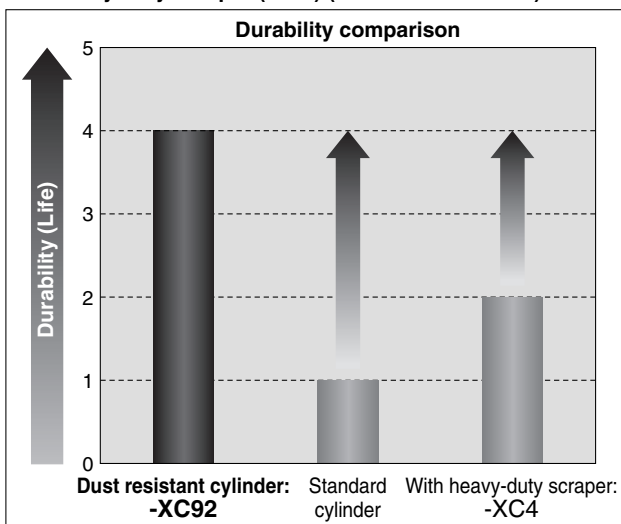


Dust Resistant Cylinder Series CM2/CQS/CQ2/MGP-XC92

■ Applicable for environments with flying micro-powder such as ceramic powder, toner powder, paper powder, and metallic powder (except weld spatter).

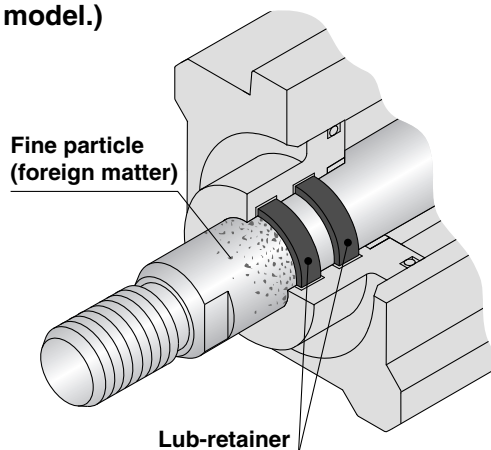
■ 4 times stronger than the standard model

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.

- 2 Lub-retainers on the rod cover prevent micro-powder of 30 μm or less from entering.
- The Lub-retainers create coat with grease on the piston rod for improving durability.
- The full length dimensions of the CQ2 and MGP series are compatible with models with a heavy-duty scraper (-XC4). (The CM2 series dimensions are the same as the standard model.)



Series CQ2-XC92

Applicable Cylinder

Air Cylinder



Series CM2-XC92
 ø20 to ø40

Compact Cylinder/
 Compact Type



Series CQS-XC92
 ø12 to ø25

Compact Cylinder



Series CQ2-XC92
 ø32 to ø100

Compact Guide Cylinder



Series MGP-XC92
 ø12 to ø100

Specifications

Applicable series	Bore size (mm)	Minimum operating pressure
CM2	ø20 to ø40	0.1 MPa
CQS	ø12, ø16	0.14 MPa
	ø20, ø25	0.1 MPa
CQ2	ø32 to ø100	0.1 MPa

Specifications other than above are the same as standard model.

Applicable series	Bore size (mm)		Minimum operating pressure
	MGP	-XC92 (With lub-retainers on one side)	
ø20 to ø100			0.15 MPa
-XC92W (With lub-retainers on both sides)		ø12, ø16	0.25 MPa
		ø20 to ø100	0.2 MPa

Dust Resistant Cylinder

Series *CM2-XC92*

ø20, ø25, ø32, ø40



How to Order

CM2 L 40 - 150 - XC92

With auto switch **CDM2 L 40 - 150 - M9BW [] - XC92**

• **With auto switch**
(Built-in magnet)

• **Dust resistant cylinder**

• **Mounting**

B	Basic	T	Head trunnion
L	Axial foot	E	Integral clevis
F	Rod flange	BZ	Boss-cut/Basic
G	Head flange	FZ	Boss-cut/ Rod flange
C	Single clevis	UZ	Boss-cut/ Rod trunnion
D	Double clevis		
U	Rod trunnion		

• **Number of auto switches**

Nil	2 pcs.
S	1 pc.
n	"n" pcs.

• **Auto switch**

Nil	Without auto switch
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* Applicable auto switch is the same as for the standard type.

• **Bore size**

20	20 mm
25	25 mm
32	32 mm
40	40 mm

• **Cylinder stroke (mm)**

Bore size	Standard stroke
20	
25	25, 50, 75, 100, 125, 150
32	200, 250, 300
40	

Dimensions

The CM2 series dimensions are the same as the standard model.

Dust Resistant Cylinder

CQS-XC92 Series

ø12, ø16, ø20, ø25



How to Order

CQS **B** **20** - **30** **D** **□** - **XC92**

With auto switch **CDQS** **B** **20** - **30** **D** **□** - **M9BW** **□** - **XC92**

With auto switch (Built-in magnet)

Mounting

B	Through-hole/Both ends tapped common (Standard)
L	Foot
F	Rod flange
G	Head flange
D	Double clevis

* Mounting brackets are shipped together, (but not assembled).
* Cylinder mounting bolts are not included.

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 pcs.
S	1 pc.
n	"n" pcs.

Auto switch

Nil	Without auto switch
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* Applicable auto switch is the same as for the standard type.

Cushion/Rod end thread

Nil	Standard (Rod end female thread)
C	With rubber bumper
M	Rod end male thread

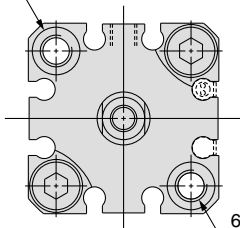
* Combination of body options is available.

Action

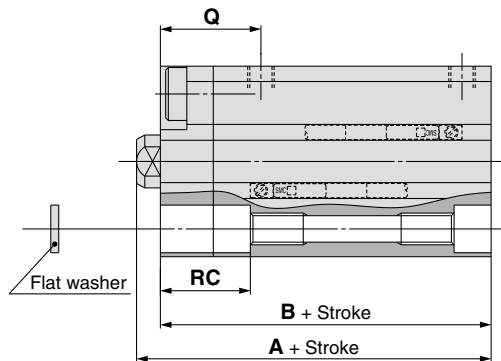
D	Double acting
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Dimensions (Other dimensions are the same as the standard type.)

6 x ϕ OB counterbore
4 locations on the back side



6 x OA effective depth RA (Note 1)
4 locations on the back side (Note 4)



Note 1) For the standard type ø12 and ø16 with 5 strokes, ø20 with 15 strokes or less, and ø25 with 5 or 10 strokes, and for models with an auto switch and built-in magnet of ø20 with 5 strokes, the through-hole is threaded over the entire length.

Note 2) Be sure to use the attached flat washer for mounting cylinder with through-holes.

Note 3) For models with a rubber bumper, the stroke tolerance does not include bumper deflection.

Note 4) 2 locations on the back side for the standard-type ø20 with 15 strokes or less and ø25 with 5 strokes, and for models with an auto switch and built-in magnet.

Bore size (mm)	A		B		Q	OA	OB	RA	RC
	Without auto switch	With auto switch	Without auto switch	With auto switch					
12	30.5	35.5	27	32	17.5	M4 x 0.7	6.5	7	14
16	30.5	35.5	27	32	17.5	M4 x 0.7	6.5	7	14
20	34	44	29.5	39.5	19	M6 x 1.0	9	10	17
25	37.5	47.5	32.5	42.5	21	M6 x 1.0	9	10	17

Dust Resistant Cylinder

Series CQ2-XC92

ø32, ø40, ø50, ø63, ø80, ø100



How to Order

CQ2 B 32 - 30 D [] Z - XC92

With auto switch CDQ2 B 32 - 30 D [] Z - M9BW [] - XC92

With auto switch (Built-in magnet)

Mounting

B	Through-hole (Standard)
A	Both ends tapped
L	Foot
F	Rod flange
G	Head flange
D	Double clevis

* Mounting brackets are shipped together, (but not assembled).
* Cylinder mounting bolts are not included.

Bore size

32	32 mm
40	40 mm
50	50 mm
63	63 mm
80	80 mm
100	100 mm

Cylinder stroke (mm)

Bore size	Standard stroke
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

Number of auto switches

Nil	2 pcs.
S	1 pc.
n	"n" pcs.

Auto switch

Nil	Without auto switch
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* Applicable auto switch is the same as for the standard type.

Auto switch mounting groove

Z	ø32 to ø100 4 surfaces
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Body option

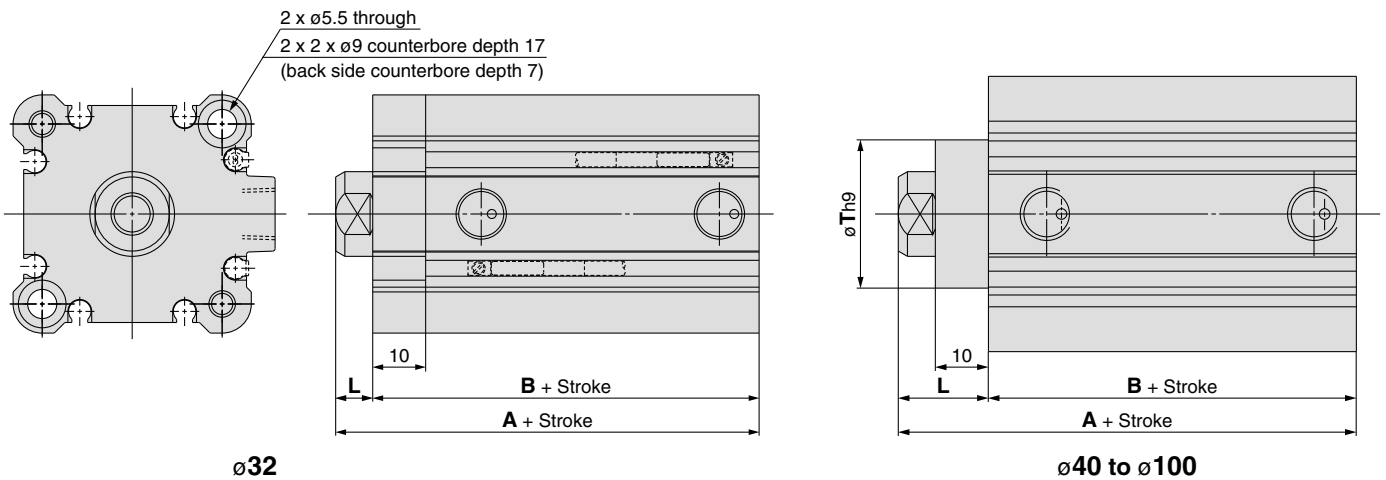
Nil	Standard (Rod end female thread)
C	With rubber bumper
M	Rod end male thread

* Combination of body options is available.

Action

D	Double acting
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Dimensions (Other dimensions are the same as the standard type.)



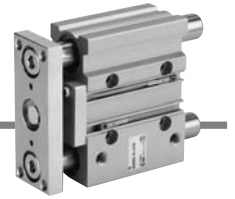
Bore size (mm)	A		B		L	T
	Without auto switch	With auto switch	Without auto switch	With auto switch		
32	40 (50)	50	33 (43)	43	7	—
40	46.5 (56.5)	56.5	29.5 (39.5)	39.5	17	28
50	48.5 (58.5)	58.5	30.5 (40.5)	40.5	18	35
63	54 (64)	64	36 (46)	46	18	35
80	63.5 (73.5)	73.5	43.5 (53.5)	53.5	20	43
100	75 (85)	85	53 (63)	63	22	59

Note 1) For models with a rubber bumper, the stroke tolerance does not include bumper deflection.
Note 2) Dimensions in () indicates 75 st and 100 st

Dust Resistant Cylinder

Series MGP-XC92

ø12, ø16, ø20, ø25, ø32, ø40, ø50, ø63, ø80, ø100



How to Order

MGP M 25 - 30 - M9BW - XC92

Compact guide cylinder

Bearing type
M Slide bearing

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	M5 x 0.8
N	NPT
TF	G

* For bore sizes 12 and 16, only M5 x 0.8 thread is available.

Cylinder stroke (mm)

Bore size	Standard stroke
12, 16	10, 20, 30, 40, 50, 75, 100
20, 25	20, 30, 40, 50, 75, 100, 125, 150, 175, 200
32 to 100	25, 50, 75, 100, 125, 150, 175, 200

Number of auto switches

Symbol	Type	Drive unit	Guide unit	
			Rod end	Head end
Nil	With lub-retainers on one side	○	○	—
W	With lub-retainers on both sides	○	○	○

Dust resistant cylinder

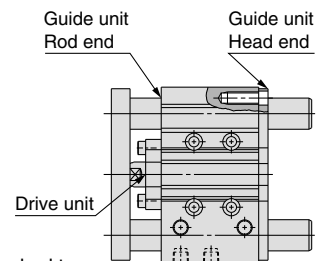
Number of auto switches

Nil	2 pcs.
S	1 pc.
n	"n" pcs.

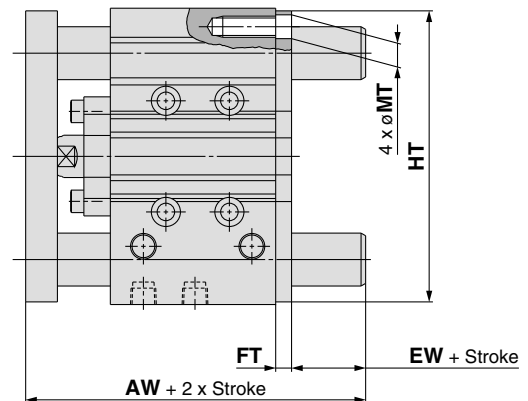
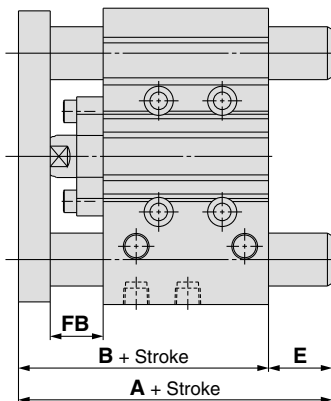
Auto switch

Nil Without auto switch (Built-in magnet)

* Applicable auto switch is the same as for the standard type.



Dimensions (Other dimensions are the same as the standard type.)



With lub-retainers on one side (mm)

Bore size (mm)	A		B	E		FB
	50 st or less	Over 50 st and 200 st or less*		50 st or less	Over 50 st and 200 st or less*	
12	52	70.5	52	0	18.5	15
16	56	74.5	56	0	18.5	15
20	63	94.5	63	0	31.5	16
25	63.5	95	63.5	0	31.5	16
32	97	112	69.5	27.5	42.5	20
40	97	112	76	21	36	20
50	106.5	128	82	24.5	46	22
63	106.5	128	87	19.5	41	22
80	125	152	106.5	18.5	45.5	28
100	147	172	126	21	46	35

With lub-retainers on both sides (mm)

Bore size (mm)	AW	EW	FT	MT	HT
12	63	6	5	5	57
16	67	6	5	6	64
20	74	6	5	6	80
25	74.5	6	5	7	93
32	82.5	7	6	9	110
40	89	7	6	9	118
50	95	7	6	11	146
63	100	7	6	11	160
80	120.5	8	6	14	200
100	143	8	9	16	236

* The standard stroke for ø12 and ø16 is 100 st.