Mechanically Jointed Rodless Cylinder with Protective Cover
Slide Bearing Guide Type, Cam Follower Guide Type

MY1□W Series

ø16, ø20, ø25, ø32, ø40, ø50, ø63

How to Order

MY1 M W K 32 □ □ – 300 □ – M9BW □ – □

Guide type

M	Slide bearing guide type
C	Cam follower guide type

With protective cover

Side seal

Nil	None
K	With side seal

Note) Cylinders with side seal are available for ø16 to ø40.

Bore size

16	16 mm
20	20 mm
25	25 mm
32	32 mm
40	40 mm
50	50 mm
63	63 mm

Port thread type

Symbol	Type	Bore size
Nil	M thread	ø16, ø20
	Rc	ø25, ø32, ø40, ø50, ø63
TN	NPT	
TF	G	

Piping

Nil	Standard type
G	Centralized piping type

Auto switch

Nil	Without auto switch (Built-in magnet)

Applicable auto switches vary depending on the bore size. Select an applicable one referring to the table below.

Number of auto switches

Nil	2 pcs
S	1 pc
n	"n" pcs

Stroke adjustment unit symbol
Refer to "Stroke adjustment unit" on page 1351.

Made to Order Specifications
For details, refer to page 1351.

Cylinder stroke (mm)

Bore size (mm)	Standard stroke (mm)*	Maximum manufacturable stroke (mm)
16, 20, 25, 32 40, 50, 63	100, 200, 300, 400, 500, 600, 700 800, 900, 1000, 1200, 1400, 1600 1800, 2000	3000

* The stroke can be manufactured up to the maximum stroke from 1 mm stroke in 1 mm increments. However, when the stroke is 49 mm or less, the air cushion capability lowers and multiple auto switches cannot be mounted. Pay special attention to this point. Also when exceeding a 2000 mm stroke, specify "-XB11" at the end of the model number. For details, refer to the "Made to Order Specifications".

Applicable Auto Switches /Refer to pages 1575 to 1701 for further information on auto switches.

Type	Special function	Electrical entry	Indicator light	Wiring (Output)	Load voltage DC	Load voltage AC	Auto switch model: Perpendicular ø16, ø20	Perpendicular ø25 to ø40	Perpendicular ø50, ø63	In-line ø16, ø20	In-line ø25 to ø63	Lead wire length (m): 0.5 (Nil)	1 (M)	3 (L)	5 (Z)	Pre-wired connector	Applicable load	
Solid state auto switch	——	Grommet	Yes	3-wire (NPN)	5 V, 12 V	—	—	M9NV	—	M9N		●	●	●	○	○	IC circuit	Relay, PLC
				3-wire (PNP)			—	M9PV	—	M9P		●	●	●	○	○		
				2-wire	12 V		—	M9BV	—	M9B		●	●	●	○	○	—	
	Diagnostic indication (2-color indicator)			3-wire (NPN)	5 V, 12 V		—	M9NWV	—	M9NW		●	●	●	○	○	IC circuit	
				3-wire (PNP)			—	M9PWV	—	M9PW		●	●	●	○	○		
				2-wire	12 V		—	M9BWV	—	M9BW		●	●	●	○	○	—	
	Water resistant (2-color indicator)			3-wire (NPN)	5 V, 12 V		—	M9NAV*1	—	M9NA*1		○	○	●	○	○	IC circuit	
				3-wire (PNP)			—	M9PAV*1	—	M9PA*1		○	○	●	○	○		
				2-wire	12 V		—	M9BAV*1	—	M9BA*1		○	○	●	○	○	—	
Reed auto switch	——	Grommet	Yes	3-wire (NPN equivalent)	—	5 V	—	—	—	A96	Z76	●	—	●	—	—	IC circuit	—
			Yes	2-wire	24 V	100 V	—	—	—	A93	Z73*2	●	●	●	●	—	—	Relay, PLC
			No			100 V or less	—	—	—	A90	Z80	●	—	●	—	—	IC circuit	

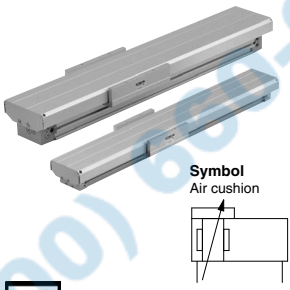
*1 Water resistant type auto switches can be mounted on the above models, but in such case SMC cannot guarantee water resistance.

* Lead wire length symbols: 0.5 m·····Nil (Example) M9NW
1 m·····M (Example) M9NWM
3 m·····L (Example) M9NWL
5 m·····Z (Example) M9NWZ

* Solid state auto switches marked with "○" are produced upon receipt of order.
* Separate switch spacers (BMG2-012) are required to retrofit auto switches (M9 type) on cylinders ø25 to ø63.

*2 1 m type lead wire is only applicable to D-A93.

* Refer to page 1360 for details on other applicable auto switches than listed above.
* For details about auto switches with pre-wired connector, refer to pages 1648 and 1649.
* Auto switches are shipped together (not assembled). (Refer to pages 1359 to 1361 for the details of auto switch mounting.)



Symbol
Air cushion

Made to Order

Made to Order Specifications
Click here for details

Symbol	Specifications
–XB11	Long stroke
–XB22	Shock absorber soft type RJ series type
–XC67	NBR rubber lining in dust seal band

Specifications

Bore size (mm)		16	20	25	32	40	50	63
Fluid		Air						
Action		Double acting						
Operating pressure range		MY1MW: 0.15 to 0.8 MPa; MY1CW: 0.1 to 0.8 MPa						
Proof pressure		1.2 MPa						
Ambient and fluid temperature		5 to 60°C						
Cushion		Air cushion						
Lubrication		Non-lube						
Stroke length tolerance		1000 or less $^{+1.8}_{0}$, 1001 to 3000 $^{+2.8}_{0}$		2700 or less $^{+1.8}_{0}$, 2701 to 3000 $^{+2.8}_{0}$				
Piping port size	Front/Side port	M5 x 0.8		Rc 1/8		Rc 1/4	Rc 3/8	
	Bottom port	ø4		ø6		ø8	ø10	

Piston Speed

Bore size (mm)		16 to 63
Without stroke adjustment unit		100 to 1000 mm/s
Stroke adjustment unit	A unit	100 to 1000 mm/s (1)
	L unit	100 to 1500 mm/s (2)

Note 1) Be aware that when the stroke adjustment range is increased by manipulating the adjustment bolt, the air cushion capacity decreases. Also, when exceeding the air cushion stroke ranges on page 1346, **the piston speed should be 100 to 200 mm per second.**
Note 2) The piston speed is 100 to 1000 mm/s for centralized piping.
Note 3) Use at a speed within the absorption capacity range. Refer to page 1346.

Stroke Adjustment Unit Specifications

Bore size (mm)		16		20		25		32		40		50		63	
Unit symbol		A	L	A	L	A	L	A	L	A	L	A	L	A	L
Configuration / Shock absorber model		With adjustment bolt	RB 0806 + with adjustment bolt	With adjustment bolt	RB 0806 + with adjustment bolt	With adjustment bolt	RB 1007 + with adjustment bolt	With adjustment bolt	RB 1412 + with adjustment bolt	With adjustment bolt	RB 1412 + with adjustment bolt	With adjustment bolt	RB 2015 + with adjustment bolt	With adjustment bolt	RB 2015 + with adjustment bolt
Stroke adjustment range by intermediate fixing spacer (mm)	Without spacer	0 to –5.6		0 to –6		0 to –11.5		0 to –12		0 to –16		0 to –20		0 to –25	
	With short spacer	–5.6 to –11.2		–6 to –12		–11.5 to –23		–12 to –24		–16 to –32		–20 to –40		–25 to –50	
	With long spacer	–11.2 to –16.8		–12 to –18		–23 to –34.5		–24 to –36		–32 to –48		–40 to –60		–50 to –75	

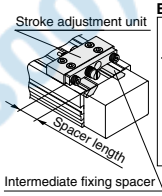
∗ Stroke adjustment range is applicable for one side when mounted on a cylinder.

Stroke Adjustment Unit Symbol

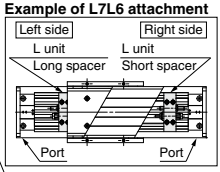
Left side stroke adjustment unit		Right side stroke adjustment unit: Without unit	A: With adjustment bolt	With short spacer	With long spacer	L: With low load shock absorber + Adjustment bolt	With short spacer	With long spacer
Without unit		Nil	SA	SA6	SA7	SL	SL6	SL7
A: With adjustment bolt		AS	A	AA6	AA7	AL	AL6	AL7
	With short spacer	A6S	A6A	A6	A6A7	A6L	A6L6	A6L7
	With long spacer	A7S	A7A	A7A6	A7	A7L	A7L6	A7L7
L: With low load shock absorber + Adjustment bolt		LS	LA	LA6	LA7	L	LL6	LL7
	With short spacer	L6S	L6A	L6A6	L6A7	L6L	L6	L6L7
	With long spacer	L7S	L7A	L7A6	L7A7	L7L	L7L6	L7

∗ Spacers are used to fix the stroke adjustment unit at an intermediate stroke position.

Stroke adjustment unit mounting diagram



Example of L7L6 attachment



Shock Absorbers for L Unit

Type	Stroke adjustment unit	Bore size (mm) 16	20	25	32	40	50	63
Standard (Shock absorber/RB series)	L	RB0806		RB1007	RB1412		RB2015	
Shock absorber/soft type RJ series mounted (-XB22)	L	RJ0806H		RJ1007H	RJ1412H		—	

∗ The shock absorber service life is different from that of the MY1□W cylinder depending on operating conditions. Refer to the RB Series Specific Product Precautions for the replacement period.
∗ Mounted shock absorber soft type RJ series (-XB22) is made to order specifications. For details, refer to page 1752.

Shock Absorber Specifications

Model		RB 0806	RB 1007	RB 1412	RB 2015
Max. energy absorption (J)		2.9	5.9	19.6	58.8
Stroke absorption (mm)		6	7	12	15
Max. collision speed (mm/s)		1500			
Max. operating frequency (cycle/min)		80	70	45	25
Spring force (N)	Extended	1.96	4.22	6.86	8.34
	Retracted	4.22	6.86	15.98	20.50
Operating temperature range (°C)		5 to 60			

∗ The shock absorber service life is different from that of the MY1□W cylinder depending on operating conditions. Refer to the RB Series Specific Product Precautions for the replacement period.