

Mechanically Jointed Rodless Cylinder

Slide bearing guide type

Series MY3M

ø16, ø25, ø40, ø63

How to Order

Slide bearing guide type

MY3 M 16 - 300 HL - M9BW -

Slide bearing guide type

Cylinder bore size

16	16 mm
25	25 mm
40	40 mm
63	63 mm

Port thread type

Symbol	Type	Bore size
Nil	M5	ø16
	Rc	
TN	NPT	ø25, ø40, ø63
TF	G	

Stroke

* Refer to "Standard Stroke" table on page 32 for further information.

Number of auto switches

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

Made to Order

For details, refer to page 32.

Auto switch

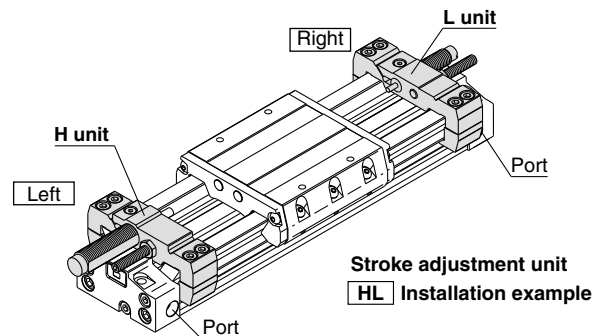
Nil	Without auto switch (Built-in magnet)
-----	---------------------------------------

* Refer to the table below for auto switch model numbers.

Stroke adjustment unit

Nil	Without adjustment unit
L	With shock absorbers for low load on both sides
H	With shock absorbers for high load on both sides
LS	With a shock absorber for low load on left side
SL	With a shock absorber for low load on right side
HS	With a shock absorber for high load on left side
SH	With a shock absorber for high load on right side
LH	With L unit on left side and H unit on right side
HL	With H unit on left side and L unit on right side

Stroke adjustment unit appearance and mounting direction



Applicable Auto Switches/ Refer to Best Pneumatics No. 2, pages 1263 to 1371 for further information on auto switches.

Type	Special function	Electrical entry	Indicator light	Wiring (Output)	Load voltage			Auto switch model		Lead wire length (m)				Pre-wired connector	Applicable load	
					DC		AC	Perpendicular	In-line	0.5 (Nil)	1 (M)	3 (L)	5 (Z)			
Solid state switch	—	Grommet	Yes	3-wire (NPN)	24 V	5 V, 12 V	—	M9NV	M9N	●	●	●	○	○	IC circuit	Relay, PLC
	3-wire (PNP)			M9PV				M9P	●	●	●	○	○			
	2-wire			M9BV				M9B	●	●	●	○	○			
	3-wire (NPN)			5 V, 12 V		M9NWV		M9NW	●	●	●	○	○	IC circuit		
	3-wire (PNP)					M9PWV		M9PW	●	●	●	○	○			
	2-wire					M9BWW		M9BW	●	●	●	○	○			
Reed switch	—	Grommet	Yes	3-wire (NPN equiv.)	—	5 V	—	A96V	A96	●	—	●	—	—	IC circuit	—
				2-wire	24 V	12 V	100 V	A93V	A93	●	—	●	—	—	—	Relay, PLC
			100 V or less				A90V	A90	●	—	●	—	—	—	IC circuit	

* 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 a "○" symbol are produced upon receipt of order.

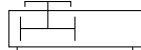
* Refer to page 38 for further details on other applicable auto switches that are not listed above.

* Refer to Best Pneumatics No. 2, pages 1328 and 1329 for the details of auto switches with a pre-wired connector.

* Auto switches are shipped together, but not assembled.



Symbol



Specifications

Bore size (mm)	16	25	40	63
Fluid	Air			
Action	Double acting			
Operating pressure range	0.15 to 0.7 MPa			
Proof pressure	1.05 MPa			
Ambient and fluid temperature	5 to 60°C			
Cushion	Air cushion			
Lubrication	Not required (Non-lube)			
Stroke length tolerance	1000 mm or less $+1.8_0$, From 1001 mm $+2.8_0$			
Port size (Rc, NPT, G)	M5 x 0.8	1/8	1/4	3/8

Piston Speed

Bore size (mm)	16	25	40	63
Without stroke adjustment unit	80 to 1000 mm/s			
Stroke adjustment unit (L and H unit)	80 to 1500 mm/s			
* External shock absorber	80 to 1500 mm/s			

* When the RB series is used, operate at a piston speed that will not exceed the absorption capacity of the air cushion and stroke adjustment unit.

* Because of its structure, the fluctuation of this cylinder's operating speed is greater than rod type cylinders. For applications that require constant speed, select an applicable equipment for the level of demand.

Standard Stroke

Bore Size (mm)	Standard Stroke (mm)*	Max. manufacturable stroke (mm)
16, 25 40, 63	100, 200, 300, 400, 500, 600 700, 800, 900, 1000, 1200 1400, 1600, 1800, 2000	3000

* Strokes are manufacturable in 1 mm increments, up to the maximum stroke.

However, when exceeding 2000 mm stroke, add "-XB11" to the end of the model number. Refer to "Made to Order" on page 40.

Stroke Adjustment Unit Specifications

Bore size (mm)	16		25		40		63	
Unit symbol	L	H	L	H	L	H	L	H
Shock absorber model	RB0806	RB1007	RB1007	RB1412	RB1412	RB2015	RB2015	RB2725
Shock absorber soft type Series RJ (-XB22) model	RJ0806H	RJ1007H	RJ1007H	RJ1412H	RJ1412H	—	—	—
Fine stroke adjustment range (mm)	0 to -10		0 to -12		0 to -16		0 to -24	



Made to Order

(For details, refer to pages 40 to 44.)

Symbol	Specification
-XB11	Long stroke type
-XB22	Shock absorber soft type Series RJ type
-X168	Helical insert thread
-X416	Holder mounting bracket I
-X417	Holder mounting bracket II

Shock Absorber Specifications

Model		RB 0806	RB 1007	RB 1412	RB 2015	RB 2725
Max. energy absorption (J)		2.9	5.9	19.6	58.8	147
Stroke absorption (mm)		6	7	12	15	25
Max. collision speed (mm/s)		1500				
Max. operating frequency (cycle/min)		80	70	45	25	10
Spring force (N)	Extended	1.96	4.22	6.86	8.34	8.83
	Compressed	4.22	6.86	15.98	20.50	20.01
Operating temperature range (°C)		5 to 60				

Note) The shock absorber service life is different from that of the MY3M cylinders depending on operating conditions. Allowable operating cycle under the specifications set in this catalog is shown below.

1.2 million times RB08□□
2 million times RB10□□ to RB2725

Note) Specified service life (suitable replacement period) is the value at room temperature (20 to 25°C). The period may vary depending on the temperature and other conditions. In some cases the absorber may need to be replaced before the allowable operating cycle above.