

# Mechanically Jointed Rodless Cylinder Linear Guide Type

## Series MY1H

ø10, ø16, ø20, ø25, ø32, ø40

### How to Order

**Linear guide type MY1H 25 - 300 - M9BW**

**Linear guide type**

**Bore size**

10	10 mm
16	16 mm
20	20 mm
25	25 mm
32	32 mm
40	40 mm

**Port thread type**

Symbol	Type	Bore size
Nil	M thread	ø10, ø16, ø20
TN	Rc	ø25, ø32, ø40
TF	NPT	ø40
	G	

**Piping**

Nil	Standard type
G	Centralized piping type

Note) For ø10, only G is available.

**Cylinder stroke(mm)**

Refer to "Standard Stroke" on page 1021.

**Stroke adjusting unit**

Nil	Without adjusting unit
A	With adjusting bolt
L	With low load shock absorber + Adjusting bolt
H	With high load shock absorber + Adjusting bolt
AL	With one A unit and one L unit
AH	With one A unit and one H unit each
LH	With one L unit and one H unit each

**Number of auto switches**

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

**Auto switch**

Nil	Without auto switch (Built-in magnet)
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\* Refer to the table below for the applicable auto switch model.

**End lock position**

Nil	Without end lock
E	Right end
F	Left end
W	Both ends

\* MY1H10 is not available with end lock.  
\* For end lock positions, refer to page 1036.

**Suffix for stroke adjusting unit**

Nil	Both ends
S	One end

Note) "S" is applicable for stroke adjusting units A, L and H.

**Shock Absorbers for L and H Units**

Bore size (mm)	25	16	20	25	32	40
Unit no.						
L unit	—	RB0806	RB1007	RB1412	RB2015	
H unit	RB0805	—	RB1007	RB1412	RB2015	

Note) MY1H16 is not available with H unit.  
MY1H10 is not available with A and L units.

### Applicable Auto Switch/Refer to 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)	None (N)			
Solid state switch	—	Grommet	Yes	3-wire (NPN)	24V	5V, 12V	—	M9NV	M9N	●	●	●	○	○	IC circuit	Relay, PLC
	3-wire (PNP)			12V		M9PV		M9P	●	●	●	○	○			
	2-wire			—		M9BV		M9B	●	●	●	○	○			
	3-wire (NPN)			24V	5V, 12V	M9NWV		M9NW	●	●	●	○	○	IC circuit		
	3-wire (PNP)				—	M9PWV		M9PW	●	●	●	○	○			
	2-wire				12V	M9BWV		M9BW	●	●	●	○	○			
Reed switch	—	Grommet	Yes	3-wire (NPN equivalent)	—	5V	100V or less	A96V	A96	●	—	●	—	—	IC circuit	—
				2-wire	24V	12V		A93V	A93	●	—	●	—	—	IC circuit	
			No	2-wire	24V	12V		A90V	A90	●	—	●	—	—		

\* 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

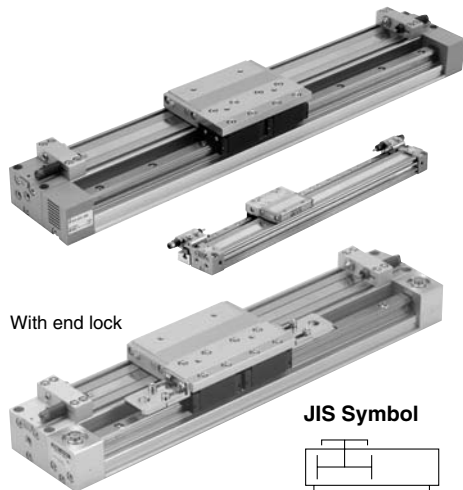
\* Solid state auto switches marked with "○" are produced upon receipt of order.

\* There are other applicable auto switches than listed above. For details, refer to page 1053.

\* For details about auto switches with pre-wired connector, refer to pages 1328 and 1329.

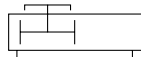
\* Auto switches are shipped together (not assembled).

# Mechanically Jointed Rodless Cylinder Linear Guide Type **Series MY1H**




With end lock

JIS Symbol



## Specifications

Bore size (mm)		10	16	20	25	32	40
Fluid		Air					
Action		Double acting					
Operating pressure range		0.2 to 0.8 MPa (2.0 to 8.2 kgf/cm <sup>2</sup> )	0.1 to 0.8 MPa				
Proof pressure		1.2 MPa					
Ambient and fluid temperature		5 to 60°C					
Cushion		Rubber bumper	Air cushion				
Lubrication		Non-lube					
Stroke length tolerance		+1.8 0					
Piping port size	Front/Side port	M5 x 0.8			Rc 1/8		Rc 1/4
	Bottom port		ø4		ø5	ø6	ø8

## Stroke Adjusting Unit Specifications

Bore size (mm)	10	16	20	25	32	40
Unit symbol	H	A	L	A	L	H
Configuration	RB 0805 + with adjusting bolt	With adjusting bolt	RB 0806 + with adjusting bolt	With adjusting bolt	RB 1007 + with adjusting bolt	With adjusting bolt
Shock absorber model	RB 0805 + with adjusting bolt	With adjusting bolt	RB 0806 + with adjusting bolt	With adjusting bolt	RB 1007 + with adjusting bolt	With adjusting bolt
Fine stroke adjustment range (mm)	0 to -10	0 to -5.6	0 to -6	0 to -11.5	0 to -12	0 to -16
Stroke adjustment range	When exceeding the stroke fine adjustment range: Utilize a made-to-order specifications "-X416" and "-X417".					

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

## Shock Absorber Specifications

Model		RB 0805	RB 0806	RB 1007	RB 1412	RB 2015
Max. energy absorption (J)		1.0	2.9	5.9	19.6	58.8
Stroke absorption (mm)		5	6	7	12	15
Max. collision speed (mm/s)		1000	1500	1500	1500	1500
Max. operating frequency (cycle/min)		80	80	70	45	25
Spring force (N)	Extended	1.96	1.96	4.22	6.86	8.34
	Retracted	3.83	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 MY1H cylinder depending on operating conditions. Refer to the RB Series Specific Product Precautions for the replacement period.

## Standard Stroke

Bore size (mm)	Standard stroke * (mm)	Maximum manufacturable stroke (mm)
10, 16, 20	50, 100, 150, 200 250, 300, 350, 400	1000
25, 32, 40	450, 500, 550, 600	1500



\* Strokes are manufacturable in 1 mm increments, up to the maximum stroke. However, add "-XB10" to the end of the part number for non-standard strokes from 51 to 599. Also when exceeding a 600 mm stroke, specify "-XB11" at the end of the model number. (Except ø10)

## Lock Specifications

Bore size (mm)	16	20	25	32	40
Lock position	One end (Selectable), Both ends				
Holding force (Max.) (N)	110	170	270	450	700
Fine stroke adjusting range (mm)	0 to -5.6	0 to -6	0 to -11.5	0 to -12	0 to -16
Backlash	1 mm or less				
Manual release	Possible (Non-lock type)				

## Piston Speed

Bore size (mm)	10	16 to 40
Without stroke adjusting unit	100 to 500 mm/s	100 to 1000 mm/s
Stroke adjusting unit	A unit	100 to 200 mm/s
	L unit and H unit	100 to 1000 mm/s <sup>(1)</sup>

Note 1) Be aware that when the stroke adjusting range is increased by manipulating the adjusting bolt, the air cushion capacity decreases. Also, when exceeding the air cushion stroke ranges on page 1023, **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 1023.



## Made to Order Specifications (For details, refer to pages 1395 to 1565.)

Symbol	Specifications
—XB10	Intermediate stroke (Using exclusive body)
—XB11	Long stroke
—XC56	With knock pin hole
—XC67	NBR rubber lining in dust seal band
—X168	Helical insert thread specifications
—X416	Holder mounting bracket I
—X417	Holder mounting bracket II

MY1B

MY1M

MY1C

MY1H

MY1HT

MY1□W

MY2C

MY2H□

MY3A

MY3B

MY3M

D-□

-X□

Individual

-X□

Technical data