ] [ ] B-50 [ ] [ ] -S1

Series compatible with secondary batteries

1 2 3 4 5 6 7 8 9

JXC [ ] Series  
**CD17T**

LEC [ ] Series  
**AN** 1 [ ]

10 11 12

For details on controllers, refer to the Web Catalog.

#### 1 Size

|    |
|----|
| 16 |
| 25 |
| 32 |
| 40 |

#### 2 Bearing type\*1

|   |                      |
|---|----------------------|
| M | Sliding bearing      |
| L | Ball bushing bearing |

#### 3 Motor mounting position

|     |                   |
|-----|-------------------|
| Nil | Top side parallel |
| D   | In-line           |

#### 4 Motor type

| Symbol | Type                         | Applicable size |        |           | Compatible controllers/<br>drivers   |
|--------|------------------------------|-----------------|--------|-----------|--|
|        |                              | LEYG16          | LEYG25 | LEYG32/40 |  |
| Nil    | Step motor<br>(Servo/24 VDC) | ●               | ●      | ●         | JXC51 JXCD1 JXCPF<br>JXC61 JXCL1 JXCLF<br>JXGE1 JXCM1<br>JXC91 JXCEF LECPC1<br>JXCP1 JXC9F LECPA |
| A      | Servo motor<br>(24 VDC)      | ●               | ●      | —         | LECA6  |

#### 5 Lead [mm]

| Symbol | LEYG16 | LEYG25 | LEYG32/40 |
|--------|--------|--------|-----------|
| A      | 10     | 12     | 16        |
| B      | 5      | 6      | 8         |
| C      | 2.5    | 3      | 4         |

#### 6 Stroke\*2 \*3 [mm]

|     |     |
|-----|-----|
| 30  | 30  |
| to  | to  |
| 300 | 300 |

\* For details, refer to the applicable stroke table below.

#### 7 Motor option\*4

|     |                       |
|-----|-----------------------|
| Nil | Without option        |
| C   | With motor cover      |
| B   | With lock             |
| W   | With lock/motor cover |

#### 8 Guide option\*5

|     |                                   |
|-----|-----------------------------------|
| Nil | Without option                    |
| F   | With grease retaining function*15 |

\*15 Only applicable for sizes 25, 32, and 40 with the sliding bearing

#### 9 Actuator cable type/length\*7

| Standard cable [m] | Robotic cable [m] |    |     |    |      |
|--------------------|-------------------|----|-----|----|------|
| Nil                | None              | R1 | 1.5 | RA | 10*6 |
| S1                 | 1.5*9             | R3 | 3   | RB | 15*6 |
| S3                 | 3*9               | R5 | 5   | RC | 20*6 |
| S5                 | 5*9               | R8 | 8*6 |    |      |

#### Applicable Stroke Table\*2

| Model     | Stroke [mm] | 30 | 50 | 100 | 150 | 200 | 250 | 300       | Manufacturable stroke range [mm] |
|-----------|-------------|----|----|-----|-----|-----|-----|-----------|----------------------------------|
|           | LEYG16      | ●  | ●  | ●   | ●   | ●   | —   | —         |                                  |
| LEYG25    | ●           | ●  | ●  | ●   | ●   | ●   | ●   | 15 to 300 |                                  |
| LEYG32/40 | ●           | ●  | ●  | ●   | ●   | ●   | ●   | 20 to 300 |                                  |

●: Standard

Solid state auto switches should be ordered separately.  
[Click here](#) for auto switch details.

#### Applicable auto switches

D-M9N(V)-900, D-M9P(V)-900, D-M9B(V)-900  
D-M9NW(V)-900, D-M9PW(V)-900, D-M9BW(V)-900

#### Replacement Parts/Grease Pack

| Applied portion | Order no.       |
|-----------------|-----------------|
| Piston rod      | GR-D-005 (5 g)  |
| Guide rod       | GR-D-010 (10 g) |

\* Copper and zinc materials are used for the motors, cables, controllers/drivers.  
\* The 25A-series specifications and dimensions are the same as those of the standard model.

For details, refer to the [Web Catalog](#).



## JXC Series (For details, refer to page 547.)

### 10 Controller

|       |                    |
|-------|--------------------|
| Nil   | Without controller |
| C□1□□ | With controller    |

**C D 1 7 T**

### Interface (Communication protocol/Input/Output)

| Symbol | Type                 | Number of axes, Special specification |                       |
|--------|----------------------|---------------------------------------|-----------------------|
|        |                      | Standard                              | With STO sub-function |
| 5      | Parallel input (NPN) | ●                                     |                       |
| 6      | Parallel input (PNP) | ●                                     |                       |
| E      | EtherCAT             | ●                                     | ●                     |
| 9      | EtherNet/IP™         | ●                                     | ●                     |
| P      | PROFINET             | ●                                     | ●                     |
| D      | DeviceNet®           | ●                                     |                       |
| L      | IO-Link              | ●                                     | ●                     |
| M      | CC-Link              | ●                                     |                       |

### Mounting

|      |                |
|------|----------------|
| 7    | Screw mounting |
| 8*13 | DIN rail       |

### Number of axes, Special specification

| Symbol | Number of axes | Specification         |
|--------|----------------|-----------------------|
| 1      | Single axis    | Standard              |
| F      | Single axis    | With STO sub-function |

### Communication plug connector, I/O cable\*14

| Symbol | Type                                       | Applicable interface                         |
|--------|--|--|
| Nil    | Without accessory                          | —  |
| S      | Straight type communication plug connector | DeviceNet®                                   |
| T      | T-branch type communication plug connector | CC-Link Ver. 1.10                            |
| 1      | I/O cable (1.5 m)                          | Parallel input (NPN)<br>Parallel input (PNP) |
| 3      | I/O cable (3 m)                            |  |
| 5      | I/O cable (5 m)                            |  |



## LEC Series (For details, refer to the Web Catalog.)

**AN 1 □**

10 11 12

### 10 Controller/Driver type\*8

|     |  |     |
|-----|--|-----|
| Nil | Without controller/driver                |     |
| 6N  | <b>LECA6</b><br>(Step data input type)   | NPN |
| 6P  |  | PNP |
| 1N  | <b>LECP1</b> *9<br>(Programless type)    | NPN |
| 1P  |  | PNP |
| AN  | <b>LECPA</b> *9*10<br>(Pulse input type) | NPN |
| AP  |  | PNP |

### 11 I/O cable length\*11

|     |   |  |
|-----|---|--|
| Nil | Without cable<br>(Without communication plug connector) |  |
| 1   | 1.5 m   |  |
| 3   | 3 m*12  |  |
| 5   | 5 m*12  |  |

### 12 Controller/Driver mounting

|     |                |
|-----|----------------|
| Nil | Screw mounting |
| D   | DIN rail*13    |



- \*1 When [M: Sliding bearing] is selected, the max. speed of lead [A] is 400 mm/s (at no-load, horizontal mounting). The speed is also restricted with a horizontal/moment load. Refer to the "Model Selection" on the **Web Catalog**.
- \*2 Please contact SMC for non-standard strokes as they are produced as special orders.
- \*3 There is a limit for mounting the size 32/40 top side parallel motor types and strokes of 50 mm or less. Refer to the dimensions.
- \*4 When "With lock" or "With lock/motor cover" is selected for the top side parallel motor type, the motor body will stick out from the end of the body for size 16/40 with strokes of 30 mm or less. Check for interference with workpieces before selecting a model.
- \*5 Only available for size 25, 32, and 40 sliding bearings (Refer to the "Construction" on the **Web Catalog**.)
- \*6 Produced upon receipt of order (Robotic cable only)
- \*7 The standard cable should only be used on fixed parts.  
For use on moving parts, select the robotic cable.  
Refer to the **Web Catalog** if only the actuator cable is required.
- \*8 For details on controllers/drivers and compatible motors, refer to the

- compatible controllers/drivers on the next page.
- \*9 Only available for the motor type "Step motor"
- \*10 When pulse signals are open collector, order the current limiting resistor (LEC-PA-R-□) on separately.
- \*11 When "Without controller/driver" is selected for controller/driver types, I/O cable cannot be selected. Refer to the **Web Catalog** if an I/O cable is required.
- \*12 When "Pulse input type" is selected for controller/driver types, pulse input usable only with differential. Only 1.5 m cables u-able with open collector
- \*13 The DIN rail is not included. It must be ordered separately.
- \*14 Select "Nil" for anything other than DeviceNet®, CC-Link, or parallel input.  
Select "Nil," "S," or "T" for DeviceNet® or CC-Link.  
Select "Nil," "1," "3," or "5" for parallel input.

## ⚠ Caution

### [CE/UKCA-compliant products]

- ① EMC compliance was tested by combining the electric actuator LEY series and the controller LEC/JXC series.  
The EMC depends on the configuration of the customer's control panel and the relationship with other electrical equipment and wiring. Therefore, compliance with the EMC directive cannot be certified for SMC components incorporated into the customer's equipment under actual operating conditions. As a result, it is necessary for the customer to verify compliance with the EMC directive for the machinery and equipment as a whole.
- ② For the incremental (servo motor 24 VDC) specification, EMC compliance was tested by installing a noise filter set (LEC-NFA). Refer to the **Web Catalog** for the noise filter set. Refer to the LECA series Operation Manual for installation.

### [UL-compliant products (For the LEC series)]

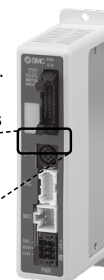
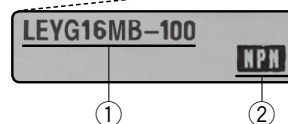
When compliance with UL is required, the electric actuator and controller/driver should be used with a UL1310 Class 2 power supply.

## The actuator and controller/driver are sold as a package.

Confirm that the combination of the controller/driver and actuator is correct.

### <Check the following before use.>

- ① Check the actuator label for the model number (after "25A-"). This number should match that of the controller/driver.
- ② Check that the Parallel I/O configuration matches (NPN or PNP).



\* Refer to the Operation Manual for using the products. Please download it via our website: <https://www.smcworld.com>

# Guide Rod Type

Secondary Battery Compatible

## 25A-LEYG Series 25A-LEYG16, 25, 32, 40



RoHS

\* For details, refer to the Web Catalog.

### How to Order



**25A-LEYG** **25** **M** **E** **B** - **50** **C** - **R1** **CD17T**

Series compatible with secondary batteries

For details on controllers, refer to the next page.

#### 1 Size

|    |
|----|
| 16 |
| 25 |
| 32 |
| 40 |

#### 2 Bearing type\*1

|          |                      |
|----------|----------------------|
| <b>M</b> | Sliding bearing      |
| <b>L</b> | Ball bushing bearing |

#### 3 Motor mounting position/Motor cover direction

| Symbol     | Motor mounting position | Motor cover direction |
|------------|-------------------------|-----------------------|
| <b>Nil</b> | Top side parallel       | —                     |
| <b>D</b>   | In-line                 | —*2                   |
| <b>D1</b>  |                         | Left*3                |
| <b>D2</b>  |                         | Right*3               |
| <b>D3</b>  |                         | Top*3                 |
| <b>D4</b>  |                         | Bottom*3              |

#### 4 Motor type

|          |   |
|----------|---|
| <b>E</b> | Battery-less absolute (Step motor 24 VDC) |
|----------|---|

#### 5 Lead [mm]

| Symbol   | LEYG16 | LEYG25 | LEYG32/40 |
|----------|--------|--------|-----------|
| <b>A</b> | 10     | 12     | 16        |
| <b>B</b> | 5      | 6      | 8         |
| <b>C</b> | 2.5    | 3      | 4         |

#### 6 Stroke\*4 \*5 [mm]

| Stroke           | Note     |                                 |
|------------------|----------|---------------------------------|
|                  | Size     | Applicable stroke               |
| <b>30 to 200</b> | 16       | 30, 50, 100, 150, 200           |
| <b>30 to 300</b> | 25/32/40 | 30, 50, 100, 150, 200, 250, 300 |

#### 7 Motor option\*6

|          |                       |
|----------|-----------------------|
| <b>C</b> | With motor cover      |
| <b>W</b> | With lock/motor cover |

#### 8 Guide option\*7

|            |                                   |
|------------|-----------------------------------|
| <b>Nil</b> | Without option                    |
| <b>F</b>   | With grease retaining function*11 |

\*11 Only applicable for sizes 25, 32, and 40 with the sliding bearing

#### 9 Actuator cable type/length

| Robotic cable |      |           |      | [m] |
|---------------|------|-----------|------|-----|
| <b>Nil</b>    | None | <b>R8</b> | 8*8  |     |
| <b>R1</b>     | 1.5  | <b>RA</b> | 10*8 |     |
| <b>R3</b>     | 3    | <b>RB</b> | 15*8 |     |
| <b>R5</b>     | 5    | <b>RC</b> | 20*8 |     |

Solid state auto switches should be ordered separately. [Click here](#) for auto switch details.

#### Applicable auto switches

D-M9N(V)-900, D-M9P(V)-900, D-M9B(V)-900  
D-M9NW(V)-900, D-M9PW(V)-900, D-M9BW(V)-900

\* Copper and zinc materials are used for the motors, cables, controllers/drivers.  
\* The 25A- series specifications and dimensions are the same as those of the standard model.

For details, refer to the [Web Catalog](#).

#### Replacement Parts/Grease Pack

| Applied portion | Order no.       |
|-----------------|-----------------|
| Piston rod      | GR-D-005 (5 g)  |
| Guide rod       | GR-D-010 (10 g) |

## 10 Controller

|       |                    |
|-------|--------------------|
| Nil   | Without controller |
| C□1□□ | With controller    |



### Interface (Communication protocol/Input/Output)

| Symbol | Type                 | Number of axes, Special specification |                       |
|--------|----------------------|---------------------------------------|-----------------------|
|        |                      | Standard                              | With STO sub-function |
| 5      | Parallel input (NPN) | ●                                     |                       |
| 6      | Parallel input (PNP) | ●                                     |                       |
| E      | EtherCAT             | ●                                     | ●                     |
| 9      | EtherNet/IP™         | ●                                     | ●                     |
| P      | PROFINET             | ●                                     | ●                     |
| D      | DeviceNet®           | ●                                     |                       |
| L      | IO-Link              | ●                                     | ●                     |
| M      | CC-Link              | ●                                     |                       |

### Mounting

|     |                |
|-----|----------------|
| 7   | Screw mounting |
| 8*9 | DIN rail       |

### Number of axes, Special specification

| Symbol | Number of axes | Specification         |
|--------|----------------|-----------------------|
| 1      | Single axis    | Standard              |
| F      | Single axis    | With STO sub-function |

### Communication plug connector, I/O cable\*10

| Symbol | Type                                       | Applicable interface                         |
|--------|--|--|
| Nil    | Without accessory                          | —  |
| S      | Straight type communication plug connector | DeviceNet®                                   |
| T      | T-branch type communication plug connector | CC-Link Ver. 1.10                            |
| 1      | I/O cable (1.5 m)                          | Parallel input (NPN)<br>Parallel input (PNP) |
| 3      | I/O cable (3 m)                            |  |
| 5      | I/O cable (5 m)                            |  |

- \*1 When [M: Sliding bearing] is selected, the maximum speed of lead [A] is 400 mm/s (at no-load, horizontal mounting). The speed is also restricted with a horizontal/moment load. Refer to the "Model Selection" on the **Web Catalog**.
- \*2 Sizes 25, 32, and 40 only
- \*3 Size 16 only
- \*4 Please contact SMC for non-standard strokes as they are produced as special orders.
- \*5 There is a limit for mounting size 16/32/40 top side parallel motor types and strokes of 50 mm or less. Refer to the dimensions.
- \*6 When "With lock/motor cover" is selected for the top side parallel motor

- type, the motor body will stick out from the end of the body for size 16 with strokes of 50 mm or less and size 40 with strokes of 30 mm or less. Check for interference with workpieces before selecting a model.
- \*7 Only available for size 25, 32, and 40 sliding bearings (Refer to the "Construction" on the **Web Catalog**.)
- \*8 Produced upon receipt of order
- \*9 The DIN rail is not included. It must be ordered separately.
- \*10 Select "Nil" for anything other than DeviceNet®, CC-Link, or parallel input.  
Select "Nil," "S," or "T" for DeviceNet® or CC-Link.  
Select "Nil," "1," "3," or "5" for parallel input.

## ⚠ Caution

### [CE/UKCA-compliant products]

EMC compliance was tested by combining the electric actuator LEY series and the controller JXC series.  
The EMC depends on the configuration of the customer's control panel and the relationship with other electrical equipment and wiring. Therefore, compliance with the EMC directive cannot be certified for SMC components incorporated into the customer's equipment under actual operating conditions. As a result, it is necessary for the customer to verify compliance with the EMC directive for the machinery and equipment as a whole.

### [Precautions relating to differences in controller versions]

When the JXC series is to be used in combination with the battery-less absolute encoder, use a controller that is version V3.4 or S3.4 or higher. For details, refer to the **Web Catalog**.

### [UL certification]

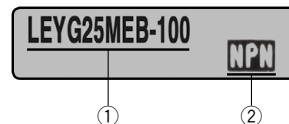
The JXC series controllers used in combination with electric actuators are UL certified.

## The actuator and controller are sold as a package.

Confirm that the combination of the controller and actuator is correct.

### <Check the following before use.>

- ① Check the actuator label for the model number (after "25A-"). This number should match that of the controller/driver.
- ② Check that the Parallel I/O configuration matches (NPN or PNP).



\* Refer to the Operation Manual for using the products.  
Please download it via our website: <https://www.smcworld.com>

| Type                     | Step data input type                      | EtherCAT direct input type | EtherCAT direct input type with STO sub-function | EtherNet/IP™ direct input type | EtherNet/IP™ direct input type with STO sub-function | PROFINET direct input type | PROFINET direct input type with STO sub-function | DeviceNet® direct input type | IO-Link direct input type | IO-Link direct input type with STO sub-function | CC-Link direct input type |
|--------------------------|---|----------------------------|--|--------------------------------|--|----------------------------|--|------------------------------|---------------------------|---|---------------------------|
|                          |   |                            |  |                                |  |                            |  |                              |                           |   |                           |
| Series                   | JXC51<br>JXC61                            | JXCE1                      | JXCEF  | JXC91                          | JXC9F  | JXCP1                      | JXC PF   | JXCD1                        | JXCL1                     | JXCLF   | JXCM1                     |
| Features                 | Parallel I/O                              | EtherCAT direct input      | EtherCAT direct input with STO sub-function      | EtherNet/IP™ direct input      | EtherNet/IP™ direct input with STO sub-function      | PROFINET direct input      | PROFINET direct input with STO sub-function      | DeviceNet® direct input      | IO-Link direct input      | IO-Link direct input with STO sub-function      | CC-Link direct input      |
| Compatible motor         | Battery-less absolute (Step motor 24 VDC) |                            |  |                                |  |                            |  |                              |                           |   |                           |
| Max. number of step data | 64 points                                 |                            |  |                                |  |                            |  |                              |                           |   |                           |
| Power supply voltage     | 24 VDC                                    |                            |  |                                |  |                            |  |                              |                           |   |                           |

# Guide Rod Type

Secondary Battery Compatible

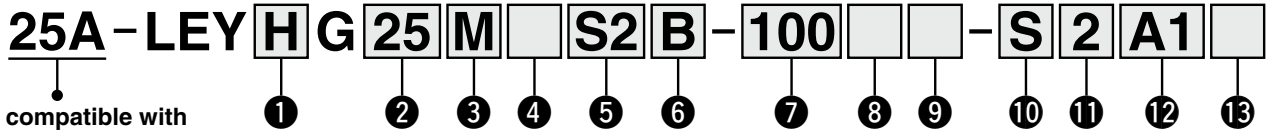
## 25A-LEYG Series 25A-LEYG25, 32

LECY□ Series ▶ p. 314-8



\* For details, refer to the Web Catalog.

### How to Order



Series compatible with secondary batteries

#### 1 Accuracy

|     |                     |
|-----|---------------------|
| Nil | Basic type          |
| H   | High-precision type |

#### 2 Size

|    |
|----|
| 25 |
| 32 |

#### 3 Bearing type

|   |                      |
|---|----------------------|
| M | Sliding bearing      |
| L | Ball bushing bearing |

#### 4 Motor mounting position

|     |                   |
|-----|-------------------|
| Nil | Top side parallel |
| D   | In-line           |

#### 5 Motor type\*1

| Symbol | Type                                 | Output [W] | 2 Size | 12 Driver type | Compatible drivers*3 |
|--------|--------------------------------------|------------|--------|----------------|----------------------|
| S2*1   | AC servo motor (Incremental encoder) | 100        | 25     | A1/A2          | LECSA□-S1            |
|        |                                      | 200        | 32     | A1/A2          | LECSA□-S3            |
| T6*2   | AC servo motor (Absolute encoder)    | 100        | 25     | B2             | LECSB2-T5            |
|        |                                      |            |        | C2             | LECSC2-T5            |
|        |                                      |            |        | S2             | LECSS2-T5            |
| T7     | AC servo motor (Absolute encoder)    | 200        | 32     | B2             | LECSB2-T7            |
|        |                                      |            |        | C2             | LECSC2-T7            |
|        |                                      |            |        | S2             | LECSS2-T7            |

- \*1 For motor type S2, the compatible driver part number suffix is S1.
- \*2 For motor type T6, the compatible driver part number is LECS□2-T5.
- \*3 For details on the driver, refer to the Web Catalog.

#### 6 Lead [mm]

| Symbol | LEYG25 | LEYG32*1 |
|--------|--------|----------|
| A      | 12     | 16 (20)  |
| B      | 6      | 8 (10)   |
| C      | 3      | 4 (5)    |

\*1 The values shown in ( ) are the leads for the size 32 top side parallel motor type. (Equivalent leads which include the pulley ratio [1.25:1])

#### 7 Stroke [mm]

|     |     |
|-----|-----|
| 30  | 30  |
| to  | to  |
| 300 | 300 |

- \* For details, refer to the applicable stroke table below.
- \* There is a limit for mounting the size 32 top side parallel motor type and strokes of 50 mm or less. Refer to the dimensions.

#### 8 Motor option

|     |                |
|-----|----------------|
| Nil | Without option |
| B   | With lock      |

#### 9 Guide option

|     |                                  |
|-----|----------------------------------|
| Nil | Without option                   |
| F   | With grease retaining function*1 |

\*1 Only available for sliding bearings

#### 10 Cable type\*1 \*2

|     |                |
|-----|----------------|
| Nil | Without cable  |
| S   | Standard cable |
| R   | Robotic cable  |

\*1 A motor cable and encoder cable are included with the product. (A lock cable is also included if motor option "B: With lock" is selected.)

- \*2 Standard cable entry direction is
  - Top side parallel: (A) Axis side
  - In-line: (B) Counter axis side
 (Refer to the Web Catalog for details.)

#### 11 Cable length\*1 [m]

|     |               |
|-----|---------------|
| Nil | Without cable |
| 2   | 2             |
| 5   | 5             |
| A   | 10            |

\*1 The length of the motor, encoder, and lock cables are the same.

#### Replacement Parts/Grease Pack

| Applied portion | Order no.       |
|-----------------|-----------------|
| Piston rod      | GR-D-005 (5 g)  |
| Guide rod       | GR-D-010 (10 g) |

Solid state auto switches should be ordered separately. [Click here](#) for auto switch details.

#### Applicable auto switches

D-M9N(V)-900, D-M9P(V)-900, D-M9B(V)-900, D-M9NW(V)-900, D-M9PW(V)-900, D-M9BW(V)-900

#### Applicable Stroke Table

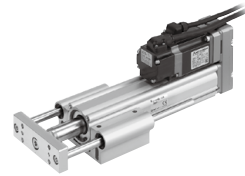
| Model  | Stroke [mm] | ●: Standard |    |     |     |     |     |     | Manufacturable stroke range |
|--------|-------------|-------------|----|-----|-----|-----|-----|-----|-----------------------------|
|        |             | 30          | 50 | 100 | 150 | 200 | 250 | 300 |                             |
| LEYG25 |             | ●           | ●  | ●   | ●   | ●   | ●   | ●   | 15 to 300                   |
| LEYG32 |             | ●           | ●  | ●   | ●   | ●   | ●   | ●   | 20 to 300                   |

\* Please contact SMC for non-standard strokes as they are produced as special orders.

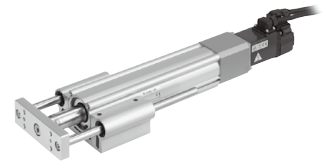
\* Copper and zinc materials are used for the motors, cables, controllers/drivers.

\* The 25A- series specifications and dimensions are the same as those of the standard model.

For details, refer to the Web Catalog.



Motor mounting position: Parallel



Motor mounting position: In-line

## 12 Driver type\*1

|            | Compatible drivers | Power supply voltage [V] |
|------------|--------------------|--------------------------|
| <b>Nil</b> | Without driver     | —                        |
| <b>A1</b>  | LECSA1-S□          | 100 to 120               |
| <b>A2</b>  | LECSA2-S□          | 200 to 230               |
| <b>B2</b>  | LECSB2-T□          | 200 to 240               |
| <b>C2</b>  | LECSC2-T□          | 200 to 230               |
| <b>S2</b>  | LECSS2-T□          | 200 to 240               |

\*1 When a driver type is selected, a cable is included.  
Select the cable type and cable length.

Example)

S2S2: Standard cable (2 m) + Driver (LECSS2)

S2: Standard cable (2 m)





Nil: Without cable and driver

## 13 I/O cable length [m]\*1

|            |                                |
|------------|--------------------------------|
| <b>Nil</b> | Without cable                  |
| <b>H</b>   | Without cable (Connector only) |
| <b>1</b>   | 1.5                            |

\*1 When “Nil: Without driver” is selected for the driver type, only “Nil: Without cable” can be selected.  
Refer to the **Web Catalog** if an I/O cable is required.

## Compatible Drivers

| Driver type                     | Pulse input type/<br>Positioning type   | Pulse input type  | CC-Link direct input type  | SSCNET III/H type   |
|---------------------------------|---|---|--|---|
|                                 |  |  |  |  |
| <b>Series</b>                   | <b>LECSA</b>  | <b>LECSB-T</b>  | <b>LECSC-T</b>   | <b>LECSS-T</b>  |
| <b>Number of point tables</b>   | Up to 7   | Up to 255   | Up to 255 (2 stations occupied)  | —   |
| <b>Pulse input</b>              | ○   | ○   | —  | —   |
| <b>Applicable network</b>       | —   | —   | CC-Link  | SSCNET III/H  |
| <b>Control encoder</b>          | Incremental<br>17-bit encoder   | Absolute<br>22-bit encoder  | Absolute<br>18-bit encoder   | Absolute<br>22-bit encoder  |
| <b>Communication function</b>   | USB communication   | USB communication,<br>RS422 communication   | USB communication,<br>RS422 communication  | USB communication   |
| <b>Power supply voltage [V]</b> | 100 to 120 VAC (50/60 Hz)<br>200 to 230 VAC (50/60 Hz)                              | 200 to 240 VAC (50/60 Hz)   | 200 to 230 VAC (50/60 Hz)  | 200 to 240 VAC (50/60 Hz)   |



# Guide Rod Type

Secondary Battery Compatible

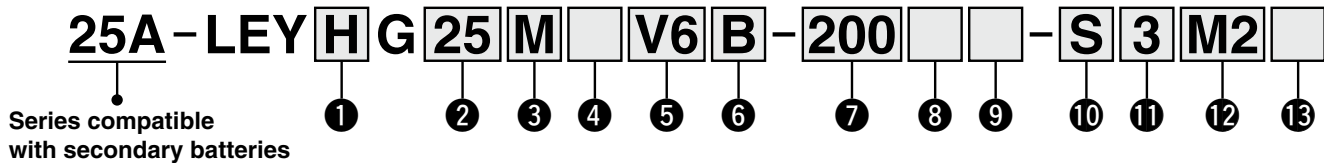
## 25A-LEYG Series 25A-LEYG25, 32



LECS Series ▶ p. 314-6



### How to Order



#### 1 Accuracy

|     |                     |
|-----|---------------------|
| Nil | Basic type          |
| H   | High-precision type |

#### 2 Size

|    |
|----|
| 25 |
| 32 |

#### 3 Bearing type

|   |                      |
|---|----------------------|
| M | Sliding bearing      |
| L | Ball bushing bearing |

#### 4 Motor mounting position

|     |                   |
|-----|-------------------|
| Nil | Top side parallel |
| D   | In-line           |

#### 5 Motor type

| Symbol | Type                              | Output [W] | 2 Size | 12 Driver type | Compatible drivers |
|--------|-----------------------------------|------------|--------|----------------|--------------------|
| V6*1   | AC servo motor (Absolute encoder) | 100        | 25     | M2             | LECYM2-V5          |
| V7     |                                   | 200        | 32     | U2             | LECYU2-V5          |
|        |                                   |            |        | M2             | LECYM2-V7          |
|        |                                   |            |        | U2             | LECYU2-V7          |

\*1 For motor type V6, the compatible driver part number suffix is V5.

#### 6 Lead [mm]

| Symbol | LEYG25 | LEYG32*1 |
|--------|--------|----------|
| A      | 12     | 16 (20)  |
| B      | 6      | 8 (10)   |
| C      | 3      | 4 (5)    |

\*1 The values shown in ( ) are the leads for the top side parallel motor type. (Equivalent leads which include the pulley ratio [1.25:1])

#### 7 Stroke [mm]

|     |     |
|-----|-----|
| 30  | 30  |
| to  | to  |
| 300 | 300 |

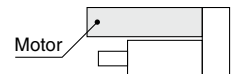
\* For details, refer to the applicable stroke table below.

\* There is a limit for mounting the size 32 top side parallel motor type and strokes of 50 mm or less. Refer to the dimensions.

#### 8 Motor option

|     |                |
|-----|----------------|
| Nil | Without option |
| B   | With lock      |

\* When "With lock" is selected for the top side parallel motor type, the motor body will stick out from the end of the body for size 25 with strokes of 30 mm or less. Check for interference with workpieces before selecting a model.



#### 9 Guide option

|     |                                |
|-----|--------------------------------|
| Nil | Without option                 |
| F   | With grease retaining function |

\* Only available for the sliding bearing

#### 10 Cable type\*1

|     |                |
|-----|----------------|
| Nil | Without cable  |
| S   | Standard cable |
| R   | Robotic cable  |

\*1 A motor cable and encoder cable are included with the product.

The motor cable for lock option is included when the motor with lock option is selected.

#### 11 Cable length [m]\*1

|     |               |
|-----|---------------|
| Nil | Without cable |
| 3   | 3             |
| 5   | 5             |
| A   | 10            |
| C   | 20            |

\*1 The length of the motor and encoder cables are the same. (For with lock)

#### Applicable Stroke Table

| Model  | Stroke [mm] | ●: Standard |    |     |     |     |     |     | Manufacturable stroke range |
|--------|-------------|-------------|----|-----|-----|-----|-----|-----|-----------------------------|
|        |             | 30          | 50 | 100 | 150 | 200 | 250 | 300 |                             |
| LEYG25 |             | ●           | ●  | ●   | ●   | ●   | ●   | ●   | 15 to 300                   |
| LEYG32 |             | ●           | ●  | ●   | ●   | ●   | ●   | ●   | 20 to 300                   |

\* Please contact SMC for non-standard strokes as they are produced as special orders.

Solid state auto switches should be ordered separately. [Click here](#) for auto switch details.

#### Applicable auto switches

D-M9N(V)-900, D-M9P(V)-900, D-M9B(V)-900  
D-M9NW(V)-900, D-M9PW(V)-900, D-M9BW(V)-900

#### Replacement Parts/Grease Pack

| Applied portion | Order no.       |
|-----------------|-----------------|
| Piston rod      | GR-D-005 (5 g)  |
| Guide rod       | GR-D-010 (10 g) |

\* Copper and zinc materials are used for the motors, cables, controllers/drivers.

\* The 25A- series specifications and dimensions are the same as those of the standard model.

For details, refer to the [Web Catalog](#).

# Guide Rod Type **25A-LEYG Series**

AC Servo Motor

Secondary Battery Compatible



Motor mounting position: Parallel



Motor mounting position: In-line

## 12 Driver type

|            | Compatible drivers | Power supply voltage [V] |
|------------|--------------------|--------------------------|
| <b>Nil</b> | Without driver     | —                        |
| <b>M2</b>  | LECYM2-V□          | 200 to 230               |
| <b>U2</b>  | LECYU2-V□          | 200 to 230               |



\* When a driver type is selected, a cable is included. Select the cable type and cable length.

## 13 I/O cable length [m]\*1

|            |                                |
|------------|--------------------------------|
| <b>Nil</b> | Without cable                  |
| <b>H</b>   | Without cable (Connector only) |
| <b>1</b>   | 1.5                            |

\*1 When "Nil: Without driver" is selected for the driver type, only "Nil: Without cable" can be selected. Refer to the **Web Catalog** if an I/O cable is required.

## Compatible Drivers

| Driver type                     | MECHATROLINK-II type  | MECHATROLINK-III type   |
|---------------------------------|---|---|
|                                 |  |  |
| <b>Series</b>                   | <b>LECYM</b>  | <b>LECYU</b>  |
| <b>Applicable network</b>       | MECHATROLINK-II   | MECHATROLINK-III  |
| <b>Control encoder</b>          | Absolute<br>20-bit encoder  |   |
| <b>Communication device</b>     | USB communication, RS-422 communication   |   |
| <b>Power supply voltage [V]</b> | 200 to 230 VAC (50/60 Hz)   |   |

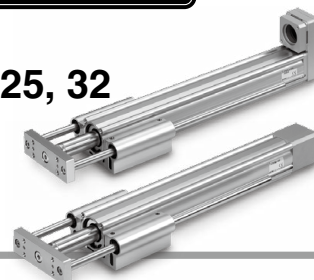


# Electric Actuator Guide Rod Type

Secondary Battery Compatible

RoHS

## 25A-LEYG Series 25A-LEYG25, 32



### How to Order

25A-LEY H G 25 M [ ] NZ B - 200 [ ]

Series compatible with secondary batteries

**1 Accuracy**

|     |                     |
|-----|---------------------|
| Nil | Basic type          |
| H   | High-precision type |

**2 Size**

|    |
|----|
| 25 |
| 32 |

**3 Bearing type**

|   |                      |
|---|----------------------|
| M | Sliding bearing      |
| L | Ball bushing bearing |

**4 Motor mounting position**

|     |                   |
|-----|-------------------|
| Nil | Top side parallel |
| D   | In-line           |

**5 Mounting type**

|     |
|-----|
| NZ  |
| NY  |
| NX  |
| NW  |
| NV  |
| NU  |
| NT  |
| NM1 |
| NM2 |
| NM3 |

**6 Lead [mm]**

| Symbol | LEYG25 | LEYG32*1 |
|--------|--------|----------|
| A      | 12     | 16 (20)  |
| B      | 6      | 8 (10)   |
| C      | 3      | 4 (5)    |

\*1 The values shown in ( ) are the leads for the size 32 top side parallel motor type. Except mounting type NM1 (Equivalent leads which include the pulley ratio [1.25:1])

**7 Stroke [mm]**

|     |     |
|-----|-----|
| 30  | 30  |
| to  | to  |
| 300 | 300 |

\* Refer to the applicable stroke table.

**8 Guide option**

|     |                                |
|-----|--------------------------------|
| Nil | Without option                 |
| F   | With grease retaining function |

\* Only available for sliding bearing

**Applicable Stroke Table**

| Model  | Stroke [mm] |    |     |     |     |     |     | Manufacturable stroke range |
|--------|-------------|----|-----|-----|-----|-----|-----|-----------------------------|
|        | 30          | 50 | 100 | 150 | 200 | 250 | 300 |                             |
| LEYG25 | ●           | ●  | ●   | ●   | ●   | ●   | ●   | 15 to 300                   |
| LEYG32 | ●           | ●  | ●   | ●   | ●   | ●   | ●   | 20 to 300                   |

\* Please contact SMC for non-standard strokes as they are produced as special orders.

**Replacement Parts/Grease Pack**

| Applied portion | Order no.       |
|-----------------|-----------------|
| Piston rod      | GR-D-005 (5 g)  |
| Guide rod       | GR-D-010 (10 g) |

**Compatible Motors and Mounting Types\*4**

| Applicable motor model                    |                        | Size/Mounting type |    |    |     |                     |     |             |    |    |                      |    |                 |                 |             |     |   |
|---|------------------------|--------------------|----|----|-----|---------------------|-----|-------------|----|----|----------------------|----|-----------------|-----------------|-------------|-----|---|
| Manufacturer                              | Series                 | 25                 |    |    |     |                     |     | 32          |    |    |                      |    |                 |                 |             |     |   |
|   |                        | NZ                 | NY | NX | NM1 | NM2                 | NM3 | NZ          | NY | NX | NW                   | NV | NU              | NT              | NM1         | NM2 |   |
| Mitsubishi Electric Corporation           | MELSERVO JN/J4/J5      | ●                  | —  | —  | —   | —                   | —   | ●           | —  | —  | —                    | —  | —               | —               | —           | —   | — |
| YASKAWA Electric Corporation              | Σ-V/7/X                | ●*3                | —  | —  | —   | —                   | —   | ●           | —  | —  | —                    | —  | —               | —               | —           | —   | — |
| SANYO DENKI CO., LTD.                     | SANMOTION R            | ●                  | —  | —  | —   | —                   | —   | ●           | —  | —  | —                    | —  | —               | —               | —           | —   | — |
| OMRON Corporation                         | OMNUC G5/1S            | ●                  | —  | —  | —   | —                   | —   | ●           | —  | —  | —                    | —  | —               | —               | —           | —   | — |
| Panasonic Corporation                     | MINAS A5/A6            | ● (MHMF only)      | ●  | —  | —   | —                   | —   | —           | ●  | —  | —                    | —  | —               | —               | —           | —   | — |
| FANUC CORPORATION                         | βis (-B)               | ●                  | —  | —  | —   | —                   | —   | ● (β1 only) | —  | —  | ●                    | —  | —               | —               | —           | —   | — |
| NIDEC SANKYO CORPORATION                  | S-FLAG                 | ●                  | —  | —  | —   | —                   | —   | ●           | —  | —  | —                    | —  | —               | —               | —           | —   | — |
| KEYENCE CORPORATION                       | SV/SV2                 | ●*3                | —  | —  | —   | —                   | —   | ●           | —  | —  | —                    | —  | —               | —               | —           | —   | — |
| FUJII ELECTRIC CO., LTD.                  | ALPHA7                 | ●                  | —  | —  | —   | —                   | —   | ●           | —  | —  | —                    | —  | —               | —               | —           | —   | — |
| MinebeaMitsumi Inc.                       | Hybrid stepping motors | —                  | —  | —  | ●*1 | —                   | —   | ●*2         | —  | —  | —                    | —  | —               | —               | —           | ●   | — |
| Shinano Kenshi Co., Ltd.                  | CSB-BZ                 | —                  | —  | —  | ●*1 | —                   | —   | ●*2         | —  | —  | —                    | —  | —               | —               | —           | —   | — |
| ORIENTAL MOTOR Co., Ltd.                  | α STEP AR/AZ           | —                  | —  | —  | —   | ● (AR/AZ (46 only)) | —   | —           | —  | —  | —                    | —  | —               | —               | —           | —   | ● |
| FASTECH Co., Ltd.                         | Ezi-SERVO              | —                  | —  | —  | ●   | —                   | —   | —           | —  | —  | —                    | —  | —               | —               | —           | ●   | — |
| Rockwell Automation, Inc. (Allen-Bradley) | Kinetix MP/VP/TL       | ● (TL only)        | —  | —  | —   | —                   | —   | —           | —  | —  | ●*1 (MP/VP only)     | —  | —               | —               | ● (TL only) | —   | — |
| Beckhoff Automation GmbH                  | AM 30/31/80/81         | ●                  | —  | —  | —   | —                   | —   | —           | —  | —  | ●*1 (AM80/AM81 only) | —  | ●*1 (AM30 only) | ●*1 (AM31 only) | —           | —   | — |
| Siemens AG                                | SIMOTICS S-1FK7        | —                  | —  | ●  | —   | —                   | —   | —           | —  | —  | ●*1                  | —  | —               | —               | —           | —   | — |
| Delta Electronics, Inc.                   | ASDA-A2                | ●                  | —  | —  | —   | —                   | —   | ●           | —  | —  | —                    | —  | —               | —               | —           | —   | — |
| ANCA Motion                               | AMD2000                | ●                  | —  | —  | —   | —                   | —   | ●           | —  | —  | —                    | —  | —               | —               | —           | —   | — |

\*1 Motor mounting position: In-line only \*2 Motor mounting position: Parallel only

\*3 For some motors, the connector may protrude from the motor body. Be sure to check for interference with the mounting surface before selecting a motor.

\*4 The compatible motors and mounting types are typical examples. Select the mounting type after referring to the "Motor Mounting, Applicable Motor Dimensions" tables on the "Dimensions" pages.

Solid state auto switches should be ordered separately.  
Click here for auto switch details.

**Applicable auto switches**  
D-M9N(V)-900, D-M9P(V)-900, D-M9B(V)-900  
D-M9NW(V)-900, D-M9PW(V)-900, D-M9BW(V)-900

\* The 25A- series specifications and dimensions are the same as those of the standard model.

For details, refer to the [Web Catalog](#).



# 25A- Series

# Applicable Auto Switches

## Applicable Cylinder Series

| Type                    | Special function                          | Electrical entry | Indicator light | Auto switches   |                            |                   |                      |     |     | Air cylinders |                     |       |                  |      |      |         |     |          |      |      |           |          |
|-------------------------|---|------------------|-----------------|-----------------|----------------------------|-------------------|----------------------|-----|-----|---------------|---------------------|-------|------------------|------|------|---------|-----|----------|------|------|-----------|----------|
|                         |   |                  |                 | Wiring (Output) | Electrical entry direction | Auto switch model | Lead wire length [m] |     |     |               | Pre-wired connector | CDJP2 | CD(B)J2<br>CDJ2K | CD85 | CDM2 | CD(B)G1 | MDB | C(P)96SD | CDA2 | CDS2 |           |          |
|                         |   |                  |                 |                 |                            |                   | 0.5 Nil              | 1 M | 3 L | 5 Z           |                     |       |                  |      |      |         |     |          |      |      | ø4 to ø16 | ø10, ø16 |
| Solid state auto switch | —   | Grommet          | Yes             | 3-wire (NPN)    | In-line                    | D-M9N-900         | ●                    | ●   | ●   | ○             | —                   | ●     | ●                | ●    | ●    | ●       | —   | ●        | ●    | ●    | ●         |          |
|                         |   |                  |                 |                 |                            | D-M9P-900         | ●                    | ●   | ●   | ○             | —                   | ●     | ●                | ●    | ●    | ●       | —   | ●        | ●    | ●    | ●         | ●        |
|                         |   |                  |                 |                 |                            | D-M9B-900         | ●                    | ●   | ●   | ○             | —                   | ●     | ●                | ●    | ●    | ●       | —   | ●        | ●    | ●    | ●         | ●        |
|                         |   |                  |                 |                 |                            | D-M9NV-900        | ●                    | ●   | ●   | ○             | —                   | ●     | ●                | ●    | ●    | ●       | —   | ●        | ●    | ●    | ●         | ●        |
|                         |   |                  |                 |                 |                            | D-M9PV-900        | ●                    | ●   | ●   | ○             | —                   | ●     | ●                | ●    | ●    | ●       | —   | ●        | ●    | ●    | ●         | ●        |
|                         |   |                  |                 |                 |                            | D-M9BV-900        | ●                    | ●   | ●   | ○             | —                   | ●     | ●                | ●    | ●    | ●       | —   | ●        | ●    | ●    | ●         | ●        |
|                         |   |                  |                 | 3-wire (PNP)    | Perpendicular              | D-M9NW-900        | ●                    | ●   | ●   | ○             | —                   | ●     | ●                | ●    | ●    | —       | ●   | ●        | ●    | ●    | ●         |          |
|                         |   |                  |                 |                 |                            | D-M9PW-900        | ●                    | ●   | ●   | ○             | —                   | ●     | ●                | ●    | ●    | —       | ●   | ●        | ●    | ●    | ●         |          |
|                         |   |                  |                 |                 |                            | D-M9BW-900        | ●                    | ●   | ●   | ○             | ○                   | ●     | ●                | ●    | ●    | —       | ●   | ●        | ●    | ●    | ●         |          |
|                         |   |                  |                 |                 |                            | D-M9NVV-900       | ●                    | ●   | ●   | ○             | —                   | ●     | ●                | ●    | ●    | —       | ●   | ●        | ●    | ●    | ●         |          |
|                         |   |                  |                 |                 |                            | D-M9PVV-900       | ●                    | ●   | ●   | ○             | —                   | ●     | ●                | ●    | ●    | —       | ●   | ●        | ●    | ●    | ●         |          |
|                         |   |                  |                 |                 |                            | D-M9BVV-900       | ●                    | ●   | ●   | ○             | ○                   | ●     | ●                | ●    | ●    | —       | ●   | ●        | ●    | ●    | ●         |          |
|                         | —   | Grommet          | Yes             | 3-wire (NPN)    | In-line                    | D-Y59A-900        | ●                    | —   | ●   | ○             | —                   | —     | —                | —    | —    | —       | —   | —        | —    | —    |           |          |
|                         |   |                  |                 |                 |                            | D-Y7P-900         | ●                    | —   | ●   | ○             | —                   | —     | —                | —    | —    | —       | —   | —        | —    | —    |           |          |
|                         |   |                  |                 |                 |                            | D-Y59B-900        | ●                    | —   | ●   | ○             | —                   | —     | —                | —    | —    | —       | —   | —        | —    | —    |           |          |
|                         |   |                  |                 |                 |                            | D-Y69A-900        | ●                    | —   | ●   | ○             | —                   | —     | —                | —    | —    | —       | —   | —        | —    | —    |           |          |
|                         |   |                  |                 |                 |                            | D-Y7PV-900        | ●                    | —   | ●   | ○             | —                   | —     | —                | —    | —    | —       | —   | —        | —    | —    |           |          |
|                         |   |                  |                 |                 |                            | D-Y69B-900        | ●                    | —   | ●   | ○             | —                   | —     | —                | —    | —    | —       | —   | —        | —    | —    |           |          |
|                         |   |                  |                 | 3-wire (PNP)    | Perpendicular              | D-Y7NW-900        | ●                    | —   | ●   | ○             | —                   | —     | —                | —    | —    | —       | —   | —        | —    | —    |           |          |
|                         |   |                  |                 |                 |                            | D-Y7PW-900        | ●                    | —   | ●   | ○             | —                   | —     | —                | —    | —    | —       | —   | —        | —    |      |           |          |
|                         |   |                  |                 |                 |                            | D-Y7BW-900        | ●                    | —   | ●   | ○             | —                   | —     | —                | —    | —    | —       | —   | —        | —    |      |           |          |
|                         |   |                  |                 |                 |                            | D-Y7NVV-900       | ●                    | —   | ●   | ○             | —                   | —     | —                | —    | —    | —       | —   | —        | —    |      |           |          |
|                         |   |                  |                 |                 |                            | D-Y7PVV-900       | ●                    | —   | ●   | ○             | —                   | —     | —                | —    | —    | —       | —   | —        | —    |      |           |          |
|                         |   |                  |                 |                 |                            | D-Y7BVV-900       | ●                    | —   | ●   | ○             | —                   | —     | —                | —    | —    | —       | —   | —        | —    |      |           |          |
|                         | Diagnostic indication (2-color indicator) | Grommet          | Yes             | 3-wire (NPN)    | In-line                    | D-G59-900         | ●                    | —   | ●   | ○             | —                   | —     | —                | —    | —    | —       | ●   | —        | —    | —    |           |          |
|                         |   |                  |                 |                 |                            | D-G5P-900         | ●                    | —   | ●   | ○             | —                   | —     | —                | —    | —    | ●       | —   | —        | —    |      |           |          |
|                         |   |                  |                 |                 |                            | D-K59-900         | ●                    | —   | ●   | ○             | —                   | —     | —                | —    | —    | ●       | —   | —        | —    |      |           |          |
|                         |   |                  |                 |                 |                            | D-G59W-900        | ●                    | —   | ●   | ○             | —                   | —     | —                | —    | —    | ●       | —   | —        | —    |      |           |          |
|                         |   |                  |                 |                 |                            | D-G5PW-900        | ●                    | —   | ●   | ○             | —                   | —     | —                | —    | —    | ●       | —   | —        | —    |      |           |          |
|                         |   |                  |                 |                 |                            | D-K59W-900        | ●                    | —   | ●   | ○             | ○                   | —     | —                | —    | —    | ●       | —   | —        | —    |      |           |          |
|                         |   |                  |                 | 3-wire (PNP)    | Perpendicular              | D-F79-900         | ●                    | —   | ●   | ○             | —                   | —     | —                | —    | —    | —       | —   | —        | —    | —    |           |          |
|                         |   |                  |                 |                 |                            | D-F7P-900         | ●                    | —   | ●   | ○             | —                   | —     | —                | —    | —    | —       | —   | —        | —    |      |           |          |
|                         |   |                  |                 |                 |                            | D-J79-900         | ●                    | —   | ●   | ○             | —                   | —     | —                | —    | —    | —       | —   | —        | —    |      |           |          |
|                         |   |                  |                 |                 |                            | D-F7NV-900        | ●                    | —   | ●   | ○             | —                   | —     | —                | —    | —    | —       | —   | —        | —    |      |           |          |
|                         |   |                  |                 |                 |                            | D-F7PV-900        | ●                    | —   | ●   | ○             | —                   | —     | —                | —    | —    | —       | —   | —        | —    |      |           |          |
|                         |   |                  |                 |                 |                            | D-F7BV-900        | ●                    | —   | ●   | ○             | —                   | —     | —                | —    | —    | —       | —   | —        | —    |      |           |          |
|                         | Diagnostic indication (2-color indicator) | Grommet          | Yes             | 3-wire (NPN)    | In-line                    | D-F79W-900        | ●                    | —   | ●   | ○             | —                   | —     | —                | —    | —    | —       | —   | —        |      |      |           |          |
|                         |   |                  |                 |                 |                            | D-F7PW-900        | ●                    | —   | ●   | ○             | —                   | —     | —                | —    | —    | —       | —   | —        |      |      |           |          |
|                         |   |                  |                 |                 |                            | D-J79W-900        | ●                    | —   | ●   | ○             | —                   | —     | —                | —    | —    | —       | —   | —        |      |      |           |          |
|                         |   |                  |                 |                 |                            | D-F7NVV-900       | ●                    | —   | ●   | ○             | —                   | —     | —                | —    | —    | —       | —   | —        |      |      |           |          |
|                         |   |                  |                 |                 |                            | D-F7PVV-900       | ●                    | —   | ●   | ○             | —                   | —     | —                | —    | —    | —       | —   | —        |      |      |           |          |
|                         |   |                  |                 |                 |                            | D-F7BVV-900       | ●                    | —   | ●   | ○             | —                   | —     | —                | —    | —    | —       | —   | —        |      |      |           |          |
|                         |   |                  |                 | 3-wire (PNP)    | Perpendicular              | D-F8N-900         | ●                    | —   | ●   | ○             | —                   | —     | —                | —    | —    | —       | —   | —        | —    |      |           |          |
|                         |   |                  |                 |                 |                            | D-F8P-900         | ●                    | —   | ●   | ○             | —                   | —     | —                | —    | —    | —       | —   | —        |      |      |           |          |
|                         |   |                  |                 |                 |                            | D-F8B-900         | ●                    | —   | ●   | ○             | —                   | —     | —                | —    | —    | —       | —   | —        |      |      |           |          |
|                         |   |                  |                 |                 |                            | D-A93L-900        | —                    | —   | ●   | —             | —                   | ●*1   | ●                | —    | ●    | ●       | —   | ●        | ●    | ●    |           |          |
|                         |   |                  |                 |                 |                            | D-A90L-900        | —                    | —   | ●   | —             | —                   | ●*1   | ●                | —    | ●    | ●       | —   | ●        | ●    | ●    |           |          |
|                         |   |                  |                 |                 |                            | D-Z80-900         | —                    | —   | ●   | —             | —                   | —     | —                | —    | —    | —       | —   | —        | —    |      |           |          |
| Reed auto switch        | —   | Grommet          | Yes             | 2-wire          | In-line                    | D-E76A            | ●                    | —   | ●   | —             | —                   | —     | —                | —    | —    | —       | —   |          |      |      |           |          |
|                         |   |                  |                 |                 |                            | D-E73A            | ●                    | —   | ●   | —             | —                   | —     | —                | —    | —    | —       | —   |          |      |      |           |          |
|                         |   |                  |                 |                 |                            | D-E80A            | ●                    | —   | ●   | —             | —                   | —     | —                | —    | —    | —       | —   |          |      |      |           |          |
|                         |   |                  |                 |                 |                            | D-E80A            | ●                    | —   | ●   | —             | —                   | —     | —                | —    | —    | —       | —   |          |      |      |           |          |

\*1 The D-A90L-900 and D-A93L-900 cannot be mounted on ø4. \* Solid state auto switches marked with a "○" are produced upon receipt of order.

### Ordering the Auto Switches

Please be aware that the order part numbers for the cylinder mounted and individual auto switches are different.  
 (Example) Part number for ordering D-M9BWL-900:  
 • Cylinder mounted type: 25A-CDJ2L16-60Z-M9BWL-B \* Lead wire length symbols: 0.5 m..... Nil (Example) M9NW  
 (Omit the first "D-" and the last "-900" or "-901".) 1 m..... M (Example) M9NWM  
 • Individual auto switch: D-M9BWL-900 3 m..... L (Example) M9NWL  
 (Place the order with the part number for auto switch shown in the table above.) 5 m..... Z (Example) M9NWZ



# 25A- Series

## Applicable Cylinder Series

| Auto switches           |                  |                  |                 |                     |                            |                   |                      |         |            |   |                     |   |   |
|-------------------------|------------------|------------------|-----------------|---------------------|----------------------------|-------------------|----------------------|---------|------------|---|---------------------|---|---|
| Type                    | Special function | Electrical entry | Indicator light | Wiring (Output)     | Electrical entry direction | Auto switch model | Lead wire length [m] |         |            |   | Pre-wired connector |   |   |
|                         |                  |                  |                 |                     |                            |                   | 0.5                  | 1       | 3          | 5 |                     |   |   |
|                         |                  |                  |                 |                     |                            |                   | Nil                  | M       | L          | Z | SDPC                |   |   |
| Solid state auto switch | —                | Grommet          | Yes             | 3-wire (NPN)        | In-line                    | D-M9N-900         | ●                    | ●       | ●          | ○ | —                   |   |   |
|                         |                  |                  |                 | 3-wire (PNP)        |                            | D-M9P-900         | ●                    | ●       | ●          | ○ | —                   |   |   |
|                         |                  |                  |                 | 2-wire              |                            | D-M9B-900         | ●                    | ●       | ●          | ○ | —                   |   |   |
|                         |                  |                  |                 | 3-wire (NPN)        |                            | Perpendicular     | D-M9NV-900           | ●       | ●          | ● | ○                   | — |   |
|                         |                  |                  |                 | 3-wire (PNP)        |                            |                   | D-M9PV-900           | ●       | ●          | ● | ○                   | — |   |
|                         |                  |                  |                 | 2-wire              |                            |                   | D-M9BV-900           | ●       | ●          | ● | ○                   | — |   |
|                         |                  |                  |                 | 3-wire (NPN)        | In-line                    |                   | D-M9NW-900           | ●       | ●          | ● | ○                   | — |   |
|                         |                  |                  |                 | 3-wire (PNP)        |                            |                   | D-M9PW-900           | ●       | ●          | ● | ○                   | — |   |
|                         |                  |                  |                 | 2-wire              |                            |                   | D-M9BW-900           | ●       | ●          | ● | ○                   | ○ |   |
|                         |                  |                  |                 | 3-wire (NPN)        |                            | Perpendicular     | D-M9NWV-900          | ●       | ●          | ● | ○                   | — |   |
|                         |                  |                  |                 | 3-wire (PNP)        |                            |                   | D-M9PWV-900          | ●       | ●          | ● | ○                   | — |   |
|                         |                  |                  |                 | 2-wire              |                            |                   | D-M9BWB-900          | ●       | ●          | ● | ○                   | ○ |   |
|                         | 3-wire (NPN)     |                  |                 | In-line             | D-Y59A-900                 |                   | ●                    | —       | ●          | ○ | —                   |   |   |
|                         | 3-wire (PNP)     |                  |                 |                     | D-Y7P-900                  |                   | ●                    | —       | ●          | ○ | —                   |   |   |
|                         | 2-wire           |                  |                 |                     | D-Y59B-900                 |                   | ●                    | —       | ●          | ○ | —                   |   |   |
|                         | 3-wire (NPN)     |                  |                 |                     | Perpendicular              | D-Y69A-900        | ●                    | —       | ●          | ○ | —                   |   |   |
|                         | 3-wire (PNP)     |                  |                 |                     |                            | D-Y7PV-900        | ●                    | —       | ●          | ○ | —                   |   |   |
|                         | 2-wire           |                  |                 |                     |                            | D-Y69B-900        | ●                    | —       | ●          | ○ | —                   |   |   |
|                         | 3-wire (NPN)     |                  |                 | In-line             |                            | D-Y7NW-900        | ●                    | —       | ●          | ○ | —                   |   |   |
|                         | 3-wire (PNP)     |                  |                 |                     |                            | D-Y7PW-900        | ●                    | —       | ●          | ○ | —                   |   |   |
|                         | 2-wire           |                  |                 |                     |                            | D-Y7BW-900        | ●                    | —       | ●          | ○ | —                   |   |   |
|                         | 3-wire (NPN)     |                  |                 |                     | Perpendicular              | D-Y7NWV-900       | ●                    | —       | ●          | ○ | —                   |   |   |
|                         | 3-wire (PNP)     |                  |                 |                     |                            | D-Y7PWV-900       | ●                    | —       | ●          | ○ | —                   |   |   |
|                         | 2-wire           |                  |                 |                     |                            | D-Y7BWB-900       | ●                    | —       | ●          | ○ | —                   |   |   |
|                         | 3-wire (NPN)     | In-line          | D-G59-900       | ●                   |                            | —                 | ●                    | ○       | —          |   |                     |   |   |
|                         | 3-wire (PNP)     |                  | D-G5P-900       | ●                   |                            | —                 | ●                    | ○       | —          |   |                     |   |   |
|                         | 2-wire           |                  | D-K59-900       | ●                   |                            | —                 | ●                    | ○       | —          |   |                     |   |   |
|                         | 3-wire (NPN)     |                  | Perpendicular   | D-G59W-900          | ●                          | —                 | ●                    | ○       | —          |   |                     |   |   |
|                         | 3-wire (PNP)     |                  |                 | D-G5PW-900          | ●                          | —                 | ●                    | ○       | —          |   |                     |   |   |
|                         | 2-wire           |                  |                 | D-K59W-900          | ●                          | —                 | ●                    | ○       | ○          |   |                     |   |   |
|                         | 3-wire (NPN)     | In-line          |                 | D-F79-900           | ●                          | —                 | ●                    | ○       | —          |   |                     |   |   |
|                         | 3-wire (PNP)     |                  |                 | D-F7P-900           | ●                          | —                 | ●                    | ○       | —          |   |                     |   |   |
|                         | 2-wire           |                  |                 | D-J79-900           | ●                          | —                 | ●                    | ○       | —          |   |                     |   |   |
|                         | 3-wire (NPN)     |                  | Perpendicular   | D-F7NV-900          | ●                          | —                 | ●                    | ○       | —          |   |                     |   |   |
|                         | 3-wire (PNP)     |                  |                 | D-F7PV-900          | ●                          | —                 | ●                    | ○       | —          |   |                     |   |   |
|                         | 2-wire           |                  |                 | D-F7BV-900          | ●                          | —                 | ●                    | ○       | —          |   |                     |   |   |
|                         | 3-wire (NPN)     | In-line          |                 | D-F79W-900          | ●                          | —                 | ●                    | ○       | —          |   |                     |   |   |
|                         | 3-wire (PNP)     |                  |                 | D-F7PW-900          | ●                          | —                 | ●                    | ○       | —          |   |                     |   |   |
|                         | 2-wire           |                  |                 | D-J79W-900          | ●                          | —                 | ●                    | ○       | —          |   |                     |   |   |
|                         | 3-wire (NPN)     |                  | Perpendicular   | D-F7NWV-900         | ●                          | —                 | ●                    | ○       | —          |   |                     |   |   |
|                         | 2-wire           |                  |                 | D-F7BWB-900         | ●                          | —                 | ●                    | ○       | —          |   |                     |   |   |
|                         | 3-wire (NPN)     |                  |                 | In-line             | D-F8N-900                  | ●                 | —                    | ●       | ○          | — |                     |   |   |
|                         | 3-wire (PNP)     | D-F8P-900        |                 |                     | ●                          | —                 | ●                    | ○       | —          |   |                     |   |   |
|                         | 2-wire           | D-F8B-900        |                 |                     | ●                          | —                 | ●                    | ○       | —          |   |                     |   |   |
|                         | Reed auto switch | —                |                 |                     | Grommet                    | Yes               | 2-wire               | In-line | D-A93L-900 | — | —                   | ● | — |
|                         |                  |                  | No              |                     |                            | D-A90L-900        |                      |         | —          | — | ●                   | — | — |
|                         |                  |                  | —               |                     |                            | D-Z80-900         |                      |         | —          | — | ●                   | — | — |
|                         |                  | —                | Yes             | 3-wire (NPN equiv.) |                            | In-line           | D-E76A               | ●       | —          | ● | —                   | — |   |
| No                      |                  |                  | 2-wire          | D-E73A              |                            |                   | ●                    | —       | ●          | — | —                   |   |   |
| —                       |                  |                  |                 | D-E80A              |                            |                   | ●                    | —       | ●          | — | —                   |   |   |



# 25A- Series

## Applicable Rotary Actuator Series

| Type                    | Special function                          | Electrical entry | Indicator light | Auto switches   |                            |                   |                      |             | Rotary actuators |     |                     |           |         |           |          |      |       |
|-------------------------|---|------------------|-----------------|-----------------|----------------------------|-------------------|----------------------|-------------|------------------|-----|---------------------|-----------|---------|-----------|----------|------|-------|
|                         |   |                  |                 | Wiring (Output) | Electrical entry direction | Auto switch model | Lead wire length [m] |             |                  |     | Pre-wired connector | MSQA MSQB | MSQ MSZ | MDSUB     |          |      |       |
|                         |   |                  |                 |                 |                            |                   | 0.5 Nil              | 1 M         | 3 L              | 5 Z |                     |           |         | 10 to 200 | 10 to 50 | 1, 3 | 7, 20 |
| Solid state auto switch | —   | Grommet          | Yes             | 3-wire (NPN)    | In-line                    | D-M9N-900         | ●                    | ●           | ●                | ○   | —                   | ●         | ●       | —         | —        |      |       |
|                         |   |                  |                 |                 |                            | D-M9P-900         | ●                    | ●           | ●                | ○   | —                   | ●         | ●       | —         | —        |      |       |
|                         |   |                  |                 |                 |                            | 2-wire            | D-M9B-900            | ●           | ●                | ●   | ○                   | —         | ●       | ●         | —        | —    |       |
|                         |   |                  |                 |                 |                            | 3-wire (NPN)      | Perpendicular        | D-M9NV-900  | ●                | ●   | ●                   | ○         | —       | ●         | ●        | —    | —     |
|                         |   |                  |                 |                 |                            |                   |                      | D-M9PV-900  | ●                | ●   | ●                   | ○         | —       | ●         | ●        | —    | —     |
|                         |   |                  |                 |                 |                            | 2-wire            | D-M9BV-900           | ●           | ●                | ●   | ○                   | —         | ●       | ●         | —        | —    |       |
|                         |   |                  |                 | 3-wire (PNP)    | In-line                    | D-M9NW-900        | ●                    | ●           | ●                | ○   | —                   | ●         | ●       | —         | —        |      |       |
|                         |   |                  |                 |                 |                            | D-M9PW-900        | ●                    | ●           | ●                | ○   | —                   | ●         | ●       | —         | —        |      |       |
|                         |   |                  |                 |                 |                            | 2-wire            | D-M9BW-900           | ●           | ●                | ●   | ○                   | ○         | ●       | ●         | —        | —    |       |
|                         |   |                  |                 |                 |                            | 3-wire (NPN)      | Perpendicular        | D-M9NWV-900 | ●                | ●   | ●                   | ○         | —       | ●         | ●        | —    | —     |
|                         |   |                  |                 |                 |                            |                   |                      | D-M9PWV-900 | ●                | ●   | ●                   | ○         | —       | ●         | ●        | —    | —     |
|                         |   |                  |                 |                 |                            | 2-wire            | D-M9BWV-900          | ●           | ●                | ●   | ○                   | ○         | ●       | ●         | —        | —    |       |
|                         | 3-wire (NPN)                              | In-line          | D-Y59A-900      | ●               | —                          | ●                 | ○                    | —           | —                | —   | —                   | —         |         |           |          |      |       |
|                         |   |                  | 3-wire (PNP)    | D-Y7P-900       | ●                          | —                 | ●                    | ○           | —                | —   | —                   | —         |         |           |          |      |       |
|                         |   |                  | 2-wire          | D-Y59B-900      | ●                          | —                 | ●                    | ○           | —                | —   | —                   | —         |         |           |          |      |       |
|                         |   |                  | 3-wire (NPN)    | Perpendicular   | D-Y69A-900                 | ●                 | —                    | ●           | ○                | —   | —                   | —         | —       |           |          |      |       |
|                         |   |                  |                 |                 | D-Y7PV-900                 | ●                 | —                    | ●           | ○                | —   | —                   | —         | —       |           |          |      |       |
|                         |   |                  | 2-wire          | D-Y69B-900      | ●                          | —                 | ●                    | ○           | —                | —   | —                   | —         |         |           |          |      |       |
|                         | Diagnostic indication (2-color indicator) | 3-wire (NPN)     | In-line         | D-Y7NW-900      | ●                          | —                 | ●                    | ○           | —                | —   | —                   | —         |         |           |          |      |       |
|                         |   |                  |                 | 3-wire (PNP)    | D-Y7PW-900                 | ●                 | —                    | ●           | ○                | —   | —                   | —         |         |           |          |      |       |
|                         |   |                  |                 | 2-wire          | D-Y7BW-900                 | ●                 | —                    | ●           | ○                | —   | —                   | —         |         |           |          |      |       |
|                         |   |                  |                 | 3-wire (NPN)    | Perpendicular              | D-Y7NWV-900       | ●                    | —           | ●                | ○   | —                   | —         | —       |           |          |      |       |
|                         |   |                  |                 |                 |                            | D-Y7PWV-900       | ●                    | —           | ●                | ○   | —                   | —         | —       |           |          |      |       |
|                         |   |                  |                 | 2-wire          | D-Y7BWV-900                | ●                 | —                    | ●           | ○                | —   | —                   | —         |         |           |          |      |       |
|                         |   | 3-wire (NPN)     | In-line         | D-S991-901*1    | ●                          | —                 | ●                    | ○           | —                | —   | —                   | ●         | —       |           |          |      |       |
|                         |   |                  |                 | D-S992-901*1    | ●                          | —                 | ●                    | ○           | —                | —   | —                   | ●         | —       |           |          |      |       |
|                         |   |                  |                 | 3-wire (PNP)    | D-S9P1-901*1               | ●                 | —                    | ●           | ○                | —   | —                   | —         | ●       | —         |          |      |       |
|                         |   |                  |                 | D-S9P2-901*1    | ●                          | —                 | ●                    | ○           | —                | —   | —                   | ●         | —       |           |          |      |       |
|                         |   |                  |                 | 2-wire          | D-T991-901*1               | ●                 | —                    | ●           | ○                | —   | —                   | —         | ●       | —         |          |      |       |
|                         |   |                  |                 |                 | D-T992-901*1               | ●                 | —                    | ●           | ○                | —   | —                   | —         | ●       | —         |          |      |       |
|                         | 3-wire (NPN)                              | Perpendicular    | D-S99V1-901*1   | ●               | —                          | ●                 | ○                    | —           | —                | —   | ●                   | —         |         |           |          |      |       |
|                         |   |                  | D-999V2-901*1   | ●               | —                          | ●                 | ○                    | —           | —                | —   | ●                   | —         |         |           |          |      |       |
|                         |   |                  | 3-wire (PNP)    | D-S9PV1-901*1   | ●                          | —                 | ●                    | ○           | —                | —   | —                   | ●         | —       |           |          |      |       |
|                         |   |                  | D-S9PV2-901*1   | ●               | —                          | ●                 | ○                    | —           | —                | —   | ●                   | —         |         |           |          |      |       |
|                         |   |                  | 2-wire          | D-T99V1-901*1   | ●                          | —                 | ●                    | ○           | —                | —   | —                   | ●         | —       |           |          |      |       |
|                         |   |                  |                 | D-T99V2-901*1   | ●                          | —                 | ●                    | ○           | —                | —   | —                   | ●         | —       |           |          |      |       |
|                         | 3-wire (NPN)                              | In-line          | D-S791-901*1    | ●               | —                          | ●                 | ○                    | —           | —                | —   | —                   | ●         |         |           |          |      |       |
|                         |   |                  | D-S792-901*1    | ●               | —                          | ●                 | ○                    | —           | —                | —   | —                   | ●         |         |           |          |      |       |
|                         |   |                  | 3-wire (PNP)    | D-S7P1-901*1    | ●                          | —                 | ●                    | ○           | —                | —   | —                   | —         | ●       |           |          |      |       |
|                         |   |                  | D-S7P2-901*1    | ●               | —                          | ●                 | ○                    | —           | —                | —   | —                   | —         | ●       |           |          |      |       |
| 2-wire                  |   |                  | D-T791-901*1    | ●               | —                          | ●                 | ○                    | —           | —                | —   | —                   | ●         |         |           |          |      |       |
|                         |   |                  | D-T792-901*1    | ●               | —                          | ●                 | ○                    | —           | —                | —   | —                   | ●         |         |           |          |      |       |
| Reed auto switch        | —   | Grommet          | Yes             | 2-wire          | In-line                    | D-A93L-900        | —                    | —           | ●                | —   | —                   | ●         | ●       | —         | —        |      |       |
|                         |   |                  |                 |                 |                            | D-A90L-900        | —                    | —           | ●                | —   | —                   | —         | ●       | ●         | —        | —    |       |

- \* Solid state auto switches marked with a "○" are produced upon receipt of order.
- \* Note that the individual auto switch with part number of "S□□" and "T□□" have the right-hand-type (□□□1) and the left-hand-type (□□□2).  
When you order the actuator with two auto switches at the part number of the actuator, one each of the right-hand-type and the left-hand-type are shipped together with the actuator.
- \* When the MHZ2-10, MHZL2-10, MHL2-10 to 40, or MHS3-32 air gripper is ordered with auto switch, mounting brackets are supplied with the air gripper.  
When the auto switch is used at the square groove on the side with other cylinder bore sizes, or ordering only auto switches separately, mounting brackets (90-BMG2-012) are required. Order them separately. For details, refer to page 325.

### Ordering the Auto Switches

Please be aware that the order part numbers for the rotary actuator mounted and individual auto switches are different.  
 (Example) Part number for ordering D-M9BWL-900:

- Rotary actuator mounted type: 25A-MSQB-10A-M9BWL (Omit the first "D-" and the last "-900" or "-901".)
- Individual auto switch: D-M9BWL-900 (Place the order with the part number for auto switch shown in the table above.)

\* Lead wire length symbols: 0.5 m..... Nil (Example) M9NW  
 1 m..... M (Example) M9NWM  
 3 m..... L (Example) M9NWL  
 5 m..... Z (Example) M9NWZ

\*1 Lead wire for a solid state auto switch with "-901" at the end of part number has been changed to a cable for a robot use.



**Applicable Air Gripper Series**

| Type                    | Special function                          | Electrical entry | Indicator light | Auto switches   |                            |                   |                      |     | Air grippers |     |                     |       |             |             |      |       |       |             |             |      |
|-------------------------|---|------------------|-----------------|-----------------|----------------------------|-------------------|----------------------|-----|--------------|-----|---------------------|-------|-------------|-------------|------|-------|-------|-------------|-------------|------|
|                         |   |                  |                 | Wiring (Output) | Electrical entry direction | Auto switch model | Lead wire length [m] |     |              |     | Pre-wired connector | JMHZ2 | JMHZ2-X6900 | JMHZ2-X7460 | MHZ2 | MHZL2 | MHZJ2 | MHZJ2-X6100 | MHZL2-X5955 |      |
|                         |   |                  |                 |                 |                            |                   | 0.5 Nil              | 1 M | 3 L          | 5 Z |                     |       |             |             |      |       |       |             |             | SDPC |
| Solid state auto switch | —   | Grommet          | Yes             | In-line         | In-line                    | D-M9N-900         | ●                    | ●   | ●            | ○   | —                   | ●     | ●           | ●           | ●    | ●     | ●     | ●           |             |      |
|                         |   |                  |                 |                 |                            | D-M9P-900         | ●                    | ●   | ●            | ○   | —                   | ●     | ●           | ●           | ●    | ●     | ●     | ●           | ●           |      |
|                         |   |                  |                 |                 |                            | D-M9B-900         | ●                    | ●   | ●            | ○   | —                   | ●     | ●           | ●           | ●    | ●     | ●     | ●           | ●           |      |
|                         |   |                  |                 |                 |                            | Perpendicular     | D-M9NV-900           | ●   | ●            | ●   | ○                   | —     | ●           | ●           | ●    | ●     | ●     | ●           | ●           | ●    |
|                         |   |                  |                 |                 |                            |                   | D-M9PV-900           | ●   | ●            | ●   | ○                   | —     | ●           | ●           | ●    | ●     | ●     | ●           | ●           | ●    |
|                         |   |                  |                 |                 |                            |                   | D-M9BV-900           | ●   | ●            | ●   | ○                   | —     | ●           | ●           | ●    | ●     | ●     | ●           | ●           | ●    |
|                         |   |                  |                 | In-line         | D-M9NW-900                 | ●                 | ●                    | ●   | ○            | —   | ●                   | ●     | ●           | ●           | ●    | ●     | ●     | ●           |             |      |
|                         |   |                  |                 |                 | D-M9PW-900                 | ●                 | ●                    | ●   | ○            | —   | ●                   | ●     | ●           | ●           | ●    | ●     | ●     | ●           |             |      |
|                         |   |                  |                 |                 | D-M9BW-900                 | ●                 | ●                    | ●   | ○            | ○   | ●                   | ●     | ●           | ●           | ●    | ●     | ●     | ●           |             |      |
|                         |   |                  |                 |                 | Perpendicular              | D-M9NVV-900       | ●                    | ●   | ●            | ○   | —                   | ●     | ●           | ●           | ●    | ●     | ●     | ●           | ●           |      |
|                         |   |                  |                 |                 |                            | D-M9PVV-900       | ●                    | ●   | ●            | ○   | —                   | ●     | ●           | ●           | ●    | ●     | ●     | ●           | ●           |      |
|                         |   |                  |                 |                 |                            | D-M9BWW-900       | ●                    | ●   | ●            | ○   | ○                   | ●     | ●           | ●           | ●    | ●     | ●     | ●           | ●           |      |
|                         | In-line                                   | D-Y59A-900       | ●               | —               | ●                          | ○                 | —                    | —   | —            | —   | ●                   | ●     | —           | —           | —    |       |       |             |             |      |
|                         |   | D-Y7P-900        | ●               | —               | ●                          | ○                 | —                    | —   | —            | —   | ●                   | ●     | —           | —           | —    |       |       |             |             |      |
|                         |   | D-Y59B-900       | ●               | —               | ●                          | ○                 | —                    | —   | —            | —   | ●                   | ●     | —           | —           | —    |       |       |             |             |      |
|                         |   | Perpendicular    | D-Y69A-900      | ●               | —                          | ●                 | ○                    | —   | —            | —   | —                   | ●     | ●           | —           | —    | —     |       |             |             |      |
|                         |   |                  | D-Y7PV-900      | ●               | —                          | ●                 | ○                    | —   | —            | —   | —                   | ●     | ●           | —           | —    | —     |       |             |             |      |
|                         |   |                  | D-Y69B-900      | ●               | —                          | ●                 | ○                    | —   | —            | —   | —                   | ●     | ●           | —           | —    | —     |       |             |             |      |
|                         | Diagnostic indication (2-color indicator) | In-line          | D-Y7NW-900      | ●               | —                          | ●                 | ○                    | —   | —            | —   | —                   | ●     | ●           | —           | —    | —     |       |             |             |      |
|                         |   |                  | D-Y7PW-900      | ●               | —                          | ●                 | ○                    | —   | —            | —   | —                   | ●     | ●           | —           | —    | —     |       |             |             |      |
|                         |   |                  | D-Y7BW-900      | ●               | —                          | ●                 | ○                    | —   | —            | —   | —                   | ●     | ●           | —           | —    | —     |       |             |             |      |
|                         |   |                  | Perpendicular   | D-Y7NVV-900     | ●                          | —                 | ●                    | ○   | —            | —   | —                   | —     | ●           | ●           | —    | —     | —     |             |             |      |
|                         |   |                  |                 | D-Y7PVV-900     | ●                          | —                 | ●                    | ○   | —            | —   | —                   | —     | ●           | ●           | —    | —     | —     |             |             |      |
|                         |   |                  |                 | D-Y7BWW-900     | ●                          | —                 | ●                    | ○   | —            | —   | —                   | —     | ●           | ●           | —    | —     | —     |             |             |      |
|                         |   | In-line          | D-S991-901*1    | ●               | —                          | ●                 | ○                    | —   | —            | —   | —                   | —     | —           | —           | —    | —     |       |             |             |      |
|                         |   |                  | D-S992-901*1    | ●               | —                          | ●                 | ○                    | —   | —            | —   | —                   | —     | —           | —           | —    | —     |       |             |             |      |
|                         |   |                  | D-S9P1-901*1    | ●               | —                          | ●                 | ○                    | —   | —            | —   | —                   | —     | —           | —           | —    | —     |       |             |             |      |
|                         |   |                  | D-S9P2-901*1    | ●               | —                          | ●                 | ○                    | —   | —            | —   | —                   | —     | —           | —           | —    | —     |       |             |             |      |
|                         |   |                  | D-T991-901*1    | ●               | —                          | ●                 | ○                    | —   | —            | —   | —                   | —     | —           | —           | —    | —     |       |             |             |      |
|                         |   |                  | D-T992-901*1    | ●               | —                          | ●                 | ○                    | —   | —            | —   | —                   | —     | —           | —           | —    | —     |       |             |             |      |
|                         | Perpendicular                             | D-S99V1-901*1    | ●               | —               | ●                          | ○                 | —                    | —   | —            | —   | —                   | —     | —           | —           | —    |       |       |             |             |      |
|                         |   | D-999V2-901*1    | ●               | —               | ●                          | ○                 | —                    | —   | —            | —   | —                   | —     | —           | —           | —    |       |       |             |             |      |
|                         |   | D-S9PV1-901*1    | ●               | —               | ●                          | ○                 | —                    | —   | —            | —   | —                   | —     | —           | —           | —    |       |       |             |             |      |
|                         |   | D-S9PV2-901*1    | ●               | —               | ●                          | ○                 | —                    | —   | —            | —   | —                   | —     | —           | —           | —    |       |       |             |             |      |
|                         |   | D-T99V1-901*1    | ●               | —               | ●                          | ○                 | —                    | —   | —            | —   | —                   | —     | —           | —           | —    |       |       |             |             |      |
|                         |   | D-T99V2-901*1    | ●               | —               | ●                          | ○                 | —                    | —   | —            | —   | —                   | —     | —           | —           | —    |       |       |             |             |      |
| In-line                 | D-S791-901*1                              | ●                | —               | ●               | ○                          | —                 | —                    | —   | —            | —   | —                   | —     | —           | —           |      |       |       |             |             |      |
|                         | D-S792-901*1                              | ●                | —               | ●               | ○                          | —                 | —                    | —   | —            | —   | —                   | —     | —           | —           |      |       |       |             |             |      |
|                         | D-S7P1-901*1                              | ●                | —               | ●               | ○                          | —                 | —                    | —   | —            | —   | —                   | —     | —           | —           |      |       |       |             |             |      |
|                         | D-S7P2-901*1                              | ●                | —               | ●               | ○                          | —                 | —                    | —   | —            | —   | —                   | —     | —           | —           |      |       |       |             |             |      |
|                         | D-T791-901*1                              | ●                | —               | ●               | ○                          | —                 | —                    | —   | —            | —   | —                   | —     | —           | —           |      |       |       |             |             |      |
|                         | D-T792-901*1                              | ●                | —               | ●               | ○                          | —                 | —                    | —   | —            | —   | —                   | —     | —           | —           |      |       |       |             |             |      |
| Reed auto switch        | —   | Grommet          | Yes<br>No       | 2-wire          | In-line                    | D-A93L-900        | —                    | —   | ●            | —   | —                   | —     | —           | —           | —    | —     | —     |             |             |      |
|                         |   |                  |                 |                 |                            | D-A90L-900        | —                    | —   | ●            | —   | —                   | —     | —           | —           | —    | —     | —     | —           |             |      |

- \* Solid state auto switches marked with a "○" are produced upon receipt of order.
- \* Note that the individual auto switch with part number of "S□□" and "T□□" have the right-hand-type (□□□1) and the left-hand-type (□□□2).  
When you order the actuator with two auto switches at the part number of the actuator, one each of the right-hand-type and the left-hand-type are shipped together with the actuator.
- \* When the MHZ2-10, MHZL2-10, MHL2-10 to 40, or MHS3-32 air gripper is ordered with auto switch, mounting brackets are supplied with the air gripper.  
When the auto switch is used at the square groove on the side with other cylinder bore sizes, or ordering only auto switches separately, mounting brackets (90-BMG2-012) are required. Order them separately. For details, refer to page 325.

**Ordering the Auto Switches**

Please be aware that the order part numbers for the air gripper mounted and individual auto switches are different.  
 (Example) Part number for ordering D-M9BWL-900:  
 • Air gripper mounted type: 25A-MHZ2-16D-M9BWL \* Lead wire length symbols: 0.5 m..... Nil (Example) M9NW  
 (Omit the first "D-" and the last "-900" or "-901".) 1 m..... M (Example) M9NWM  
 • Individual auto switch: D-M9BWL-900 3 m..... L (Example) M9NWL  
 (Place the order with the part number for auto switch shown in the table above.) 5 m..... Z (Example) M9NWZ

\*1 Lead wire for a solid state auto switch with "-901" at the end of part number has been changed to a cable for a robot use.

# 25A- Series

## Applicable Air Gripper Series

| Type                    | Special function                          | Electrical entry | Indicator light | Auto switches   |                            |                   |                      |     | Air grippers |     |                     |        |      |      |           |       |      |      |      |
|-------------------------|---|------------------|-----------------|-----------------|----------------------------|-------------------|----------------------|-----|--------------|-----|---------------------|--------|------|------|-----------|-------|------|------|------|
|                         |   |                  |                 | Wiring (Output) | Electrical entry direction | Auto switch model | Lead wire length [m] |     |              |     | Pre-wired connector | MHL2-Z | MHL2 | MHF2 | MHS3 MHS4 | MHSJ3 | MHY2 | MHW2 |      |
|                         |   |                  |                 |                 |                            |                   | 0.5 Nil              | 1 M | 3 L          | 5 Z |                     |        |      |      |           |       |      |      | SDPC |
| Solid state auto switch | Diagnostic indication (2-color indicator) | Grommet          | Yes             | In-line         | In-line                    | D-M9N-900         | ●                    | ●   | ●            | ○   | —                   | ●      | ●    | ●    | ●         | ●     | ●    |      |      |
|                         |   |                  |                 |                 |                            | D-M9P-900         | ●                    | ●   | ●            | ○   | —                   | ●      | ●    | ●    | ●         | ●     | ●    |      |      |
|                         |   |                  |                 |                 |                            | D-M9B-900         | ●                    | ●   | ●            | ○   | —                   | ●      | ●    | ●    | ●         | ●     | ●    |      |      |
|                         |   |                  |                 |                 |                            | Perpendicular     | D-M9NV-900           | ●   | ●            | ●   | ○                   | —      | ●    | ●    | ●         | ●     | ●    | ●    |      |
|                         |   |                  |                 |                 |                            |                   | D-M9PV-900           | ●   | ●            | ●   | ○                   | —      | ●    | ●    | ●         | ●     | ●    | ●    |      |
|                         |   |                  |                 |                 |                            |                   | D-M9BV-900           | ●   | ●            | ●   | ○                   | —      | ●    | ●    | ●         | ●     | ●    | ●    |      |
|                         |   |                  |                 | In-line         | D-M9NW-900                 | ●                 | ●                    | ●   | ○            | —   | ●                   | ●      | ●    | ●    | ●         | ●     |      |      |      |
|                         |   |                  |                 |                 | D-M9PW-900                 | ●                 | ●                    | ●   | ○            | —   | ●                   | ●      | ●    | ●    | ●         | ●     |      |      |      |
|                         |   |                  |                 |                 | D-M9BW-900                 | ●                 | ●                    | ●   | ○            | ○   | ●                   | ●      | ●    | ●    | ●         | ●     |      |      |      |
|                         |   |                  |                 |                 | Perpendicular              | D-M9NWV-900       | ●                    | ●   | ●            | ○   | —                   | ●      | ●    | ●    | ●         | ●     | ●    |      |      |
|                         |   |                  |                 |                 |                            | D-M9P WV-900      | ●                    | ●   | ●            | ○   | —                   | ●      | ●    | ●    | ●         | ●     | ●    |      |      |
|                         |   |                  |                 |                 |                            | D-M9B WV-900      | ●                    | ●   | ●            | ○   | ○                   | ●      | ●    | ●    | ●         | ●     | ●    |      |      |
|                         | In-line                                   | In-line          | D-Y59A-900      | ●               | —                          | ●                 | ○                    | —   | ●            | ●   | —                   | —      | —    | —    | ●         |       |      |      |      |
|                         |   |                  | D-Y7P-900       | ●               | —                          | ●                 | ○                    | —   | ●            | ●   | —                   | —      | —    | —    | ●         |       |      |      |      |
|                         |   |                  | D-Y59B-900      | ●               | —                          | ●                 | ○                    | —   | ●            | ●   | —                   | —      | —    | —    | ●         |       |      |      |      |
|                         |   |                  | Perpendicular   | D-Y69A-900      | ●                          | —                 | ●                    | ○   | —            | ●   | ●                   | —      | —    | —    | —         | ●     |      |      |      |
|                         |   |                  |                 | D-Y7PV-900      | ●                          | —                 | ●                    | ○   | —            | ●   | ●                   | —      | —    | —    | —         | ●     |      |      |      |
|                         |   |                  |                 | D-Y69B-900      | ●                          | —                 | ●                    | ○   | —            | ●   | ●                   | —      | —    | —    | —         | ●     |      |      |      |
|                         | Diagnostic indication (2-color indicator) | Grommet          | Yes             | In-line         | In-line                    | D-Y7NW-900        | ●                    | —   | ●            | ○   | —                   | ●      | ●    | —    | —         | —     | —    | ●    |      |
|                         |   |                  |                 |                 |                            | D-Y7PW-900        | ●                    | —   | ●            | ○   | —                   | ●      | ●    | —    | —         | —     | —    | ●    |      |
|                         |   |                  |                 |                 |                            | D-Y7BW-900        | ●                    | —   | ●            | ○   | —                   | ●      | ●    | —    | —         | —     | —    | ●    |      |
|                         |   |                  |                 |                 |                            | Perpendicular     | D-Y7NWV-900          | ●   | —            | ●   | ○                   | —      | ●    | ●    | —         | —     | —    | —    | ●    |
|                         |   |                  |                 |                 |                            |                   | D-Y7PWV-900          | ●   | —            | ●   | ○                   | —      | ●    | ●    | —         | —     | —    | —    | ●    |
|                         |   |                  |                 |                 |                            |                   | D-Y7B WV-900         | ●   | —            | ●   | ○                   | —      | ●    | ●    | —         | —     | —    | —    | ●    |
|                         |   |                  |                 | In-line         | In-line                    | D-S991-901*1      | ●                    | —   | ●            | ○   | —                   | —      | —    | —    | —         | —     | —    | —    |      |
|                         |   |                  |                 |                 |                            | D-S992-901*1      | ●                    | —   | ●            | ○   | —                   | —      | —    | —    | —         | —     | —    | —    |      |
|                         |   |                  |                 |                 |                            | D-S9P1-901*1      | ●                    | —   | ●            | ○   | —                   | —      | —    | —    | —         | —     | —    | —    |      |
|                         |   |                  |                 |                 |                            | D-S9P2-901*1      | ●                    | —   | ●            | ○   | —                   | —      | —    | —    | —         | —     | —    | —    |      |
|                         |   |                  |                 |                 |                            | D-T991-901*1      | ●                    | —   | ●            | ○   | —                   | —      | —    | —    | —         | —     | —    | —    |      |
|                         |   |                  |                 |                 |                            | D-T992-901*1      | ●                    | —   | ●            | ○   | —                   | —      | —    | —    | —         | —     | —    | —    |      |
|                         | Perpendicular                             | Perpendicular    | D-S99V1-901*1   | ●               | —                          | ●                 | ○                    | —   | —            | —   | —                   | —      | —    | —    | —         |       |      |      |      |
|                         |   |                  | D-999V2-901*1   | ●               | —                          | ●                 | ○                    | —   | —            | —   | —                   | —      | —    | —    | —         |       |      |      |      |
|                         |   |                  | D-S9PV1-901*1   | ●               | —                          | ●                 | ○                    | —   | —            | —   | —                   | —      | —    | —    | —         |       |      |      |      |
|                         |   |                  | D-S9PV2-901*1   | ●               | —                          | ●                 | ○                    | —   | —            | —   | —                   | —      | —    | —    | —         |       |      |      |      |
|                         |   |                  | D-T99V1-901*1   | ●               | —                          | ●                 | ○                    | —   | —            | —   | —                   | —      | —    | —    | —         |       |      |      |      |
|                         |   |                  | D-T99V2-901*1   | ●               | —                          | ●                 | ○                    | —   | —            | —   | —                   | —      | —    | —    | —         |       |      |      |      |
|                         | In-line                                   | In-line          | D-S791-901*1    | ●               | —                          | ●                 | ○                    | —   | —            | —   | —                   | —      | —    | —    | —         |       |      |      |      |
|                         |   |                  | D-S792-901*1    | ●               | —                          | ●                 | ○                    | —   | —            | —   | —                   | —      | —    | —    | —         |       |      |      |      |
|                         |   |                  | D-S7P1-901*1    | ●               | —                          | ●                 | ○                    | —   | —            | —   | —                   | —      | —    | —    | —         |       |      |      |      |
|                         |   |                  | D-S7P2-901*1    | ●               | —                          | ●                 | ○                    | —   | —            | —   | —                   | —      | —    | —    | —         |       |      |      |      |
| D-T791-901*1            |   |                  | ●               | —               | ●                          | ○                 | —                    | —   | —            | —   | —                   | —      | —    | —    |           |       |      |      |      |
| D-T792-901*1            |   |                  | ●               | —               | ●                          | ○                 | —                    | —   | —            | —   | —                   | —      | —    | —    |           |       |      |      |      |
| Reed auto switch        | —   | Grommet          | Yes<br>No       | 2-wire          | In-line                    | D-A93L-900        | —                    | —   | ●            | —   | —                   | —      | —    | —    | —         | —     |      |      |      |
|                         |   |                  |                 |                 |                            | D-A90L-900        | —                    | —   | ●            | —   | —                   | —      | —    | —    | —         | —     | —    |      |      |

- \* Solid state auto switches marked with a "○" are produced upon receipt of order.
- \* Note that the individual auto switch with part number of "S□□" and "T□□" have the right-hand-type (□□□1) and the left-hand-type (□□□2).  
When you order the actuator with two auto switches at the part number of the actuator, one each of the right-hand-type and the left-hand-type are shipped together with the actuator.
- \* When the MHZ2-10, MHZL2-10, MHL2-10 to 40, or MHS3-32 air gripper is ordered with auto switch, mounting brackets are supplied with the air gripper.  
When the auto switch is used at the square groove on the side with other cylinder bore sizes, or ordering only auto switches separately, mounting brackets (90-BMG2-012) are required. Order them separately. For details, refer to page 325.

### Ordering the Auto Switches

Please be aware that the order part numbers for the air gripper mounted and individual auto switches are different.  
 (Example) Part number for ordering D-M9BWL-900:  
 • Air gripper mounted type: 25A-MHZ2-16D-M9BWL \* Lead wire length symbols: 0.5 m..... Nil (Example) M9NW  
 (Omit the first "D-" and the last "-900" or "-901".) 1 m..... M (Example) M9NWM  
 • Individual auto switch: D-M9BWL-900 3 m..... L (Example) M9NWL  
 (Place the order with the part number for auto switch shown in the table above.) 5 m..... Z (Example) M9NWZ

\*1 Lead wire for a solid state auto switch with "-901" at the end of part number has been changed to a cable for a robot use.

**Applicable Electric Actuator Series**

| Auto switches           |  |                  |                 |                 |                            |                   |                      |   |   | Electric actuators |                     |                  |                   |                 |                  |
|-------------------------|--|------------------|-----------------|-----------------|----------------------------|-------------------|----------------------|---|---|--------------------|---------------------|------------------|-------------------|-----------------|------------------|
| Type                    | Special function                             | Electrical entry | Indicator light | Wiring (Output) | Electrical entry direction | Auto switch model | Lead wire length [m] |   |   |                    | Pre-wired connector | LEJS<br>40 to 63 | LEKFS<br>16 to 40 | LEY<br>16 to 40 | LEYG<br>16 to 40 |
|                         |  |                  |                 |                 |                            |                   | 0.5                  | 1 | 3 | 5                  |                     |                  |                   |                 |                  |
|                         |  |                  |                 |                 |                            |                   | Nil                  | M | L | Z                  | SDPC                |                  |                   |                 |                  |
| Solid state auto switch | —  | Grommet          | Yes             | 3-wire (NPN)    | In-line                    | D-M9N-900         | ●                    | ● | ● | ○                  | —                   | ●                | ●                 | ●               | ●                |
|                         |  |                  |                 | 3-wire (PNP)    |                            | D-M9P-900         | ●                    | ● | ● | ○                  | —                   | ●                | ●                 | ●               | ●                |
|                         |  |                  |                 | 2-wire          |                            | D-M9B-900         | ●                    | ● | ● | ○                  | —                   | ●                | ●                 | ●               | ●                |
|                         |  |                  |                 | 3-wire (NPN)    | Perpendicular              | D-M9NV-900        | ●                    | ● | ● | ○                  | —                   | ●                | ●                 | ●               | ●                |
|                         |  |                  |                 | 3-wire (PNP)    |                            | D-M9PV-900        | ●                    | ● | ● | ○                  | —                   | ●                | ●                 | ●               | ●                |
|                         |  |                  |                 | 2-wire          |                            | D-M9BV-900        | ●                    | ● | ● | ○                  | —                   | ●                | ●                 | ●               | ●                |
|                         | Diagnostic indication<br>(2-color indicator) | Grommet          | Yes             | 3-wire (NPN)    | In-line                    | D-M9NW-900        | ●                    | ● | ● | ○                  | —                   | ●                | ●                 | ●               | ●                |
|                         |  |                  |                 | 3-wire (PNP)    |                            | D-M9PW-900        | ●                    | ● | ● | ○                  | —                   | ●                | ●                 | ●               | ●                |
|                         |  |                  |                 | 2-wire          |                            | D-M9BW-900        | ●                    | ● | ● | ○                  | ○                   | ●                | ●                 | ●               | ●                |
|                         |  |                  |                 | 3-wire (NPN)    | Perpendicular              | D-M9NWV-900       | ●                    | ● | ● | ○                  | —                   | ●                | ●                 | ●               | ●                |
|                         |  |                  |                 | 3-wire (PNP)    |                            | D-M9P WV-900      | ●                    | ● | ● | ○                  | —                   | ●                | ●                 | ●               | ●                |
|                         |  |                  |                 | 2-wire          |                            | D-M9B WV-900      | ●                    | ● | ● | ○                  | ○                   | ●                | ●                 | ●               | ●                |

- \* Solid state auto switches marked with a "○" are produced upon receipt of order.
- \* Auto switches cannot be ordered with the actuator part number. They should be ordered separately. Please refer below for ordering.

**Ordering the Auto Switches**

- Individual auto switch: D-M9BWL-900  
(Place the order with the part number for auto switch shown in the table above.)
- \* Lead wire length symbols: 0.5 m..... Nil (Example) M9NW  
   1 m..... M (Example) M9NWM  
   3 m..... L (Example) M9NWL  
   5 m..... Z (Example) M9NWZ

# 25A- Series Auto Switch Mounting

## Band Mounting Type

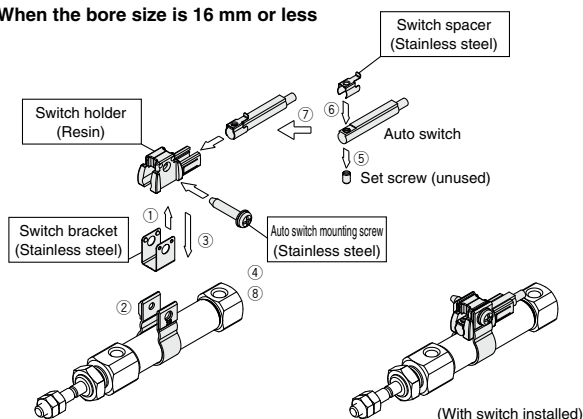
Applicable cylinder series: 25A-CDJ2, 25A-CDJ2K, 25A-CDBJ2, 25A-CD85, 25A-CDM2, 25A-CDG1, 25A-CDBG1, 25A-MGG  
 Applicable auto switches : D-M9□-900, D-M9□W-900, D-M9BWSRPC-900, D-M9BWSRPC-900, D-A90L-900, D-A93L-900

### Auto Switch Mounting Bracket Part Nos.

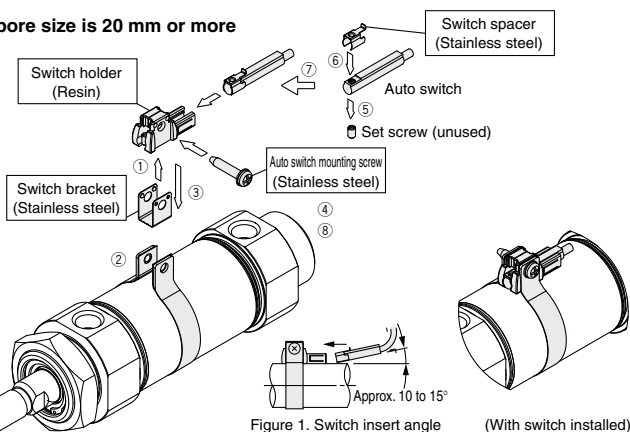
| Cylinder series                    | Applicable bore size [mm] |                    |              |                    |                     |                     |                     |                     |                     |                     |    |     |
|------------------------------------|---------------------------|--------------------|--------------|--------------------|---------------------|---------------------|---------------------|---------------------|---------------------|---------------------|----|-----|
|                                    | 8                         | 10                 | 12           | 16                 | 20                  | 25                  | 32                  | 40                  | 50                  | 63                  | 80 | 100 |
| 25A-CDJ2<br>25A-CDJ2K<br>25A-CDBJ2 | —                         | *1<br>25A-BJ7-010S | —            | *1<br>25A-BJ7-016S | —                   | —                   | —                   | —                   | —                   | —                   | —  | —   |
| 25A-CD85*4                         | 25A-BJ7-008S              | 25A-BJ7-010S       | 25A-BJ7-012S | 25A-BJ7-016S       | 25A-BM6-020S        | 25A-BM6-025S        | —                   | —                   | —                   | —                   | —  | —   |
| 25A-CDM2                           | —                         | —                  | —            | —                  | *2<br>25A-BM6-020S  | *2<br>25A-BM6-025S  | *2<br>25A-BM6-032S  | *2<br>25A-BM6-040S  | —                   | —                   | —  | —   |
| 25A-CDG1<br>25A-CDBG1              | —                         | —                  | —            | —                  | *3<br>25A-BMA4-020S | *3<br>25A-BMA4-025S | *3<br>25A-BMA4-032S | *3<br>25A-BMA4-040S | *3<br>25A-BMA4-050S | *3<br>25A-BMA4-063S | —  | —   |
| 25A-MGG                            | —                         | —                  | —            | —                  | *3<br>25A-BMA4-020S | *3<br>25A-BMA4-025S | *3<br>25A-BMA4-032S | *3<br>25A-BMA4-040S | *3<br>25A-BMA4-050S | —                   | —  | —   |

- \*1 The combination of the auto switch mounting band (BJ2-□□□S/with a stainless steel screw) and the holder set (BJ3-1).
- \*2 The combination of the auto switch mounting band (for BM2-□□□) and stainless steel screw (BBA4), and the holder set (BJ3-1).
- \*3 The combination of the auto switch mounting band (for BMA2-□□□) and stainless steel screw (BBA4), and the holder set (BJ3-1).
- \*4 D-A90L-900 and D-A93L-900 auto switches cannot be mounted on bore size  $\phi 8$ ,  $\phi 10$ , or  $\phi 12$  cylinders.

### When the bore size is 16 mm or less



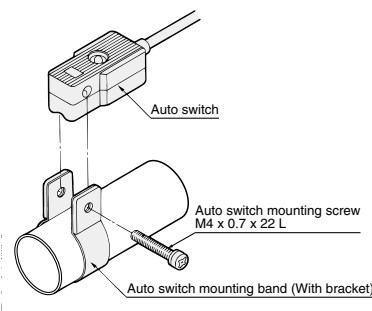
### When the bore size is 20 mm or more



Applicable cylinder series: 25A-CDG1, 25A-CDBG1  
 Applicable auto switches : D-G5□-900, D-K59-900, D-G5□W-900,  
 D-K59W-900, D-K59WSRPC-900

### Auto Switch Mounting Bracket Part Nos.

| Cylinder series       | Applicable bore size [mm] |        |
|-----------------------|---------------------------|--------|
|                       | 80                        | 100    |
| 25A-CDG1<br>25A-CDBG1 | BA-08S                    | BA-10S |

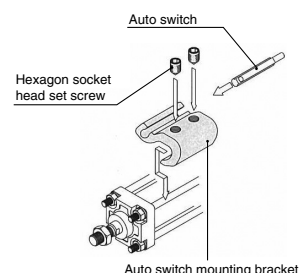


## Tie-rod Mounting Type

Applicable cylinder series: 25A-MDB, 25A-CDA2, 25A-CDS2, 25A-MDWB, 25A-CDNS, 25A-C96SD, 25A-C95SD  
 Applicable auto switches : D-M9□-900, D-M9□V-900, D-M9□W-900, D-M9□WV-900, D-M9BWSRPC-900, D-M9BWSRPC-900  
 : D-A90L-900, D-A93L-900

### Auto Switch Mounting Bracket Part Nos.

| Cylinder series      | Applicable bore size [mm] |             |            |            |            |            |             |             |             |             |
|----------------------|---------------------------|-------------|------------|------------|------------|------------|-------------|-------------|-------------|-------------|
|                      | 32                        | 40          | 50         | 63         | 80         | 100        | 125         | 140         | 160         | 200         |
| 25A-MDB              | 90-BMB5-032               | 90-BMB5-032 | 90-BA7-040 | 90-BA7-040 | 90-BA7-063 | 90-BA7-063 | —           | —           | —           | —           |
| 25A-C96SD            | 90-BMB5-032               | 90-BMB5-032 | 90-BA7-040 | 90-BA7-040 | 90-BA7-063 | 90-BA7-063 | 90-BA7-080  | —           | —           | —           |
| 25A-CDA2             | —                         | 90-BA7-040  | 90-BA7-040 | 90-BA7-063 | 90-BA7-080 | 90-BA7-080 | —           | —           | —           | —           |
| 25A-CDS2<br>25A-CDNS | —                         | —           | —          | —          | —          | —          | 25A-BS6-125 | 25A-BS6-125 | 25A-BS6-160 | —           |
| 25A-MDWB             | 90-BMB5-032               | 90-BMB5-032 | 90-BA7-040 | 90-BA7-040 | 90-BA7-063 | 90-BA7-063 | —           | —           | —           | —           |
| 25A-C95SD            | —                         | —           | —          | —          | —          | —          | —           | —           | 25A-BS6-160 | 25A-BS6-160 |



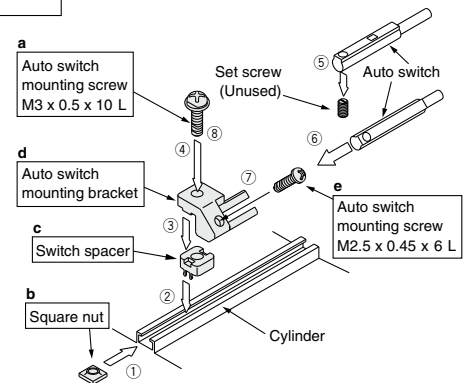
## Rail Mounting Type

Applicable cylinder series: 25A-CDBQ2

Applicable auto switches : D-M9N(V)-900, D-M9P(V)-900, D-M9B(V)-900, D-M9NW(V)-900, D-M9PW(V)-900, D-M9BW(V)-900, D-A90L-900, D-A93L-900

### Auto Switch Mounting Bracket Part No.

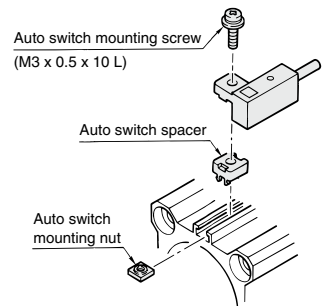
| Cylinder series | Applicable bore size [mm] |    |             |    |    |    |    |     |
|-----------------|---------------------------|----|-------------|----|----|----|----|-----|
|                 | 20                        | 25 | 32          | 40 | 50 | 63 | 80 | 100 |
| 25A-CDBQ2       | —                         | —  | 25A-BQ2-032 |    |    | —  | —  | —   |



Applicable auto switches: D-F79-900, D-F7P-900, D-J79-900, D-F7NV-900, D-F7PV-900, D-F7BV-900, D-F79W-900, D-F7PW-900, D-J79W-900, D-F7NWV-900, D-F7BWV-900

### Auto Switch Mounting Bracket Part No.

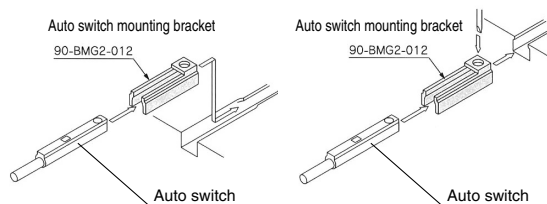
| Cylinder series | Applicable bore size [mm] |    |          |    |    |    |    |     |   |
|-----------------|---------------------------|----|----------|----|----|----|----|-----|---|
|                 | 20                        | 25 | 32       | 40 | 50 | 63 | 80 | 100 |   |
| 25A-CDBQ2       | —                         | —  | 25A-BQ-2 |    |    |    |    |     | — |



# 25A- Series

## Direct Mounting Type

Applicable cylinder series : 25A-CDJP2, 25A-MDU, 25A-MY1B, 25A-MY1M, 25A-MY1C, 25A-MY1H, 25A-MY3□, 25A-CY3R, 25A-MGP-Z, 25A-MGP-AZ, 25A-MGPK, 25A-RSH  
 Applicable air gripper series: 25A-MHZ(L)2, 25A-MHL2, 25A-MHS3, 25A-MHS4  
 Applicable auto switches : D-M9□-900, D-M9□V-900, D-M9□W-900, D-M9□WV-900, D-M9BWSRPC-900, D-M9BWVSDPC-900  
 : D-A90L-900, D-A93L-900



### Auto Switch Mounting Bracket Part Nos.

| Cylinder series<br>Air gripper series | Applicable bore size [mm] |              |              |              |              |              |              |              |              |              |              |              |              |              |
|---------------------------------------|---------------------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|
|                                       | 4                         | 6            | 10           | 12           | 15           | 16           | 20           | 25           | 32           | 40           | 50           | 63           | 80           | 100          |
| 25A-CDJP2                             | Not required              | Not required | Not required | —            | —            | Not required | —            | —            | —            | —            | —            | —            | —            | —            |
| 25A-MDU                               | —                         | —            | —            | —            | —            | —            | —            | MUZ-025      | MUZ-025      | MUZ-025      | MUZ-025      | MUZ-025      | —            | —            |
| 25A-MY1B                              | —                         | —            | —            | —            | —            | Not required | Not required | BMY3-016     | BMY3-016     | BMY3-016     | —            | 90-BMG2-012  | —            | —            |
| 25A-MY1M                              | —                         | —            | —            | —            | —            | Not required | Not required | 90-BMG2-012  | 90-BMG2-012  | 90-BMG2-012  | 90-BMG2-012  | 90-BMG2-012  | —            | —            |
| 25A-MY1C                              | —                         | —            | —            | —            | —            | Not required | Not required | 90-BMG2-012  | 90-BMG2-012  | 90-BMG2-012  | 90-BMG2-012  | 90-BMG2-012  | —            | —            |
| 25A-MY1H                              | —                         | —            | —            | —            | —            | Not required | Not required | BMY3-016     | BMY3-016     | BMY3-016     | —            | —            | —            | —            |
| 25A-MY3□                              | —                         | —            | —            | —            | —            | BMY3-016     | BMY3-016     | BMY3-016     | BMY3-016     | BMY3-016     | BMY3-016     | BMY3-016     | —            | —            |
| 25A-CY3R                              | —                         | —            | —            | —            | Not required | —            | Not required | 90-BMG2-012  | 90-BMG2-012  | 90-BMG2-012  | 90-BMG2-012  | 90-BMG2-012  | —            | —            |
| 25A-MGP-Z<br>25A-MGP-AZ               | —                         | —            | —            | Not required | —            | Not required | Not required | Not required | Not required | Not required | Not required | Not required | Not required | Not required |
| 25A-MGPK                              | —                         | —            | —            | Not required | —            | Not required | Not required | Not required | Not required | Not required | Not required | —            | —            | —            |
| 25A-RSH                               | —                         | —            | —            | —            | —            | —            | 90-BMG2-012  | —            | 90-BMG2-012  | —            | —            | —            | —            | —            |
| 25A-MHZ2                              | —                         | —            | 90-BMG2-012  | —            | —            | *1           | *1           | *1           | *1           | *1           | —            | —            | —            | —            |
| 25A-MHZL2                             | —                         | —            | 90-BMG2-012  | —            | —            | *1           | *1           | *1           | —            | —            | —            | —            | —            | —            |
| 25A-MHL2                              | —                         | —            | 90-BMG2-012  | —            | —            | 90-BMG2-012  | 90-BMG2-012  | 90-BMG2-012  | 90-BMG2-012  | 90-BMG2-012  | —            | —            | —            | —            |
| 25A-MHS3<br>25A-MHS4                  | —                         | —            | —            | —            | —            | Not required | Not required | Not required | 90-BMG2-012  | —            | —            | —            | —            | —            |

\*1 When mounting D-M9 type of auto switch onto the square groove of the side of the air gripper, the auto switch mounting bracket (90-BMG2-012) is required.

Applicable cylinder series : 25A-CDUJ, 25A-MGJ  
 Applicable auto switches : D-F8N-900, D-F8P-900, D-F8B-900

Auto switch mounting brackets are not required.



# 25A- Series Precautions

Be sure to read this before handling products.

## Precautions

### Caution

#### ■ Change of material

For the 25A- series, there is a restriction on the use of copper and zinc as main components in the metal materials used. Keep in mind that the aluminum alloy, aluminum die cast, and some of the stainless steel materials contain traces of copper (Cu) and/or zinc (Zn) as an additive element.

However, copper is used in some parts—the coils of solenoid valves, the circuit boards, connector pins, and lead wires of electrical equipment and auto switches, and the motors, cables, and drivers of electric actuators—whose materials cannot be easily changed to alternative materials.

In addition, some magnets (including the surface treatment) contain copper (Cu) and/or zinc (Zn). However, due to their magnetic characteristics, it is impossible to use alternative materials.

#### ■ Particle generation (metallic contaminants)

Usage of metal stoppers and/or shock absorbers on an air slide table produces metal-to-metal collision and contact, and may generate wear particles. Do not use metal stoppers and/or shock absorbers in an environment where wear particles are problem.

When the buffer mechanism or the end lock mechanism functional options are used, dust particles may be generated by the buffer part as well as the end lock part.

The following models of air gripper may generate dust particles, as metal-to-metal collisions occur when fingers are fully closed.

- MHZ2
- MHZL2 (Except -X5955)
- MHF2
- MHY2
- MHW2

#### ■ Static electricity

Refrain from using the electrical equipments including detection switches (e.g., pressure switches and flow switches) in electrostatically-charged environments. Otherwise, they may cause the system to fail or to malfunction.

#### ■ Piping

Usage of nylon tubing and polyurethane tubing in environments with a low dew point may affect dew points of ambient air and inside of piping. Use fluoropolymer tubing (TL series) or stainless steel tubing (Supply it on your own) in environments with a low dew point.

#### ■ Chemical environment

Refrain from using the products in such environments as exposed to chemicals. Otherwise, resin parts may deteriorate.

If you want SMC to test the products for the effects of chemicals attached to them, send the products back to SMC after thoroughly cleaning them.

Consult your SMC sales representative for further details.

#### ■ Trademark

DeviceNet® is a registered trademark of ODVA, Inc.

EtherNet/IP® is a registered trademark of ODVA, Inc.

EtherCAT® is registered trademark and patented technology, licensed by Beckhoff Automation GmbH, Germany.

## UL Approved Product

### Caution

When conformity to UL is required, the product should be used with a UL1310 Class 2 power supply.

The product is a UL approved product only if it has a mark on the body.

Be sure to read the "Handling Precautions for SMC Products" (M-E03-3) and the "Operation Manual" before use.



# Series Compatible with Secondary Batteries

## — 25A- Series —

Copper (Cu)  
and Zinc (Zn)  
**Restrictions**

Compatible with  
dew points as low as  
**-70°C**

**Longer  
life**  
due to use of grease  
compatible with  
low dew points

A wide range  
of products!  
Now with a  
greater number  
of models!

## SMC Corporation

Akihabara UDX 15F,  
4-14-1, Sotokanda, Chiyoda-ku, Tokyo 101-0021, JAPAN  
Phone: 03-5207-8249 Fax: 03-5298-5362  
<https://www.smcworld.com>  
© 2024 SMC Corporation All Rights Reserved

Specifications are subject to change without prior notice  
and any obligation on the part of the manufacturer.

D-G