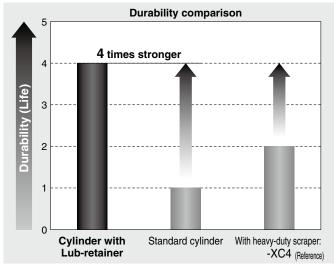
Applicable to operation in micro-powder (10 to 100 µm)/general environments Cylinder with Stable Lubrication Function (Lub-retainer)

Durability is 4 times stronger than

the standard model in micro-powder environments.



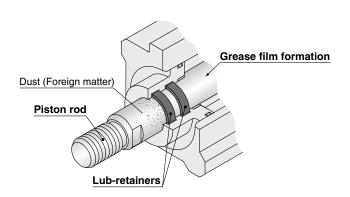
Comparison with the standard model and model with heavy-duty scraper (-XC4) (Relative ratio of B₁₀)

* The durability test is conducted in accordance with SMC test conditions.

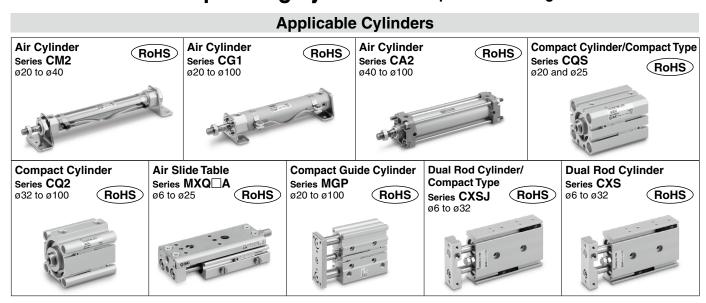
As the Lub-retainer is mounted at two locations.

- 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.



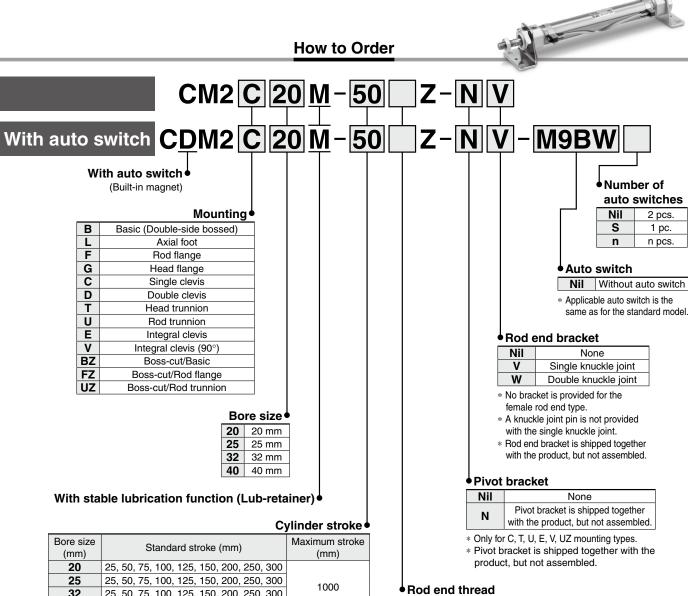
Air Cylinder with Stable Lubrication Function (Lub-retainer)

Standard: Double Acting, Single Rod

Series CM2 Ø20, Ø25, Ø32, Ø40



How to Order



$25,\, 50,\, 75,\, 100,\, 125,\, 150,\, 200,\, 250,\, 300$ * Manufacture of intermediate strokes in 1 mm intervals is possible.

25, 50, 75, 100, 125, 150, 200, 250, 300

Specifications

32

Bore size (mm)	20	25	32	40
Minimum operating pressure		0.1	MPa	
Other specifications	Same as the standard model			
Dimensions	5	Same as the s	tandard mod	el



Male rod end

Female rod end

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

Series CG1



Ø20, Ø25, Ø32, Ø40, Ø50, Ø63, Ø80, Ø100

How to Order



CG1 B N 20 M - 100 Z - V

With auto switch CDG1 DN 20 M-100 Z-NW-M9BW

With auto switch (Built-in magnet)

Mounting '

Basic
Basic (without trunnion mounting female thread)
Axial foot
Rod flange
Head flange
Head trunnion
Clevis

- * Not available for ø80 or ø100.
- * Mounting bracket is shipped together with the product, but not assembled.
- * The cylinder for F, G, L, D mounting types is Z: Basic (without trunnion mounting female thread).

Rore size

ы	16 3126
20	20 mm
25	25 mm
32	32 mm
40	40 mm
50	50 mm
63	63 mm
80	80 mm
100	100 mm

With stable lubrication function (Lub-retainer)

Specifications

Bore size (mm)	20	25	32	40	50	63	80	100
Minimum operating pressure	0.1 MPa							
Other specifications	Same as the standard model							
Dimensions	See below							

Rod end thread Nil Male rod end

Pivot bracket ♦ Nil None N Pivot bracket is shipped together with the product, but not assembled.

Female rod end

- * Only for D, T mounting types
- * Pivot bracket is shipped together with the product, but not assembled.

Number of auto switches

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

Auto switch

Nil	Without auto	owitch
INII	williout auto	SWILCIT

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

Rod end bracket

Nil	None
V	Single knuckle joint
W	Double knuckle joint

- * No bracket is provided for the female rod end type.
- * Rod end bracket is shipped together with the product, but not assembled.
- * A knuckle joint pin is not provided with the single knuckle joint.

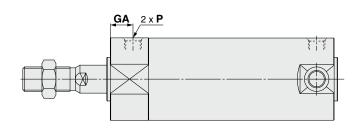
Cylinder stroke

Bore size (mm)	Standard stroke (mm) Note)
20	25, 50, 75, 100, 125, 150, 200
25	
32	
40	25 50 75 100 125 150 200 250 200
50, 63	25, 50, 75, 100, 125, 150, 200, 250, 300
80	
100	

Note) Manufacture of intermediate strokes in 1 mm intervals is possible. (Spacers are not used.) Produced upon receipt of order.

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

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



		(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.

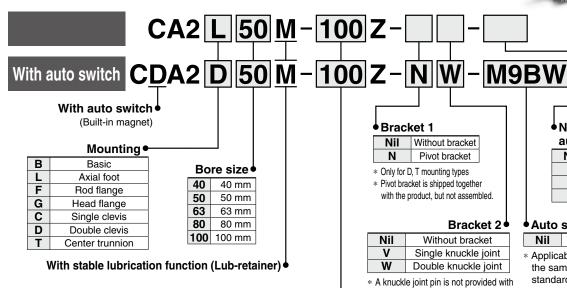
Air Cylinder with Stable Lubrication Function (Lub-retainer) Standard: Double Acting, Single Rod

Series CA2 Ø40, Ø50, Ø63, Ø80, Ø100



How to Order





Cylinder stroke

Bore size (mm)	Standard stroke (mm)*	Long stroke (L and F only) (mm)
40	25, 50, 75, 100, 125, 150, 175, 200, 250, 300, 350, 400, 450, 500	800
50, 63	25, 50, 75, 100, 125, 150, 175, 200, 250, 300, 350, 400, 450, 500, 600	1200
80, 100	25, 50, 75, 100, 125, 150, 175, 200, 250, 300, 350, 400, 450, 500, 600, 700	ø80 : 1400 ø100: 1500

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

Bracket 1

Nil	Without bracket
N	Pivot bracket

- * Only for D, T mounting types
- * Pivot bracket is shipped together with the product, but not assembled.

Bracket 2

out bracket
knuckle joint
knuckle joint

- * A knuckle joint pin is not provided with the single knuckle joint.
- * Rod end bracket is shipped together with the product, but not assembled.

Number of auto switches

Nil	2 pcs.	
S	1 pc.	
3	3 pcs.	
n	n pcs.	

Auto switch

INII	without auto switch
* Applica	able auto switch is

the same as for the standard model.

Made to Order

Symbol	Specifications
-XA□	Change of rod end shape
-XC7	Tie-rod, cushion valve, tie-rod nut, etc. made of stainless steel
-XC14	Change of trunnion bracket mounting position
-XC15	Change of tie-rod length

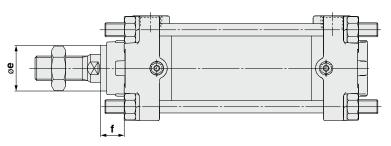
Built-in Magnet Cylinder Model

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 standard 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.



Compact Cylinder with Stable Lubrication Function (Lub-retainer)

Standard: Double Acting, Single Rod

Series CQS ø20, ø25





How to Order



With auto switch

(Built-in magnet)

Mounting •

В	Through-hole/Both ends tapped common (Standard)		
L	Foot		
LC	Compact foot		
F	Rod side flange		
G	Head side flange		
D	Double clevis		

Mounting brackets are shipped together, (but not assembled).

Bore size

20	20 mm
25	25 mm

With stable lubrication function (Lub-retainer)

Cylinder stroke

Bore size (mm)	Standard stroke (mm)	
20	5, 10, 15, 20, 25,	
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

Applicable auto switch is the same as for the standard model.

Body option

<Standard stroke>

Nil	Standard	
M	Rod end male thread	
F	Boss on head end	

* Combination of body options (FM) is available.

Action

D Double acting

Built-in Magnet Cylinder Model

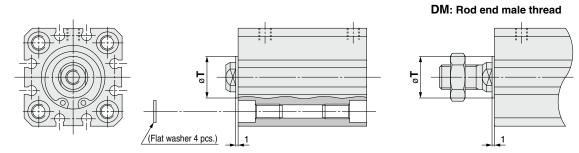
If a built-in magnet cylinder without an auto switch is required, there is no need to enter the symbol for the auto switch.

(Example) CDQSL25M-30D

Specifications

Bore size (mm)	20	25	
Minimum operating pressure	0.1 MPa		
Other specifications	Same as the standard model		
Dimensions	See below		

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



		(mm)
Bore size	Standard stroke	Т
20	5, 10, 15, 20, 25, 30,	15
25	35, 40, 45, 50	18

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

Mounting Bracket Part No.

mounting Diagnost at the							
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 cylinder.



Compact Cylinder with Stable Lubrication Function (Lub-retainer)

Standard: Double Acting, Single Rod

Series CQ2 ø32, ø40, ø50, ø63, ø80, ø100





How to Order

With auto switch CDQ2B32M-30DMZ-LW-M9BW

With auto switch

(Built-in magnet)

Mounting ●

В	Through-hole (Standard)
Α	Both ends tapped
L	Foot
LC	Compact foot
F	Rod flange
G	Head flange
D	Double clevis

* Mounting brackets are shipped together, (but not assembled).

Bore size

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

With stable lubrication function (Lub-retainer)

Cylinder stroke

Bore size (mm)	Standard stroke (mm)
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

Action •

D Double acting

Nil	Standard (Rod end female thread)
F	With boss on head end
M	Rod end male thread

^{*} Combination of body options (FM) is available.

100

* Combination o

Number of auto switches

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

Auto switch

Nil Without auto switch

 Applicable auto switch is the same as for the standard model.

Mounting bolt

Nil	None
L	Shipped together

- * Mounting bolt is shipped together only when the mounting bracket is "B".
- * Mounting bolt size is the same as the standard model.
- * Mounting bolt is shipped together.

Rod end bracket

Nil	None
D	Simple joint A type + Joint
E Simple joint B type + Joint	
V	Single knuckle joint
W	Double knuckle joint

- * The single knuckle joint and double knuckle joint cannot be mounted for the rod end female thread.
- * A knuckle joint pin is not provided with the single knuckle joint.
- * The simple joint A and B types cannot be mounted for the rod end male thread.
- * Rod end bracket is shipped together with the product, but not assembled.

Auto switch mounting groove

Z ø32 to ø100 4 surfaces

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

63

0.1 MPa

Same as the standard model

See below

80

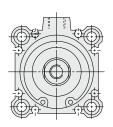
50

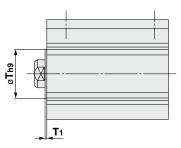
ø32 to ø100

Specifications

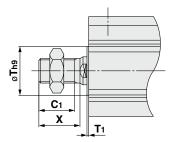
Bore size (mm)
Minimum operating pressure

Other specifications Dimensions





DMZ: Rod end male thread



C ₁	Х
20.5	23.5
20.5	23.5
24	26.5
24	26.5
32.5	35.5
32.5	35.5
	24 24 32.5

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

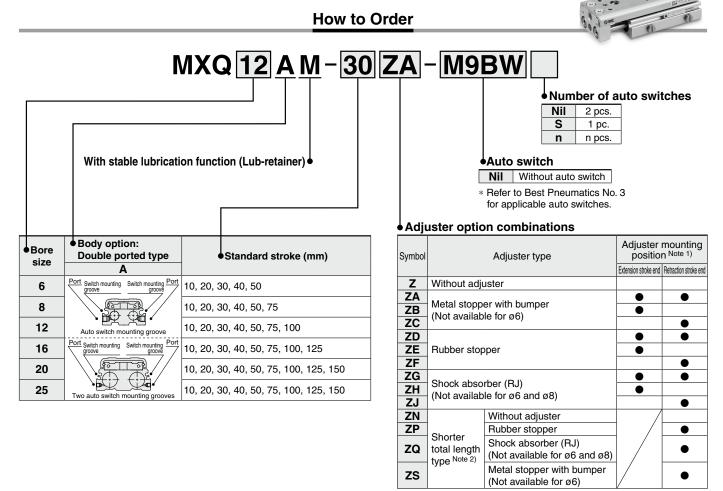


Air Slide Table with Stable Lubrication Function (Lub-retainer) Double Ported Type

Series MXQ A

Ø6, Ø8, Ø12, Ø16, Ø20, Ø25

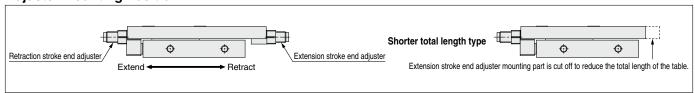




Note 1) •: Shipped together with the product, but not assembled. Without any symbols for the adjuster mounting position, the adjuster can be mounted afterward.

Note 2) Extension stroke end adjuster mounting holes are removed to reduce the total length. As the total length is reduced by removing the extension stroke end adjuster mounting holes, an extension stroke end adjuster cannot be mounted afterward. (Retraction stroke end adjuster can be mounted afterward.)

Adjuster Mounting Position



Specifications

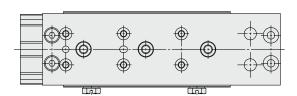
Bore size (mm)		6	8	12	16	20	25
Minimum	Without adjuster	0.15 MPa					
	Rubber stopper						
operating pressure	Shock absorber	_	_				
pressure	Metal stopper with bumper	_	0.3 MPa	0.3 MPa	0.2 MPa	0.2 MPa	0.2 MPa
Other specifi	Other specifications Same as the standard model						
Dimensions		Refer to next page.					

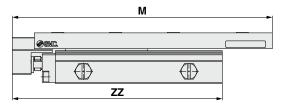


Series MXQ□A

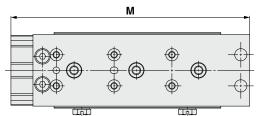
Dimensions (Dimensions other than those shown below are the same as the standard model.)

MXQ6AM



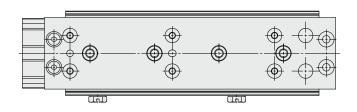


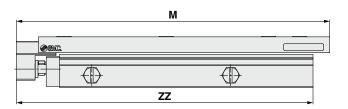
Shorter total length type



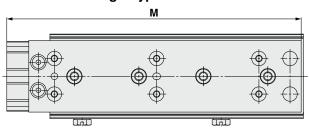
			(mm)	
Model	ı	77		
Model	Standard type	Shorter total length type	22	
MXQ6AM-10Z	74	64.5	69.5	
MXQ6AM-20Z	84	74.5	69.5	
MXQ6AM-30Z	105	95.5	82.5	
MXQ6AM-40Z	117	107.4	94.5	
MXQ6AM-50Z	127	117.5	104.5	

MXQ8AM





Shorter total length type



			(mm)			
Model		M				
Model	Standard type	Shorter total length type	ZZ			
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			

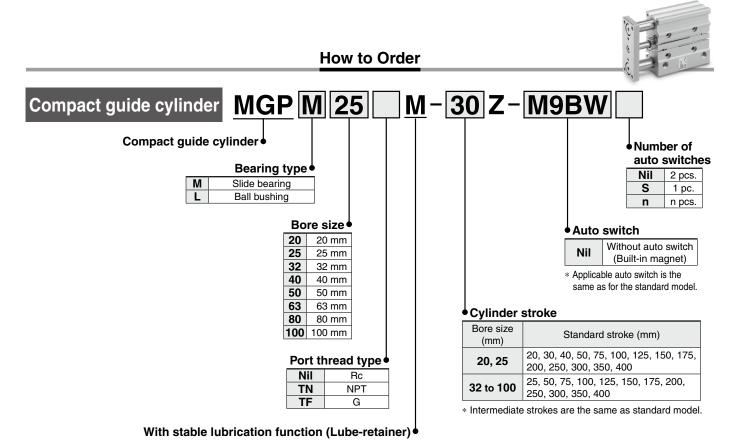
The MXQ12AM/MXQ16AM/MXQ20AM/MXQ25AM dimensions are the same as the standard model.

Compact Guide Cylinder with Stable Lubrication Function (Lube-retainer)

Series MGP



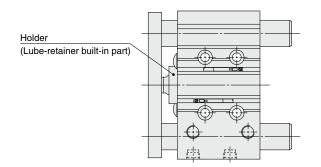
Ø20, Ø25, Ø32, Ø40, Ø50, Ø63, Ø80, Ø100



Specifications

Bore size (mm)	20	25	32	40	50	63	80	100
Minimum operating pressure	0.15 MPa							
Other specifications	Same as the standard model							
Dimensions	See right side							

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

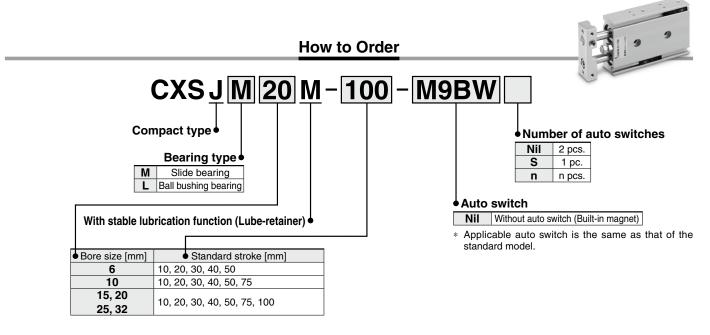




With Stable Lubrication Function (Lube-retainer) Dual Rod Cylinder/Compact Type

CXSJ Series ø6, ø10, ø15, ø20, ø25, ø32



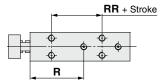


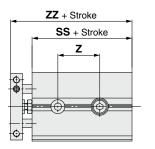
Specifications

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	00 mm/s	50 to 70	00 mm/s 50 to 600 mm/s				
Other specifications	Same as the standard model							
Dimensions	See below.							

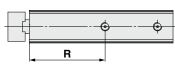
Dimensions (Dimensions other than those shown below are the same as those of the standard model.)

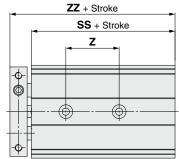
CXSJ□6, 10M





CXSJ□15 to 32M





				[mm]
Model	R	RR	SS	ZZ
CXSJ□6M	25	13.5	36.5	46.5
CXSJ□10M	33.5	17	49.5	61
CXSJ□15M	44	_	63.5	76
CXSJ□20M	51	_	73.5	90
CXSJ□25M	52	_	76.5	93
CXSJ□32M	66		90.5	110.5

							[mm]		
Symbol		Z							
Model Stroke	10	20	30	40	50	75	100		
CXSJ□6M	19.5	29.5	39.5	49.5	59.5	_	_		
CXSJ□10M	23	33	43	53	63	88	_		
CXSJ□15M	3	1		41	51	61			
CXSJ□20M	3	6		46		66			
CXSJ□25M	3	7		47			67		
CXSJ□32M	5	0		60		80			

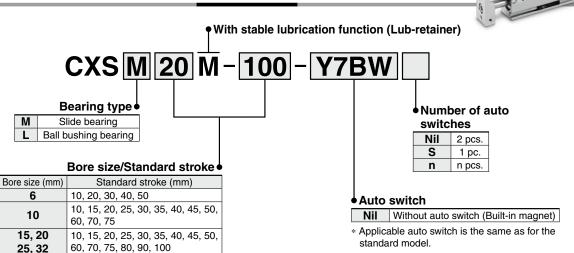


Dual Rod Cylinder with Stable Lubrication Function (Lub-retainer)

Series CXS Ø6, Ø10, Ø15, Ø20, Ø25, Ø32





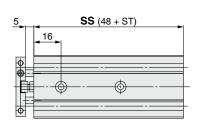


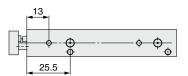
Specifications

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 300 mm/s	50 to 800 mm/s	50 to 70	00 mm/s	50 to 600 mm/s					
Other specifications	Same as the standard model									
Dimensions		See below								

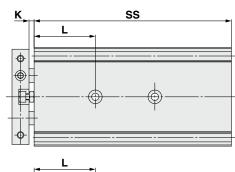
Dimensions (Dimensions other than those shown below are the same as the standard model.)

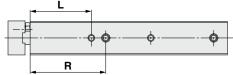






CXS□10 to 32





			<u>(mm)</u>
Model	K	L	R
CXS□10	4	25	35
CXS□15	3	36	44.5
CXS□20	6	36	50.5
CXS□25	6	36	52
CXS□32	4	40	66

															(mm)
Symbol		SS													
Model Stroke	10	15	20	25	30	35	40	45	50	60	70	75	80	90	100
CXS□10	70	75	80	85	90	95	100	105	110	120	130	135	_	_	_
CXS□15	76	81	86	91	96	101	106	111	116	126	136	141	146	156	166
CXS□20	86	91	96	101	106	111	116	121	126	136	146	151	156	166	176
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

With Stable Lubrication Function (Lube-retainer)

Dual Rod Cylinder/ Compact Type

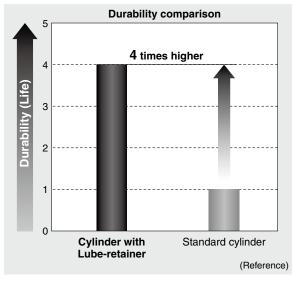
Ø6, Ø10, Ø15, Ø20, Ø25, Ø32



4 times the durability of

10 to 100 μm

the standard model in micro-powder environments





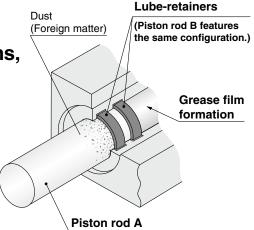
Comparison with the standard model (Relative ratio of B₁₀)

 This durability test was conducted in accordance with SMC test conditions.

As Lube-retainers are mounted in two locations, grease film is formed on the piston rod surface, improving durability.

This construction allows for the prevention of the entry of dust and foreign matter.

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



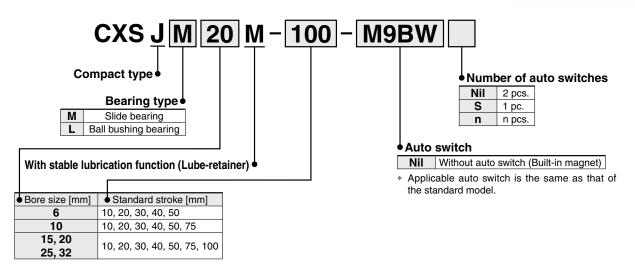
CXSJ Series



CXSJ Series

How to Order



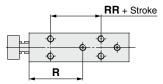


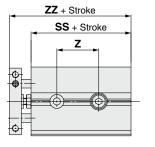
Specifications

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	50 to 800 mm/s 50 to 7			00 mm/s 50 to 600 mm/s		
Other specifications	Same as the standard model						
Dimensions	See below.						

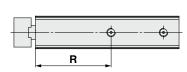
Dimensions (Dimensions other than those shown below are the same as those of the standard model.)

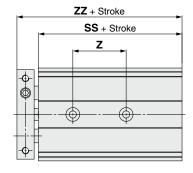
CXSJ□6, 10M





CXSJ□15 to 32M





				<u>[mmj</u>
Model	R	RR	SS	ZZ
CXSJ□6M	25	13.5	36.5	46.5
CXSJ□10M	33.5	17	49.5	61
CXSJ□15M	44	_	63.5	76
CXSJ□20M	51	_	73.5	90
CXSJ□25M	52	_	76.5	93
CXSJ□32M	66		90.5	110.5

							[mm]		
Symbol		Z							
Model Stroke	10	20	30	40	50	75	100		
CXSJ□6M	19.5	29.5	39.5	49.5	59.5	_	_		
CXSJ□10M	23	33	43	53	63	88	_		
CXSJ□15M	3	1		41			61		
CXSJ□20M	3	6		46			66		
CXSJ□25M	3	7		47			67		
CXSJ□32M	5	0		60			80		



Made to Order Common Specifications:

-XC93□: With Greater Water Resistance + Stable Lubrication Function



66 With Greater Water Resistance + Stable Lubrication Function

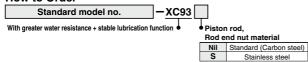
Symbol -XC93

- ·5 times stronger against water (liquids) than the standard model
- -Equipped with the greater water resistant scraper (Fluororubber). The Lube-retainer creates grease coating around the piston rod, which improves lubrication.
- ·Stainless steel can be selected for the piston rod and rod end nut.

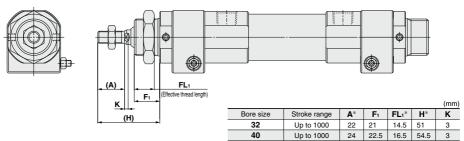
Applicable Series

Series	Description	Model	Action		Vol. no. (for std model)
RHC	High power cylinder	RHC	Double acting, Single rod	Applicable bore size: ø32, ø40 Rc port only	2 -3 From P. 351

How to Order



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



^{*:} Same as the standard model