Mechanically Jointed Rodless Cylinder
Linear Guide Type
MY1H Series
ø10, ø16, ø20, ø25, ø32, ø40

How to Order

ø10, ø16, ø20: **MY1H 20 ❶ ❷ ❸ – 300 ❹ ❺ ❻ – M9BW ❼ ❽ – ❾**

ø25, ø32, ø40: **MY1H 25 ❶ ❷ ❸ – 300 ❹ ❺ ❻ Z – M9BW ❼ ❽ – ❾**

Linear guide type

❶ Bore size

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

❷ Port thread type

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

❸ Piping

Nil	Standard type
G	Centralized piping type

∗ For ø10, only G is available.

❹ Cylinder stroke [mm]

Bore size	Standard stroke	Intermediate stroke	Long stroke	Maximum manufacturable stroke
10	50, 100, 150, 200, 250, 300, 350, 400, 450, 500, 550, 600	Strokes of 60 to 590 mm (10 mm increments) other than standard strokes	—	—
16, 20		Strokes of 51 to 599 mm (1 mm increments) other than standard strokes	Strokes of 601 to 1000 mm (1 mm increments) exceeding the standard stroke	1000
25, 32, 40			Strokes of 601 to 1500 mm (1 mm increments) exceeding the standard stroke	1500

∗ Long stroke is not available for MY1H10.

Ordering example

∗ Intermediate stroke can be ordered the same as the standard stroke. MY1H10-60-M9BW

∗ Long stroke can be ordered the same as the standard stroke. MY1H20-800L-M9BW

❺ Stroke adjustment unit symbol

For stroke adjustment units, refer to on page 78.
Intermediate fixing spacer is not available for end lock mounting side.

❻ 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 pages 92 and 93.

❼ Auto switch

Nil	ø10	Without auto switch (Built-in magnet for reed switch)
		Without auto switch (Built-in magnet for solid state switch) (Made to order: -X1810)
	ø16 to ø100	Without auto switch (Built-in magnet)

∗ Refer to the table below for the applicable auto switch model.

❽ Number of auto switches

Nil	2
S	1
n	n

❾ Made to Order Common Specifications

Refer to page 78 for details.

Applicable Auto Switches/Refer to the **Web Catalog** 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	Auto switch model: In-line	Lead wire length [m]: 0.5 (Nil)	1 (M)	3 (L)	5 (Z)	None (N)	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	—	**A96V**	**A96**	●	—	●	—	—	—	IC circuit	—
				2-wire	24 V	12 V	100 V	**A93V**∗2	**A93**	●	●	●	●	—	—	—	Relay, PLC
			No				100 V or less	**A90V**	**A90**	●	—	●	—	—	—	IC circuit	

∗1 Water-resistant type auto switches can be mounted on the above models, but SMC cannot guarantee water resistance. Please contact SMC regarding water-resistant types with the above model numbers.

∗2 The 1 m lead wire is only applicable to the D-A93.

∗ For details on auto switch mounting brackets and part numbers, refer to page 112.

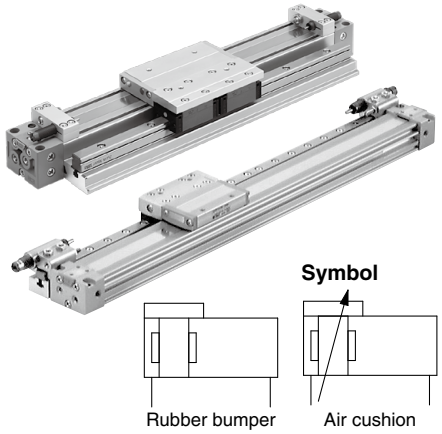
∗ Lead wire length symbols: 0.5 m ····· Nil (Example) M9NW
1 m ····· M (Example) M9NWM
3 m ····· L (Example) M9NWL
5 m ····· Z (Example) M9NWZ

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

∗ Since there are applicable auto switches other than those listed above, refer to page 112 for details.

∗ Auto switches are shipped together with the product but do not come assembled. (Refer to page 110 for the details of auto switch mounting.)

CAT.ES20-261A 2023-03



Specifications

Bore size [mm]		10	16	20	25	32	40
Fluid		Air					
Action		Double acting					
Operating pressure range		0.2 to 0.8 MPa	0.15 to 0.8 MPa		0.1 to 0.8 MPa		
Proof pressure		1.2 MPa					
Ambient and fluid temperatures		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			1/8		1/4
	Bottom port		ø4		ø6		ø8

Piston Speed

Bore size [mm]		10	16 to 40
Without stroke adjustment unit		100 to 500 mm/s	100 to 1000 mm/s
Stroke adjustment unit	**A unit**		100 to 1000 mm/s*1
	L unit and H unit	100 to 1000 mm/s	100 to 1500 mm/s*2

*1 Be aware that when the stroke adjustment range is increased with the adjustment bolt, the air cushion capacity decreases. Also, when exceeding the air cushion stroke ranges on page 80, **the piston speed should be 100 to 200 mm/s.**

*2 The piston speed is 100 to 1000 mm/s for centralized piping.

* Use at a speed within the absorption capacity range. Refer to page 80.

Made to Order

Made to Order Common Specifications (For details, refer to page 114.)

Symbol	Specifications
-XB22	Shock absorber soft type RJ series mounted
-XC56	With knock pin hole
-XC67*1	NBR rubber lining in dust seal band
-X168	Helical insert thread specifications
-X1810	Magnet for ø10 solid state auto switch specifications

*1 Only ø16 and ø20 are available for the -XC67.

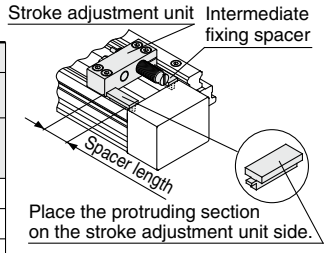
Stroke Adjustment Unit Specifications

Bore size [mm]		10	16		20			25			32			40		
Unit symbol		**H**	**A**	**L**	**A**	**L**	**H**	**A**	**L**	**H**	**A**	**L**	**H**	**A**	**L**	**H**
Configuration Shock absorber model		RB 0805 + with adjustment bolt	With adjustment bolt	RB 0806 + with adjustment bolt	With adjustment bolt	RB 0806 + with adjustment bolt	RB 1007 + with adjustment bolt	With adjustment bolt	RB 1007 + with adjustment bolt	RB 1412 + with adjustment bolt	With adjustment bolt	RB 1412 + with adjustment bolt	RB 2015 + with adjustment bolt	With adjustment bolt	RB 1412 + with adjustment bolt	RB 2015 + with adjustment bolt
Stroke adjustment range by intermediate fixing spacer [mm]	**Without spacer**	0 to –10	0 to –5.6		0 to –6			0 to –11.5			0 to –12			0 to –16		
	With short spacer	—*1	–5.6 to –11.2		–6 to –12			–11.5 to –23			–12 to –24			–16 to –32		
	With long spacer	—*1	–11.2 to –16.8		–12 to –18			–23 to –34.5			–24 to –36			–32 to –48		

*1 For ø10, stroke adjustment is available. Refer to page 122 for details.

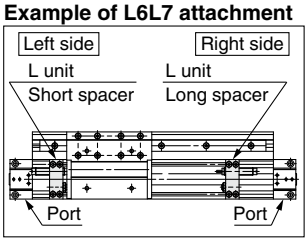
* Stroke adjustment range is applicable for one side when mounted on a cylinder.

Stroke adjustment unit mounting diagram



Place the protruding section on the stroke adjustment unit side.

Example of L6L7 attachment



Stroke Adjustment Unit Symbol

			Right side stroke adjustment unit									
			Without unit	A: With adjustment bolt			L: With low load shock absorber + Adjustment bolt			H: With high load shock absorber + Adjustment bolt		
					With short spacer	With long spacer		With short spacer	With long spacer		With short spacer	With long spacer
Left side stroke adjustment unit	**Without unit**		**Nil**	**SA**	**SA6**	**SA7**	**SL**	**SL6**	**SL7**	**SH**	**SH6**	**SH7**
	A: With adjustment bolt		**AS**	**A**	**AA6**	**AA7**	**AL**	**AL6**	**AL7**	**AH**	**AH6**	**AH7**
		With short spacer	**A6S**	**A6A**	**A6**	**A6A7**	**A6L**	**A6L6**	**A6L7**	**A6H**	**A6H6**	**A6H7**
		With long spacer	**A7S**	**A7A**	**A7A6**	**A7**	**A7L**	**A7L6**	**A7L7**	**A7H**	**A7H6**	**A7H7**
	L: With low load shock absorber + Adjustment bolt		**LS**	**LA**	**LA6**	**LA7**	**L**	**LL6**	**LL7**	**LH**	**LH6**	**LH7**
		With short spacer	**L6S**	**L6A**	**L6A6**	**L6A7**	**L6L**	**L6**	**L6L7**	**L6H**	**L6H6**	**L6H7**
		With long spacer	**L7S**	**L7A**	**L7A6**	**L7A7**	**L7L**	**L7L6**	**L7**	**L7H**	**L7H6**	**L7H7**
	H: With high load shock absorber + Adjustment bolt		**HS**	**HA**	**HA6**	**HA7**	**HL**	**HL6**	**HL7**	**H**	**HH6**	**HH7**
		With short spacer	**H6S**	**H6A**	**H6A6**	**H6A7**	**H6L**	**H6L6**	**H6L7**	**H6H**	**H6**	**H6H7**
		With long spacer	**H7S**	**H7A**	**H7A6**	**H7A7**	**H7L**	**H7L6**	**H7L7**	**H7H**	**H7H6**	**H7**

* Intermediate fixing spacer is not available for end lock mounting side.

* Spacers are used to fix the stroke adjustment unit at an intermediate stroke position.
For details on spacers and stroke adjustment units, refer to “Accessory Brackets (Option)” on page 96.

* For precautions, refer to page 121.

Accessory Brackets (Option)

Stroke adjustment unit	p. 96
Side support	p. 97

Refer to pages 109 to 112 for the specifications with auto switch.

Shock Absorbers for L and H Units

Type	Stroke adjustment unit	Bore size [mm]					
		10	16	20	25	32	40
Standard (Shock absorber/ RB series)	L	—	RB0806		RB1007	RB1412	
	H	RB0805	—	RB1007	RB1412	RB2015	
Shock absorber/soft type RJ series mounted (-XB22)	L	—	RJ0806H		RJ1007H	RJ1412H	
	H	RJ0805	—	RJ1007H	RJ1412H	—	—

∗ The shock absorber service life is different from that of the MY1H cylinder depending on operating conditions. Refer to the RB/RJ Series Specific Product Precautions for the replacement period.

∗ Shock absorber soft type RJ series mounted (-XB22) is made-to-order common specifications. For details, refer to page 115.

Shock Absorber Specifications

Model		RB 0805	RB 0806	RB 1007	RB 1412	RB 2015
Max. absorbed energy [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.

Theoretical Output

[N]

Bore size [mm]	Piston area [mm²]	Operating pressure [MPa]						
		0.2	0.3	0.4	0.5	0.6	0.7	0.8
10	78	15	23	31	39	46	54	62
16	200	40	60	80	100	120	140	160
20	314	62	94	125	157	188	219	251
25	490	98	147	196	245	294	343	392
32	804	161	241	322	402	483	563	643
40	1256	251	377	502	628	754	879	1005

∗ Theoretical output [N] = Pressure [MPa] x Piston area [mm²]

Weight

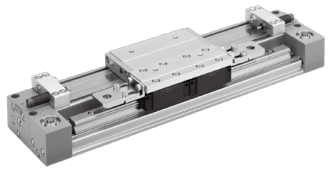
[kg]

Bore size [mm]	Basic weight	Additional weight per each 50 mm of stroke	Weight of moving parts	Side support bracket weight (per set)	Stroke adjustment unit weight (per unit)		
				Type A and B	A unit weight	L unit weight	H unit weight
10	0.26	0.08	0.05	0.003	—	—	0.02
16	0.74	0.14	0.19	0.01	0.02	0.04	—
20	1.35	0.25	0.40	0.02	0.03	0.05	0.07
25	2.17	0.30	0.73	0.02	0.04	0.07	0.11
32	4.37	0.46	1.30	0.04	0.08	0.14	0.23
40	5.84	0.55	1.89	0.08	0.12	0.19	0.28

Calculation: (Example) **MY1H20-300A**

- Basic weight····· 1.35 kg
- Cylinder stroke····· 300 mm stroke
- Additional weight····· 0.25/50 mm stroke
  1.35 + 0.25 x 300/50 + 0.03 x 2 ≈ 2.19 kg
- Weight of A unit····· 0.03 kg

With End 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 adjustment 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)				

⚠ Refer to page 123 in “Specific Product Precautions” for the product MY1H with end lock function.

⚠ Precautions

For details on the MY1H Series Mechanically Jointed Rodless Cylinder, refer to “Specific Product Precautions” on pages 119 to 123.

Cushion Capacity

Cushion Selection

<Rubber bumper>
Rubber bumpers are a standard feature on MY1H10.
Since the stroke absorption of rubber bumpers is short, when adjusting the stroke with an A unit, install an external shock absorber.
The load and speed range which can be absorbed by a rubber bumper is inside the rubber bumper limit line of the graph.

<Air cushion>
Air cushions are a standard feature on mechanically jointed rodless cylinders. (Except ø10)
The air cushion mechanism is incorporated to prevent excessive impact of the piston with high kinetic energy at the stroke end. The purpose of air cushion, thus, is not to decelerate the piston near the stroke end.
The ranges of load and speed that air cushions can absorb are within the air cushion limit lines shown in the graphs.

<Stroke adjustment unit with shock absorber>
Use this unit when operating with a load and speed exceeding the air cushion limit line, or when cushioning is required outside of the effective air cushion stroke range due to stroke adjustment.

L unit
Use this unit when cushioning is required outside of the effective air cushion range even if the load and speed are within the air cushion limit line, or when the cylinder is operated in a load and speed range above the air cushion limit line and below the L unit limit line.

H unit
Use this unit when the cylinder is operated in a load and speed range above the L unit limit line and below the H unit limit line.

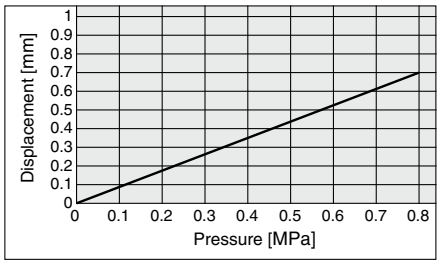
* For details on stroke adjustment using the adjustment bolt, refer to page 121.

Air Cushion Stroke

[mm]

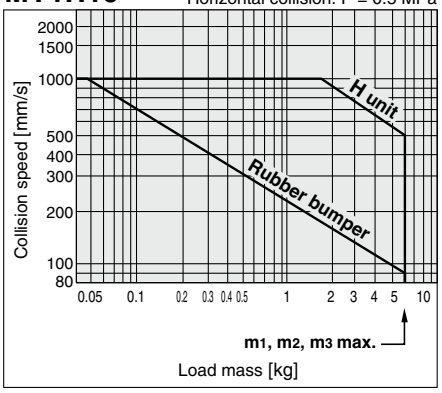
Bore size [mm]	Cushion stroke
16	12
20	15
25	15
32	19
40	24

Rubber Bumper (ø10 only) Positive Stroke from One End Due to Pressure

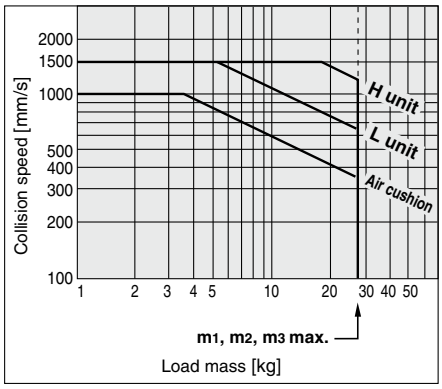


Absorption Capacity of Rubber Bumper, Air Cushion and Stroke Adjustment Units

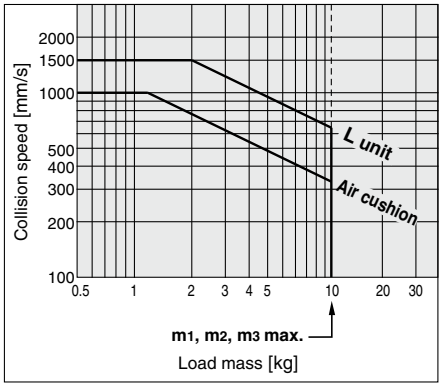
MY1H10 Horizontal collision: P = 0.5 MPa



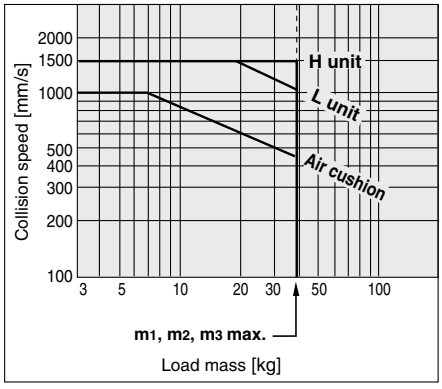
MY1H25 Horizontal collision: P = 0.5 MPa



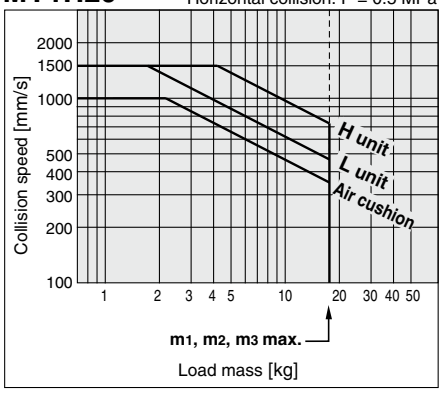
MY1H16 Horizontal collision: P = 0.5 MPa



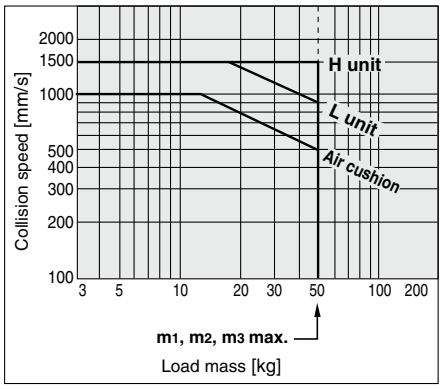
MY1H32 Horizontal collision: P = 0.5 MPa



MY1H20 Horizontal collision: P = 0.5 MPa

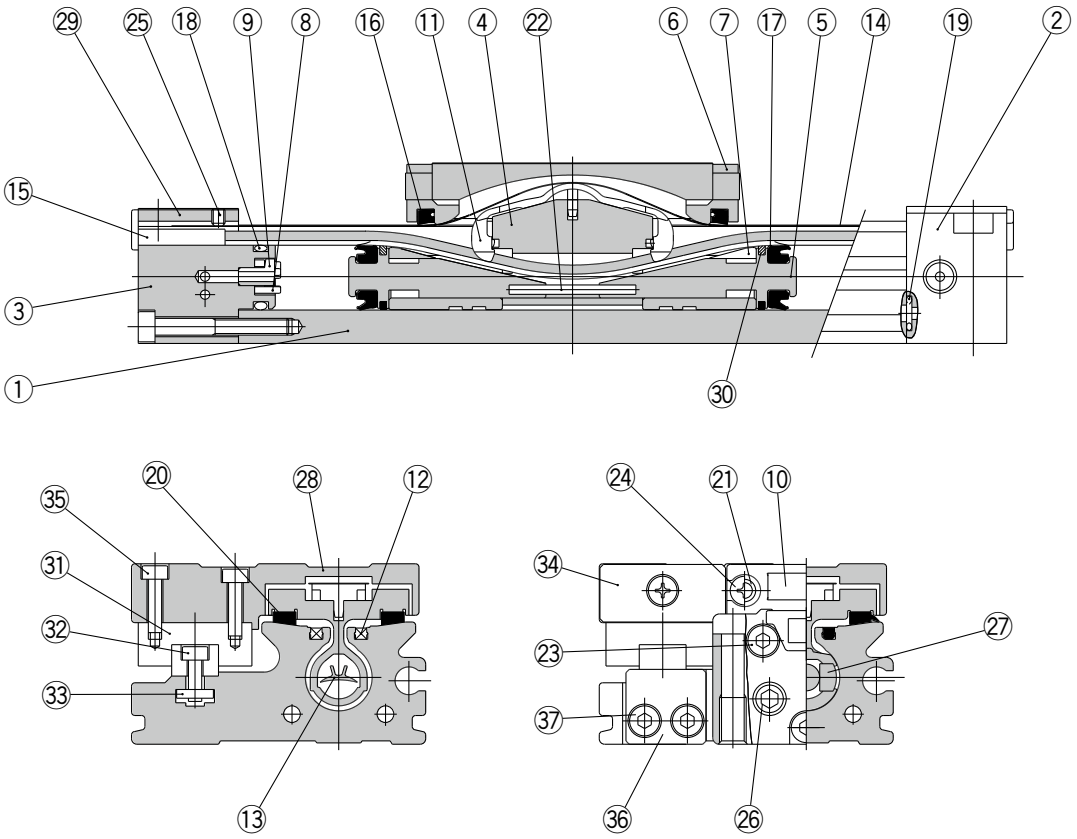


MY1H40 Horizontal collision: P = 0.5 MPa



Construction: ø10

Centralized piping type



Component Parts

No.	Description	Material	Note
1	**Cylinder tube**	Aluminum alloy	Hard anodized
2	**Head cover WR**	Aluminum alloy	Painted
3	**Head cover WL**	Aluminum alloy	Painted
4	**Piston yoke**	Aluminum alloy	Hard anodized
5	**Piston**	Aluminum alloy	Chromated
6	**End cover**	Special resin	
7	**Wear ring**	Special resin	
8	**Bumper**	Polyurethane rubber	
9	**Holder**	Stainless steel	
10	**Stopper**	Carbon steel	Nickel plating
11	**Belt separator**	Special resin	
12	**Seal magnet**	Rubber magnet	
15	**Belt clamp**	Special resin	
20	**Bearing**	Special resin	
21	**Spacer**	Chromium molybdenum steel	Nickel plating

No.	Description	Material	Note
22	**Spring pin**	Stainless steel	
23	**Hexagon socket head cap screw**	Chromium molybdenum steel	Chromated
24	**Cross recessed binding head screw**	Carbon steel	Chromated
25	**Hexagon socket head set screw**	Carbon steel	Black zinc chromated
26	**Hexagon socket head plug**	Carbon steel	Chromated
27	**Magnet**	—	
28	**Slide table**	Aluminum alloy	Hard anodized
29	**Head plate**	Stainless steel	
30	**Lube-retainer**	Special resin	
31	**Linear guide**	—	
32	**Hexagon socket head cap screw**	Chromium molybdenum steel	Chromated
33	**Square nut**	Carbon steel	Chromated
34	**Stopper plate**	Carbon steel	Chromated
35	**Hexagon socket head cap screw**	Chromium molybdenum steel	Chromated
36	**Guide stopper**	Carbon steel	Nickel plating
37	**Hexagon socket head cap screw**	Chromium molybdenum steel	Chromated

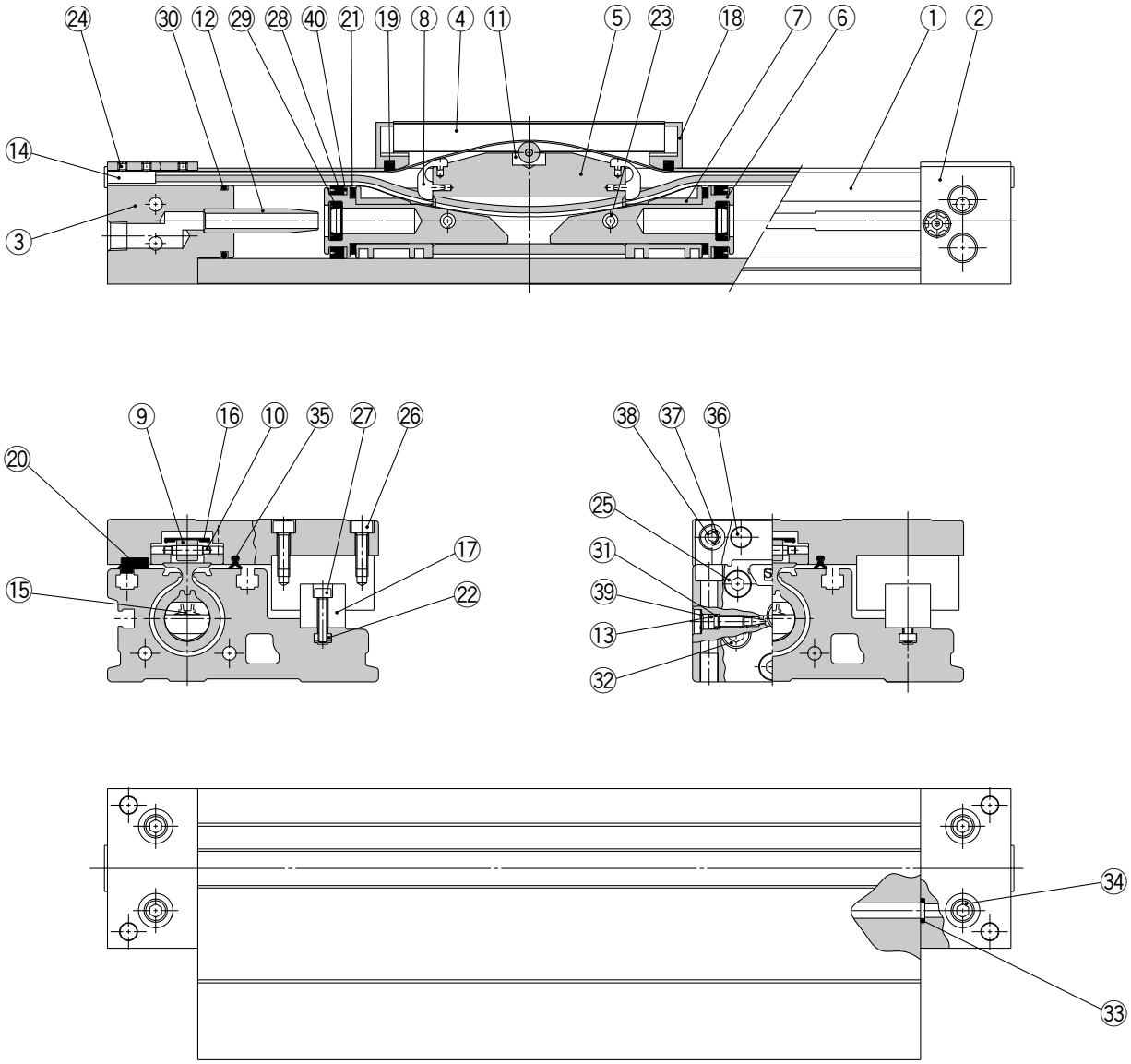
Replacement Parts/Seal Kit

No.	Description	Qty.	**MY1H10**
13	**Seal belt**	1	MY10-16A-Stroke
14	**Dust seal band**	1	MY10-16B-Stroke
16	**Scraper**	2	MY1B10-PS
17	**Piston seal**	2	
18	**Tube gasket**	2	
19	**O-ring**	4	

∗ Seal kit includes ⑯, ⑰, ⑱, and ⑲.
Seal kit includes a grease pack (10 g).
When ⑬ and ⑭ are shipped independently, a grease pack is included.
Order with the following part number when only the grease pack is needed.
Grease pack part number: GR-S-010 (10 g), **GR-S-020** (20 g)

Construction: ø16, ø20

MY1H16, 20



MY1H16, 20

Component Parts

No.	Description	Material	Note
1	**Cylinder tube**	Aluminum alloy	Hard anodized
2	**Head cover WR**	Aluminum alloy	Painted
3	**Head cover WL**	Aluminum alloy	Painted
4	**Slide table**	Aluminum alloy	Hard anodized
5	**Piston yoke**	Aluminum alloy	Chromated
6	**Piston**	Aluminum alloy	Chromated
7	**Wear ring**	Special resin	
8	**Belt separator**	Special resin	
9	**Guide roller**	Special resin	
10	**Guide roller shaft**	Stainless steel	
11	**Coupler**	Sintered iron material	
12	**Cushion ring**	Aluminum alloy	Anodized
13	**Cushion needle**	Rolled steel	Nickel plating
14	**Belt clamp**	Special resin	
17	**Guide**	—	
18	**End cover**	Special resin	
20	**Bearing**	Special resin	

No.	Description	Material	Note
21	**Magnet**	—	
22	**Square nut**	Carbon steel	Chromated
23	**Spring pin**	Carbon tool steel	
24	**Hexagon socket head set screw**	Chromium molybdenum steel	Black zinc chromated/Chromated
25	**Hexagon socket head cap screw**	Chromium molybdenum steel	Chromated
26	**Hexagon socket head cap screw**	Chromium molybdenum steel	Chromated
27	**Hexagon socket head cap screw**	Chromium molybdenum steel	Chromated
32	**Hexagon socket head taper plug**	Carbon steel	Chromated
34	**Hexagon socket head taper plug**	Carbon steel	Chromated
36	**Stopper**	Carbon steel	Nickel plating
37	**Spacer**	Stainless steel	
38	**Hexagon socket button head screw**	Chromium molybdenum steel	Chromated
39	**Type CR retaining ring**	Spring steel	
40	**Lube-retainer**	Special resin	

Replacement Parts/Seal Kit

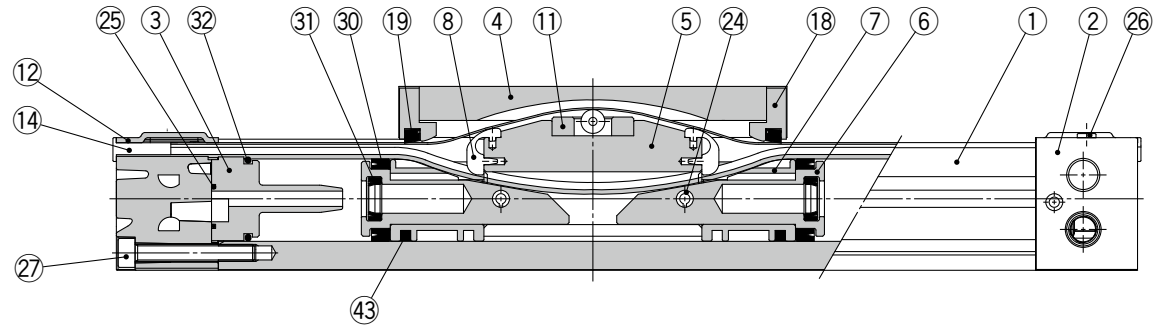
No.	Description	Qty.	MY1H16	MY1H20
15	**Seal belt**	1	MY16-16C-Stroke	MY20-16C-Stroke
16	**Dust seal band**	1	MY16-16B-Stroke	MY20-16B-Stroke
31	**O-ring**	2	KA00309 (ø4 x ø1.8 x ø1.1)	KA00309 (ø4 x ø1.8 x ø1.1)
35	**Side scraper**	1	MYH16-15BK2900B	MYH20-15BK2901B
19	**Scraper**	2	MY1H16-PS	MY1H20-PS
28	**Piston seal**	2		
29	**Cushion seal**	2		
30	**Tube gasket**	2		
33	**O-ring**	4		

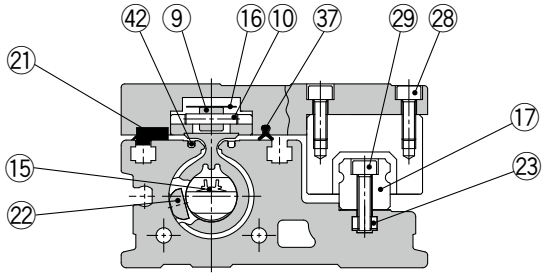
∗ Seal kit includes ⑲, ㉘, ㉙, ㉚, and ㉝. Order the seal kit based on each bore size.
∗ Seal kit includes a grease pack (10 g).
When ⑮ and ⑯ are shipped independently, a grease pack (20 g) is included.
Order with the following part number when only the grease pack is needed.
Grease pack part number: GR-S-010 (10 g), **GR-S-020** (20 g)

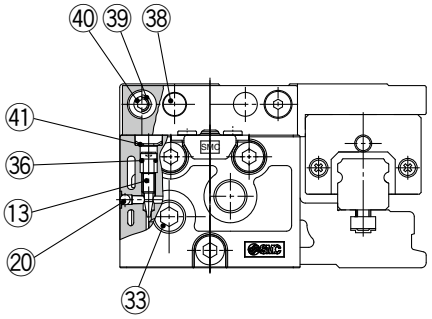
∗ Two types of dust seal bands are available. Since the part number varies depending on the treatment of the hexagon socket head set screw ㉔, please check a proper dust seal band carefully.
A: Black zinc chromated → MY□□-16B-stroke, B: Chromated → MY□□-16BW-stroke

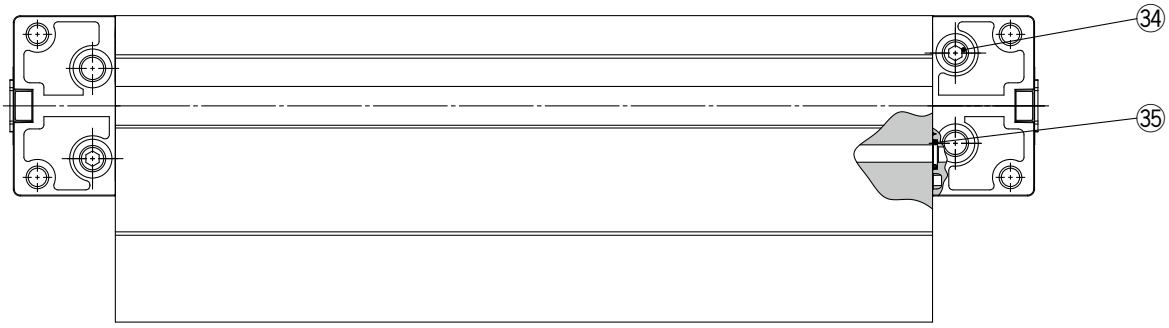
Construction: ø25, ø32, ø40

MY1H25, 32, 40









MY1H25, 32, 40

Component Parts

No.	Description	Material	Note
1	**Cylinder tube**	Aluminum alloy	Hard anodized
2	**Head cover**	Aluminum alloy	Painted
3	**Cushion boss**	Special resin	
4	**Slide table**	Aluminum alloy	Hard anodized
5	**Piston yoke**	Aluminum alloy	Chromated
6	**Piston**	Aluminum alloy	Chromated
7	**Wear ring**	Special resin	
8	**Belt separator**	Special resin	
9	**Guide roller**	Special resin	
10	**Parallel pin**	Stainless steel	
11	**Coupler**	Sintered iron material	
12	**Head plate**	Stainless steel	
13	**Cushion needle**	Rolled steel	Nickel plating
14	**Belt clamp**	Special resin	
17	**Guide**	—	
18	**End cover**	Special resin	
20	**Steel ball**	Carbon tool steel	
21	**Bearing**	Special resin	
22	**Magnet**	Rare earth magnet	
23	**Square nut**	Carbon steel	Chromated
24	**Spring pin**	Bearing steel	
26	**Thin head screw**	Chromium molybdenum steel	Chromated
27	**Hexagon socket head cap screw**	Chromium molybdenum steel	Chromated
28	**Hexagon socket head cap screw**	Chromium molybdenum steel	Chromated
29	**Hexagon socket head cap screw**	Chromium molybdenum steel	Chromated
33	**Hexagon socket head taper plug**	Carbon steel	Chromated (Centralized piping: 10 pcs.)
34	**Hexagon socket head taper plug**	Carbon steel	Chromated (Centralized piping: 4 pcs.)
38	**Stopper**	Carbon steel	
39	**Spacer**	Stainless steel	
40	**Hexagon socket button head screw**	Chromium molybdenum steel	Chromated
41	**Type CR retaining ring**	Spring steel	
42	**Seal magnet**	Rubber magnet	
43	**Lube-retainer**	Special resin	

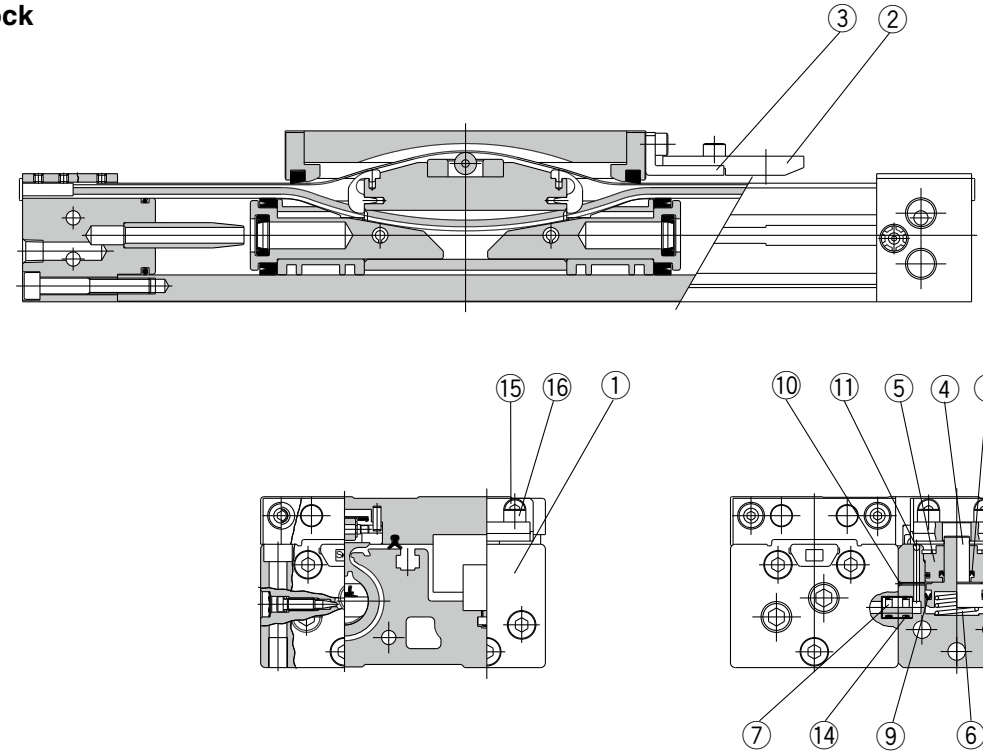
Replacement Parts/Seal Kit

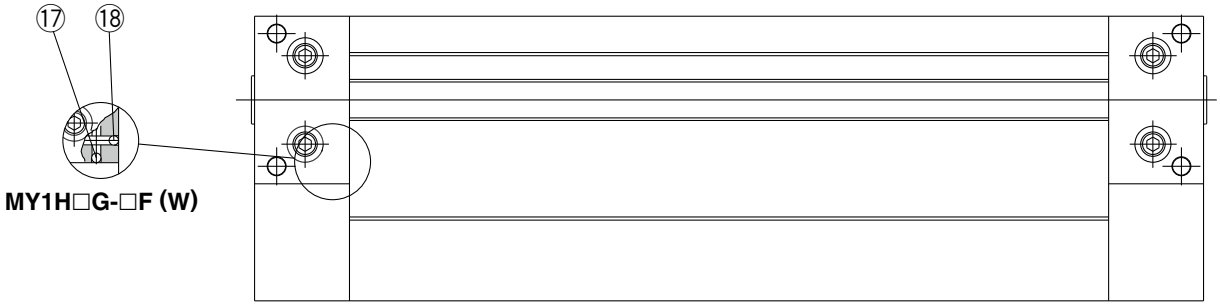
No.	Description	Material	Qty.	MY1H25	MY1H32	MY1H40
15	**Seal belt**	Urethane	1	MY25-16C-Stroke	MY32-16C-Stroke	MY40-16C-Stroke
16	**Dust seal band**	Stainless steel	1	MY1B25-16B-Stroke	MY1B32-16B-Stroke	MY1B40-16B-Stroke
25	**Cushion boss gasket**	NBR	2	MYB25-16GA5900	MYB32-16GA5901	MYB40-16GA5902
36	**O-ring**	NBR	2	KA00311 (ø5.1 x ø3 x ø1.05)	KA00320 (ø7.15 x ø3.75 x ø1.7)	KA00320 (ø7.15 x ø3.75 x ø1.7)
37	**Side scraper**	Special resin	2	MYH25-15BK2902B	MYH32-15BK2903B	MYH40-15BK2904B
19	**Scraper**	NBR	2	MY1H25-PS	MY1H32-PS	MY1H40-PS
30	**Piston seal**	NBR	2			
31	**Cushion seal**	NBR	2			
32	**Tube gasket**	NBR	2			
35	**O-ring**	NBR	4			

∗ Seal kit includes ⑲, ㉚, ㉛, ㉜, and ㉟. Order the seal kit based on each bore size.
∗ Seal kit includes a grease pack (10 g). When ⑮ or ⑯ is shipped independently, a grease pack (20 g) is included. Order with the following part number when only the grease pack is needed.
Grease pack part number: GR-S-010 (10 g), **GR-S-020** (20 g)

Construction: ø16, ø20

With end lock





Component Parts

No.	Description	Material	Note
1	**Locking body**	Aluminum alloy	Painted
2	**Lock finger**	Carbon steel	After quenching, nickel plated
3	**Lock finger bracket**	Rolled steel	Nickel plating
4	**Lock piston**	Carbon tool steel	After quenching, electroless nickel plated
5	**Rod cover**	Aluminum alloy	Hard anodized
6	**Return spring**	Spring steel	Zinc chromated
7	**Bypass pipe**	Aluminum alloy	Chromated
10	**Steel ball**	High carbon chrome bearing steel	
11	**Steel ball**	High carbon chrome bearing steel	
13	**Inverted internal retaining ring**	Carbon tool steel	Nickel plating
14	**O-ring**	NBR	
15	**Hexagon socket head cap screw**	Chromium molybdenum steel	Nickel plating
16	**Hexagon socket head cap screw**	Chromium molybdenum steel	Nickel plating
17	**Steel ball**	High carbon chrome bearing steel	
18	**Steel ball**	High carbon chrome bearing steel	

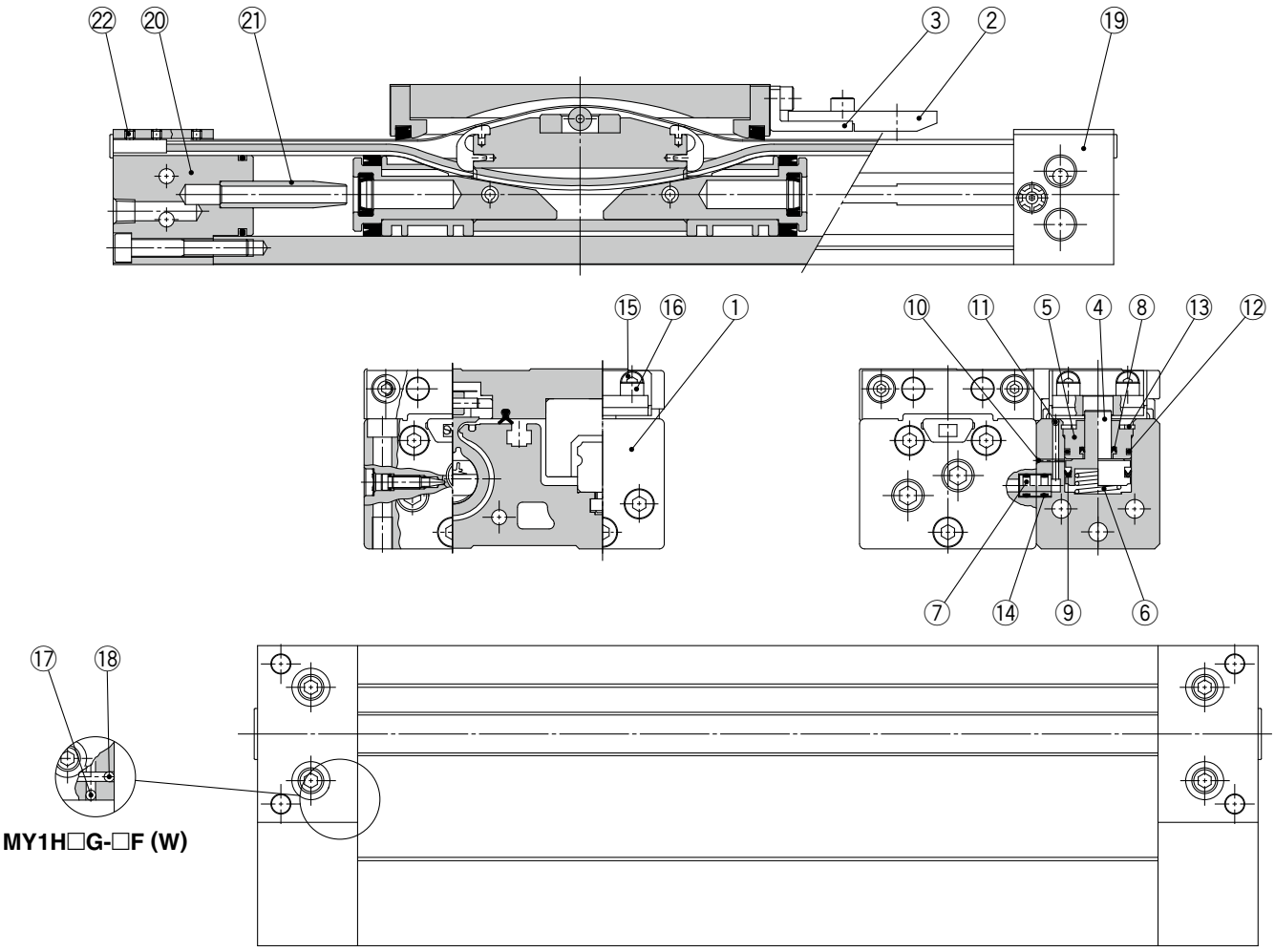
Replacement Parts: Seals

No.	Description	Material	Qty.	**MY1H16**	**MY1H20**
8	**Rod seal**	NBR	1	KB00257	KB00257
9	**Piston seal**	NBR	1	KB00202	KB00202
12	**O-ring**	NBR	1	KA00057	KA00057

∗ Since the seal does not include a grease pack, order it separately.
Grease pack part number: GR-S-010 (10 g)

Construction: ø25, ø32, ø40

With end lock



Component Parts

No.	Description	Material	Note
1	**Locking body**	Aluminum alloy	Painted
2	**Lock finger**	Carbon steel	After quenching, nickel plated
3	**Lock finger bracket**	Rolled steel	Nickel plating
4	**Lock piston**	Carbon tool steel	After quenching, electroless nickel plated
5	**Rod cover**	Aluminum alloy	Hard anodized
6	**Return spring**	Spring steel	Zinc chromated
7	**Bypass pipe**	Aluminum alloy	Hard anodized
10	**Steel ball**	High carbon chromium bearing steel	
11	**Steel ball**	High carbon chromium bearing steel	
13	**Inverted internal retaining ring**	Carbon tool steel	Nickel plating
15	**Hexagon socket head cap screw**	Chromium molybdenum steel	Chromated
16	**Hexagon socket head cap screw**	Chromium molybdenum steel	Chromated
17	**Steel ball**	High carbon chromium bearing steel	
18	**Steel ball**	High carbon chromium bearing steel	
19	**Head cover WR**	Aluminum alloy	Painted
20	**Head cover WL**	Aluminum alloy	Painted
21	**Cushion ring**	Aluminum alloy	
22	**Hexagon socket head set screw**	Chromium molybdenum steel	Chromated

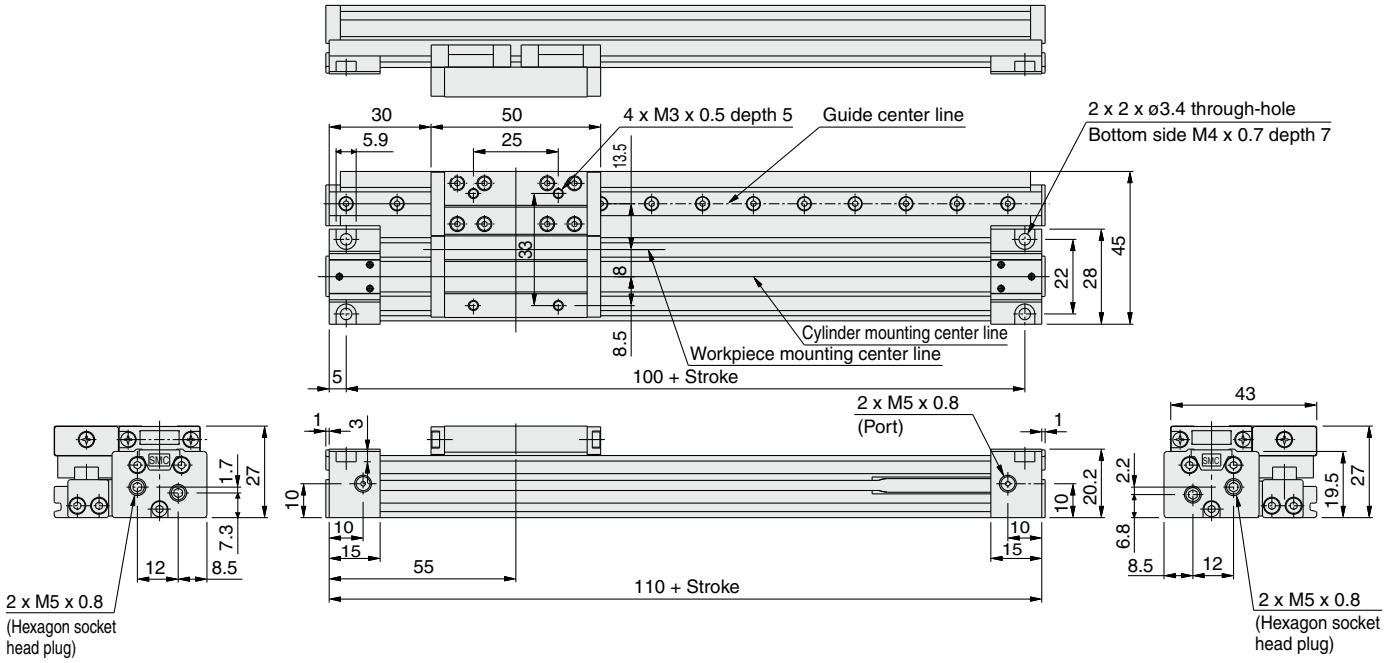
Replacement Parts: Seals

No.	Description	Material	Qty.	MY1H25	MY1H32	MY1H40
8	**Rod seal**	NBR	1	KB00267	KB00267	KB00267
9	**Piston seal**	NBR	1	KB00217	KB00217	KB00217
12	**O-ring**	NBR	1	KA00037	KA00037	KA00037
14	**O-ring**	NBR	2	KA00048	KA00048	KA00048

∗ Since the seal does not include a grease pack, order it separately.
Grease pack part number: GR-S-010 (10 g)

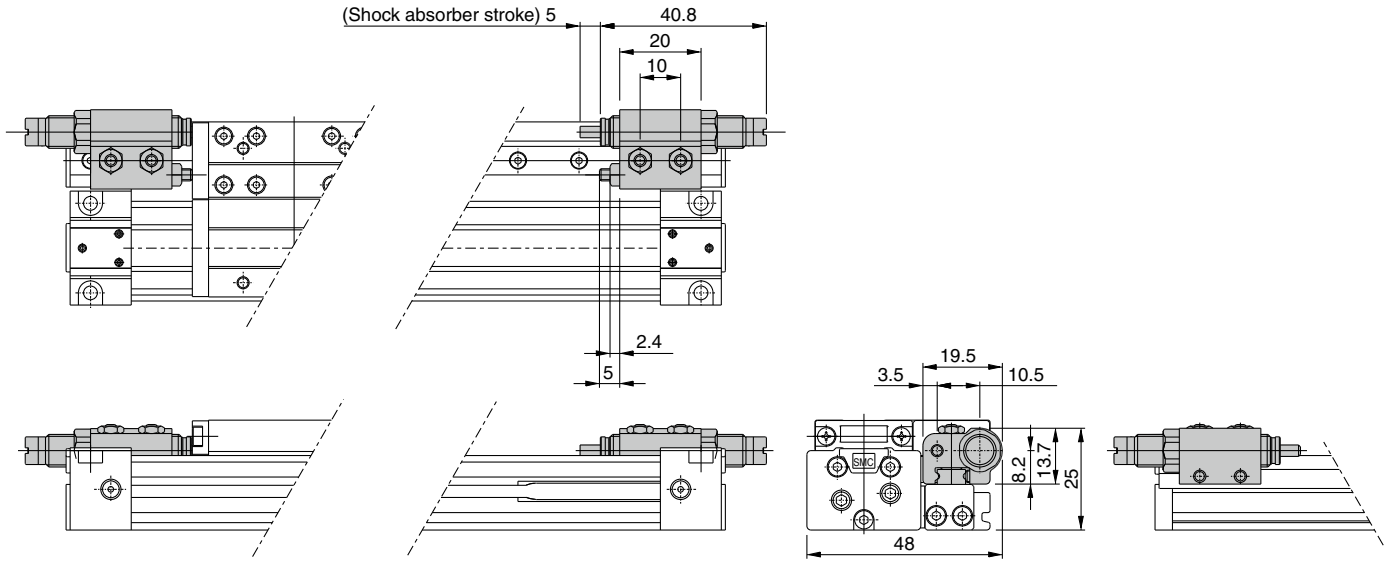
Centralized Piping Type ø10

MY1H10G— Stroke



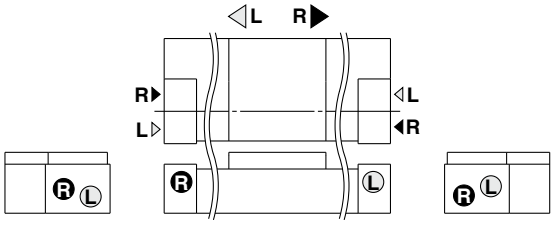
With shock absorber + Adjustment bolt

MY1H10G— Stroke H



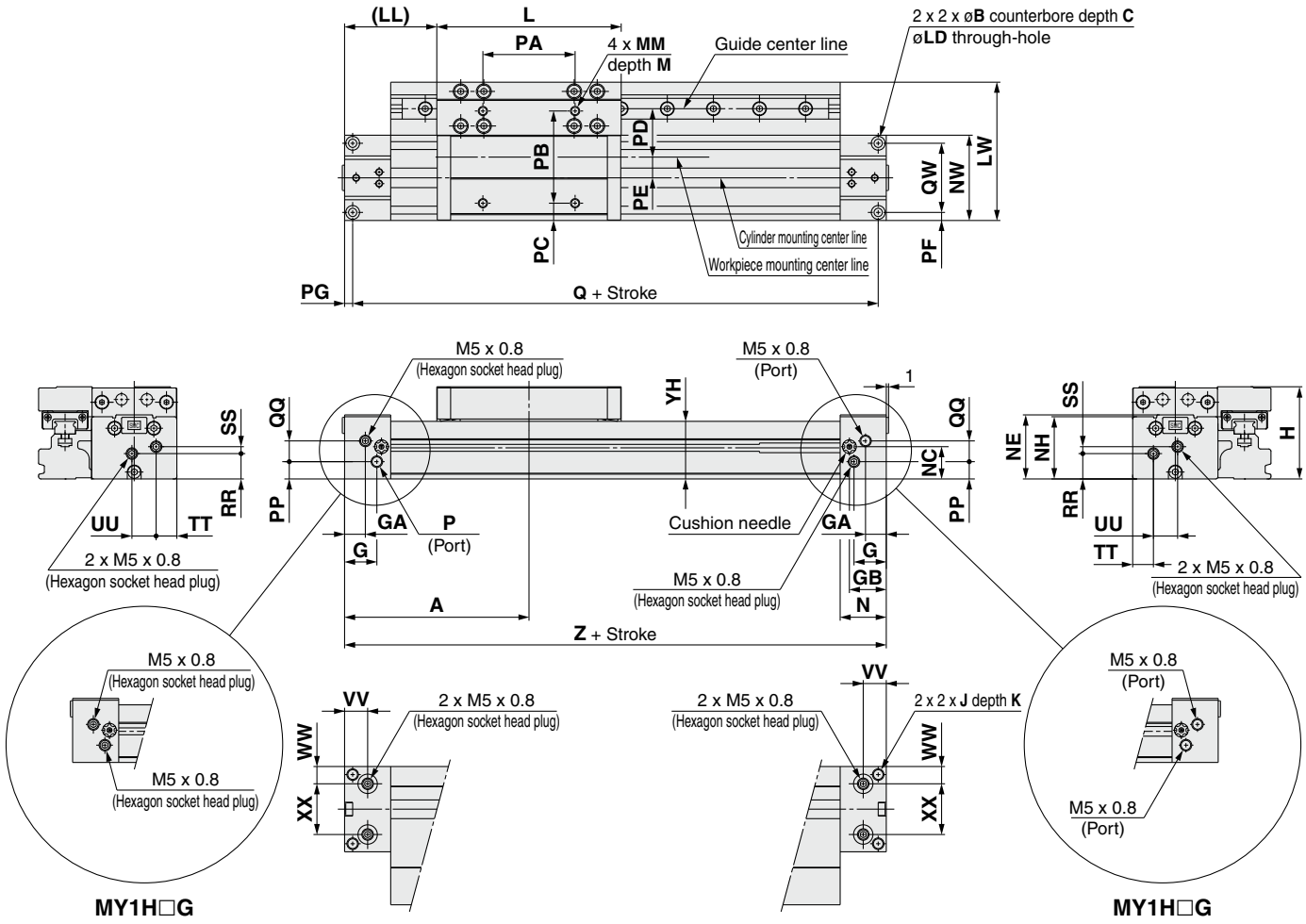
Port Variations

Slide table operating direction



Standard Type/Centralized Piping Type ø16, ø20

MY1H16□/20□ – Stroke



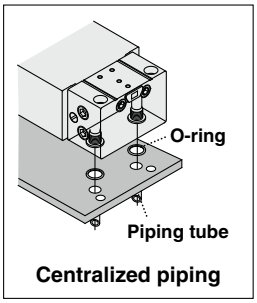
[mm]

Model	A	B	C	G	GA	GB	H	J	K	L	LD	LL	LW	M	MM	N	NC	NE	NH	NW
MY1H16□	80	6	3.5	14	9	16	40	M5 x 0.8	10	80	3.5	40	60	7	M4 x 0.7	20	14	27.8	27	37
MY1H20□	100	7.5	4.5	12.5	12.5	20.5	46	M6 x 1	12	100	4.5	50	78	8	M5 x 0.8	25	17.5	34	33.5	45

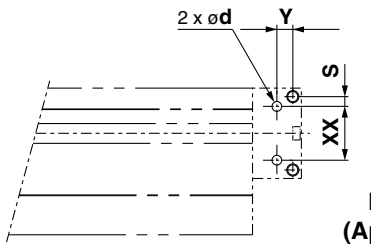
[mm]

Model	PA	PB	PC	PD	PE	PF	PG	PP	Q	QQ	QW	RR	SS	TT	UU	VV	WW	XX	YH	Z
MY1H16□	40	40	7.5	21	9	3.5	3.5	7.5	153	9	30	11	3	9	10.5	10	7.5	22	25	160
MY1H20□	50	40	14.5	27	12	4.5	4.5	11.5	191	11	36	14.5	5	10.5	12	12.5	10.5	24	31.5	200

Centralized Piping on the Bottom



Centralized piping



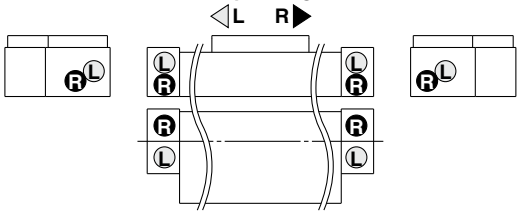
Bottom ported
(Applicable O-ring)

[mm]

Model	WX	Y	S	d	D	R	Applicable O-ring
MY1H16□	22	6.5	4	4	8.4	1.1	C6
MY1H20□	24	8	6	4	8.4	1.1	

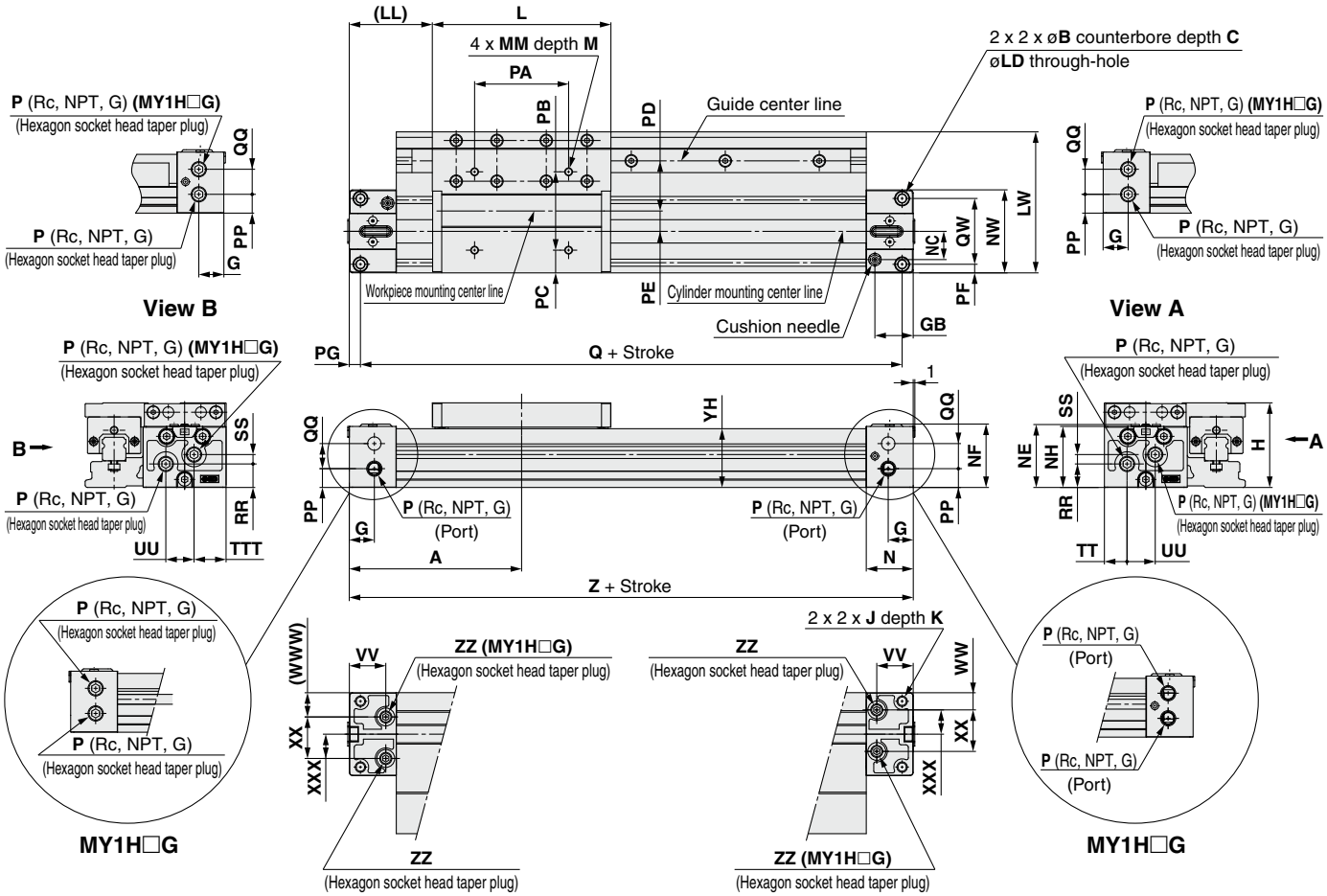
Port Variations

Slide table operating direction



Standard Type/Centralized Piping Type ø25, ø32, ø40

MY1H25□/32□/40□ – Stroke Z



Standard piping/Centralized piping

[mm]

Model	A	B	C	G	GB	H	J	K	L	LD	LL	LW	M	MM	N	NC	NE	NF	NH	NW	P	PA	PB	PC
MY1H25	110	9	5.5	16	24.5	54	M6 x 1	9.5	114	5.6	53	90	9	M5 x 0.8	30	18	40.2	40.5	39	53	1/8	60	50	14.5
MY1H32	140	11	6.6	19	28.5	68	M8 x 1.25	16	140	6.8	70	110	13	M6 x 1	37	22	50.2	50	49	64	1/8	80	60	15
MY1H40	170	14	8.5	23	35	84	M10 x 1.5	15	170	8.6	85	121	13	M6 x 1	45	26.5	62.7	62	61.5	75	1/4	100	80	20.5

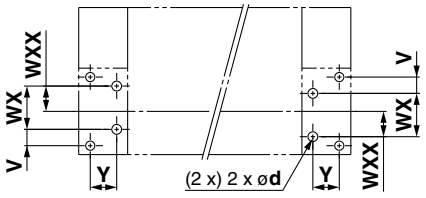
Model	PD	PE	PF	PG	PP	Q	QW	RR	TT	TTT	VV	WW	WWW	XXX	YH	Z	ZZ
MY1H25	32	13	5.5	7	12	206	42	15	14.5	20.5	23.3	11	15.5	15.5	37.5	220	1/16
MY1H32	42	13	6.5	8	16	264	51	16	16	16	28.5	12	12	20	47	280	1/16
MY1H40	37.5	23	8	9	18.5	322	59	23.5	20	20	35	14	14	23.5	59.5	340	1/8

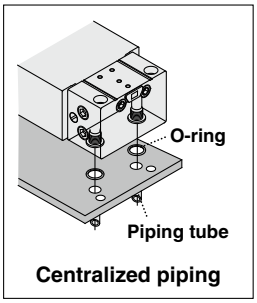
Centralized piping

[mm]

Model	QQ	SS	UU	XX
MY1H25	16	6	18	26.5
MY1H32	16	11	32	40
MY1H40	24	12	35	47

Centralized Piping on the Bottom





* This figure shows the recommended machining dimensions of the mounting surface when viewed from the cylinder side.
* Values inside the parentheses are those for **MY1H□G**.

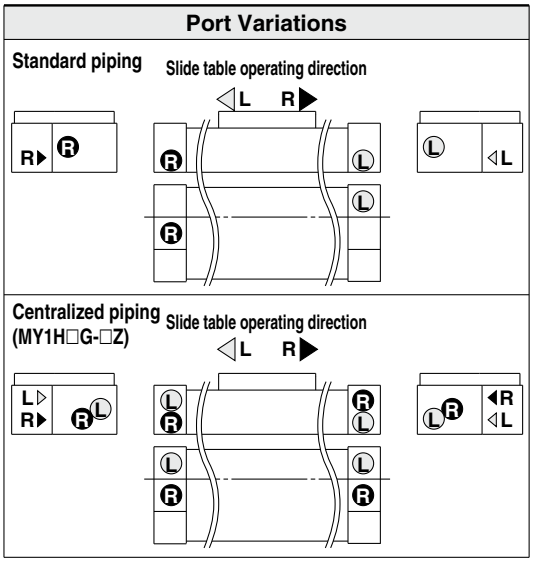
[mm]

Model	WXX	Y	d	D	R	Applicable O-ring
MY1H25	15.5	16.2	6	11.4	1.1	C9
MY1H32	20	20.4	6	11.4	1.1	
MY1H40	23.5	25.9	8	13.4	1.1	C11.2

[mm]

Model	WX	V
MY1H25	26.5	10
MY1H32	40	5.5
MY1H40	47	6

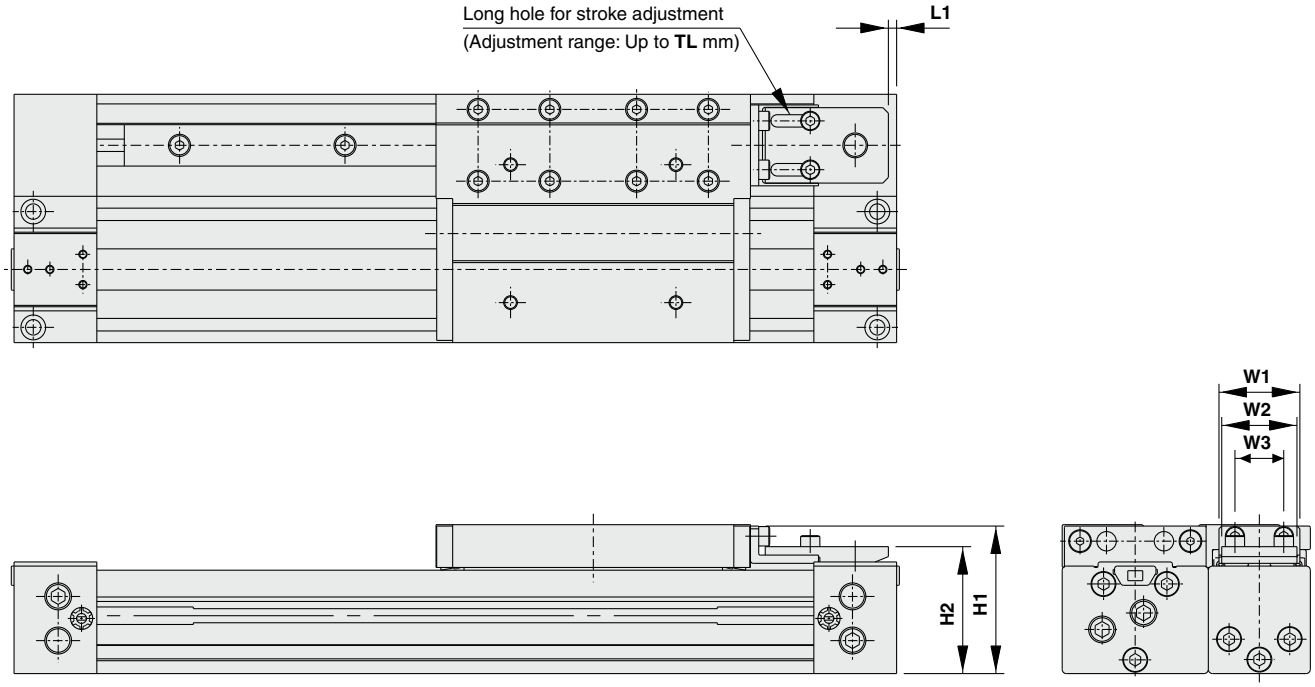
Port Variations



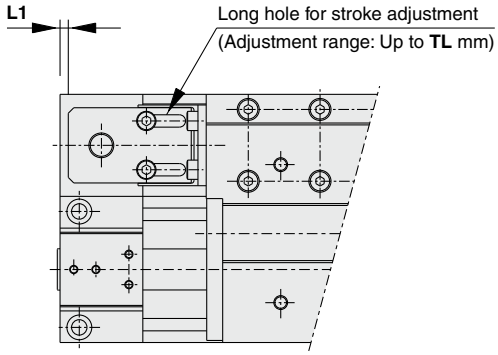
With End Lock ø16, ø20

Dimensions for types other than end lock are identical to the standard type dimensions. For details about dimensions, etc., refer to page 90.

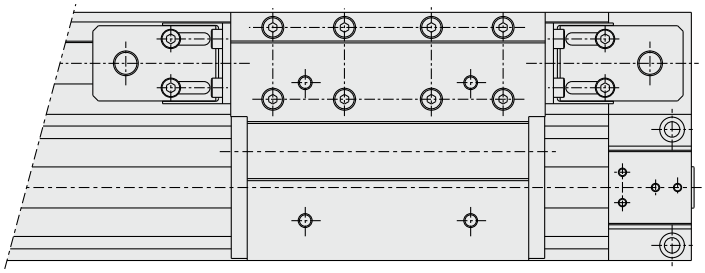
MY1H□—□E
(Right end)



MY1H□—□F
(Left end)



MY1H□—□W
(Both ends)



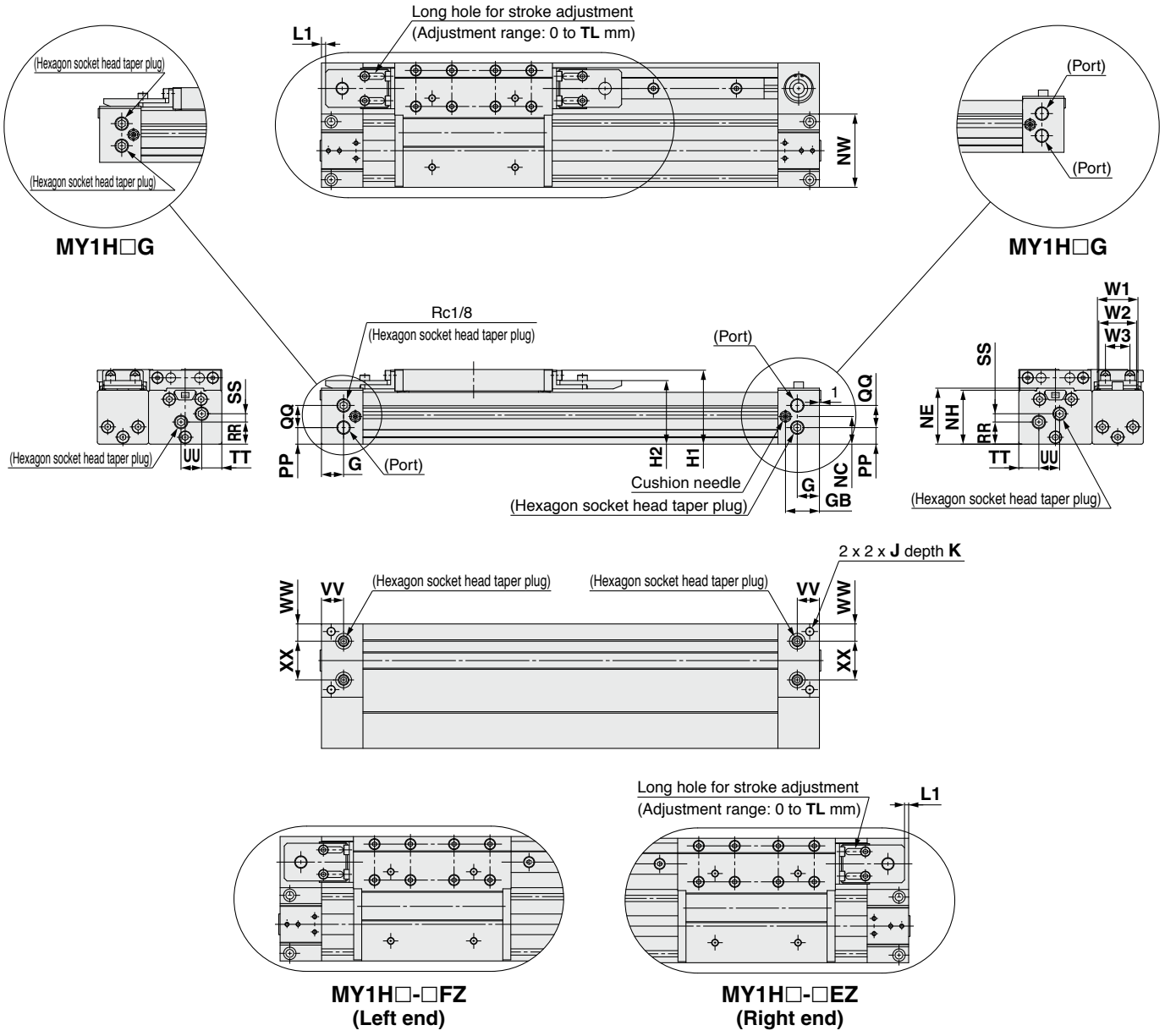
[mm]

Model	H1	H2	L1	TL	W1	W2	W3
MY1H16□	39.2	33	0.5	5.6	18	16	10.4
MY1H20□	45.7	39.5	3	6	18	16	10.4

With End Lock ø25, ø32, ø40

Dimensions for types other than end lock are identical to the standard type dimensions. For details about dimensions, etc., refer to page 91.

MY1H□–□WZ (Both ends)



Standard piping/Centralized piping [mm]

Model	NC	NE	PP	RR	SS	UU	VV	WW	XX
MY1H25	20	40.5	12	16	6	15	16	12.5	28
MY1H32	25	50	17	23	4	16	19	16	32
MY1H40	30.5	63	8.5	27	10.5	22	23	19.5	36

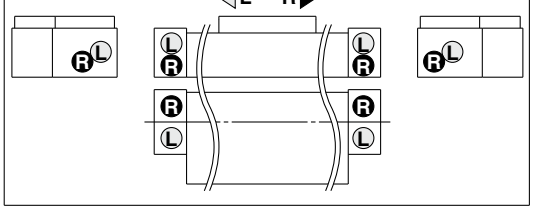
∗ The dimensions of the TT, G, GB, and NA are the same as those of the standard product.

End lock mechanism (Standard piping/Centralized piping) [mm]

Model	H1	H2	L1	TL	W1	W2	W3
MY1H25	53.5	46	3	11.5	29.3	27.3	17.7
MY1H32	67	56	6.5	12	29.3	27.3	17.7
MY1H40	83	68.5	10.5	16	38	35	24.4

Port Variations

Slide table operating direction

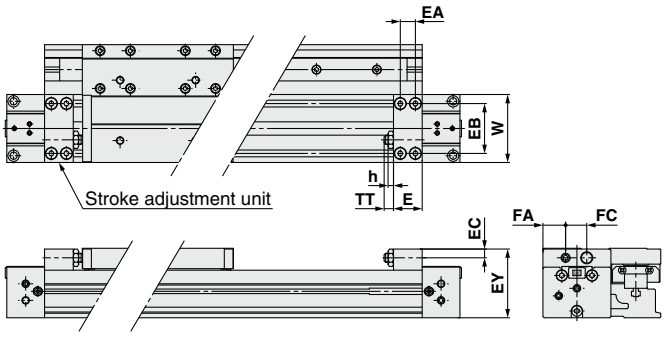


Stroke Adjustment Units

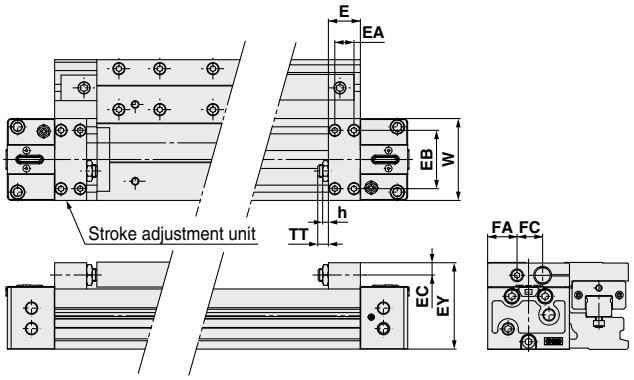
With adjustment bolt

MY1H Bore size □ – Stroke A(Z)

ø16, ø20



ø25, ø32, ø40



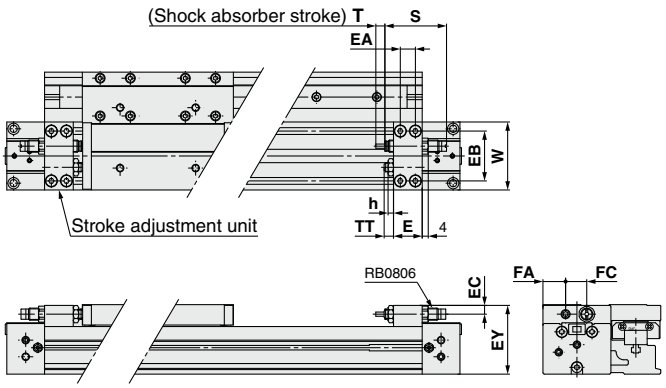
[mm]

Applicable cylinder	E	EA	EB	EC	EY	FA	FC	h	TT	W
MY1H16	14.6	7	28	5.8	39.5	11.5	13	3.6	5.4 (Max. 11)	37
MY1H20	19	10	33	5.8	45.5	15	14	3.6	6 (Max. 12)	45
MY1H25	18	9	40	7.5	53.5	16	21	3.5	5 (Max. 16.5)	53
MY1H32	25	14	45.6	9.5	67.5	23	20	4.5	8 (Max. 20)	64
MY1H40	31	19	55	11	82	24.5	26	4.5	9 (Max. 25)	75

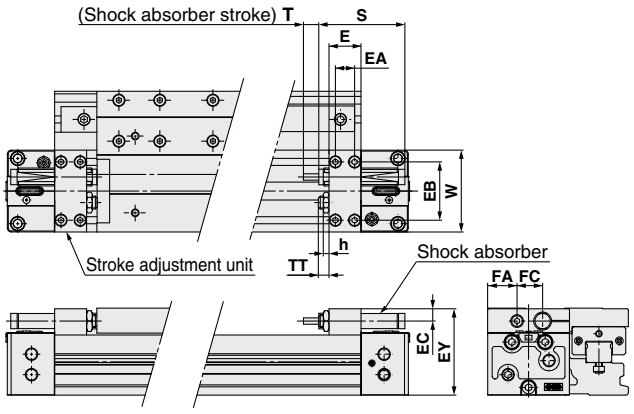
With low load shock absorber + Adjustment bolt

MY1H Bore size □ – Stroke L(Z)

ø16, ø20



ø25, ø32, ø40



[mm]

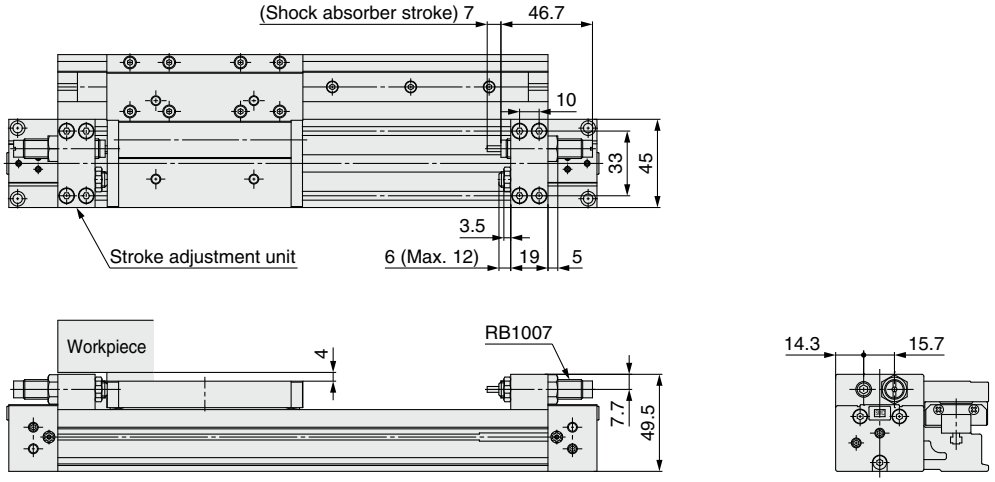
Applicable cylinder	E	EA	EB	EC	EY	FA	FC	h	S	T	TT	W	Shock absorber model
MY1H16	14.6	7	28	5.8	39.5	11.5	13	3.6	40.8	6	5.4 (Max. 11)	37	RB0806
MY1H20	19	10	33	5.8	45.5	15	14	3.6	40.8	6	6 (Max. 12)	45	RB0806
MY1H25	18	9	40	7.5	53.5	16	21	3.5	46.7	7	5 (Max. 16.5)	53	RB1007
MY1H32	25	14	45.6	9.5	67.5	23	20	4.5	67.3	12	8 (Max. 20)	64	RB1412
MY1H40	31	19	55	11	82	24.5	26	4.5	67.3	12	9 (Max. 25)	75	RB1412

Stroke Adjustment Units

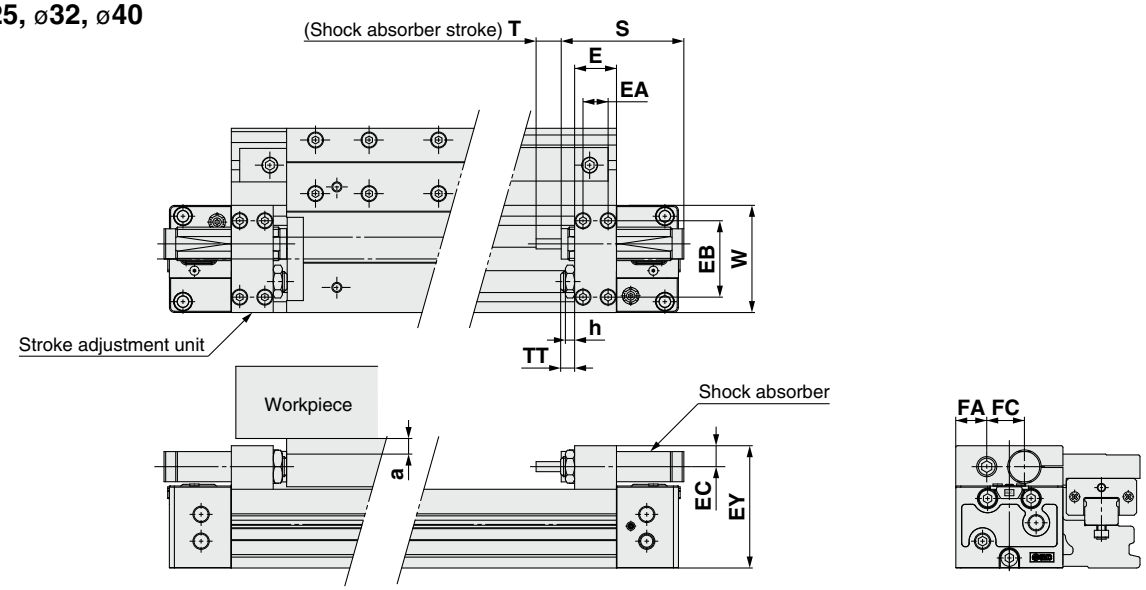
With high load shock absorber + Adjustment bolt

MY1H Bore size □ – Stroke H(Z)

ø20



ø25, ø32, ø40



∗ Since the EY dimension of H unit is longer than the table top height (H dimension), when mounting a workpiece that exceeds the overall length (L dimension) of the slide table, allow a clearance of dimension "**a**" or longer on the workpiece side.

[mm]

Applicable cylinder	E	EA	EB	EC	EY	F	FA	FC	h	S	T	TT	W	Shock absorber model	a
MY1H25	18	9	40	9	57	—	18	17.5	4.5	67.3	12	5 (Max. 16.5)	53	RB1412	3.5
MY1H32	25	14	45.6	12.4	73	—	18.5	22.5	5.5	73.2	15	8 (Max. 20)	64	RB2015	5.5
MY1H40	31	19	55	12.4	86	—	26.5	22	5.5	73.2	15	9 (Max. 25)	75	RB2015	2.5

Accessory Brackets (Option)

Stroke Adjustment Units

MYH − A 25 L2 − 6N

Stroke adjustment unit

Bore size

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

Unit no.

Symbol	Stroke adjustment unit	Mounting position
A1	A unit	Left
A2		Right
L1	L unit	Left
L2		Right
H1	H unit	Left
H2		Right

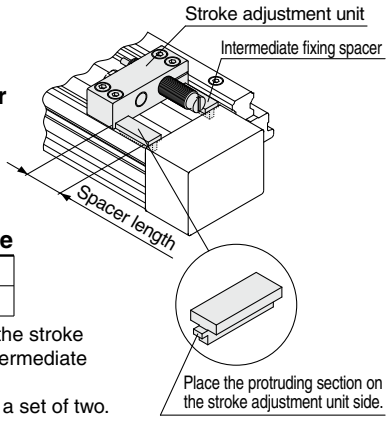
Intermediate fixing spacer

Nil	Without spacer
6□	Short spacer
7□	Long spacer

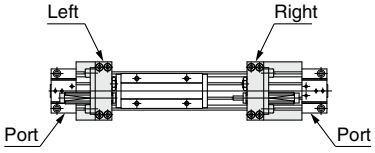
Spacer delivery type

Nil	Unit installed
N	Spacer only

∗ Spacers are used to fix the stroke adjustment unit at an intermediate stroke position.
∗ Spacers are shipped for a set of two.



∗ When ordering the intermediate fixing spacer for the stroke adjustment unit, the intermediate fixing spacer is shipped together.



Stroke adjustment range

[mm]

Bore size	10	16		20			25			32			40		
Unit symbol	**H**	**A**	**L**	**A**	**L**	**H**	**A**	**L**	**H**	**A**	**L**	**H**	**A**	**L**	**H**
Without spacer	0 to −10	0 to −5.6		0 to −6			0 to −11.5			0 to −12			0 to −16		
With short spacer	—∗1	−5.6 to −11.2		−6 to −12			−11.5 to −23			−12 to −24			−16 to −32		
With long spacer	—∗1	−11.2 to −16.8		−12 to −18			−23 to −34.5			−24 to −36			−32 to −48		

∗1 For ø10, stroke adjustment is available. Refer to page 122 for details.

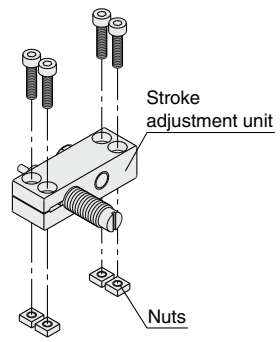
Spacer length

[mm]

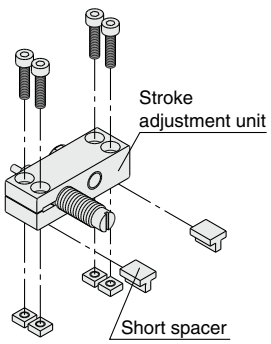
Bore size	16	20	25	32	40
Short spacer	5.6	6	11.5	12	16
Long spacer	11.2	12	23	24	32

Component Parts

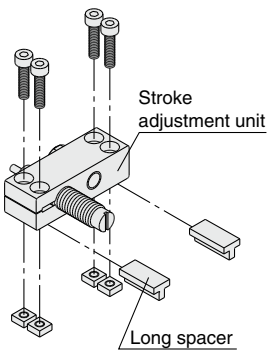
MYH-A25L1
(Without spacer)



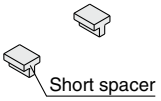
MYH-A25L1-6
(With short spacer)



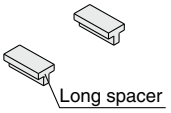
MYH-A25L1-7
(With long spacer)



MYH-A25L1-6N
(Short spacer only)



MYH-A25L1-7N
(Long spacer only)



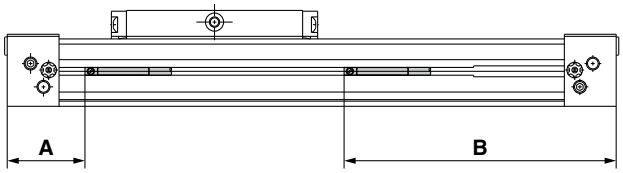
∗ Nuts are equipped on the cylinder body.

Auto Switch Mounting

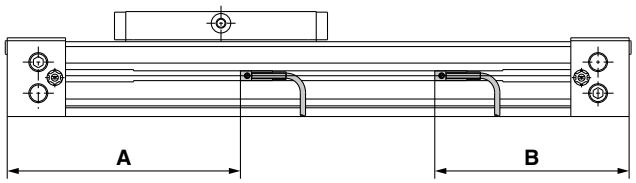
Proper Auto Switch Mounting Position (Detection at Stroke End)

MY1B (Basic type)

ø10 to ø20



ø25 to ø100



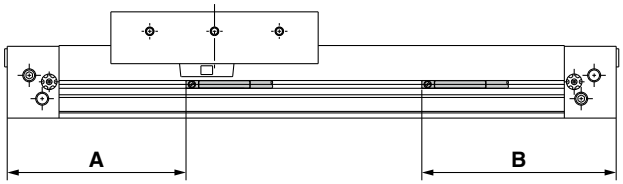
Proper Auto Switch Mounting Position [mm]

Auto switch model / Bore size	D-M9□ D-M9□V D-M9□W D-M9□WV D-M9□A D-M9□AV		D-A9□ D-A9□V		D-Y59□/Y7P D-Y69□/Y7PV D-Y7□W D-Y7□WV D-Y7BA D-Z7□/Z80	
	A	B	A	B	A	B
10	24	86	20	90	—	—
16	31.5	128.5	27.5	132.5	—	—
20	39	161	35	165	—	—
25	138	82	134	86	—	—
32	186.5	93.5	182.5	97.5	—	—
40	222.5	117.5	218.5	212.5	—	—
50	—	—	—	—	272.5	127.5
63	322.5	137.5	—	—	317.5	142.5
80	489.5	200.5	—	—	484.5	205.5
100	574.5	225.5	—	—	569.5	230.5

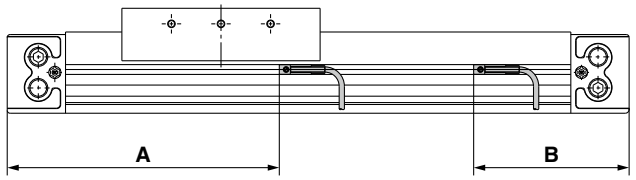
∗ D-M9□□□ type cannot be mounted on ø50.
∗ Adjust the auto switch after confirming the operating condition in the actual setting.

MY1M (Slide bearing guide type)

ø16, ø20



ø25 to ø63



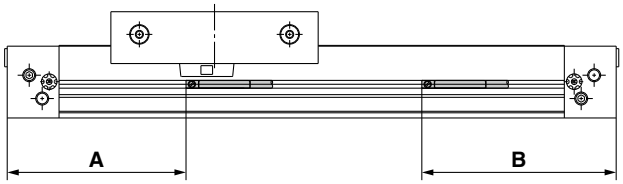
Proper Auto Switch Mounting Position [mm]

Auto switch model / Bore size	D-M9□ D-M9□V D-M9□W D-M9□WV D-M9□A D-M9□AV		D-A9□ D-A9□V		D-Y59□/Y7P D-Y69□/Y7PV D-Y7□W D-Y7□WV D-Z7□/Z80	
	A	B	A	B	A	B
16	74	86	70	90	—	—
20	94	106	90	110	—	—
25	143.5	75.5	—	—	139.5	80.5
32	189.5	90.5	—	—	184.5	95.5
40	234.5	105.5	—	—	229.5	110.5
50	283.5	116.5	—	—	278.5	121.5
63	328.5	131.5	—	—	323.5	136.5

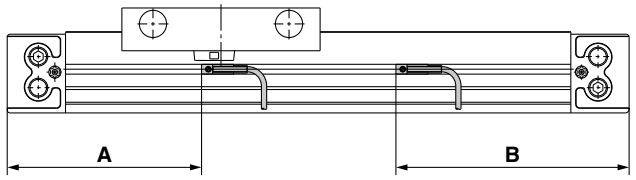
∗ Adjust the auto switch after confirming the operating condition in the actual setting.

MY1C (Cam follower guide type)

ø16, ø20



ø25 to ø63



Proper Auto Switch Mounting Position [mm]

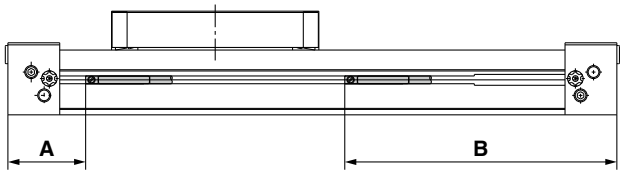
Auto switch model / Bore size	D-M9□ D-M9□V D-M9□W D-M9□WV D-M9□A D-M9□AV		D-A9□ D-A9□V		D-Y59□/Y7P D-Y69□/Y7PV D-Y7□W D-Y7□WV D-Z7□/Z80	
	A	B	A	B	A	B
16	74	86	70	90	—	—
20	94	106	90	110	—	—
25	102	118	—	—	97	123
32	132	148	—	—	127	153
40	162.5	175.5	—	—	157.5	182.5
50	283.5	116.5	—	—	278.5	121.5
63	328.5	131.5	—	—	323.5	136.5

∗ Adjust the auto switch after confirming the operating condition in the actual setting.

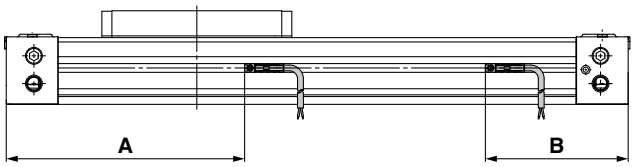
Proper Auto Switch Mounting Position (Detection at Stroke End)

MY1H (Linear guide type)

ø10 to ø20



ø25 to ø40



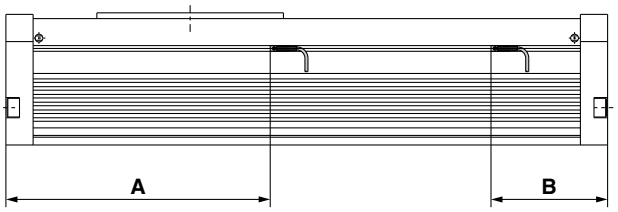
Proper Auto Switch Mounting Position [mm]

Auto switch model / Bore size	D-M9□ D-M9□V D-M9□W D-M9□WV D-M9□A D-M9□AV		D-A9□ D-A9□V		D-Y59□/Y7P D-Y69□/Y7PV D-Y7□W D-Y7□WV D-Z7□/Z80	
	A	B	A	B	A	B
10	24	86	20	90	—	—
16	31.5	128.5	27.5	132.5	—	—
20	39	161	35	165	—	—
25	138	82	134	86	—	—
32	186.5	93.5	182.5	97.5	—	—
40	222.5	117.5	218.5	121.5	—	—

∗ Adjust the auto switch after confirming the operating condition in the actual setting.

MY1HT (High rigidity/Linear guide type)

ø50, ø63



Proper Auto Switch Mounting Position [mm]

Auto switch model / Bore size	D-Y59□/Y7P D-Y69□/Y7PV D-Y7□W D-Y7□WV D-Y7BA D-Z7□/Z80	
	A	B
50	290.5	123.5
63	335.5	138.5

∗ Adjust the auto switch after confirming the operating condition in the actual setting.

Operating Range

* Values which include hysteresis are for reference purpose only. They are not a guarantee (assuming approximately ±30% dispersion) and may change substantially depending on the ambient environment.

MY1B (Basic type)

[mm]

Auto switch model	Bore size									
	10	16	20	25	32	40	50	63	80	100
D-M9□/M9□V D-M9□W/M9□WV D-M9□A/M9□AV	3.5	4	5.5	5.0	5.5	5.5	—	12	12	11.5
D-A9□/A9□V	6	6.5	8.5	7.0	10.0	9.0	—	—	—	—
D-Z7□/Z80	—	—	—	—	—	—	11.5	11.5	11.5	11.5
D-Y59□/Y69□ D-Y7P/Y7PV D-Y7□W/Y7□WV	—	—	—	—	—	—	3.5	3.5	3.5	3.5

* D-M9□□□ type cannot be mounted on ø50.

MY1M (Slide bearing guide type)

[mm]

Auto switch model	Bore size						
	16	20	25	32	40	50	63
D-M9□/M9□V D-M9□W/M9□WV D-M9□A/M9□AV	7.5	7.5	8.5	8.5	9.5	7	6
D-A9□/A9□V	11	7.5	—	—	—	—	—
D-Z7□/Z80	—	—	12	12	12	11.5	11.5
D-Y59□/Y69□ D-Y7P/Y7PV D-Y7□W/Y7□WV	—	—	5	5	5	5.5	5.5

MY1C (Cam follower guide type)

[mm]

Auto switch model	Bore size						
	16	20	25	32	40	50	63
D-M9□/M9□V D-M9□W/M9□WV D-M9□A/M9□AV	7.5	7.5	7	8	8.5	7	6
D-A9□/A9□V	11	7.5	—	—	—	—	—
D-Z7□/Z80	—	—	12	12	12	11.5	11.5
D-Y59□/Y69□ D-Y7P/Y7PV D-Y7□W/Y7□WV	—	—	5	5	5	5.5	5.5

MY1H (Linear guide type)

[mm]

Auto switch model	Bore size					
	10	16	20	25	32	40
D-M9□/M9□V D-M9□W/M9□WV D-M9□A/M9□AV	3	4.5	5	5.0	5.5	5.5
D-A9□/A9□V	11	6.5	8.5	7.0	10.0	9.0
D-Z7□/Z80	—	—	—	—	—	—
D-Y59□/Y69□ D-Y7P/Y7PV D-Y7□W/Y7□WV	—	—	—	—	—	—

MY1HT (High rigidity/Linear guide type)

[mm]

Auto switch model	Bore size	
	50	63
D-Z7□/Z80	11	11
D-Y59□/Y69□ D-Y7P/Y7PV D-Y7□W/Y7□WV D-Y7BA	5	5

Auto Switch Mounting Bracket/Part No.

Auto switch model \ Bore size [mm]	MY1B, MY1H	
	ø10 to ø20	ø50 to ø100
D-M9□/M9□V **D-M9□W/M9□WV** **D-M9□A/M9□AV** **D-A9□/A9□V**	—	BMG2-012

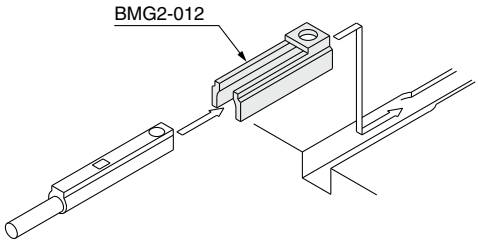
∗ The D-M9□(V)/M9□W(V)/M9□A(V) are not available for bore size ø50 of the MY1B.
∗ The D-A9□(V) is not available for bore sizes ø50 to ø100 of the MY1B.
∗ There are no bore sizes ø50 to ø100 for the MY1H.

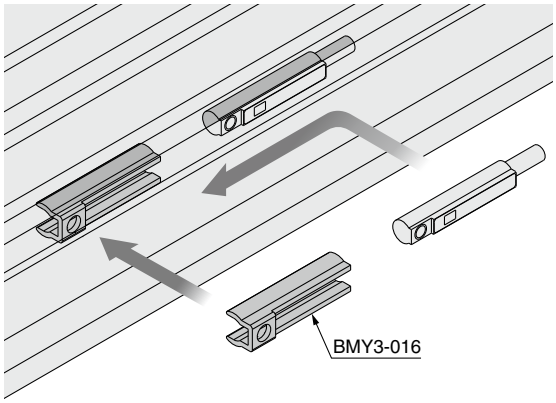
Auto switch model \ Bore size [mm]	MY1B-Z, MY1H-Z
	ø25 to ø40
D-A9□/A9□V **D-M9□/M9□V** **D-M9□W/M9□WV** **D-M9□A/M9□AV**	BMY3-016

Auto switch model \ Bore size [mm]	MY1M, MY1C	
	ø10 to ø20	ø25 to ø63
D-M9□/M9□V **D-M9□W/M9□WV** **D-M9□A/M9□AV** **D-A9□/A9□V**	—	BMG2-012

∗ The D-A9□(V) is not available for bore sizes ø25 to ø63.

ø25 to ø100: M9□(V)/M9□W(V)/M9□A(V)

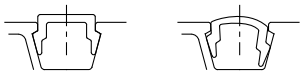


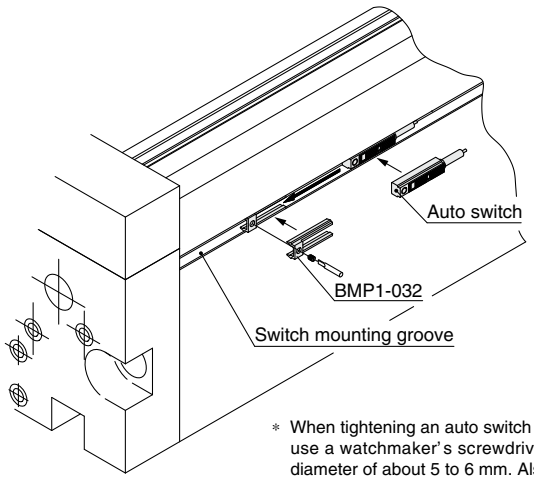


Switch Spacer No.

Cylinder series	Applicable bore size [mm]	
	50	63
MY1HT	BMP1-032	

When attaching an auto switch, first take a switch spacer between your fingers and press it into a switch mounting groove. When doing this, confirm that it is set in the correct mounting orientation, or reattach if necessary.
Next, insert an auto switch into the groove and slide it until it is positioned under the switch spacer.
After establishing the mounting position, use a watchmaker's flat head screwdriver to tighten the auto switch mounting screw which is included.





∗ When tightening an auto switch mounting screw, use a watchmaker's screwdriver with a handle diameter of about 5 to 6 mm. Also, tighten with a torque of about 0.05 to 0.1 N·m. As a guide, it should be turned about 90° past the point at which tightening can be felt.

Other than the applicable auto switches listed in "How to Order," the following auto switches are mountable.
For detailed specifications, refer to the **Web Catalog**.

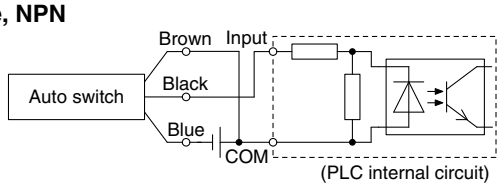
Type	Model	Electrical entry	Features	Applicable bore size
Solid state auto switch	D-Y69A, Y69B, Y7PV	Grommet (Perpendicular)	—	MY1B ø50 to ø100 MY1M ø25 to ø63 MY1C ø25 to ø63
	D-Y7NWV, Y7PWV, Y7BWV		Diagnostic indication (2-color indicator)	
	D-Y59A, Y59B, Y7P	Grommet (In-line)	—	
	D-Y7NW, Y7PW, Y7BW		Diagnostic indication (2-color indicator)	

∗ With pre-wired connector is also available for solid state auto switches. For details, refer to the **Web Catalog**.
∗ Normally closed (NC = b contact) solid state auto switches (D-M9□E(V)/Y7G/Y7H) are also available. For details, refer to the **Web Catalog**.

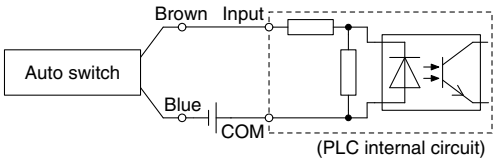
Prior to Use
Auto Switch Connections and Examples

Sink Input Specifications

3-wire, NPN

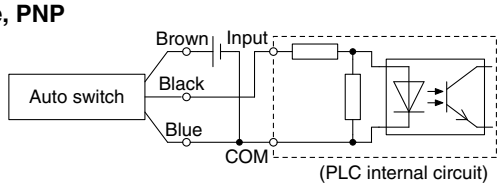


2-wire

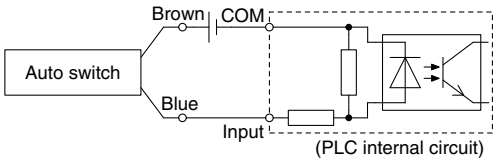


Source Input Specifications

3-wire, PNP



2-wire



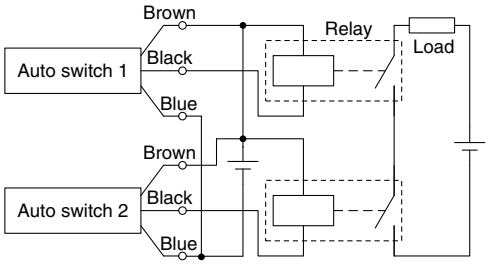
Connect according to the applicable PLC input specifications, as the connection method will vary depending on the PLC input specifications.

Examples of AND (Series) and OR (Parallel) Connections

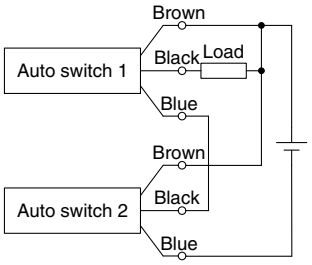
* When using solid state auto switches, ensure the application is set up so the signals for the first 50 ms are invalid. Depending on the operating environment, the product may not operate properly.

3-wire AND connection for NPN output

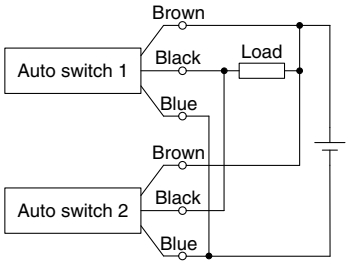
(Using relays)



(Performed with auto switches only)

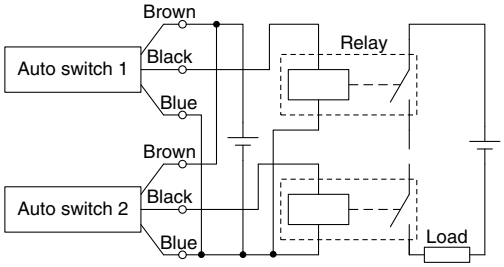


3-wire OR connection for NPN output

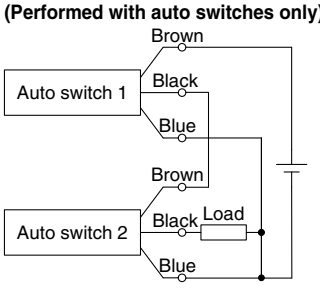


3-wire AND connection for PNP output

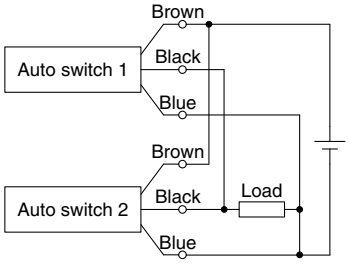
(Using relays)



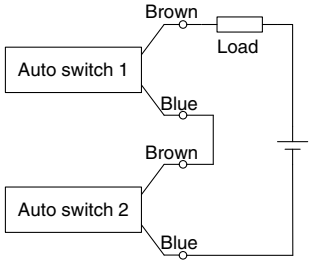
(Performed with auto switches only)



3-wire OR connection for PNP output



2-wire AND connection

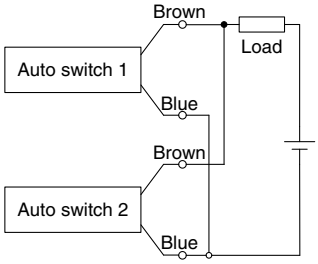


When two auto switches are connected in series, a load may malfunction because the load voltage will decline when in the ON state.
The indicator lights will light up when both of the auto switches are in the ON state.
Auto switches with a load voltage less than 20 V cannot be used.

Load voltage at ON = Power supply voltage – Residual voltage x 2 pcs.
= 24 V – 4 V x 2 pcs.
= 16 V

Example: Power supply is 24 VDC
Internal voltage drop in auto switch is 4 V.

2-wire OR connection



(Solid state)
When two auto switches are connected in parallel, malfunction may occur because the load voltage will increase when in the OFF state.

(Reed)
Because there is no current leakage, the load voltage will not increase when turned OFF. However, depending on the number of auto switches in the ON state, the indicator lights may sometimes grow dim or not light up, due to the dispersion and reduction of the current flowing to the auto switches.

Load voltage at OFF = Leakage current x 2 pcs. x Load impedance
= 1 mA x 2 pcs. x 3 kΩ
= 6 V

Example: Load impedance is 3 kΩ.
Leakage current from auto switch is 1 mA.

Made to Order Common Specifications

Made to Order

Please contact SMC for detailed specifications, delivery, and prices.

■ Made to Order Common Specifications

Symbol	Specifications	MY1B (Basic type) ø10, ø16, ø20, ø25, ø32, ø40, ø50, ø63, ø80, ø100	MY1M (Slide bearing guide type) ø16, ø20, ø25, ø32, ø40, ø50, ø63	MY1C (Cam follower guide type) ø16, ø20, ø25, ø32, ø40, ø50, ø63	MY1H (Linear guide type) ø10, ø16, ø20, ø25, ø32, ø40	MY1HT (High rigidity/Linear guide type) ø50, ø63	Page
-XB22	Shock absorber Soft type RJ series mounted	∗1	∗5	∗5			115
-XC56	With knock pin holes						117
-XC67	Dust seal band NBR lining specifications	∗2			∗6		118
-X168	Helical insert thread specifications	∗3			∗3	∗7	118
-X1810	Magnet for ø10 solid state auto switch specifications	∗4			∗4		118

∗1 Only applicable to ø10 to ø40
∗2 Only applicable to ø16, ø20, ø50, and ø63
∗3 ø10 is only available as a special product.
∗4 Only applicable to ø10
∗5 Only applicable to ø16 to ø40
∗6 Only applicable to ø16 and ø20
∗7 Produced upon receipt of order.

MY1 Series
Made to Order Common Specifications

Made to Order

Please contact SMC for detailed dimensions, specifications, and lead times.

1 Shock Absorber Soft Type RJ Series Mounted

Symbol: **-XB22**

The standard cylinder has been equipped with shock absorber soft type RJ series type to enable soft stopping at the stroke end.
Two different shock absorbers are available in accordance with the operating conditions.

Applicable Series

Description	Model	Bearing type	Applicable bore size
Mechanically jointed rodless cylinder	**MY1B**	Basic	ø10 to ø40
	MY1M	Slide bearing guide	ø16 to ø40
	MY1C	Cam follower guide	ø16 to ø40
	MY1H	Single-axis linear guide	ø10 to ø40

How to Order

Standard model no. **−XB22**

Shock absorber soft type RJ series mounted

How to Order a Stroke Adjustment Unit for MY Itself

Stroke adjustment unit part no. **−XB22**

Specifications

Absorbed energy	For the impact mass graph, refer to page 116.
Specifications other than the above and dimensions	Same as the standard type

Cylinders

Model	Type	Stroke adjustment unit	Bore size					
			ø10	**ø16**	**ø20**	**ø25**	**ø32**	**ø40**
MY1B	**-XB22**	L			RJ0806H	RJ1007H	RJ1412H	
		H	RJ0805		RJ1007H	RJ1412H	—	—
	Standard	L		RJ0604*1	RB0806	RB1007	RB1412	
		H	RB0805		RB1007	RB1412	RB2015	
MY1M MY1C	**-XB22**	L		RJ0806H		RJ1007H	RJ1412H	
		H			RJ1007H	RJ1412H	—	—
	Standard	L		RB0806		RB1007	RB1412	
		H			RB1007	RB1412	RB2015	
MY1H	**-XB22**	L		RJ0806H		RJ1007H	RJ1412H	
		H	RJ0805		RJ1007H	RJ1412H	—	—
	Standard	L		RB0806		RB1007	RB1412	
		H	RB0805		RB1007	RB1412	RB2015	

*1 The MY1B16 standard model uses an RJ0604.

* Refer to the **Web Catalog** for the details of the shock absorber RJ and RB series.
* The shock absorber service life is different from that of each cylinder.
  Refer to the “Specific Product Precautions” of the RJ series for the replacement period.

Symbol
-XB22

1 Shock Absorber Soft Type RJ Series Mounted

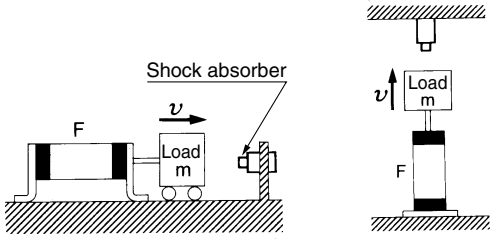
Impact Mass Graph (Shock Absorber Performance Line Graph)

∗ Values in the impact mass graph are at room temperature (20 to 25°C).

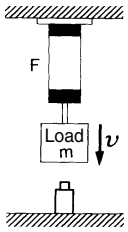
Ensure that the impact mass and the collision speed are within the absorbed energy graphs below.
Refer to each cylinder selection calculation for load factors and guide load factors.

■ Type of collision

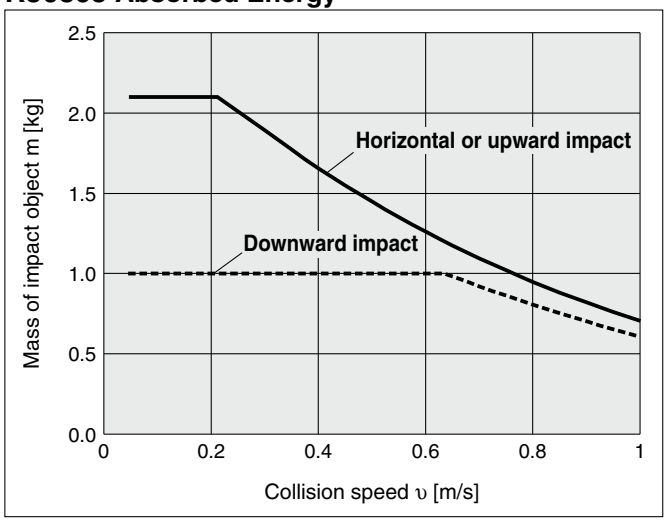
Horizontally-applied impact
Air cylinder impact (horizontal/upward)



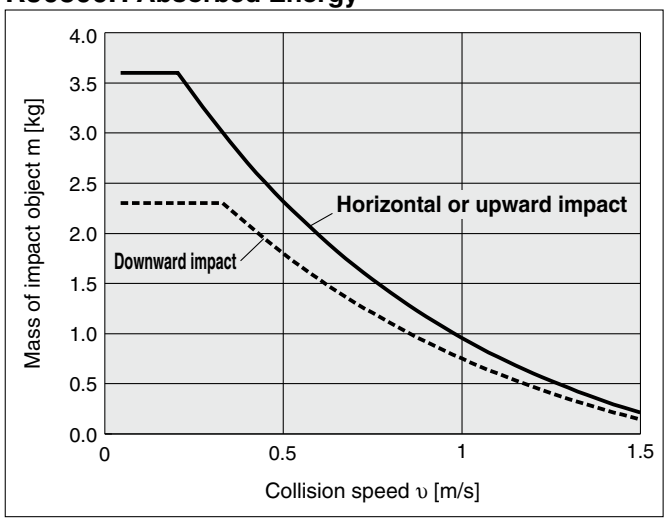
Air cylinder impact (downward)



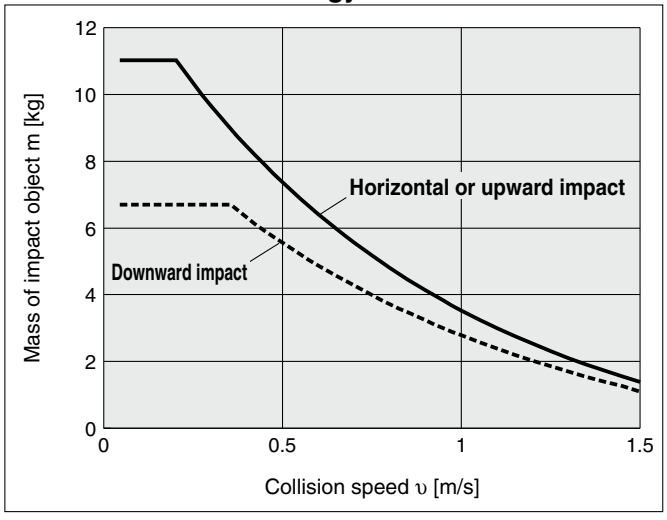
RJ0805 Absorbed Energy



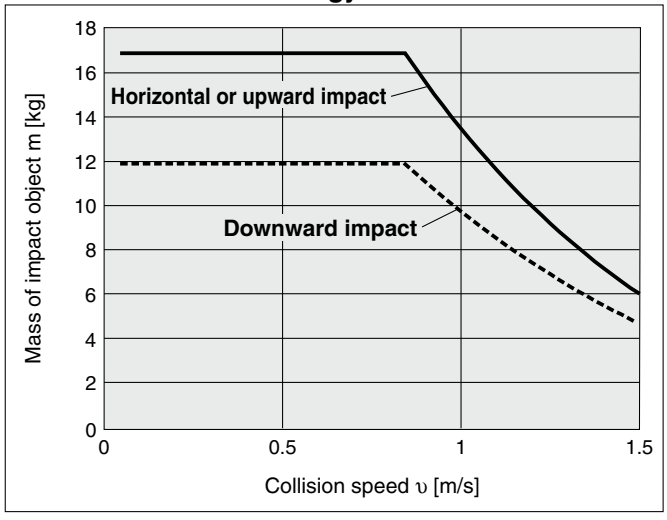
RJ0806H Absorbed Energy



RJ1007H Absorbed Energy



RJ1412H Absorbed Energy



∗ Be sure to read "Handling Precautions for SMC Products" (M-E03-3) and "Shock Absorber Soft Type RJ Series" (**Web Catalog**) before use.

Symbol
-XC56

2 With Knock Pin Holes

Cylinder with knock positioning pin hole

Applicable Series

Description	Model	Action
Mechanically jointed rodless cylinder	MY1C	Cam follower guide
	MY1H	Linear guide

How to Order

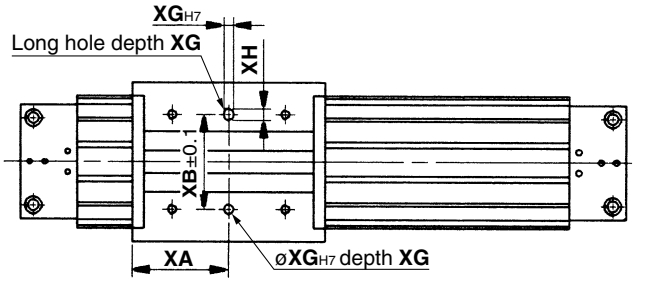
Standard model no. −XC56

With knock pin holes

Specifications: Same as the standard type

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

MY1C series



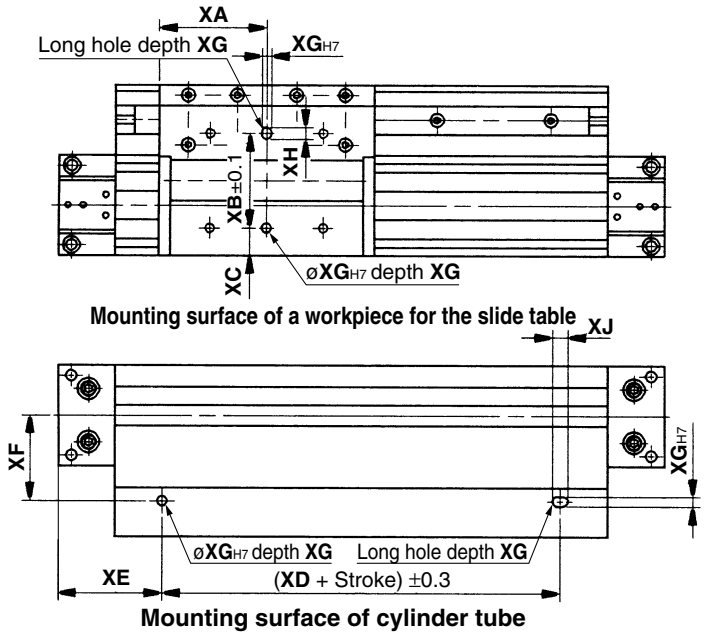
Mounting surface of a workpiece for the slide table

Mounting surface of cylinder tube

[mm]

Bore size [mm]	XA	XB	XD	XE	XG	XH	XJ
16	40	40	80	40	4	5	9
20	50	40	100	50	4	5	9
25	51	50	110	55	5	6	10
32	66	60	140	70	6	7	11
40	81	80	180	80	6	7	11
50	100	90	230	85	8	9	13
63	115	110	280	90	10	10	15

MY1H(-Z) series



Mounting surface of a workpiece for the slide table

Mounting surface of cylinder tube

[mm]

Bore size [mm]	XA	XB	XC	XD	XE
10	25	33	3.5	70	20
16	40	40	7.5	80	40
20	50	40	14.5	100	50
25	57	50	14.5	110	55
32	70	60	15	140	70
40	85	80	20.5	180	80

Bore size [mm]	XF	XG	XH	XJ
10	21.5	3	4	5
16	30	4	5	7
20	39	4	5	7
25	45	5	6	8
32	60	6	7	9
40	60.5	6	7	9

Symbol
3 Dust Seal Band NBR Lining Specifications -XC67

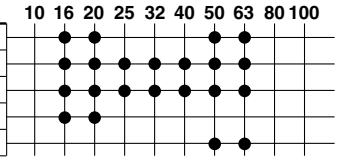
The standard vinyl chloride lining specification is changed to NBR lining.
Oil resistance and peeling resistance are improved.

* Please consult with SMC for specific details on oil resistance.

MY1 B Bore size – Stroke Stroke adjustment unit – Auto switch Suffix –XC67

Type/Bore size

B	Basic
M	Slide bearing guide
C	Cam follower guide
H	Linear guide
HT	High rigidity/Linear guide



Example) MY1B40G-300L-Z73-XC67

For ordering dust seal band (NBR lining) only

MY Bore size –16 B N □ – Stroke

Dust seal band NBR lining

Dust seal band Hexagon socket head set screw thread treatment

Nil	Black zinc chromated
W	Nickel plating

For details, refer to "Dust seal band" in the construction of each series.

Example) MY25-16BNW-300

Applicable Series

Description	Model	Type
Mechanically jointed rodless cylinder	MY1B	Basic
	MY1M	Slide bearing guide
	MY1C	Cam follower guide
	MY1H	Linear guide
	MY1HT	High rigidity/Linear guide

Symbol
4 Helical Insert Thread Specifications -X168

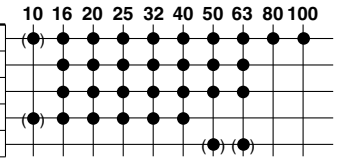
Helical insert thread is used for the slide table mounting thread, the thread size is the same as the standard model.

MY1 B Bore size – Stroke □ (Z)*1 – Auto switch Suffix –X168

Stroke adjustment unit

Type/Bore size

B	Basic
M	Slide bearing guide
C	Cam follower guide
H	Linear guide
HT	High rigidity/Linear guide



(●) is available as special orders.

Example) MY1B20G-300L-M9BW-X168

*1 Please specify "Z" for the MY1B25 to 40 and the MY1H25 to 40.

Symbol
5 Magnet for ø10 Solid State Auto Switch Specifications -X1810

By incorporating the use of the magnet for solid state auto switches, switch operation stability can be achieved.

* If you are using, or planning to use, the cylinder in combination with a solid state auto switch, but are currently only ordering the cylinder, please add the "-X1810" suffix to the end of the product number.

MY1 B 10G – Stroke □ –X1810

Magnet for ø10 solid state auto switch specifications

Stroke adjustment unit

Type

B	Basic
H	Linear guide

* If an auto switch is included in the product number, the "-X1810" suffix does not need to be added to the end of the product number.
Example) MY1B10G-300H-M9BL