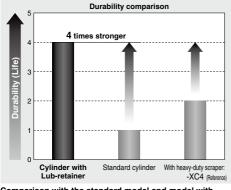
Cylinder with Stable Lubrication Function (Lub-retainer) CM2/CG1/CA2/CQS/CQ2/MXQ/MGP/CXSJ/CXS Series

Applicable to operation in micro-powder (20 to 100 µm)/general environments

Durability is 4 times stronger than

the standard model in micro-powder environments.



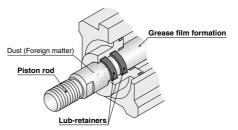
Comparison with the standard model and model with heavy-duty scraper (-XC4) (Relative ratio of B10) * The durability test is conducted in accordance with SMC test conditions.

As the Lub-retainer is mounted at two locations,

- Grease film is formed on the piston rod surface to improve the durability.
- Entry of dust and foreign matter is prevented.

Even with the built-in stable lubrication function (Lub-retainer), the overall length and mounting are the same as those of the standard model.

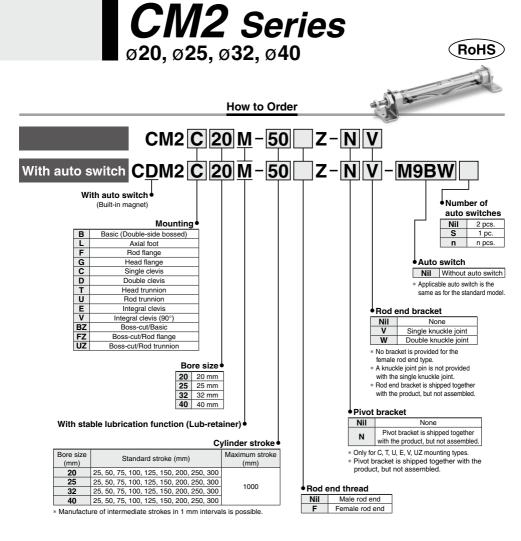
* Except for some models



• The number of operating cycles can be improved even in general environments.

			philoapie	Cynnuel	3		
Air Cylinder Series CM2 ø20 to ø40	es CM2 Series CG1		RoHS	Air Cylinder Series CA2 ø40 to ø100		Compact Cylind Series CQS ø20 and ø25	der/Compact Type
and a		and the	a the	40.			
Compact Cylinder Air Side Table Series CQ2 Series MXQ \[] A ø32 to ø100 RoHS		Series MGP ø20 to ø100 RoHS Se		Dual Rod Cylinder/ Compact Type Series CXSJ ø6 to ø32	oHS Dual Ro Series C) ø6 to ø32		
	1000		، م. بن بي. م. بن				

Air Cylinder with Stable Lubrication Function (Lub-retainer) Standard: Double Acting, Single Rod

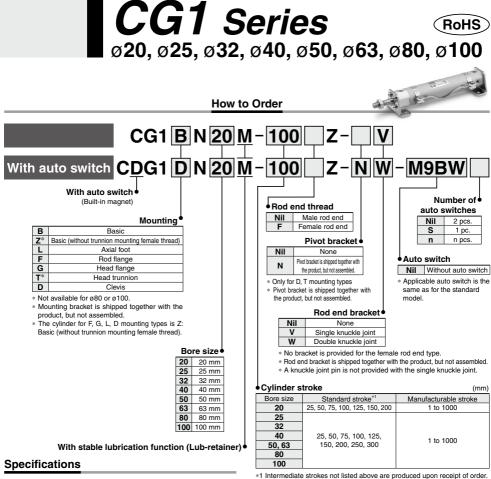


Specifications

Bore size (mm)	20	20 25 32							
Minimum operating pressure		0.1	MPa						
Other specifications	S	Same as the s	standard mod	el					
Dimensions	Same as the standard model								

* Lube-retainer or rod seal cannot be replaced

Air Cylinder with Stable Lubrication Function (Lub-retainer) Standard: Double Acting, Single Rod



Manufacture of intermediate strokes at 1 mm intervals is possible. (Spacers are not used.)

* Applicable strokes should be confirmed according to the usage. For details, refer to "Air Cylinders Model Selection" on pages 8 to 19. In addition, the products that exceed the standard stroke might not be able to fulfill the specifications due to the deflection etc.

Dimensions (Dimensions other than those shown below are the same as the standard model.)

20 25 32 40 50 63 80 100

0.1 MPa

Same as the standard model

See below

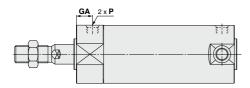
* No trunnion mounting female thread is provided on the rod side. (For B: Basic)

Bore size (mm)

Minimum operating pressur

Other specifications

Dimensions



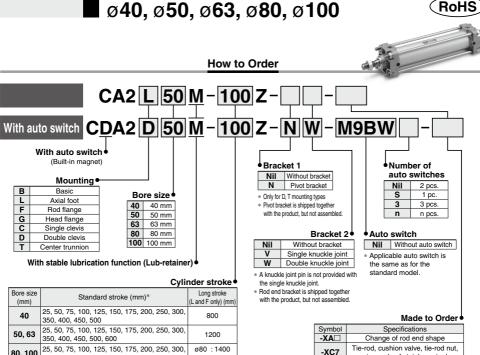
		(mm)
Bore size	GA	Р
20	14	M5 x 0.8
25	13	M5 x 0.8
32	(12)	(Rc 1/8)
40	(13)	(Rc 1/8)
50	(14)	(Rc 1/4)
63	(14)	(Rc 1/4)
80	(20)	(Rc 3/8)
100	(20)	(Rc 1/2)

* When female thread is used, use a washer, etc. to prevent the contact part at the rod end from being deformed depending on the material of the workpiece. (): Same as the standard model

* The mounting dimensions of the mounting bracket are the same as the standard model.

RoHS

Air Cylinder with Stable Lubrication Function (Lub-retainer) Standard: Double Acting, Single Rod



CA2 Series

 80, 100
 25, 50, 75, 100, 125, 150, 175, 200, 250, 300, 380 : 1400

 350, 400, 450, 500, 600, 700
 \$\$\alpha\$100: 1500

* Intermediate strokes not listed above are produced upon receipt of order.

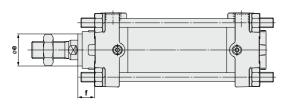
Built-in Magnet Cylinder Model

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) CDA2L40M-100Z

Specifications

Bore size (mm)	40	50	63	80	100				
Minimum operating pressure			0.1 MPa						
Other specifications		Same as	the standa	ard model					
Dimensions	See below								

Dimensions (Dimensions other than those shown below are the same as the standard model.)



		(mm)
Bore size	øe	f
40	26	13.5
50	30	12.5
63	30	12.5
80	36	16.5
100	42	16

* The mounting dimensions of the mounting bracket are the same as the standard model.

etc. made of stainless steel

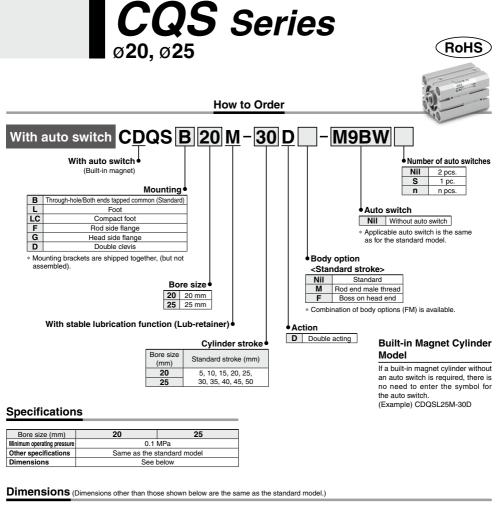
Change of tie-rod length

-XC14 Change of trunnion bracket mounting position

-XC15

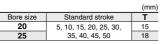


Compact Cylinder with Stable Lubrication Function (Lub-retainer) Standard: Double Acting, Single Rod



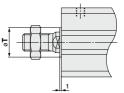


(Flat washer 4 pcs.)



The mounting dimensions of the mounting bracket are the same as the standard model.

DM: Rod end male thread

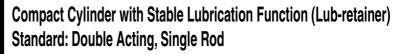


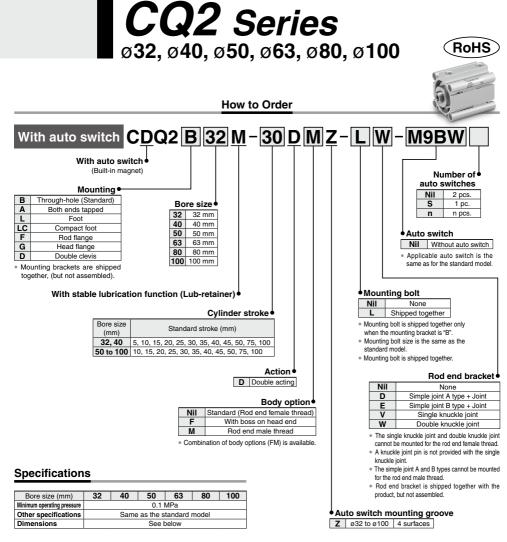
Mounting Bracket Part No.

Bore size (mm)	Foot	Compact foot	Flange
20	CQS-LM020	CQS-LCM020	CQS-FM020
25	CQS-LM025	CQS-LCM025	CQS-FM025

The double clevis type is the same as the standard model.
 When ordering foot and compact foot brackets, order 2 pieces per

 when ordering foot and compact foot brackets, order 2 pieces per cylinder.

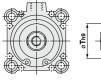


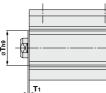


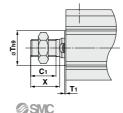
Dimensions (Dimensions other than those shown below are the same as the standard model.)

ø32 to ø100

DMZ: Rod end male thread



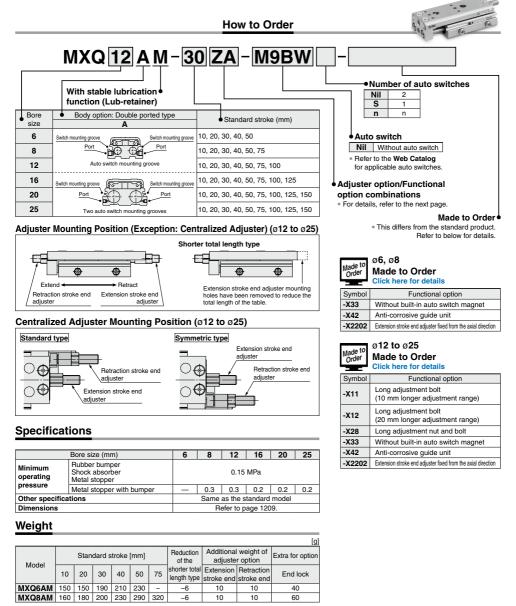




				(mm)
Bore size	Т	T 1	C 1	X
32	22	1	20.5	23.5
40	28	1	20.5	23.5
50	35	2	24	26.5
63	35	2	24	26.5
80	-	_	32.5	35.5
100	—	—	32.5	35.5

* The mounting dimensions of the mounting bracket are the same as the standard model. Air Slide Table with Stable Lubrication Function (Lub-retainer) Double Ported Type





* ø12 to ø25: Same as the standard product

*∕*SMC

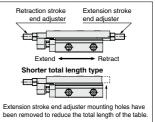
RoHS

MXQ A Series

Adjuster options/Functional option combinations ø6. ø8

					Adjuster	mounting	Functional optic	on combination
Symbol		Adiu	r type*2 *3	posit	ion*1	Nil	2	
Бупіроі		Adju	Iste	r type===	Extension stroke end	Retraction stroke end	Without functional option	End lock
Z	W	ithout adjuste	r			*3	0	0
ZA					•	•	0	×
ZB	Me	etal stopper w	/ith	bumper	•	*3	0	0
ZC						•	0	×
ZD					•	•	0	×
ZE	Ru	ubber stopper			•	*3	0	0
ZF						•	0	×
ZH	Sh	lock absorber	/RJ		•		0	0
ZK					•	•	0	×
ZL	Me	etal stopper			•	*3	0	0
ZM						•	0	×
ZN				Without adjuster	/	*3	0	×
ZP		orter total	5	Rubber stopper		•	0	×
ZS	ler	igth type*4	adjuster	Metal stopper with bumper		•	0	×
ZT			ģ	Metal stopper	/	•	0	×
ZBF	ter	Metal stopper	end	Rubber stopper	•	•	0	×
ZBM	end adjuster	with bumper		Metal stopper	•	•	0	×
ZEC	qac	Rubber	stroke	Metal stopper with bumper	•	•	0	×
ZEM	eu	stopper		Metal stopper	•	•	0	×
ZHC	stroke	Shock	l o	Metal stopper with bumper	•	•	0	×
ZHF	str	absorber/RJ	etraction	Rubber stopper	•	•	0	×
ZHM	sior	00001061/110	etr	Metal stopper	•	•	0	×
ZLC	Extension	Metal	Ē	Metal stopper with bumper	•	•	0	×
ZLF	ш	stopper		Rubber stopper	•	•	0	×

Adjuster Mounting Position



*1 : Shipped together with the product, but not assembled

Without any symbol for the adjuster mounting position: The adjuster can be mounted afterward. *2 The metal stopper with bumper is not available

- for ø6. *3 When mounting a retraction stroke end adjuster afterward, order the long adjustment bolt
- specifications (-X11). (A shock absorber cannot be used with this model.) *4 Extension stroke end adjuster mounting holes
- have been removed to reduce the total length of the table.

ø12 to ø25

						mounting				Functi	ional opti	on combi	ination			
					positio	on*1*8	Nil	1	2	3	4	5	6	7	8	9
Symbol		Adjuster type*9			Retraction stroke end	Without functional option	*2*3 With buffer	With end lock	*6 Axial piping	With buffer,	*2*6 With Buffer, axial piping	Centralized	* 7 Centralized adjuster (Symmetric)		*2*7 Buffer, Centralized adjuster (Symmetric)	
Z	W	ithout adjuste	r				0	0	0	0	0	0	×	×	×	×
ZA					•		0	×	×	0	×	×	0	0	×	×
ZB	Me	etal stopper w	/ith	bumper			0	×	0	0	×	×	×	×	×	×
ZC						•	0	×	×	0	×	×	0	0	0	0
ZD					•		0	×	×	0	×	×	0	0	0	0
ZE	Rι	ubber stopper					0	0	0	0	0	0	×	×	×	×
ZF						•	0	×	×	0	×	×	0	0	0	0
ZG					•		0	×	×	0	×	×	0	0	×	×
ZH	Sh	lock absorber	/RJ	J			0	×	0	0	×	×	×	×	×	×
ZJ						•	0	×	×	0	×	×	0	0	0	0
ZK							0	×	×	0	×	×	0	0	0	0
ZL	Me	Metal stopper				0	0	0	0	0	0	×	×	×	×	
ZM						•	0	×	×	0	×	×	0	0	0	0
ZN				Without adjuster	_ /	1	0	0*5	×	0	×	0*5	×	×	×	×
ZP	Sh	norter total		Rubber stopper			0	×	×	0	×	×	×	×	×	×
ZQ		ngth type*4		Shock absorber/RJ			0	×	×	0	×	×	×	×	×	×
ZS	101	igin type	fer	Metal stopper with bumper	1/		0	×	×	0	×	×	×	×	×	×
ZT			adjuster	Metal stopper	/		0	×	×	0	×	×	×	×	×	×
ZBF	F	Metal		Rubber stopper	•	•	0	×	×	0	×	×	0	0	×	×
ZBJ	adjuster	stopper with	end	Shock absorber/RJ	•		0	×	×	0	×	×	0	0	×	×
ZBM	Ę.	bumper		Metal stopper	•		0	×	×	0	×	×	0	0	×	×
ZEC		Rubber	stroke	Metal stopper with bumper	•		0	×	×	0	×	×	0	0	0	0
ZEJ	end	stopper		Shock absorber/RJ	•		0	×	×	0	×	×	0	0	0	0
ZEM	ê	зторрет	5	Metal stopper	•		0	×	×	0	×	×	0	0	0	0
ZHC	stroke	Shock	cti	Metal stopper with bumper	•		0	×	×	0	×	×	0	0	×	×
ZHF		absorber/BJ	Retraction	Rubber stopper	•		0	×	×	0	×	×	0	0	×	×
ZHM	<u>S</u>	42301201/10	ľ	Metal stopper	•		0	×	×	0	×	×	0	0	×	×
ZLC	enŝ	Metal		Metal stopper with bumper	•	•	0	×	×	0	×	×	0	0	0	0
ZLF	Extension	stopper		Rubber stopper	•	•	0	×	×	0	×	×	0	0	0	0
ZLJ	ш	Stopper		Shock absorber/RJ	•	•	0	×	×	0	×	×	0	0	0	0

*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 If it is necessary to install a retraction stroke end adjuster with a buffer

mechanism, use a buffer and centralized adjuster provided with a retraction stroke end adjuster on the rear end of the body. End lock or axial piping options cannot be mounted to centralized adjuster specification models.

*4 Extension stroke end adjuster mounting holes have been removed to reduce the total length of the table

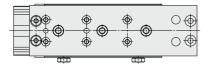
The shorter total length of the table. •5 The shorter total length type can be used, but a retraction stroke end adjuster cannot be mounted afterward. •6 For axial pring, there are no piping ports on both sides. •7 Only the centralized adjuster is symmetric.

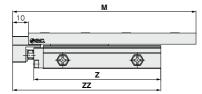
8 For details on the adjuster mounting position, refer to the previous page.
 9 The metal stopper with bumper option is not available for ø6.



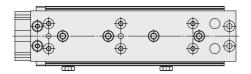
Dimensions (Dimensions other than those shown below are the same as the standard model.)

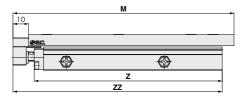
MXQ6AM



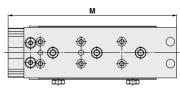


MXQ8AM



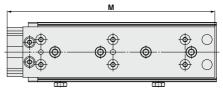


Shorter total length type



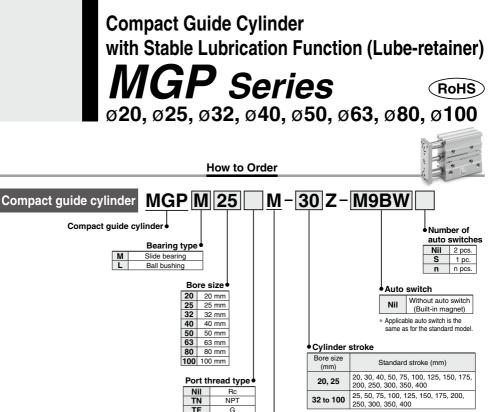
			(mm)
Model		М	ZZ
woder	Standard type	Shorter total length type	22
MXQ6AM-10Z	74	64.5	69.5
MXQ6AM-20Z	84	74.5	69.5
MXQ6AM-30Z	105	95.5	82.5
MXQ6AM-40Z	117	107.4	94.5
MXQ6AM-50Z	127	117.5	104.5

Shorter total length type



			(mm)
Model		М	77
WOUEI	Standard type	Shorter total length type	22
MXQ8AM-10Z	78	69.5	70.5
MXQ8AM-20Z	88	79.5	80.5
MXQ8AM-30Z	98	89.5	90.5
MXQ8AM-40Z	114	105.5	106.5
MXQ8AM-50Z	141	132.5	133.5
MXQ8AM-75Z	166	157.5	135.5

The MXQ12AM/MXQ16AM/MXQ20AM/ MXQ25AM dimensions are the same as the standard model.



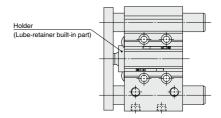
* Intermediate strokes are the same as standard model.

With stable lubrication function (Lube-retainer)

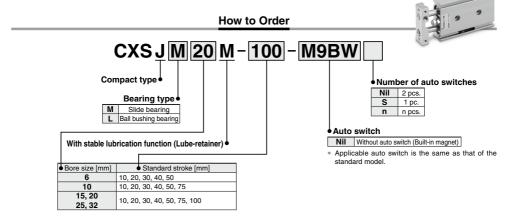
Specifications

Bore size (mm)	20	20 25 32 40 50 63 80 100											
Minimum operating pressure				0.15	MPa								
Other specifications		5	Same a	s the s	tandar	d mode	əl						
Dimensions		See right side											

Dimensions (Dimensions are the same as the standard model.)



With Stable Lubrication Function (Lube-retainer) Dual Rod Cylinder/Compact Type **CXSJ Series** ø6, ø10, ø15, ø20, ø25, ø32

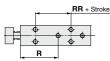


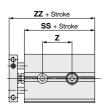
Specifications

Bore size [mm]	6	10	15	20	25	32					
Minimum operating pressure	0.2 MPa	0.15	MPa	0.1 MPa							
Piston speed	50 to 80	0 mm/s	50 to 70	00 mm/s	50 to 60	00 mm/s					
Other specifications	Same as the standard model										
Dimensions	See below.										

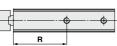
Dimensions (Dimensions other than those shown below are the same as those of the standard model.)

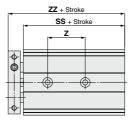
CXSJD6, 10M





CXSJD15 to 32M

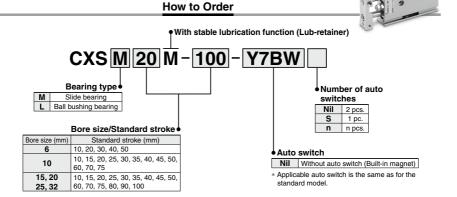




			[mm]
R	RR	SS	ZZ
25	13.5	36.5	46.5
33.5	17	49.5	61
44	—	63.5	76
51	—	73.5	90
52	—	76.5	93
66	—	90.5	110.5
	25 33.5 44 51 52	25 13.5 33.5 17 44 51 52	25 13.5 36.5 33.5 17 49.5 44 63.5 51 73.5 52 76.5

							[mm]						
Symbol		Z											
Model Stroke	10	20	30	40	50	75	100						
CXSJ□6M	19.5	29.5	39.5	49.5	59.5	—	—						
CXSJD10M	23	33	43	53	63	88	—						
CXSJD15M	3	1		41	51	61							
CXSJ 20M	3	6		46		66							
CXSJ□25M	3	7		47	67								
CXSJD32M	5	0		60	80								

Dual Rod Cylinder with Stable Lubrication Function (Lub-retainer) **CXS** Series ø6, ø10, ø15, ø20, ø25, ø32 RoHS

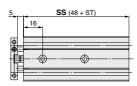


Specifications

Bore size (mm)	6	10	15	20	25	32							
Minimum operating pressure	0.2 MPa	0.15	MPa	0.1 MPa									
Piston speed	50 to 300 mm/s	50 to 800 mm/s	50 to 70	0 mm/s	50 to 600 mm/s								
Other specifications	Same as the standard model												
Dimensions		See below											

Dimensions (Dimensions other than those shown below are the same as the standard model.)

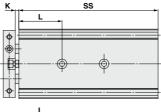
CXS₆

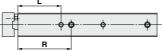




(mm)







(mm)

			()																	()
Model	K	L	R		Symbol								SS							
CXS□10	4	25	35	Model	Stroke	10	15	20	25	30	35	40	45	50	60	70	75	80	90	100
CXSD15	3	36	44.5	CXS	10	70	75	80	85	90	95	100	105	110	120	130	135	—		—
CXS 20	6	36	50.5	CXS	15	76	81	86	91	96	101	106	111	116	126	136	141	146	156	166
CXS ²⁵	6	36	52	CXS	20	86	91	96	101	106	111	116	121	126	136	146	151	156	166	176
CXS 32	4	40	66	CXS	25	88	93	98	103	108	113	118	123	128	138	148	153	158	168	178
				CXS	32	102	107	112	117	122	127	132	137	142	152	162	167	172	182	192

SMC