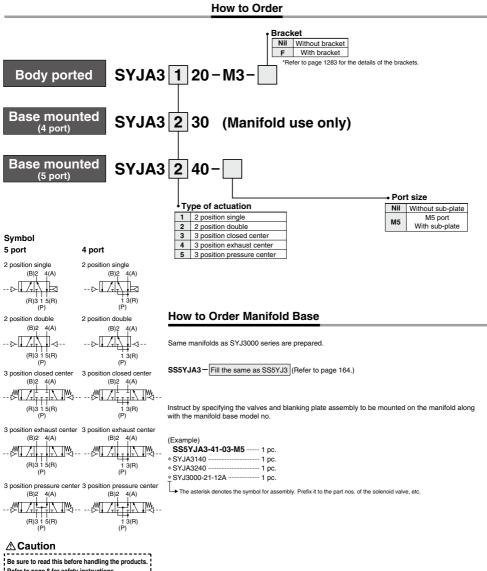
4/5 Port Air Operated Valve SYJA3000 Series



SMC

Be sure to read this before handling the products. Refer to page 8 for safety instructions and pages 9 to 15 for 3/4/5 port solenoid valve precautions.

4/5 Port Air Operated Valve SYJA3000 Series

Specifications



Base mounted



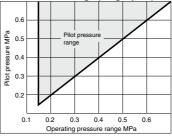
Body ported

Fluid		Air					
Fiuld		Air					
Operating pressure	2 position single	0.15 to 0.7					
range	2 position double	-100 kPa to 0.7					
MPa	3 position	-100 kPa to 0.7					
Note 1)	2 position single	Operating pressure to 0.7					
Pilot pressure range MPa	2 position double	0.1 to 0.7					
WFd	3 position	0.2 to 0.7					
Ambient and fluid tem	perature °C	-10 to 60 (No freezing.)					
Lubrication		Not required					
Mounting orientation		Unrestricted					
Impact/Vibration resist	ance (m/s ²) Note 2)	300/50					

Note 1) In case of single type, be certain that pressure within operating pressure range be supplied to supply port, because return pressure is introduced from supply port (1(P)) for activation. Note 2) impact resistance: No maifunction resulted from the impact test using a drop impact tester. The test was performed on the axis and right angle directions of the main valve, when pilot signal is ON and OFF. (Value in the initial state)

Vibration resistance: No malfunction occurred in one sweep test between 45 and 2000 Hz. Test was performed to axis and right angle directions of the main valve when pilot signal is ON and OFF. (Value in the initial state)

Pilot Pressure Range (Single pilot)



With Bracket

Air operated valve

SYJA3D20-M3-F

The mounting bracket for the 2 position double solenoid and 3 position is supplied unattached.

Flow Rate Characteristics/Weight

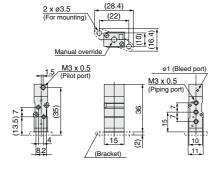
									Flo	w rate cha	racteristic	S Note 2)	
		Type of actuation		Destation	Pilot	Weight (g)	Effective area mm ²	1→4/2 (P→A/B)			4/2→5/3 (A/B→EA/EB)		
	Valve model			Port size	port size			C [dm ³ / (s•bar)]	b	Cv	C [dm ³ / (s•bar)]	b	Cv
σ		0	Single			48 (22)		0.40	0.00	0.40	0.40	0.05	0.40
Inte		2 position	Double			51 (25)	-	0.46	0.36	0.12	0.46	0.35	0.12
e) U			Closed					0.47	0.33	0.12	0.47	0.31	0.12
e n	SYJA3⊡40-M5		center	M5 x 0.8	M3 x 0.5			0.47	0.33	0.12	0.47	0.31	0.12
as dr	31JA3_40-W3	a	Exhaust	W5 X U.8		54 (00)		0.00	0.39	0.10	0.59	0.43	0.16
5 port Base mounted (with sub-plate)		3 position	center			54 (28)		0.36	0.39	0.10	[0.40]	[0.33]	[0.11]
			Pressure					0.58	0.42	0.16	0.46	0.32	0.11
w U			center					[0.32]	[0.33]	[0.080]	0.40	0.32	0.11
	SYJA3⊡20-M3	2 position	Single	- M3 x 0.5	M3 x 0.5	22							
_			Double			25	0.9						
3ody ported		3 position	Closed			28							
p 2			center										
ş			Exhaust										
8			center										
			Pressure										
			center										
5		Onesition	Single			22							
e 1)		2 position	Double			25							
Not			Closed										
l≦ e	SYJA3⊡30		center	_	M3 x 0.5		Note 1) Value when used on a manifold. Refer to page 1282 for de						
4 Port Base Mounted (For manifold) Note 1)	01010200	3 position	Exhaust	1013	M3 X 0.5	28							
			center			28) []: denote					
P P			Pressure					 3) (): Without sub-plate. 4) 5 port, base mounted without sub-plate: SYJA3□40 					
4 E			center				NOLE 4	+) 5 port, base mourned without sub-plate: STJA3L40					



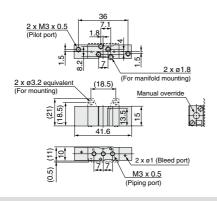
SYJA3000 Series

Dimensions/Body Ported

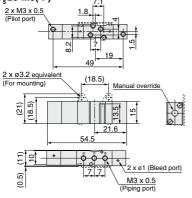
2 position single: SYJA3120-M3(-F)



2 position double: SYJA3220-M3(-F)

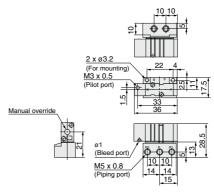


3 position closed center/exhaust center/pressure center SYJA3 $\frac{3}{5}$ 20-M3(-F) 7.1

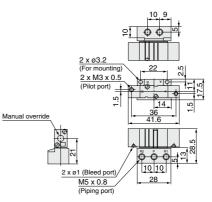


Dimensions/Base Mounted

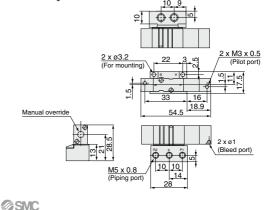
2 position single: SYJA3140-M5





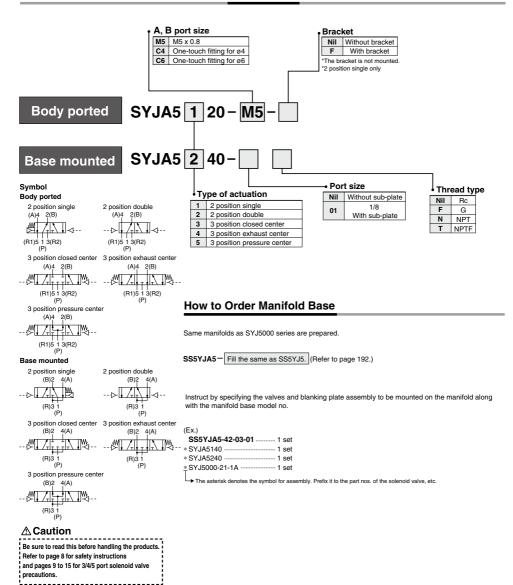


3 position closed center/exhaust center/pressure center SYJA3 $\frac{3}{4}$ 40-M5



4/5 Port Air Operated Valve SYJA5000 Series

How to Order



SYJA5000 Series



Base mounted



Body ported

Specifications

Fluid		Air				
Operating pressure range MPa	2 position single	0.15 to 0.7				
	2 position double	-100 kPa to 0.7				
	3 position	-100 kPa to 0.7				
Note 1)	2 position single	(0.4 x P+0.1) to 0.7 P: Operating pressure				
Pilot pressure range MPa	2 position double	0.1 to 0.7				
WIFa	3 position	0.15 to 0.7				
Ambient and fluid temp	perature °C	-10 to 60 (No freezing.)				
Lubrication		Not required				
Mounting orientation		Unrestricted				
Impact/Vibration resist	ance (m/s²) Note 2)	300/50				

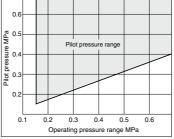
Note 1) In case of single type, be certain that pressure within operating pressure range be supplied to supply port, because return pressure is introduced from supply port {1(P)} for activation.

Note 2) Impact resistance: No malfunction resulted from the impact test using a drop impact tester. The test was performed on the axis and right angle directions of the main valve, when pilot signal is ON and OFF. (Value in the initial state)

Vibration resistance: No malfunction occurred in one sweep test between 45 and 2000 Hz. Test was performed to axis and right angle directions of the main valve when pilot signal is ON and OFF. (Value in the initial state)

Pilot Pressure Range (Single pilot)

With Bracket





Flow Rate Characteristics/Weight

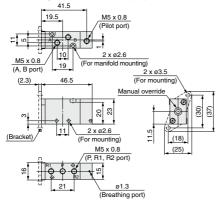
		Type of actuation		Port size		FI	Pilot	Note 2) Weight (g)				
	Valve model				1→4/2 (P→A/B)				4/2→5/3 (A/B→EA/EB)			
					C [dm ³ / (s·bar)]	b	Cv	C [dm ³ / (s·bar)]	b	Cv	port size	
		2 position	Single Double	M5 x 0.8	0.47	0.41	0.13	0.47	0.41	0.13	-	34 38
			Closed center		0.49	0.44	0.13	0.44	0.40	0.12		
	SYJA5⊡20-M5	3 position	Cerner		0.46	0.37	0.12	0.47 [0.39]	0.43 [0.35]	0.13 [0.10]		48
			Pressure center		0.49 [0.39]	0.51 [0.38]	0.14 [0.10]	0.45	0.42	0.12		
σ	SYJA5⊡20-C4	2 position	Single Double		0.69	0.39	0.18	0.44	0.39	0.12	- M5 x 0.8	41 45
Body ported		3 position	Closed center	A, B port: C4 (One-touch fitting for a4) P, R port: M5 x 0.8 A, B port: C6 (One-touch fitting for a6) P, R port: M5 x 0.8	0.69	0.40	0.19	0.43	0.40	0.12		
			Cerner		0.56	0.40	0.15	0.41 [0.41]	0.37 [0.37]	0.10 [0.11]		55
			Pressure center		0.57 [0.41]	0.40 [0.37]	0.15 [0.10]	0.41	0.37	0.10		
	SYJA5⊡20-C6	2 position	Single Double		0.70	0.36	0.19	0.47	0.40	0.12		41 45
		3 position	Closed center		0.72	0.37	0.19	0.44	0.34	0.12		
			Exhaust center		0.67	0.54	0.19	0.41 [0.41]	0.38 [0.38]	0.11 [0.11]		55
			Pressure center		0.82 [0.44]	0.41 [0.39]	0.23 [0.12]	0.41	0.36	0.11		
ed (e)		2 position	Single Double	1/8	0.79	0.21	0.19	0.83	0.32	0.21		68 (34) 72 (38)
Base mounted (with sub-plate)	SYJA5⊡40-01	□40-01 3 position	Closed center		0.80	0.28	0.18	0.86	0.34	0.20	— M5 x 0.8	
			Center		0.71	0.26	0.18	1.1 [0.60]	0.24 [0.44]	0.26 [0.18]		82 (48)
<u>w</u> i Ba			Pressure center		0.99 [0.47]	0.29 [0.38]	0.24 [0.12]	0.72	0.38	0.18		

Note 1) []: denotes normal position. Note 2) (): Without sub-plate. Note 3) Model No. for 5 port base mounted type without sub-plate is SYJA5⊡40.

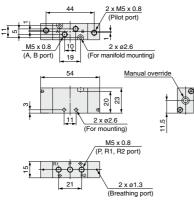


Dimensions/Body Ported

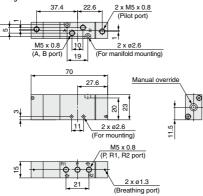
2 position single: SYJA5120-M5(-F)



2 position double: SYJA5220-M5

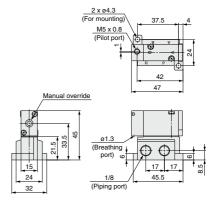


3 position closed center/exhaust center/pressure center SYJA5 $\frac{3}{2}$ 20-M5

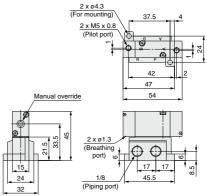


Dimensions/Base Mounted

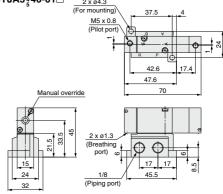
2 position single: SYJA5140-01



2 position double: SYJA5240-01



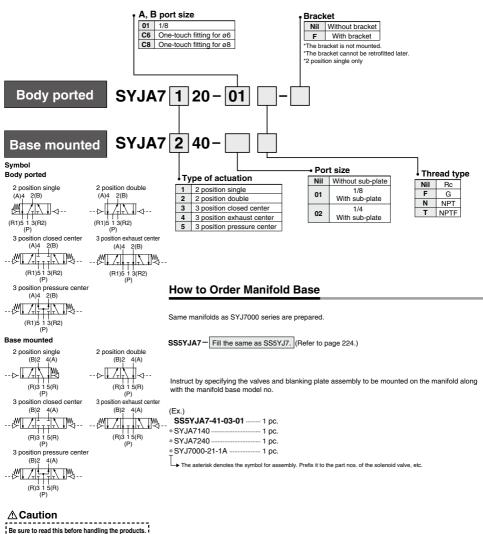
3 position closed center/exhaust center/pressure center SYJA5 $\frac{3}{4}$ 40-01 \Box _2 x g4.3



SMC

4/5 Port Air Operated Valve SYJA7000 Series

How to Order



SMC

Be sure to read this before handling the products Refer to page 8 for safety instructions and pages 9 to 15 for 3/4/5 port solenoid valve precautions.

1288

4/5 Port Air Operated Valve SYJA7000 Series

Specifications



Base mounted



Body ported

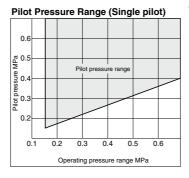
Fluid		Air				
Operating pressure	2 position single	0.15 to 0.7				
range	2 position double	-100 kPa to 0.7				
MPa	3 position	-100 kPa to 0.7				
Note 1)	2 position single	(0.4 x P+0.1) to 0.7 P: Operating pressure				
Pilot pressure range MPa	2 position double	0.1 to 0.7				
шга	3 position	0.15 to 0.7				
Ambient and fluid temp	perature °C	-10 to 60 (No freezing.)				
Lubrication		Not required				
Mounting orientation		Unrestricted				
Impact/Vibration resist	ance (m/s ²) Note 2)	300/50				

 Note 1) In case of single type, be certain that pressure within operating pressure range be supplied to supply port, because return pressure is introduced from supply port (1(P)) for activation.

 Note 2) Impact resistance:
 No malfunction resulted from the impact test using a drop impact tester. The test was performed on the axis and right angle directions of the main valve, when pilot signal is ON and OFFr. (Value in the initial state)

 Vibration resistance:
 No malfunction oncurred in one sweep test between 45 and 2000 Hz.

Test was performed to axis and right angle directions of the main valve when pilot signal is ON and OFF. (Value in the initial state)



With Bracket

Air operated

valve

SYJA7120-01-F

As a bracket is designed for a body, be sure that a bracket is attached when ordering and operating.

SYJA7000 Series

Flow Rate Characteristics/Weight

				Port size		F	Pilot	Note 3) Weight				
	Valve model	Type of	actuation		1→4/2 (P→A/B)				4/2→5/3 (A/B→EA/EB)			
	valve model			1 011 0120	C [dm ³ / (s•bar)]	b	Cv	C [dm ³ / (s•bar)]	b	Cv	port size	(g)
		2 position	Single		2.2	0.36	0.58	2.4	0.34	0.63		71
		2 position	Double	1/8		0.30	0.56		0.34	0.03		72
			Closed		1.8	0.37	0.45	2.0	0.35	0.49		
	SYJA7⊡20-01		center			0.07	0.10	-				
	31JA7	3 position	Exhaust		1.2	0.50	0.34	3.0	0.35	0.73		82
			center					[1.3]	[0.52]	[0.39]		
			Pressure		3.0	0.37	0.78	1.8	0.37	0.45		
			center		[0.83]	[0.50]	[0.25]					
		2 position	Single		1.6	0.33	0.4	2.2	0.32	0.53		82
		<u> </u>	Double									83
ted			Closed	A, B port: C6 (One-touch fitting for ø6) P, R port: 1/8	1.4	0.27	0.35	1.9	0.33	0.49	- M5 x 0.8	
por	SYJA7⊡20-C6	3 position	center									
Body ported			Exhaust		1.1	0.37	0.27	2.5	0.32	0.61		93
ы			center		1.8	0.36	0.45	[1.3]	[0.54]	[0.38]		
			Pressure center		[0.78]	0.36	0.45	1.6	0.30	0.39	-	
	SYJA7⊡20-C8	2 position - 3 position	Single	A, B port: C8 (One-touch fitting for ø8) P, R port: 1/8	2.0	0.39	[0.22] 0.52 0.42	2.3 2.0	0.34	0.61		82
			Double									83
			Closed									- 03
			center									
			Exhaust		1.2	0.38		3 2.6 [1.3]	0.35	0.67		
			center				0.33		[0.49]	[0.38]		93
			Pressure		1.9	0.57	0.59	[1.5]	[0.43]	[0.50]		
			center		[0.86]	[0.46]	[0.25]	1.7	0.39	0.42		
			Single									151 (71)
		2 position	Double	-	2.3	0.45	15 0.57	2.8	0.37	0.71		152 (72)
			Closed									
			center		1.9	0.36	0.48	2.1	0.46	0.57	M5 x 0.8	
late	SYJA7□40-01		Exhaust	1/8 Note 1)				3.4	0.36 0	0.86		
å		3 position	center		1.2	0.48	0.35	[1.3]	[0.57]	[0.41]		162 (82)
ารเ			Pressure		3.3	0.43	0.78		1 1 1	<u> </u>	-	
			center		[0.85]	[0.54]	[0.25]	2.1 0.45 0.56	0.56			
be			Single									151 (71)
nut		2 position	Double	1	2.3	0.41	0.61	2.9	0.35	0.74		152 (72)
Base mounted (with sub-plate)		3 position	Closed	- 1/4 ^{Note 1)}			0.50					
			center		1.9	0.46	0.50	2.2	0.44	0.60	MEXOC	
	SYJA7□40-02		Exhaust			0.45	0.35	3.7	0.27	0.87	M5 x 0.8	160 (00)
			center		1.3	0.45	0.35	[1.4]	[0.56]	[0.43]		162 (82)
			Pressure		3.6	0.23	0.84	2.1	0.47	0.58		
			center		[0.83]	[0.55]	[0.25]	2.1	0.47	0.56		

Note 1) P, A, B port: 1/8 is R1, R2 port: 1/4

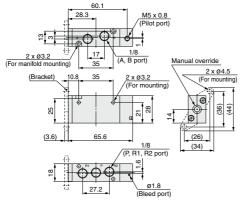
Note 2) []: for nomal position

Note 3) (): without sub-plate

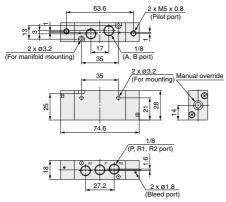
Note 4) Model No. for base mounted type without sub-plate is SYJA7 40.

Dimensions/Body Ported

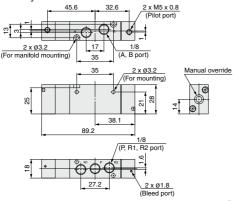
2 position single: SYJA7120-01 (-F)



2 position double: SYJA7220-01

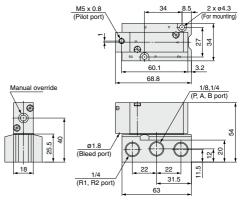


3 position closed center/exhaust center/pressure center SYJA7 $\frac{3}{2}$ 20-01 \square

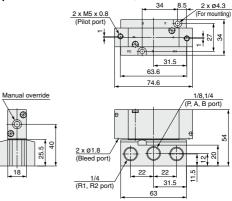


Dimensions/Base Mounted

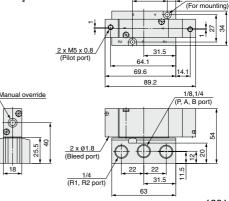
2 position single: SYJA7140-⁰¹₀₂



2 position double: SYJA7240-⁰¹₀₂



3 position closed center/exhaust center/pressure center SYJA7 $\frac{3}{4}$ 40- $\frac{10}{12}$ 34 8.5 2 x Ø4.3



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