

# Made to Order Common Specifications: -XC4: With Heavy Duty Scraper



## 16 With Heavy Duty Scraper

It is suitable for using cylinders under the environment, where there are much dusts in a surrounding area by using a heavy duty scraper on the wiper ring, or using cylinders under earth and sand exposed to the die-casted equipment, construction machinery, or industrial vehicles.

### Applicable Series

Series	Description	Model	Action	Note	Vol. no. (for std model)
CM2	Air cylinder	CM2-Z	Double acting, Single rod	Head side locking type only (Except w/ air cushion)	②-1 From P. 172
		CM2W-Z	Double acting, Double rod		
	Centralized piping type	CM2□□P	Double acting, Single rod		
	End lock cylinder	CBM2	Double acting, Single rod		
CG1	Air cylinder	CG1-Z	Double acting, Single rod	Applicable to ø32 to ø63	②-1 From P. 292
MB	Air cylinder	MB-Z	Double acting, Single rod	Except ø125	②-1 From P. 392
		MBW-Z	Double acting, Double rod	Except ø125	
MB1	Air cylinder	MB1-Z	Double acting, Single rod	Except ø125	②-1 From P. 440
		MB1W-Z	Double acting, Double rod	Except ø125	
CA2 *	Air cylinder	CA2-Z	Double acting, Single rod	Head side locking type only	②-1 From P. 470
		CA2W-Z	Double acting, Double rod		
	End lock cylinder	CBA2	Double acting, Single rod		
CS1	Air cylinder	CS1	Double acting, Single rod		②-1 From P. 530
		CS1W	Double acting, Double rod		
CS2	Air cylinder	CS2	Double acting, Single rod		②-1 From P. 568
		CS2W	Double acting, Double rod		
CQ2	Air cylinder	CQ2-Z	Double acting, Single rod	Applicable to ø20 to ø100	②-1 From P. 773
		CQ2W-Z	Double acting, Double rod	Applicable to ø40 to ø100	
	Axial piping type (Centralized piping type)	CQP2	Double acting, Single rod	Applicable to ø32 to ø100	
	Long stroke	CQ2-Z	Double acting, Single rod		
RQ	Compact cylinder with air cushion	RQ	Double acting, Single rod		②-1 From P. 985
CV	Valve mounted air cylinder	CVM5	Double acting, Single rod		②-3 From P. 771
		CV3	Double acting, Single rod		②-3 From P. 812
		CVS1	Double acting, Single rod		
MGP	Compact guide cylinder	MGPM-Z	Double acting	Applicable to ø20 to ø100	②-2 From P. 432
		MGPL-Z	Double acting	Applicable to ø20 to ø100	
		MGPA-Z	Double acting	Applicable to ø20 to ø100	
MGG	Guide cylinder	MGG	Double acting	Applicable to ø32 to ø100	②-2 From P. 538
MGC	Guide cylinder	MGC	Double acting	Applicable to ø32 to ø50	②-2 From P. 578
CNA2	Cylinder with lock	CNA2	Double acting, Single rod		②-2 From P. 922
CNG	Cylinder with lock	CNG	Double acting, Single rod	Applicable to ø32, ø40	②-2 From P. 866

\* CA2□H (Air-hydro type) comes with a heavy duty scraper as standard.

### How to Order

Standard model no. **-XC4**

With heavy duty scraper

\* For the MGP series, refer to page 1764.

### ⚠ Caution

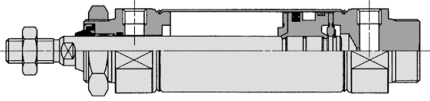
**Do not replace heavy duty scrapers.**

- Since heavy duty scrapers are press-fit, do not replace the cover only, but rather the entire rod cover assembly. The CM2 series cannot replace either heavy duty scraper or rod seal. (It goes for replacing retainer assembly for the CS1 series.) Replace the CNA2 series with the lock unit.

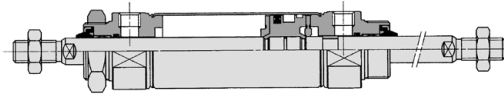
Specifications: Same as standard type

**Construction (Dimensions are the same as standard.)**

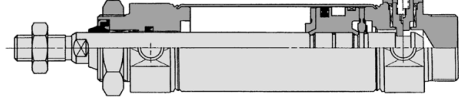
**CM2 series** Refer to page 1762 for the female rod end.



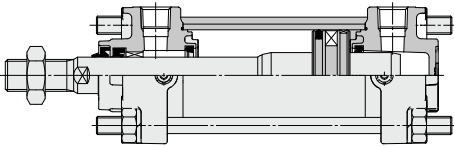
**CM2W series** Refer to page 1762 for the female rod end.



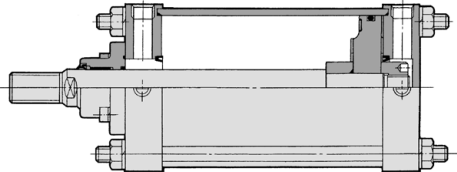
**CBM series (Only with head side locking)**



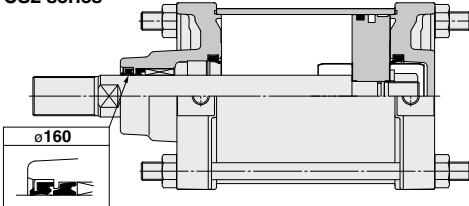
**CA2 series**



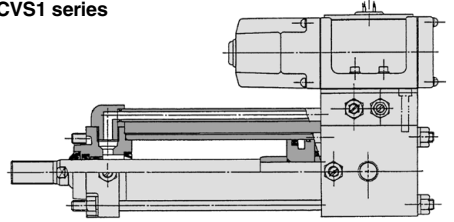
**CS1 series**



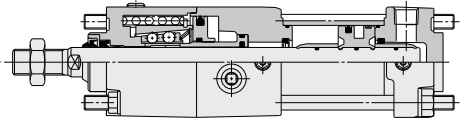
**CS2 series**



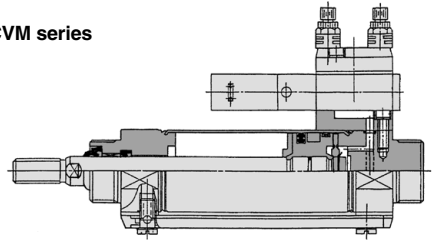
**CVS1 series**



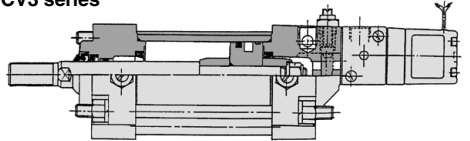
**CNA2 series**



**CVM series**



**CV3 series**



# Made to Order Common Specifications: -XC4: With Heavy Duty Scraper



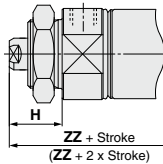
## 16 With Heavy Duty Scraper

**Dimensions** (Dimensions other than below are the same as standard type.)

### CM2 series CM2W series

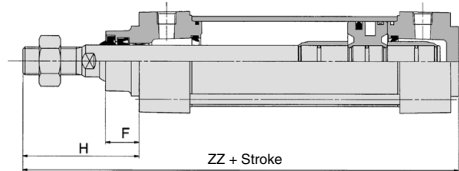
\* ( ): Denotes the dimensions for the CM2W series.

#### Female rod end



Bore size	CM2 series		CM2W series (mm)	
	H	ZZ	H	ZZ
20	24	99	24	110
25	24	99	24	110
32	24	101	24	112
40	26	130	26	140

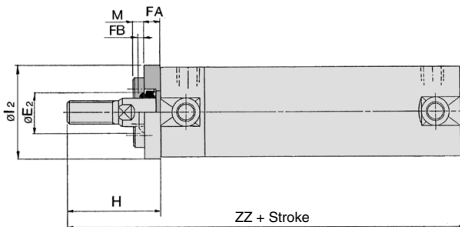
### MB series MB1 series



#### MB, MB1 Series (mm)

Bore size (mm)	F	H	ZZ
32	15	47	135
40	17	58	146
50	19	67	165
63	19	67	165
80	25	81	199
100	25	81	199

### CG1 series



#### CG1 Series

Bore size	E <sub>2</sub>	FA	FB	M	l <sub>2</sub>	(mm)			
						H		ZZ	
						Male thread	Female thread	Male thread	Female thread
32	17	8	3	5	38	48	28	121	101
40	21	8	3	3.5	47	58	29	138	109
50	26	9	3	4.5	58	66	30	158	122
63	26	9	3	5.5	72	66	30	158	122

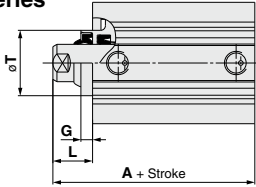
#### Long Stroke

ZZ	
Male thread	Female thread
129	109
147	118
170	134
170	134

\* On the axial foot type and the rod side flange type, the mounting bracket is wedged and bolted between the cylinder and the scraper at the time of shipment. On other types, it is placed in the same package (not assembled).

**Dimensions** (Dimensions other than below are the same as standard type.)

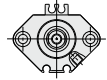
**CQ2 series**



- \* ( ) : Denotes the dimensions with auto switch magnet.
- \* Relation between bore size 20 to 32 piping port and mounting holes is as the following diagram.
- \* Please contact SMC for bore size 20 to 32 with both ends tapped and mounting brackets.



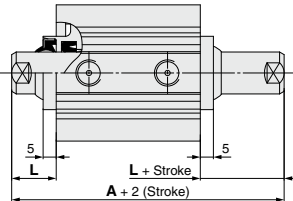
Without auto switch magnet  
Bore size 20 to 32  
With auto switch magnet  
Bore size 32



With auto switch magnet  
Bore size 20, 25

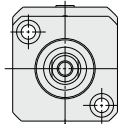
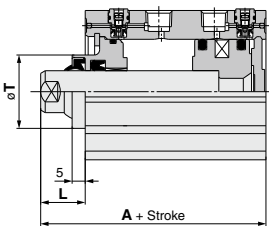
Bore size (mm)	A			G		L		T
	50 stroke or less	75, 100 stroke	125 to 300 stroke	100 stroke or less	125 stroke or more	100 stroke or less	125 to 300 stroke	
<b>20</b>	34 (46)	—	—	—	—	4.5	—	—
<b>25</b>	37.5 (47.5)	—	—	—	—	5	—	—
<b>32</b>	40 (50)	50	67.5	—	—	7	12	—
<b>40</b>	46.5 (56.5)	56.5	77	5	10	17	22	28
<b>50</b>	48.5 (58.5)	58.5	78.5	5	10	18	23	35
<b>63</b>	54 (64)	64	80	5	10	18	23	35
<b>80</b>	63.5 (73.5)	73.5	91	5	10	20	25	43
<b>100</b>	75 (85)	85	102.5	5	10	22	27	59

**CQ2W series**

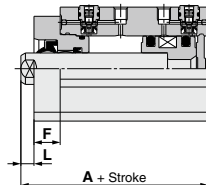


Bore size (mm)	A		L
	50 stroke or less	75, 100 stroke	
<b>40</b>	74 (84)	84	17
<b>50</b>	76.5 (86.5)	86.5	18
<b>63</b>	78 (88)	88	18
<b>80</b>	91 (101)	101	20
<b>100</b>	104.5 (114.5)	114.5	22

**RQ series**



Bore size 20, 25



Bore size (mm)	(mm)			
	A	F	L	T
<b>20</b>	46.5	10	4.5	—
<b>25</b>	51.5	10	5	—
<b>32</b>	54	10	7	—
<b>40</b>	61	—	17	28
<b>50</b>	67.5	—	18	35
<b>63</b>	73	—	18	35
<b>80</b>	83.5	—	20	43
<b>100</b>	98	—	22	59

- \* Please contact SMC for bore size 20 to 32 with both ends tapped and mounting brackets.
- \* Only standard strokes are applicable.

# Made to Order Common Specifications: -XC4: With Heavy Duty Scraper

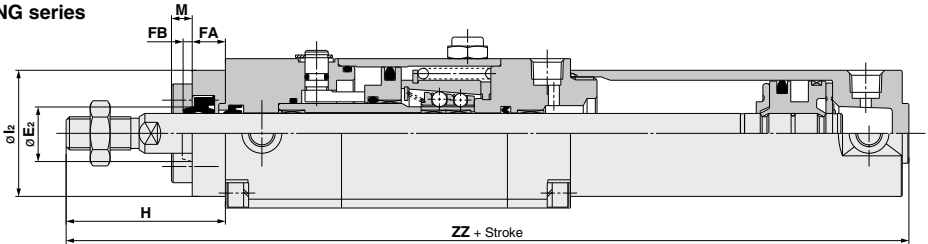


## 16 With Heavy Duty Scraper

Symbol  
**-XC4**

**Dimensions** (Dimensions other than below are the same as standard type.)

### CNG series

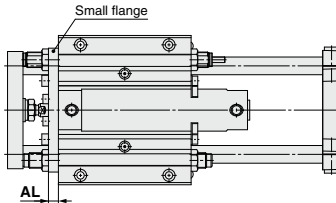


Bore size	E <sub>2</sub>	FA	FB	M	l <sub>2</sub>	H	ZZ
32	17	8	3	5	38	48	204
40	21	8	3	6	48	58	229

Long strokes	ZZ
	212
	238

- \* The above figure shows the rubber bumper type.
- \* On the axial foot type and the rod side flange type, the mounting bracket is wedged and bolted between the cylinder and the scraper at the time of shipment.

### MGG□B series ø32 to ø50

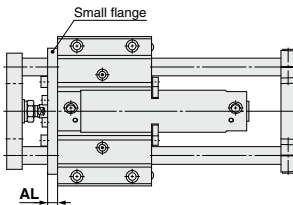


Bore size (mm)	AL (mm)
32	9
40	12
50	12

### Specifications: Same as standard type

- Note 1) Except ø20 and ø25
- Note 2) Heavy duty scrapers are attached to the piston rod and guide rods (front and back).
- Note 3) Rod side heavy duty scrapers for ø32 to ø50 are press-fit to large and small flanges.

### MGC□B series ø32 to ø50



Bore size (mm)	AL (mm)
32	9
40	12
50	12

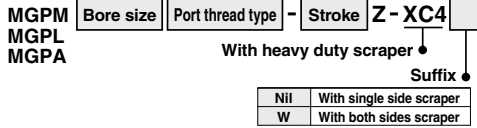
# Made to Order Common Specifications: -XC4: With Heavy Duty Scraper



## 16 With Heavy Duty Scraper

Symbol  
**-XC4**

### How to Order/MGP

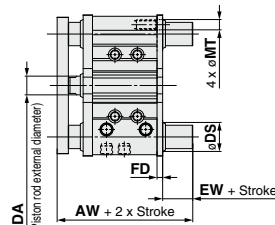
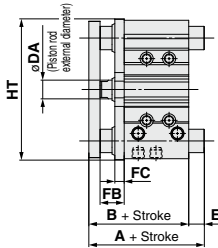


### Specifications

Applicable series	MGPM	MGPL/MGPA
Bearing type	Slide bearing	Ball bushing bearing
Bore size (mm)	20, 25, 32, 40, 50, 63, 80, 100	
Minimum operating pressure	With single side	0.12 MPa
	With both sides	0.14 MPa

Specifications other than above are the same as standard type.

### Dimensions (Dimensions other than below are the same as standard type.)



For cylinder with both sides scraper

### Common Dimensions:

MGPM, MGPL, MGPA (mm)

Bore size (mm)	B	DA	FB	FC	
				MGPM	MGPL/MGPA
20	63	10	18	9	5
25	63.5	10	17	9	5
32	69.5	14	22	9	5
40	76	14	22	9	5
50	82	20	26	10	8
63	87	20	26	10	5
80	106.5	25	34	15	6
100	126	30	41	15	6

### With Both Sides Scraper

Dimensions: AW, EW, FD, MT, DS (mm)

Bore size (mm)	AW	EW	FD	MT	DS <sup>*</sup>	
					MGPM	MGPL/MGPA
20	74	6	5	6	17	15
25	74.5	6	5	7	21	19
32	82.5	7	6	8.5	26	21
40	89	7	6	8.5	26	21
50	95	7	6	11	31	26
63	100	7	6	11	31	26
80	120.5	8	6	14	36	31
100	143	8	9	16	44	36

\* Bypass port size for guide rod with bottom mounting

### MGPM (Slide bearing) A, E, HT Dimensions (mm)

Bore size (mm)	A			E			HT
	50 st or less	Over 50 st to 200 st	Over 200 st	50 st or less	Over 50 st to 200 st	Over 200 st	
20	63	87.5	120	0	24.5	57	80
25	63.5	87.5	119.5	0	24	56	93
32	85	103.5	139.5	15.5	34	70	111.5
40	85	103.5	139.5	9	27.5	63.5	119
50	98.5	119.5	160.5	16.5	37.5	78.5	151
63	98.5	119.5	160.5	11.5	32.5	73.5	165
80	114.5	141.5	190.5	8	35	84	202
100	136.5	161.5	200.5	10.5	35.5	74.5	240

### MGPL, MGPA (Ball bushing bearing) A, E, HT Dimensions (mm)

Bore size (mm)	A			E			HT	
	30 st or less	Over 30 st to 100 st	Over 100 st to 200 st	30 st or less	Over 30 st to 100 st	Over 100 st to 200 st		
20	69	86	110	127.5	6	23	47	80
25	75.5	91.5	110.5	127.5	12	28	47	93

Bore size (mm)	A			E			HT		
	50 st or less	Over 50 st to 100 st	Over 100 st to 200 st	50 st or less	Over 50 st to 100 st	Over 100 st to 200 st			
32	89.5	106.5	126.5	148.5	20	37	57	79	110
40	89.5	106.5	126.5	148.5	13.5	30.5	50.5	72.5	118
50	101.5	122.5	142.5	169.5	19.5	40.5	60.5	87.5	146
63	101.5	122.5	142.5	169.5	14.5	35.5	55.5	82.5	160

Bore size (mm)	A			E			HT		
	25 st or less	Over 25 st to 50 st	Over 50 st to 200 st	25 st or less	Over 25 st to 50 st	Over 50 st to 200 st			
80	114.5	138.5	168.5	201.5	8	32	62	95	199
100	129.5	155.5	188.5	211.5	3.5	29.5	62.5	85.5	236

# Made to Order Common Specifications: -XC6: Made of Stainless Steel



## 18 Made of Stainless Steel

Suitable for the cases it is likely to generate rust by being immersed in the water and corrosion.

### Applicable Series

Series	Description	Model	Action	Vol. no. (for std model)
CM2	Air cylinder	CM2-Z	Double acting, Single rod Single acting (Spring return/extend)	②-1 From P. 172
		CM2W-Z	Double acting, Double rod	
	Non-rotating rod type	CM2K-Z	Double acting, Single rod Single acting (Spring return/extend)	
		CM2KW-Z	Double acting, Double rod	
	Direct mount type	CM2R-Z	Double acting, Single rod	
	Non-rotating rod, Direct mount type	CM2RK-Z	Double acting, Single rod	
	Centralized piping type	CM2□□P	Double acting, Single rod	
	Smooth cylinder	CM2Y-Z	Double acting, Single rod	
	Air-hydro type	CM2H-Z	Double acting, Single rod	
	Direct mount type, air-hydro type	CM2RH-Z	Double acting, Single rod	
End lock cylinder	CBM2	Double acting, Single rod		
CG1	Air cylinder	CG1-Z	Double acting, Single rod Single acting (Spring return)	②-1 From P. 292
	Double rod type	CG1W-Z	Double acting, Double rod	
	Direct mount type	CG1R-Z	Double acting, Single rod	
	Smooth cylinder	CG1Y-Z	Double acting, Single rod	
MB <sup>(2)</sup>	Air cylinder	MB-Z <sup>(4)</sup>	Double acting, Single rod	②-1 From P. 392
		MBW-Z <sup>(4)</sup>	Double acting, Double rod	
MB1 <sup>(2)</sup>	Air cylinder	MB1-Z <sup>(4)</sup>	Double acting, Single rod	②-1 From P. 440
	End lock cylinder	CB2A <sup>(1)</sup>	Double acting, Single rod	
CA2 <sup>(2)</sup>	Air-hydro type	CA2□H	Double acting, Single rod Double acting, Double rod	②-1 From P. 470
		CA2W□H	Double acting, Double rod	
CS1 <sup>(2)</sup>	Air cylinder	CS1	Double acting, Single rod	②-1 From P. 530
	Air-hydro type	CS1W	Double acting, Double rod	
	Air-hydro type	CS1□H	Double acting, Single rod	

Series	Description	Model	Action	Vol. no. (for std model)
CQS	Compact cylinder	CQS	Double acting, Single rod Single acting (Spring return/extend)	②-1 From P. 693
		CQSW	Double acting, Double rod	
	Non-rotating rod type	CQSK	Double acting, Single rod	
	Lateral load resisting type	CQS□S	Double acting, Single rod	
CQ2	Compact cylinder	CQ2-Z	Double acting, Single rod Single acting (Spring return/extend)	②-1 From P. 773
		CQ2W-Z	Double acting, Double rod	
	Axial piping type (Centralized piping type)	CQP2	Double acting, Single rod Single acting (Spring return/extend)	
	Long stroke	CQ2-Z	Double acting, Single rod	
	Lateral load resisting type	CQ2□S-Z	Double acting, Single rod	
	Water-resistant compact cylinder	CQ2□□-Z	Double acting, Single rod	
	Water resistant, axial piping	CQP2□□-Z	Double acting, Single rod	
MU	Plate cylinder	MU-Z	Double acting, Single rod	②-1 From P. 1036
		CVM5	Double acting, Single rod	
CV	Valve mounted air cylinder	CVM5K	Double acting, Single rod	②-3 From P. 771
		CV3	Double acting, Single rod	
		CVS1	Double acting, Single rod	
MGP	Compact guide cylinder	MGP-Z	Double acting	②-2 From P. 432
MGG	Guide cylinder	MGG	Double acting, Single rod	②-2 From P. 538
MGC	Guide cylinder	MGC	Double acting	②-2 From P. 578
CXS	Dual rod cylinder	CXSM	Double acting	②-2 From P. 749
CXSJ	Dual rod cylinder compact type	CXSJM	Double acting	②-2 From P. 737
RHC	High power cylinder	RHC	Double acting	②-3 From P. 351

Note 1) Head side locking type only

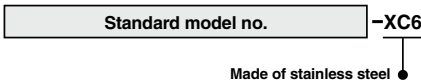
Note 2) There is a maximum stroke limit for CA2, MB, MB1 (ø100) and CS1 cylinders.

Note 3) The CS2 series, made of stainless steel, is applicable as "-XC68".

Note 4) Only available for ø125 type.

### How to Order

CM2, CG1, MB, MB1, CA2, CS1,  
CQS, CQ2, MU, CV



### Mounting brackets, accessories, and nut material: Stainless steel

The following accessories need to be prepared separately. (Please order separately.)  
Refer to the "Accessories" page of each series for details.

Series	Bore size (mm)	Foot	Flange	Single knuckle joint	Double knuckle joint	Mounting nut	Rod end nut	Accessories page
CM2	20, 25, 32, 40	○	○	○	○	○	○	Best Pneumatics No. 2-1 p. 190
	20, 25, 32, 40, 50, 63, 80, 100	○*	○*	○	○	—	○	
CG1	20, 25, 32, 40, 50, 63, 80, 100	—	—	○	○	—	○	Best Pneumatics No. 2-1 p. 309-1
	20, 25, 32, 40, 50, 63, 80, 100	—	—	○	○	—	○	
CQ2	20, 25, 32, 40, 50, 63, 80, 100	—	—	○	○	—	○	Best Pneumatics No. 2-1 p. 796
	20, 25, 32, 40, 50, 63, 80, 100	—	—	○	○	—	○	

\* Except bore size 20 and 25.

### Maximum Stroke

(mm)

Series	Double acting, Single rod	Double acting single rod with rod boot
CA2, MB, MB1 (Bore size 100) Others same as the standard type	1500 (Same as standard)	1000
CS1	1200	1200

### Specifications

Parts changed to stainless steel	Piston rod, Rod end nut
Specifications other than above and external dimensions	Same as standard

Note 1) In the case of CS1 cylinder, the piston rod is only made of stainless steel. Rod end nut is not attached.

Note 2) In the case of CQ cylinder, its snap ring and piston rod are made of stainless steel.

Rod end nut is also made of stainless steel for rod end male thread type.

## CQ (P) 2<sup>1/2</sup> series

Piston rod and rod end nut (male thread only) have been changed to stainless steel specification "-XC6". Also, the materials for hexagon socket head cap screws to fix  $\phi 20$  to  $\phi 32$  rod covers have been changed to stainless steel.

### Applicable Series

Series	Model	Action	Note	Vol. no. (for std model)	
CQ2	Water-resistant compact cylinder	CQ2□ <sup>1/2</sup> -Z	Double acting, Single rod	Applicable to $\phi 20$ , $\phi 25$ , $\phi 32$ .	②-1 From P. 949
	Water resistant, axial piping	CQP2□ <sup>1/2</sup>	Double acting, Single rod	Applicable to $\phi 32$ .	②-1 From P. 893

### Specifications

Parts changed to stainless steel	Piston rod, Rod end nut (male thread only), Rod cover holding hexagon socket head cap screw
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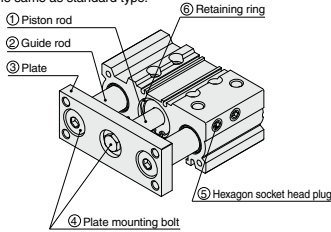
Specifications other than above and external dimensions	Same as standard
---	------------------

## MGP series

### Stainless Steel Modified Parts

XC6A	① ② ③ ④ ⑤ ⑥
XC6B	① ② ⑤ ⑥

Specifications and external dimensions other than above are the same as standard type.



## CXSJM series

### How to Order

CXSJM  Standard model no. **-XC6**

Made of stainless steel

### Specifications

Parts changed to stainless steel	Piston rod, retaining ring, hexagon socket head bolt, hexagon socket head set screw, dumper bolt, hexagon nut
Specifications other than above and external dimensions	Same as standard

## CXSM series

### How to Order

CXSM  Standard model no. **-XC6**

Made of stainless steel

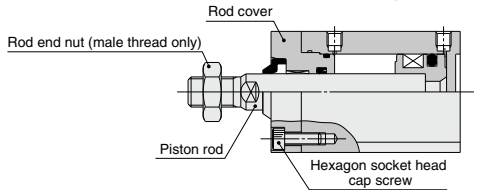
### Specifications

Parts changed to stainless steel	Piston rod, retaining ring, hexagon socket head bolt, hexagon socket head set screw, dumper bolt, hexagon nut, hexagon socket head plug
Specifications other than above and external dimensions	Same as standard

### How to Order

C□Q2□<sup>R</sup>  Standard model no. **-XC6A**  
C□QP2□<sup>R</sup>

Stainless steel used on all standard iron parts



### How to Order

MGP<sup>M</sup><sub>L</sub>  Standard model no. **-XC6 A**

Made of stainless steel

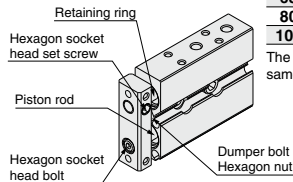
Suffix

A	Stainless steel used on all standard iron parts
B	Stainless steel rod parts

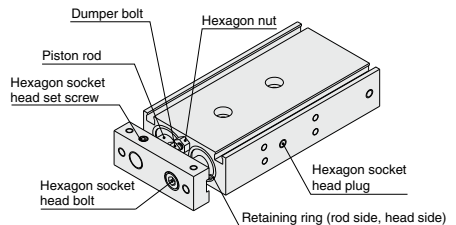
### Dimensions

Bore size (mm)	XC6A			XC6B
	DA	FA	FB	DA
12	(6)	8	5	(6)
16	(8)	8	5	(8)
20	(10)	9	7	(10)
25	(10)	10	6	(10)
32	(14)	12	10	(14)
40	(14)	12	10	(14)
50	20	16	12	20
63	20	16	12	20
80	25	19	21	25
100	30	22	28	30

The dimensions in ( ) are the same as standard type.



Note) The head cover retaining ring for  $\phi 6$  is made of special steel.





# Made to Order Common Specifications: -XC6: Made of Stainless Steel

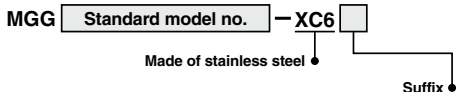


## 18 Made of Stainless Steel

Symbol  
**-XC6**

Suitable for the cases it is likely to generate rust by being immersed in the water and corrosion.

### MGG series How to Order

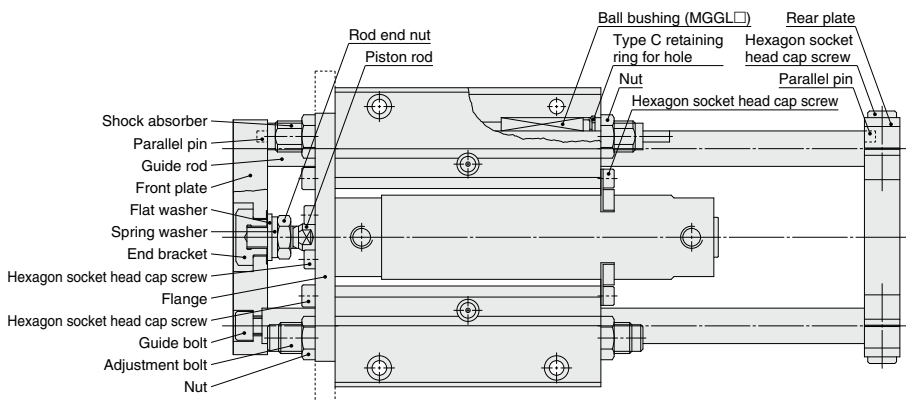


Nil	Piston rod, rod end nut made of stainless steel
<b>A</b>	Stainless steel used on all standard iron parts
<b>B</b>	Stainless steel rod end moving parts
<b>C</b>	Stainless steel rod parts

### Parts Changed to Stainless Steel

Symbol	Basic cylinder	Guide unit
<b>-XC6</b>		—
<b>-XC6A</b>	CDG1Z20 to 63-□-XC6 CDG1B20 to 100-□-XC6 (Piston rod, Rod end nut)	Flange, Front plate, Rear plate, Ball bushing (MGG□), Guide rod, End bracket, Flat washer, Spring washer, Type C retaining ring for hole, Adjustment bolt, Nut, Parallel pin, Hexagon socket head cap screw, Guide bolt
<b>-XC6B</b>		Front plate, Guide rod, End bracket, Flat washer, Spring washer, Parallel pin (for front plate), Guide bolt
<b>-XC6C</b>		Guide rod

\* Specifications other than the above are the same as the standard type.  
Note) RBL (coolant resistant) type shock absorbers are used for -XC6A.

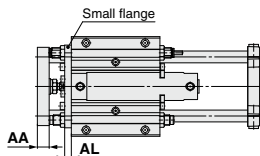


### Dimensions (Dimensions other than below are the same as standard type.)

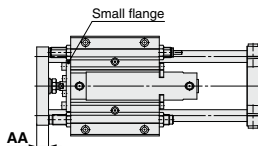
MGG□B20 to 50-□-XC6A

MGG□B20 to 50-□-XC6B  
MGG□B20 to 50-□-XC6C

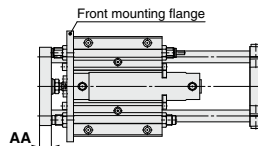
MGG□F20 to 50-□-XC6A  
MGG□F20 to 50-□-XC6B  
MGG□F20 to 50-□-XC6C



Bore size (mm)	(mm)	
	AA	AL
20	12	9
25	16	9
32	16	9
40	19	12
50	25	12



Bore size (mm)	(mm)
	AA
20	12
25	16
32	16
40	19
50	25



Bore size (mm)	(mm)
	AA
20	12
25	16
32	16
40	19
50	25

# Made to Order Common Specifications: -XC6: Made of Stainless Steel



## 18 Made of Stainless Steel

Symbol  
**-XC6**

Suitable for the cases it is likely to generate rust by being immersed in the water and corrosion.

### MGC series How to Order

MGC  Bearing type  Mounting type  Bore size  Stroke  Equipped/Not equipped back plate  Auto switch  C  -XC6

Note) For the XC6A, XC6B, and XC6C, this symbol is displayed when the D-A9□ or M9□ type auto switch is specified. It does not apply to other auto switches (such as the D-C7□ and H7□). (Nil)

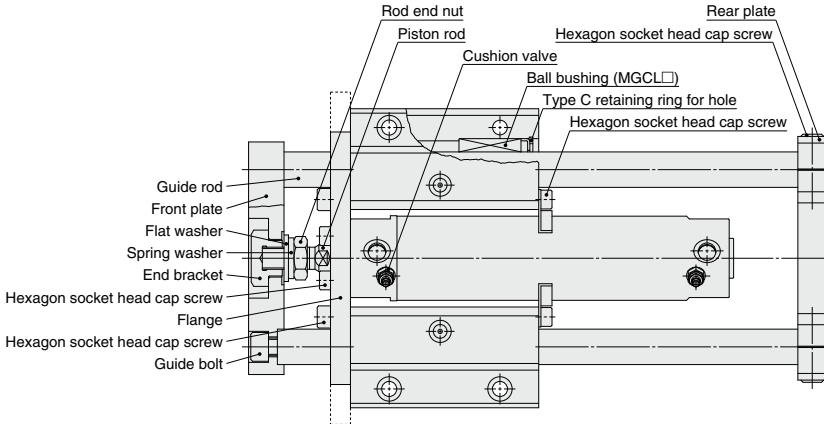
Made of stainless steel  
Suffix

<b>Nil</b>	Piston rod, rod end nut made of stainless steel
<b>A</b>	Stainless steel used on all standard iron parts
<b>B</b>	Stainless steel rod end moving parts
<b>C</b>	Stainless steel rod parts

### Parts Changed to Stainless Steel

Symbol	Basic cylinder	Guide unit
<b>-XC6</b>	<b>CDG1ZA20 to 50-□-XC6</b> (Piston rod, Rod end nut)	—
<b>-XC6A</b>	<b>CDG1BA20 to 50-□-X1057</b> (Piston rod, Rod end nut, Cushion valve)	Flange, Front plate, Rear plate, Ball bushing (MGCL□), Guide rod, End bracket, Flat washer, Spring washer, Type C retaining ring for hole, Hexagon socket head cap screw, Guide bolt
<b>-XC6B</b>		Front plate, Guide rod, End bracket, Flat washer, Spring washer, Guide bolt
<b>-XC6C</b>		Guide rod

\* Specifications other than the above are the same as the standard type.



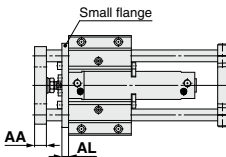
### Dimensions (Dimensions other than below are the same as standard type.)

MGC□B20 to 50-□-XC6A

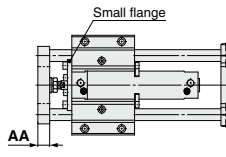
MGC□B20 to 50-□-XC6B

MGC□F20 to 50-□-XC6A

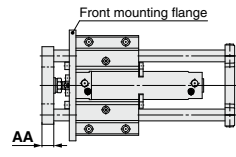
MGC□F20 to 50-□-XC6B



Bore size (mm)	(mm)	
	AA	AL
20	12	9
25	16	9
32	16	9
40	19	12
50	25	12



Bore size (mm)	(mm)
	AA
20	12
25	16
32	16
40	19
50	25



Bore size (mm)	(mm)
	AA
20	12
25	16
32	16
40	19
50	25



# Made to Order Common Specifications: -XC22: Fluororubber Seals



## 29 Fluororubber Seals

### Applicable Series

Series	Description	Model	Action	Note	Vol. no. (for std model)
CJP	Pin cylinder	CJP2	Double acting, Single rod	Except ø4. Packing set (7)	2-1 From P. 23
		CJPB	Single acting (Panel mounting)	Except ø4	
		CJPS	Single acting (Embedded)	Except ø4	
CJ2	Air cylinder	CJ2-Z	Double acting, Single rod	Except with air cushion	2-1 From P. 46
		CJ2W-Z	Single acting (Spring return/extend)		
	Non-rotating rod type	CJ2K-Z	Double acting, Double rod	Except with air cushion	
CM2	Direct mount type	CJ2R-Z	Double acting, Single rod		2-1 From P. 172
		CM2-Z	Double acting, Single rod		
	Air cylinder	CM2W-Z	Double acting, Double rod		
		CM2K-Z	Double acting, Single rod		
		CM2KW-Z	Double acting, Double rod		
	Direct mount type	CM2R-Z	Double acting, Single rod		
	Non-rotating rod, Direct mount type	CM2RK-Z	Double acting, Single rod		
End lock cylinder	CBM2	Double acting, Single rod			
CG1	Air cylinder	CG1-Z	Double acting, Single rod	Without a bumper for cylinders with a rubber bumper	2-1 From P. 292 (5)
	Double rod type	CG1W-Z	Double acting, Double rod	Without a bumper for cylinders with a rubber bumper	
	Direct mount type	CG1R-Z	Double acting, Single rod	Without a bumper for cylinders with a rubber bumper	
MB	Air cylinder	MB-Z	Double acting, Single rod	Except ø125	2-1 From P. 392
		MBW-Z	Double acting, Double rod	Except ø125	
MB1	Air cylinder	MB1-Z	Double acting, Single rod	Air cushion only	2-1 From P. 440
		MB1W-Z	Double acting, Double rod	Air cushion only	
CA2	Air cylinder	CA2-Z	Double acting, Single rod		2-1 From P. 470
		CA2W-Z	Double acting, Double rod		
	End lock cylinder	CBA2	Double acting, Single rod		
CS1	Air cylinder	CS1	Double acting, Single rod	Applicable bore: Lube type 125 to 300, Non-lube type 125 to 200	2-1 From P. 530
CS2	Air cylinder	CS2	Double acting, Single rod		2-1 From P. 568
		CS2W	Double acting, Double rod		
CUJ	Mini free mount cylinder	CUJ	Double acting, Single rod	Except ø4, and single acting, spring return type. ø12 to ø20: A bumper is a standard product.	2-1 From P. 596
CU	Free mount cylinder	CU	Double acting, Single rod		2-1 From P. 623
			Single acting (Spring return/extend)		
	Non-rotating rod type	CUK	Double acting, Single rod		
			Single acting (Spring return/extend)		
Long stroke	CU	Double acting, Single rod			
	CUK	Double acting, Single rod			
MGP	Compact guide cylinder	MGPM-Z	Double acting	Slide bearing only	2-2 From P. 432
MGQ	Compact guide cylinder	MGQM	Double acting	Slide bearing only	2-2 From P. 520 (6)
MGG	Guide cylinder	MGG	Double acting	Without rubber bumper	2-2 From P. 538
MGC	Guide cylinder	MGC	Double acting		2-2 From P. 578
CV	Valve mounted air cylinder	CV3	Double acting, Single rod		2-3 From P. 812
		CVS1	Double acting, Single rod		
CEP1	High precision stroke reading cylinder	CEP1	Double acting, Single rod		2-3 From P. 647
MXH	Compact slide	MXH-Z	Double acting		2-2 From P. 19
CXS	Dual rod cylinder	CXS	Double acting		2-2 From P. 749
CXSJ	Dual rod cylinder compact type	CXSJ	Double acting		2-2 From P. 737
CX2	Slide unit	CX2	Double acting		2-2 From P. 650
CXW	Slide unit	CXW	Double acting		2-2 From P. 659
MK	Rotary clamp cylinder	MK	Double acting	The bumper is a standard product.	2-3 From P. 389

### How to Order

Standard model no. **-XC22**

Fluororubber seals

### Specifications

Seal material	Fluororubber	
Ambient temperature range	With auto switch : -10 to 60°C (0°C to 60°C for CS1, CS2 series) Without auto switch : -10 to 70°C (0°C to 70°C for CS1, CS2 series)	Note 1) (No freezing)
Specifications other than above and external dimensions	Same as standard type for each series	

Note 1) Please confirm with SMC, as the type of chemical and the operating temperature may not allow the use of this product.

Note 2) Cylinders with auto switches can also be produced; however, auto switch related parts (auto switch units, mounting brackets, built-in magnets) are the same as standard products. Before using these, please contact SMC regarding their suitability for the operating environment.

Note 3) It is only applicable for the cylinder main body section as to CV3, CVS1 series.

Note 4) The MGG series is using a shock absorber RBL type.

Note 5) No cushion is equipped for N type. Piston speed is ranged from 50 to 500 mm/s.

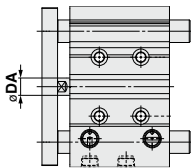
Note 6) The MGP and MGQ series are without a cushion. Confirm the kinetic energy.

Note 7) Refer to the construction of the standard type for the details of the packing set for CJP2□6,10 and 16.

**How to Order**

MGPM Standard model no. **-XC22**  
↓  
 Fluororubber seals

**Dimensions**



(mm)			
Bore size (mm)	DA	Bore size (mm)	DA
<b>12</b>	(6)	<b>40</b>	(14)
<b>16</b>	(8)	<b>50</b>	20
<b>20</b>	(10)	<b>63</b>	20
<b>25</b>	(10)	<b>80</b>	25
<b>32</b>	(14)	<b>100</b>	30

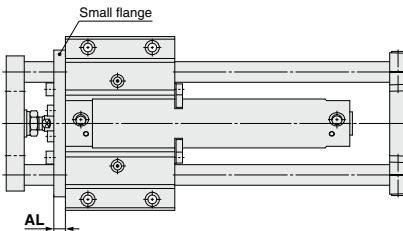
The dimensions in ( ) are the same as standard type.

**How to Order**

MGC Standard model no. **-XC22**  
↓  
 Fluororubber seals

**Dimensions** (Dimensions other than below are the same as standard type.)

**MGCLB series**



(mm)	
Bore size (mm)	AL
<b>20</b>	9
<b>25</b>	9
<b>32</b>	9
<b>40</b>	12
<b>50</b>	12

# Made to Order Common Specifications: -XC35: With Coil Scraper



## 39 With Coil Scraper

Symbol  
**-XC35**

It gets rid of frost, ice, weld spatter, cutting chips adhered to the piston rod, and protects the seals, etc.

### Applicable Series

Series	Description	Model	Action	Note	Vol. no. (for std model)
CM2	Air cylinder	CM2-Z	Double acting, Single rod	Except with air cushion	②-1 From P. 172
		CM2W-Z	Double acting, Double rod	Except with air cushion	
	Cylinder with end lock	CBM2	Double acting, Single rod	Lock in head end only (Except with air cushion)	
CG1	Air cylinder	CG1-Z	Double acting, Single rod		②-1 From P. 292
MB	Air cylinder	MB-Z	Double acting, Single rod	Except ø125	②-1 From P. 392
		MBW-Z	Double acting, Double rod	Except ø125	
MB1	Air cylinder	MB1-Z	Double acting, Single rod		②-1 From P. 440
		MBW-Z	Double acting, Double rod		
CA2	Air cylinder	CA2-Z	Double acting, Single rod		②-1 From P. 470
		CA2W-Z	Double acting, Double rod		
	Cylinder with end lock	CBA2	Double acting, Single rod		
CS1	Air cylinder	CS1	Double acting, Single rod		②-1 From P. 530
		CS1W	Double acting, Double rod		
CS2	Air cylinder	CS2	Double acting, Single rod		②-1 From P. 568
		CS2W	Double acting, Double rod		
CQ2	Compact cylinder	CQ2-Z	Double acting, Single rod	Applicable to ø32 to ø100	②-1 From P. 773
		CQ2W-Z	Double acting, Double rod	Applicable to ø32 to ø100	
		CQP2	Double acting, Single rod	Applicable to ø32 to ø100, Except with bracket	
	Long stroke	CQ2-Z	Double acting, Single rod	Applicable to ø32 to ø100	
RQ	Compact cylinder with air cushion	RQ	Double acting, Single rod	Applicable to ø32 to ø100	②-1 From P. 985
MWB	Cylinder with lock	MWB	Double acting, Single rod		ES20-246
		MWBW	Double acting, Double rod		
	Lock unit	MWB-UT	—		
MNB	Cylinder with lock	MNB	Double acting, Single rod		②-2 From P. 890
CNA2	Cylinder with lock	CNA2	Double acting, Single rod		②-2 From P. 922
CNG	Cylinder with lock	CNG	Double acting, Single rod		②-2 From P. 866
CLS	Cylinder with lock	CLS	Double acting, Single rod	Applicable to ø125 to ø160 (ø180 to ø250 as standard)	②-2 From P. 982
CLQ	Compact cylinder with lock	CLQ	Double acting, Single rod	Applicable to ø40 to ø100	②-2 From P. 1008
CV	Valve mounted cylinder	CVS1	Double acting, Single rod		②-3 From P. 832
MGP	Compact guide cylinder	MGPM-Z	Double acting	Applicable to ø20 to ø100	②-2 From P. 432
		MGPL-Z	Double acting	Applicable to ø20 to ø100	
		MGPA-Z	Double acting	Applicable to ø20 to ø100	
MGG	Guide cylinder	MGG	Double acting	Applicable to ø32 to ø100	②-2 From P. 538
MGC	Guide cylinder	MGC	Double acting	Applicable to ø32 to ø50	②-2 From P. 578

### How to Order

Standard model no.

-XC35

With coil scraper

\* For MGP series, refer to page 1827.

Specifications: Same as standard type

# Made to Order Common Specifications: -XC35: With Coil Scraper

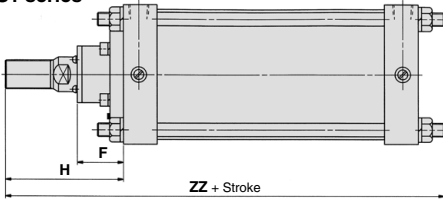


## 39 With Coil Scraper

### Dimensions (Dimensions other than below are the same as standard type.)

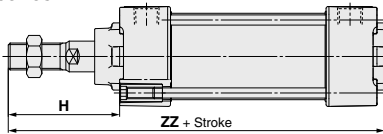
The dimensions of the CS2 series are the same as the standard type.

#### CS1 series



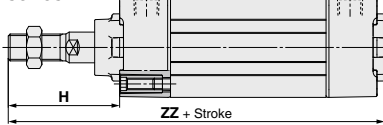
Bore size (mm)	Without auto switch			With auto switch		
	F	H	ZZ	F	H	ZZ
125	50	120	245	50	120	245
140	50	120	245	50	120	245
160	50	130	266.5	50	130	266.5
180	55	145	291	55	145	295
200	55	145	291	55	145	300
250	69	175	357.5	—	—	—
300	69	190	387.5	—	—	—

#### MB series



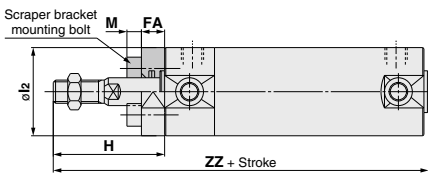
Bore size	(mm)	
	H	ZZ
32	47	135
40	58	146
50	67	165
63	67	165
80	81	199
100	81	199

#### MB1 series



Bore size	(mm)	
	H	ZZ
32	47	135
40	58	146
50	67	165
63	67	165
80	81	199
100	81	199

#### CG1 series

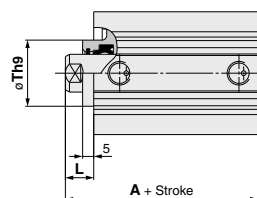


Bore size	Stroke range		FA	H		l <sub>2</sub>	M	ZZ	
	Standard	Long stroke		Male thread	Female thread			Male thread	Female thread
20	Up to 200	201 to 1500	6	39	27	27	4	110 (118)	98 (106)
25	Up to 300	301 to 1500	6	44	28	32	5	115 (123)	99 (107)
32	Up to 300	301 to 1500	6	44	28	38	5	117 (125)	101 (109)
40	Up to 300	301 to 1500	7	54	29	47	3.5	134 (143)	109 (118)
50	Up to 300	301 to 1500	7	62	30	58	4.5	154 (166)	122 (134)
63	Up to 300	301 to 1500	7	62	30	72	5.5	154 (166)	122 (134)

Note) ( ) : Long stroke

- \* Other dimensions are the same as the double acting, single rod type.
- \* On the axial foot and rod side flange types, the mounting bracket is wedged and bolted between the cylinder and the scraper at the time of shipment. Others are shipped together (but not assembled).
- \* The long stroke shows the maximum manufacturable stroke. For details about maximum stroke that can be used for each mounting bracket, refer to the stroke selection table on front matter pages.

#### CQ2 series

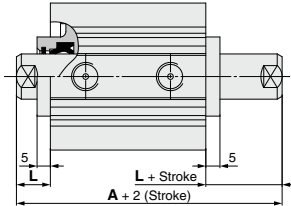


Bore size	A			L		T
	Standard type, Axial piping type		Long stroke	Standard type, Axial piping type	Long stroke	
	50 stroke or less	75, 100 stroke	125 to 300 stroke	100 stroke or less	125 to 300 stroke	
32	35 (45)	45	62.5	12	17	23 <sup>0</sup> <sub>-0.062</sub>
40	41.5 (51.5)	51.5	72	12	17	28 <sup>0</sup> <sub>-0.062</sub>
50	43.5 (53.5)	53.5	73.5	13	18	35 <sup>0</sup> <sub>-0.062</sub>
63	49 (59)	59	75	13	18	35 <sup>0</sup> <sub>-0.062</sub>
80	58.5 (68.5)	68.5	86	15	20	43 <sup>0</sup> <sub>-0.062</sub>
100	70 (80)	80	97.5	17	22	59 <sup>0</sup> <sub>-0.074</sub>

\* ( ) : Denotes the dimensions with auto switch magnet.

**Dimensions** (Dimensions other than below are the same as standard type.)

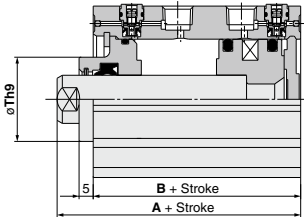
**CQ2W series**



Bore size	A		L
	50 stroke or less	75, 100 stroke	
<b>32</b>	54.5 (64.5)	64.5	12
<b>40</b>	64 (74)	74	12
<b>50</b>	66.5 (76.5)	76.5	13
<b>63</b>	68 (78)	78	13
<b>80</b>	81 (91)	91	15
<b>100</b>	94.5 (104.5)	104.5	17

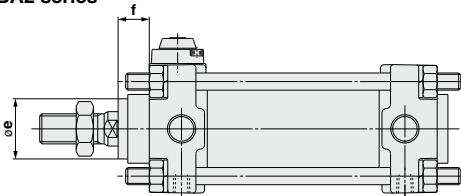
\* ( ) : Denotes the dimensions with auto switch magnet.

**RQ series**



Bore size (mm)	A	B	Th9
<b>32</b>	49	37	23 <sup>0</sup> <sub>-0.052</sub>
<b>40</b>	56	44	28 <sup>0</sup> <sub>-0.052</sub>
<b>50</b>	62.5	49.5	35 <sup>0</sup> <sub>-0.062</sub>
<b>63</b>	68	55	35 <sup>0</sup> <sub>-0.062</sub>
<b>80</b>	78.5	63.5	43 <sup>0</sup> <sub>-0.062</sub>
<b>100</b>	93	76	59 <sup>0</sup> <sub>-0.074</sub>

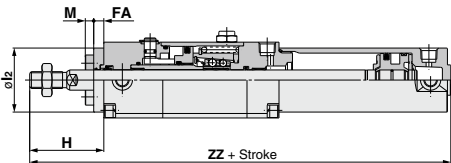
**CBA2 series**



Bore size (mm)	øe	f	
		With rod side locking. With both-side locking	
<b>40</b>	28	14.5	
<b>50</b>	32	16.5	
<b>63</b>	32	14	
<b>80</b>	37	16	
<b>100</b>	44	17.5	

The above diagram shows the rod side locking and manual releasing non-locking types.  
The CBA2 series head side locking type is the same as the standard type.  
The dimensions of the manual releasing non-locking type are the same as indicated above.

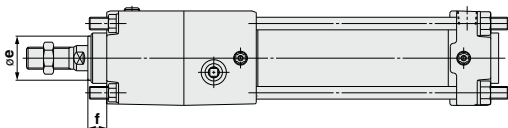
**CNG series**



Bore size (mm)	FA	M	l <sub>2</sub>	H	ZZ
<b>20</b>	6	4	27	39	182
<b>25</b>	6	5	32	44	197
<b>32</b>	6	5	38	44	200
<b>40</b>	7	6	48	54	225
					ZZ
					190
					205
					208
					234

Long stroke

**CNA2 series**



Bore size (mm)	e	f
<b>40</b>	28	12
<b>50</b>	32	12.5
<b>63</b>	32	12.5
<b>80</b>	37	16.5
<b>100</b>	44	17

\* Other dimensions are the same as the standard type. (The figure shows a type with a rubber bumper.)

\* On the axial foot and rod side flange types, the mounting bracket is wedged and bolted between the cylinder and the scraper at the time of shipment.



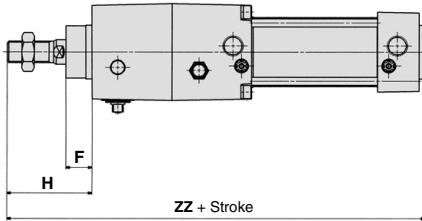
# Made to Order Common Specifications: -XC35: With Coil Scraper



## 39 With Coil Scraper

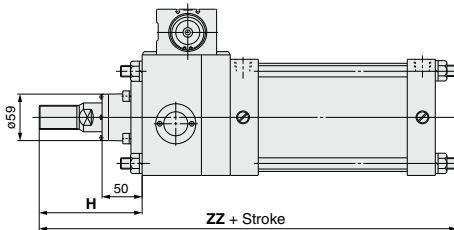
**Dimensions** (Dimensions other than below are the same as standard type.)

### MNB series



Bore size (mm)	F	H	ZZ
32	16	47	205
40	18	56	221
50	19	63	250
63	19	63	264
80	25	77	326
100	25	77	346

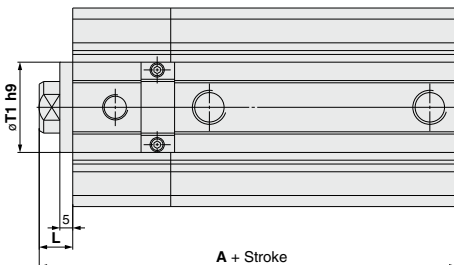
### CLS series



Bore size (mm)	H	ZZ
125	120	355
140	120	355
160	130	398.5

\* ø180 to ø250: A coil scraper is attached as standard.

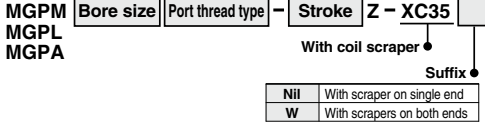
### CLQ series



Bore size (mm)	Stroke range (mm)	A		L	T1 h9
		Without auto switch	With auto switch		
40	10 to 50	75.5	85.5	12	28 <sup>0</sup> <sub>-0.052</sub>
	75,100	85.5			
	50	10 to 50	78.5		
75,100	88.5				
63	10 to 50	87	97	13	35 <sup>0</sup> <sub>-0.062</sub>
	75,100	97			
	80	10 to 50	101.5		
75,100		111.5			
100		10 to 50	120	130	17
	75,100	130			



**How to Order**

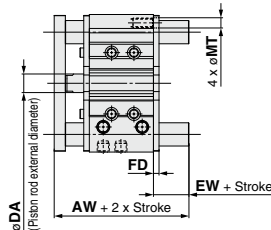
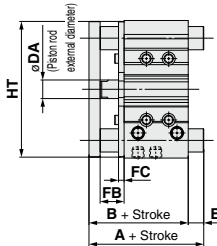


**Specifications**

Applicable series		MGPM	MGPL, MGPA
Bearing type		Slide bearing	Ball bushing bearing
Bore size (mm)		20, 25, 32, 40, 50, 63, 80, 100	
Minimum operating pressure	With single end	0.12 MPa	
	With both ends	0.14 MPa	

\* Specifications other than above are the same as standard type.

**Dimensions (Dimensions other than below are the same as standard type.)**



For cylinder with both sides scraper

**Common Dimensions:**

Bore size (mm)	B	DA	FB	FC	
				MGPM	MGPL/MGPA
20	63	10	18	5	5
25	63.5	10	17	6	5
32	69.5	14	22	6	5
40	76	14	22	6	5
50	82	20	26	6	5
63	87	20	26	6	5
80	106.5	25	34	8	6
100	126	30	41	9	6

**With Both Sides Scraper**

Dimensions: AW, EW, FD, MT (mm)

Bore size (mm)	AW	EW	FD	MT
20	74	6	5	6
25	74.5	6	5	7
32	82.5	7	6	9
40	89	7	6	8.5
50	95	7	6	11
63	100	7	6	11
80	120.5	8	6	14
100	143	8	9	16

**MGPM (Slide bearing) A, E, HT Dimensions (mm)**

Bore size (mm)	A			E			HT
	50 st or less	Over 50 st to 200 st	Over 200 st	50 st or less	Over 50 st to 200 st	Over 200 st	
20	63	87.5	120	0	24.5	57	80
25	63.5	87.5	119.5	0	24	56	93
32	85	103.5	139.5	15.5	34	70	110
40	85	103.5	139.5	9	27.5	63.5	118
50	98.5	119.5	160.5	16.5	37.5	78.5	146
63	98.5	119.5	160.5	11.5	32.5	73.5	160
80	114.5	141.5	190.5	8	35	84	199
100	136.5	161.5	200.5	10.5	35.5	74.5	236

**MGPL, MGPA (Ball bushing bearing) A, E, HT Dimensions (mm)**

Bore size (mm)	A				E				HT
	30 st or less	Over 30 st to 100 st	Over 100 st to 200 st	Over 200 st	30 st or less	Over 30 st to 100 st	Over 100 st to 200 st	Over 200 st	
20	69	86	110	127.5	6	23	47	64.5	80
25	75.5	91.5	110.5	127.5	12	28	47	64	93

Bore size (mm)	A				E				HT
	50 st or less	Over 50 st to 100 st	Over 100 st to 200 st	Over 200 st	50 st or less	Over 50 st to 100 st	Over 100 st to 200 st	Over 200 st	
32	89.5	106.5	126.5	148.5	20	37	57	79	110
40	89.5	106.5	126.5	148.5	13.5	30.5	50.5	72.5	118
50	101.5	122.5	142.5	169.5	19.5	40.5	60.5	87.5	146
63	101.5	122.5	142.5	169.5	14.5	35.5	55.5	82.5	160

Bore size (mm)	A				E				HT
	25 st or less	Over 25 st to 50 st	Over 50 st to 200 st	Over 200 st	25 st or less	Over 25 st to 50 st	Over 50 st to 200 st	Over 200 st	
80	114.5	138.5	168.5	201.5	8	32	62	95	199
100	129.5	155.5	188.5	211.5	3.5	29.5	62.5	85.5	236



# Made to Order Common Specifications: -XC35: With Coil Scraper



**39** With Coil Scraper

Symbol  
**-XC35**

## How to Order

MGG  -XC35  
MGC  -XC35  
With coil scraper ●

**Specifications: Same as the standard type of each series**

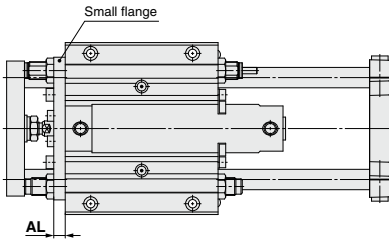
Note 1) Except  $\phi 20$  and  $\phi 25$

Note 2) Coil scrapers are attached to the piston rod and guide rods (front and back).

**Dimensions** (Dimensions other than below and the MGG□B series ( $\phi 63$  to  $\phi 100$ ) are the same as standard type.)

### MGG□B series

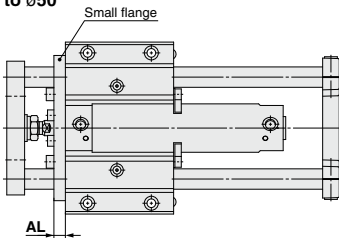
$\phi 32$  to  $\phi 50$



(mm)	
Bore size (mm)	AL
32	9
40	12
50	12

### MGC□B series

$\phi 32$  to  $\phi 50$



(mm)	
Bore size (mm)	AL
32	9
40	12
50	12

# Made to Order Common Specifications: -XC85: Grease for Food Processing Equipment



## 59 Grease for Food Processing Equipment

Symbol  
**-XC85**

Food grade grease (certified by NSF-H1) is used as lubricant.

### Applicable Series

Series	Description	Model	Action	Note	Vol. no. (for std model)
CM2	Air cylinder	CM2-Z	Double acting, Single rod		②-1 From P. 172
	Direct mount type	CM2W-Z	Double acting, Double rod		
	Centralized piping type	CM2□P	Double acting, Single rod	Except with rod boot	
CG1	Air cylinder	CG1-Z	Double acting, Single rod		②-1 From P. 292
	Direct mount type	CG1W-Z	Double acting, Double rod		
	Direct mount type	CG1R-Z	Double acting, Single rod		
CA2	Air cylinder	CA2-Z	Double acting, Single rod		②-1 From P. 470
		CA2W-Z	Double acting, Double rod		
CQS	Compact cylinder	CQS	Double acting, Single rod		②-1 From P. 693
		CQS	Single acting, Single rod		
		CQSW	Double acting, Double rod		
		CQS	Double acting, Single rod		
CQ2	Compact cylinder	CQ2-Z	Double acting, Single rod		②-1 From P. 773
		CQ2-Z	Single acting, Single rod		
		CQ2W-Z	Double acting, Double rod		
	Large bore size	CQ2B-Z	Double acting, Single rod		
		CQ2WB-Z	Double acting, Double rod		
	Long stroke	CQ2-Z	Double acting, Single rod		
	Non-rotating rod	CQ2K-Z	Double acting, Single rod		
		CQ2KW-Z	Double acting, Double rod		
	Axial piping type (Centralized piping type)	CQP2	Double acting, Single rod		
		CQP2	Single acting, Single rod		
Anti-lateral load	CQ2□S-Z	Double acting, Single rod			
With end lock	CBQ2	Double acting, Single rod			
MGP	Compact guide cylinder	MGP-Z	Double acting, Single rod		②-2 From P. 432
	With air cushion	MGP-□AZ	Double acting, Single rod		
	With end lock	MGP	Double acting, Single rod		
	Heavy duty guide rod type	MGPS	Double acting, Single rod		
	High precision ball bushing type	MGPA-Z	Double acting, Single rod		
CXSJ	Dual rod cylinder	CXSJ	Double acting		②-2 From P. 737
CXS		CXS	Double acting		②-2 From P. 749

### How to Order

Standard model no. — **XC85**

Grease for food processing equipment

### Specifications

Seal material	Nitrile rubber
Grease	Grease for food
Auto switch	Mountable
Dimensions	Same as standard model
Specifications other than above	Same as standard model

### Warning

#### Precautions

Be aware that smoking cigarettes, etc. after your hands have come into contact with the grease used in this cylinder can create a gas that is hazardous to humans.

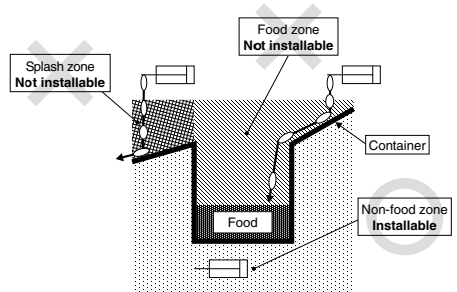
<Not installable>

Food zone.....An environment where food which will be sold as merchandise, directly touches the cylinder's components.

Splash zone.....An environment where food which will not be sold as merchandise, directly touches the cylinder's components.

<Installable>

Non-food zone.....An environment where there is no contact with food.



Note 1) Avoid using this product in the food zone. (Refer to the figure above.)

Note 2) When the product is used in an area of liquid splash, or a water resistant function is required for the product, please consult SMC.

Note 3) Operate without lubrication from a pneumatic system lubricator.

Note 4) Use the following grease pack for the maintenance work.  
GR-H-010 (Grease: 10 g)

Note 5) Please contact SMC for details on the maintenance intervals for this cylinder, which differ from those of the standard cylinder.