Air Slide Table

ø6, ø8, ø12, ø16, ø20, ø25

RoHS

Reduced in height

10%*1 reduction 27 mm*1 (Current model: 30 mm*1)

Product weight

22%*1 reduction 298 g*1 (Current model: 380 g*1)

Allowable kinetic energy

64%*1 improvement 0.09 J*1 (Current model: 0.055 J*1)

*1 Comparison between the double-ported type and the current MXQ12-30 (without adjuster)

Reduced in height and weight with thinner table

- Thin table made of special stainless steel
- Durable material with the same strength as the current model

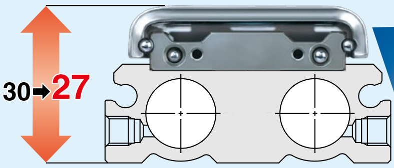
2 combinations of guide and cylinder bore size available

New
- The centralized adjuster of the functional option is available as standard.
- Made to order options have been added.
  - Dual stroke specification
  - Side adjuster specification
  - Combined use of shock absorber + metal stopper, etc.

Double-ported type
Page 11

Bore size ø12

Increases flexibility of wiring and piping with piping ports and auto switch mounting grooves on both sides

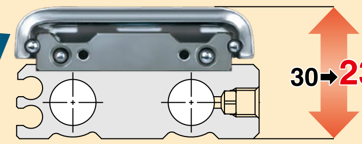


For MXQ12A

Low thrust with high rigidity type
Page 53

Bore size ø8

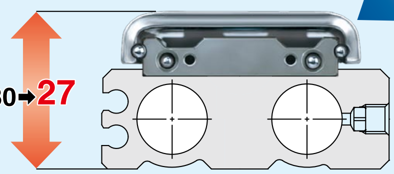
Combination with a cylinder of one bore size smaller increases rigidity according to thrust. The height can be reduced as well.



For MXQ8B

Single side-ported type
Page 67

Better auto switch visibility. Indicator LED can be checked from one side when used with a short stroke.



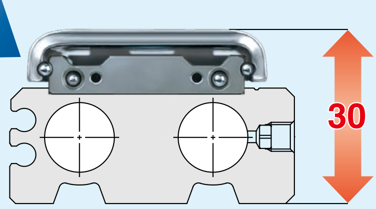
For MXQ12C

Bore size ø12

Height interchangeable type
Page 83

Height interchangeable with the current **MXQ** series

Bore size ø12



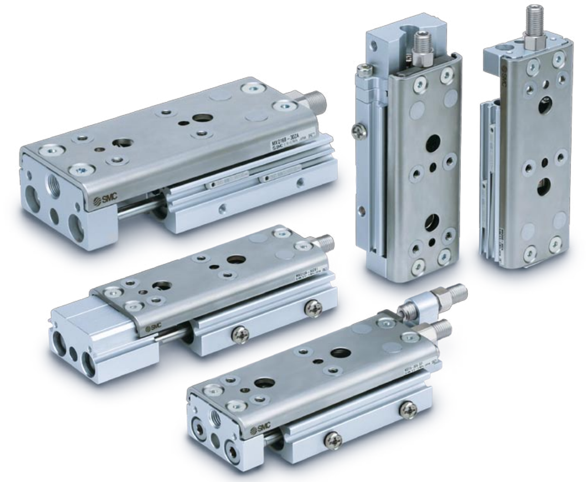
For MXQ12

MXQ Series

SMC

CAT.ES20-211C

2 combinations of guide and cylinder bore size available



Double-ported type MXQ□A

Page 11

■ **Height reduced by 10% of the current model**

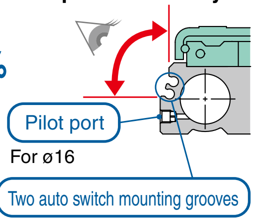
30 mm → 27 mm

■ **Weight reduced by 22%**

380 g → 298 g

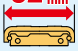
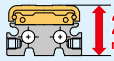
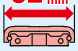
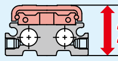
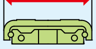
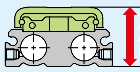
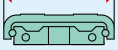
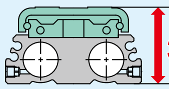
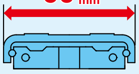
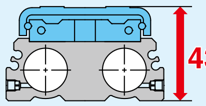
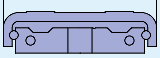
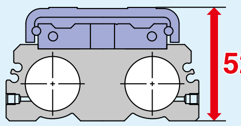
For MXQ12A-30ZN

Improved visibility



■ **A piping port and auto switch mounting groove are provided on both sides.**

◎ Guide Size and Cylinder Bore Size Combination Chart

Guide size		Maximum load mass	Bore size	
Small guide	32 mm 	0.6 kg	ø6	When the height needs to be the same as the current model, choose the MXQ□, height interchangeable type.  23 mm
	32 mm 	1 kg	ø8	 23 mm
	40 mm 	2 kg	ø12	 27 mm
	50 mm 	4 kg	ø16	 35 mm
	60 mm 	6 kg	ø20	 43 mm
Large guide	70 mm 	9 kg	ø25	 52 mm Size ø16, ø20, and ø25 have two auto switch mounting grooves on both sides.

Purpose of usage ①

Guide rigidity and a large table surface are necessary but thrust is not needed.

Application examples • Horizontal transfer of workpieces, transfer of tools, low thrust clamping

Purpose of usage ②

A guide with higher rigidity is necessary without changing the thrust from the current model.

Application examples
• Transfer of workpieces with increased overhang
• High-accuracy and high-thrust clamping

Select the best actuator with guide according to the application.

Low thrust with high rigidity type MXQ□B Page 53

Guide rigidity according to thrust improved

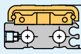
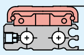
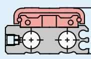
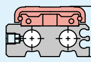
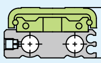
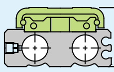
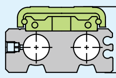
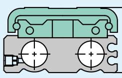
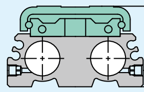
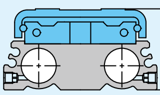
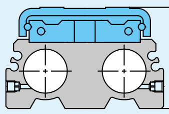
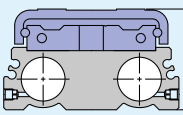
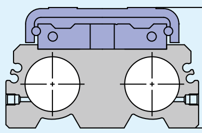
- **Guide rigidity improved by 50%**
  (For MXQ8B and MXQ8A)
- **Cylinder can be downsized when load is light!**
  - Reduced in height
  - Reduced in air consumption
  - Lightweight

Single side-ported type MXQ□C Page 67

- **Compact body with good switch visibility**
  Applicable to ø8 and ø12 only
- **Compact design, Two auto switch mounting grooves on one side**

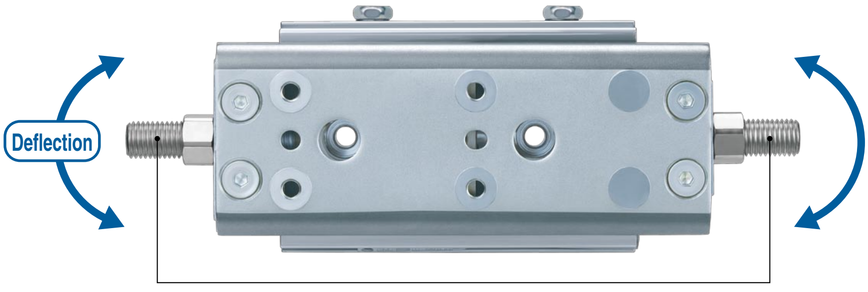
Height interchangeable type MXQ□ Page 83

- **Same height as the current model**
- **Visibility of auto switches improved**
- **Interchangeable in mounting with the current model**

Bore size	MXQ□B	Bore size	MXQ□C	Bore size	MXQ□
—	—	ø6	Not available Use the MXQ□, height interchangeable type.	ø6	 20 mm Standard/Symmetric type (Figure shows standard model)
ø6	 20 mm Standard/Symmetric type (Figure shows standard model)	ø8	 21 mm Standard/Symmetric type (Figure shows standard model)	ø8	 23 mm Standard/Symmetric type (Figure shows standard model)
ø8	 23 mm Standard/Symmetric type (Figure shows standard model)	ø12	 27 mm Standard/Symmetric type (Figure shows standard model)	ø12	 30 mm Standard/Symmetric type (Figure shows standard model)
ø12	 30 mm Standard/Symmetric type (Figure shows standard model)	ø16	Not available Use the MXQ□A, double-ported type.	ø16	 37 mm
ø16	 37 mm	ø20		ø20	 46 mm
ø20	 46 mm Size ø16 and ø20 have two auto switch mounting grooves on both sides.	ø25		ø25	 55 mm Size ø16, ø20, and ø25 have two auto switch mounting grooves on both sides.

Stroke adjuster (Option)

The stroke adjuster is positioned in the center.
Play at the stroke end is reduced.



Allowable kinetic energy improved

Allowable kinetic energy improved by reducing the weight of movable parts

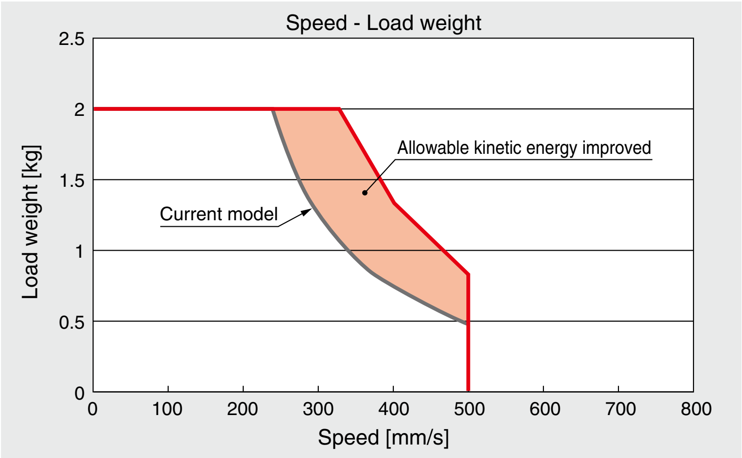
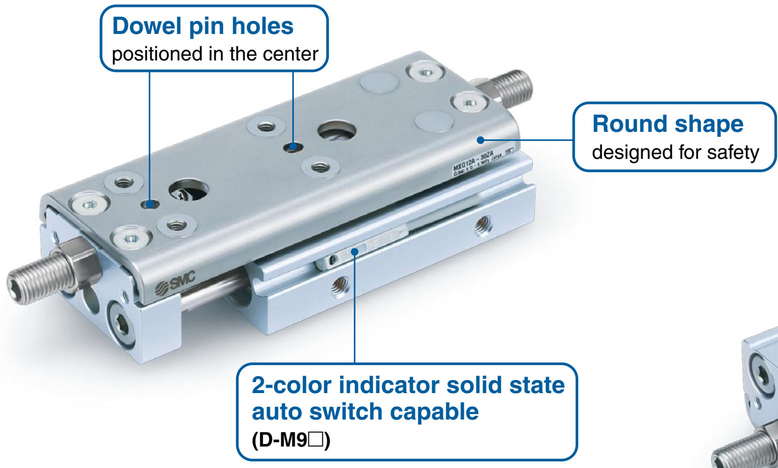
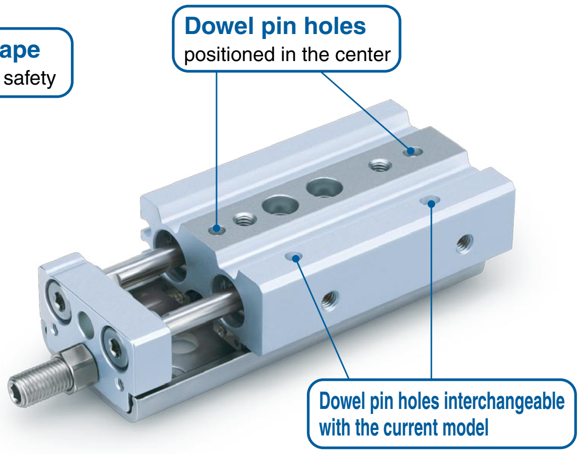


Table configuration for better function and easier maintenance



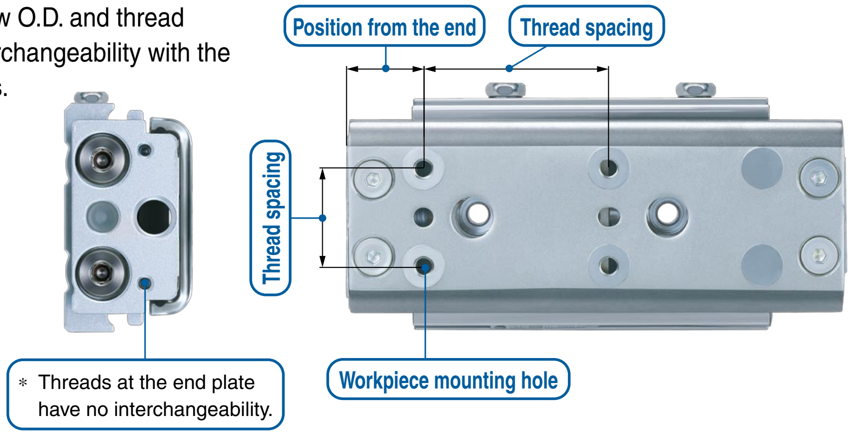


∗ Height interchangeable type

The mounting dimensions are equivalent to the current MXQ series.

Workpiece mounting

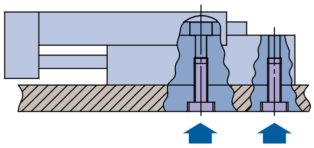
- The mounting screw O.D. and thread positions have interchangeability with the current **MXQ** series.



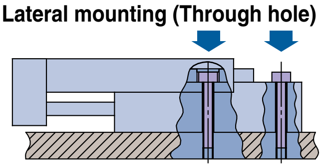
Body mounting

- Two methods of mounting are available.
- Body mounting threads and spacing have interchangeability with the current **MXQ** series.

Lateral mounting (Body tapped)



Lateral mounting (Through hole)



Various adjusters (Option)

Metal Stopper with Bumper

High accuracy due to the integrated construction of the bumper and metal stopper: Repeated positioning accuracy of **±0.05 or less**
Improved cycle time
Operating speed of **300** mm/sec (Current model: 200 mm/sec)
(Compared with a stopper of the current MXQ series)

Shock Absorber

Soft type/RJ
Suitable for operations which require gentle stops, such as a lightweight workpiece transfers or low-speed transfers

Rubber Stopper

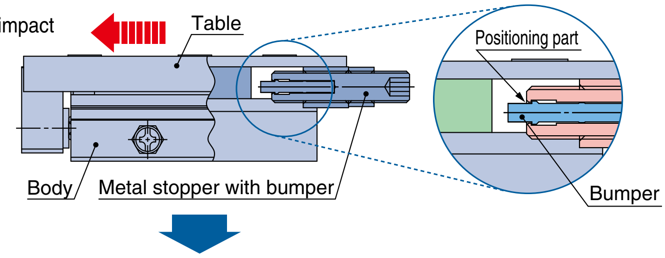
Impact reduced by 1/2 compared with models without a stroke adjuster

Metal Stopper

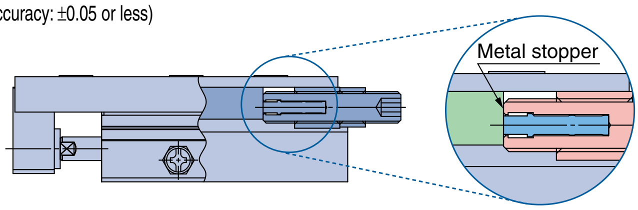
Suitable for positioning

Operating Principle/Metal Stopper with Bumper

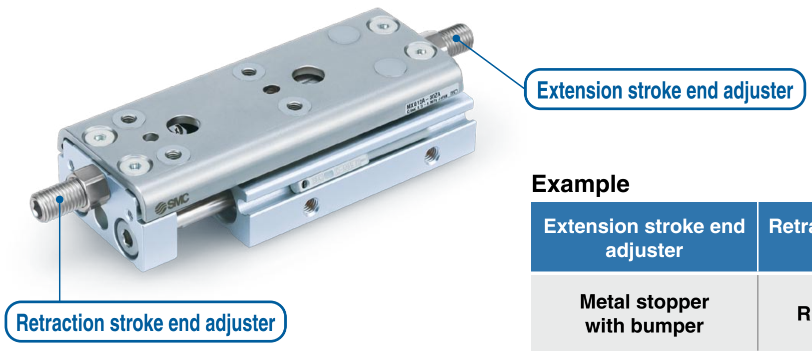
1. The bumper absorbs impact at the initial stage.



2. The bumper goes into the adjustment bolt, and the metal stopper performs highly accurate positioning at the end of the adjustment bolt. (Repeated positioning accuracy: ±0.05 or less)



It is possible to combine an extension stroke end adjuster and a retraction stroke end adjuster.



Example

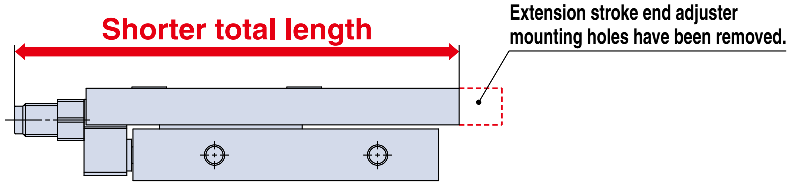
Extension stroke end adjuster	Retraction stroke end adjuster
Metal stopper with bumper	Rubber stopper

Shorter total length type table is now available.

Total length shortened by **8.5 mm**

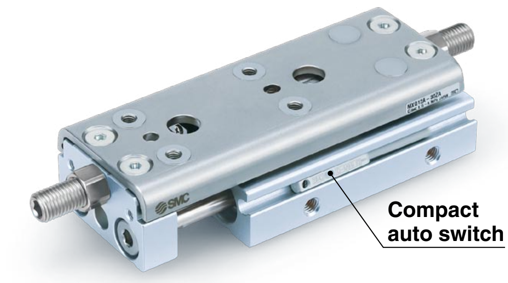
70 mm (Basic type 78.5 mm) (For MXQ8A-20)

＊ Extension stroke end adjusters cannot be mounted.



Compact auto switch is now available.

- Reed auto switch: D-A9□, D-A9□V
- Solid state auto switch: D-M9□(A), D-M9□W

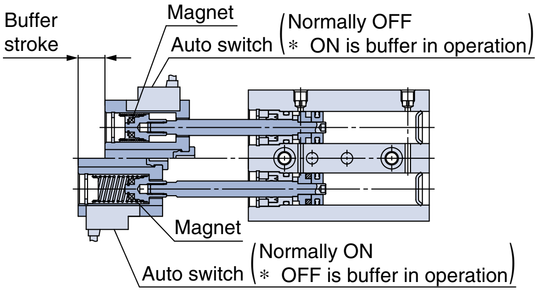


Functional Options

◉ With buffer mechanism

- Protects workpieces and tools by eliminating impact at the extension stroke end
- Buffer unit is auto switch capable.

Buffer mechanism operating condition

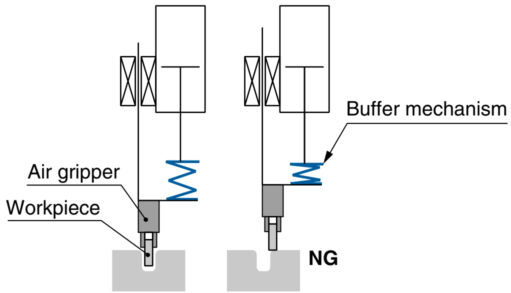


Normal condition

＊ By changing the mounting direction of auto switches, the settings of normally ON/OFF can be changed.

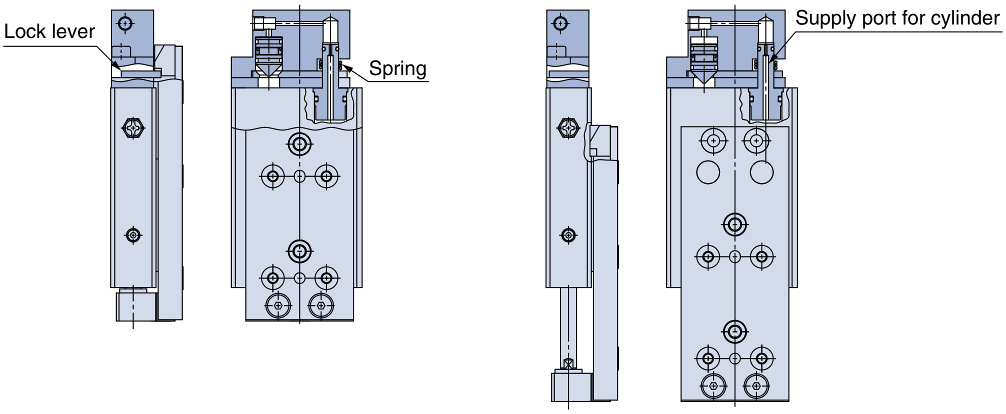
Application Example

In workpiece insertion processes when there is a problem such as faulty positioning, the buffer mechanism absorbs the shock from the workpiece impact to prevent damage.



◉ With end lock

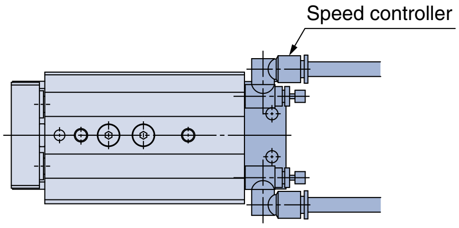
- Holds the cylinder's home position to prevent the dropping of a workpiece even if the air supply is cut off



Locked **Unlocked**

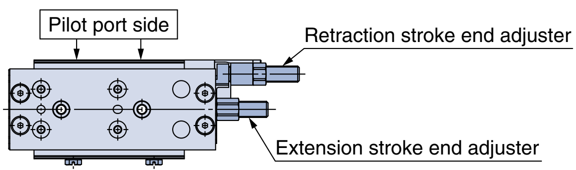
◉ Axial piping

- Centralized piping in the axial direction helps maintain clear space around the body

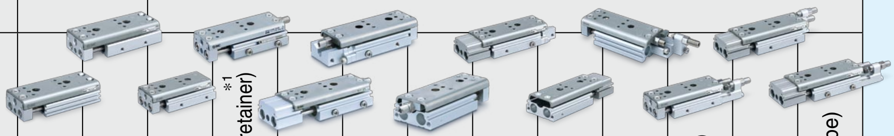


◉ Centralized adjuster

- The retraction stroke end adjuster is mounted on the extension stroke end adjuster side.

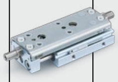


Variations



	Bore size						Body option		Functional option (pages 5, 6, 15)											
	6	8	12	16	20	25	Standard type	Symmetric type	Shorter total length type	Cylinder with stable lubrication function (Lube-retainer)*1	With buffer	With end lock	Axial piping	With buffer, end lock	With buffer, axial piping	Centralized adjuster	Centralized adjuster (Symmetric type)	Buffer, Centralized adjuster	Buffer, Centralized adjuster (Symmetric type)
Double-ported type MXQ□A  Page 11	●	●	●	●	●	●	●	—	●	●	●	●	●	●	●	●	●	●	●
Stroke	10, 20, 30, 40, 50	10, 20, 30, 40, 50, 75	10, 20, 30, 40, 50, 75, 100	10, 20, 30, 40, 50, 75, 100, 125	10, 20, 30, 40, 50, 75, 100, 125, 150	10, 20, 30, 40, 50, 75, 100, 125, 150													
Low thrust with high rigidity type MXQ□B  Page 53	●	●	●	●	●	—	●	●	●	—	—	—	—	—	—	—	—	—	—
Stroke	10, 20, 30, 40, 50, 75	10, 20, 30, 40, 50, 75, 100	10, 20, 30, 40, 50, 75, 100, 125	10, 20, 30, 40, 50, 75, 100, 125, 150	10, 20, 30, 40, 50, 75, 100, 125, 150														
Single side-ported type MXQ□C  Page 67	—	●	●	—	—	—	●	●	●	—	●	●	●	●	●	●	●	●	●
Stroke		10, 20, 30, 40, 50, 75	10, 20, 30, 40, 50, 75, 100																
Height interchangeable type MXQ□  Page 83	●	●	●	●	●	●	●	●	●	—	●	●	●	●	●	●	●	●	●
Stroke	10, 20, 30, 40, 50	10, 20, 30, 40, 50, 75	10, 20, 30, 40, 50, 75, 100	10, 20, 30, 40, 50, 75, 100, 125	10, 20, 30, 40, 50, 75, 100, 125, 150	10, 20, 30, 40, 50, 75, 100, 125, 150													

*1 For details, refer to the **Web Catalog**.

Adjuster option (page 4, 5)					Auto switch (page 125)	Made to order (pages 127 to 156)														
 Metal stopper with bumper	 Shock absorber	 Rubber stopper	 Metal stopper	 Extension stroke end/ Retraction stroke end mounting	Solid state/Reed	PTFE grease **(-X7)**	Grease for food processing equipment **(-X9)**	Long adjustment bolt (10 mm longer adjustment range) **(-X11)**	Long adjustment bolt (20 mm longer adjustment range) **(-X12)**	Long adjustment nut and bolt **(-X28)**	Without built-in auto switch magnet **(-X33)**	Fluororubber seal **(-X39)**	Anti-corrosive guide unit **(-X42)**	Low-speed specification (15 to 50 mm/s) **(-X580)**	End plate compatible with the current MXQ series **(-X2100)**	Heat-resistant specification (−10 to 100°C) **(-X2128)**	Dual stroke specification **(-X2192)**	Side adjuster specification **(-X2200)**	Combined use of shock absorber + metal stopper **(-X2201)**	Extension stroke end and adjuster fixed from the axial direction **(-X2202)**
●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	—	●	●	—	—	●
●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	—	●	—	—	—	●
●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	—	●	—	—	—	●
●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	—	●	●	●

CONTENTS Air Slide Table *MXQ* Series

Double-ported type
MXQ□A Series

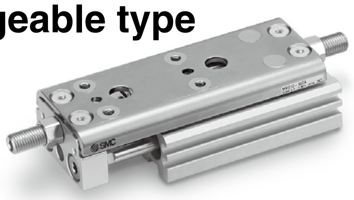
When the features as shown below are required for ø8 and ø12 sizes, refer to the MXQ□C, single side-ported type as well.
- When two auto switch mounting grooves are required on one side (Two auto switches can be mounted on one side when the stroke is short.)
- When a height lower than the MXQ□A is required (for ø8)

Low thrust with high rigidity type
MXQ□B Series

Single side-ported type
MXQ□C Series

When the features as shown below are required for ø8 and ø12 sizes, refer to the MXQ□A, double-ported type as well.
- When an auto switch mounting groove and air piping are provided on both sides (for increased flexibility in piping and wiring)

Height interchangeable type
MXQ□ Series



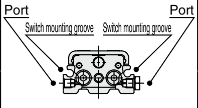
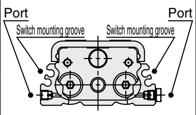
Air Slide Table
Double-ported Type
MXQ□A Series
ø6, ø8, ø12, ø16, ø20, ø25

RoHS

How to Order

MXQ 12 A − 30 ZA □ − M9BW □ − □

❶ 12 ❷ A ❸ 30 ❹ ZA ❺ □ ❻ M9BW ❼ □ ❽ □

❶ Bore size	❷ Body option: Double-ported type A	❸ Standard stroke [mm]
6		10, 20, 30, 40, 50
8		10, 20, 30, 40, 50, 75
12		10, 20, 30, 40, 50, 75, 100
16		10, 20, 30, 40, 50, 75, 100, 125
20		10, 20, 30, 40, 50, 75, 100, 125, 150
25		10, 20, 30, 40, 50, 75, 100, 125, 150*

* Because piping ports and auto switch grooves are provided on both sides, only the adjuster part of the centralized adjuster is symmetric.
* The operating speed range of the stroke marked with an asterisk (*) is 50 to 300 mm/s. (Refer to page 13.)

❺ Functional options

Symbol	Functional option
Nil	Without functional option
1	With buffer
2	With end lock
3	Axial piping
4	With buffer, end lock
5	With buffer, axial piping
6	Centralized adjuster
7	Centralized adjuster (Symmetric)
8	Buffer, Centralized adjuster
9	Buffer, Centralized adjuster (Symmetric)

❻ Auto switch

Nil	Without auto switch

* For applicable auto switches, refer to the next page.

❼ Number of auto switches

Nil	2
S	1
n	n

❽ Made to order

For details, refer to the next page.

❹ Adjuster options/Functional option combinations

Symbol	Adjuster type*9		Adjuster mounting position*1*8		Functional option combination									
			Extension stroke end	Retraction stroke end	Nil Without functional option	1 With buffer *2*3	2 With end lock	3 Axial piping *6	4 With buffer, end lock *2	5 With Buffer, axial piping *2*6	6 Centralized adjuster	7 Centralized adjuster (Symmetric) *7	8 Buffer, Centralized adjuster *2	9 Buffer, Centralized adjuster (Symmetric) *2*7
Z	Without adjuster				○	○	○	○	○	○	×	×	×	×
ZA	Metal stopper with bumper		●	●	○	×	×	○	×	×	○	○	×	×
ZB			●		○	×	○	○	×	×	×	×	×	×
ZC				●	○	×	×	○	×	×	○	○	○	○
ZD	Rubber stopper		●	●	○	×	×	○	×	×	○	○	○	○
ZE			●		○	○	○	○	○	○	×	×	×	×
ZF				●	○	×	×	○	×	×	○	○	○	○
ZG	Shock absorber/RJ		●	●	○	×	×	○	×	×	○	○	×	×
ZH			●		○	×	○	○	×	×	×	×	×	×
ZJ				●	○	×	×	○	×	×	○	○	○	○
ZK	Metal stopper		●	●	○	×	×	○	×	×	○	○	○	○
ZL			●		○	○	○	○	○	○	×	×	×	×
ZM				●	○	×	×	○	×	×	○	○	○	○
ZN	Shorter total length type*4	Retraction stroke end adjuster: Without adjuster			○	○*5	×	○	×	○*5	×	×	×	×
ZP		Rubber stopper		●	○	×	×	○	×	×	×	×	×	×
ZQ		Shock absorber/RJ		●	○	×	×	○	×	×	×	×	×	×
ZS		Metal stopper with bumper		●	○	×	×	○	×	×	×	×	×	×
ZT		Metal stopper		●	○	×	×	○	×	×	×	×	×	×
ZBF	Extension stroke end adjuster: Metal stopper with bumper	Rubber stopper	●	●	○	×	×	○	×	×	○	○	×	×
ZBJ		Shock absorber/RJ	●	●	○	×	×	○	×	×	○	○	×	×
ZBM		Metal stopper	●	●	○	×	×	○	×	×	○	○	×	×
ZEC	Rubber stopper	Metal stopper with bumper	●	●	○	×	×	○	×	×	○	○	○	○
ZEJ		Shock absorber/RJ	●	●	○	×	×	○	×	×	○	○	○	○
ZEM		Metal stopper	●	●	○	×	×	○	×	×	○	○	○	○
ZHC	Shock absorber/RJ	Metal stopper with bumper	●	●	○	×	×	○	×	×	○	○	×	×
ZHF		Rubber stopper	●	●	○	×	×	○	×	×	○	○	×	×
ZHM		Metal stopper	●	●	○	×	×	○	×	×	○	○	×	×
ZLC	Metal stopper	Metal stopper with bumper	●	●	○	×	×	○	×	×	○	○	○	○
ZLF		Rubber stopper	●	●	○	×	×	○	×	×	○	○	○	○
ZLJ		Shock absorber/RJ	●	●	○	×	×	○	×	×	○	○	○	○

*1 ●: Shipped together with the product, but not assembled
Without any symbol for the adjuster mounting position: The adjuster can be mounted afterward.
*2 For the buffer mechanism, the buffer stroke will be shorter for the stroke that is adjusted by the extension stroke end adjuster.
*3 If it is necessary to install a retraction stroke end adjuster with a buffer mechanism, use a buffer and centralized adjuster provided with a retraction stroke end adjuster on the rear end of the body. End lock or axial piping options cannot be mounted to centralized adjuster specification models.
*4 Extension stroke end adjuster mounting holes have been removed to reduce the total length of the table.
*5 The shorter total length type can be used, but a retraction stroke end adjuster cannot be mounted afterward.
*6 For axial piping, there are no piping ports on both sides.
*7 Only the centralized adjuster is symmetric.
*8 For details on the adjuster mounting position, refer to the next page.
*9 The metal stopper with bumper option is not available for ø6.

Applicable Auto Switches/Refer to the **Web Catalog** for further information on auto switches.

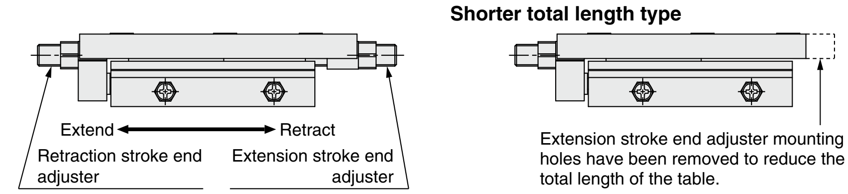
Type	Special function	Electrical entry	Indicator light	Wiring (Output)	Load voltage DC		Load voltage AC	Auto switch model Perpendicular	Auto switch model In-line	Lead wire length [m] 0.5 (Nil)	1 (M)	3 (L)	5 (Z)	Pre-wired connector	Applicable load	
Solid state auto switch	—	Grommet	Yes	3-wire (NPN)	24 V	5 V, 12 V	—	**M9NV**	**M9N**	●	●	●	○	○	IC circuit	Relay, PLC
				3-wire (PNP)				**M9PV**	**M9P**	●	●	●	○	○		
				2-wire		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 (Equiv. to NPN)	—	5 V	—	**A96V**	**A96**	●	●	●	●	○	IC circuit	—
				2-wire	24 V	12 V	100 V	**A93V**	**A93**	●	●	●	●	○*2	—	Relay, PLC
			None				100 V or less	**A90V**	**A90**	●	●	●	●	○*2	IC circuit	

*1 Water-resistant type auto switches can be mounted on the above models, but SMC cannot guarantee water resistance.
A water-resistant type cylinder is recommended for use in an environment which requires water resistance.
*2 The load voltage used is 24 VDC.
* 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
* Auto switches marked with "○" are produced upon receipt of order.
* Since there are applicable auto switches other than those listed above, refer to page 125 for details.
* For details about auto switches with pre-wired connectors, refer to the **Web Catalog**.
* Auto switches are shipped together, but not assembled.

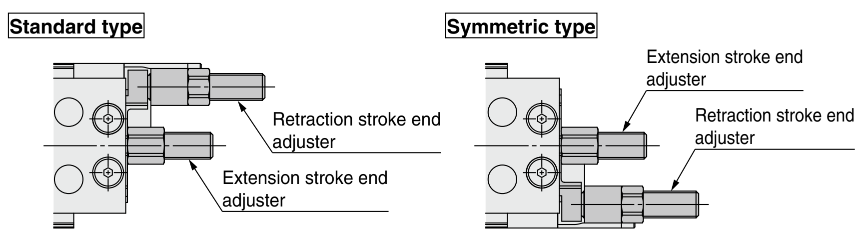
Made to Order
(For details, refer to pages 127 to 156.)

Symbol	Specifications
-X7	PTFE grease
-X9	Grease for food processing equipment
-X11	Long adjustment bolt (10 mm longer adjustment range)
-X12	Long adjustment bolt (20 mm longer adjustment range)
-X28	Long adjustment nut and bolt
-X33	Without built-in auto switch magnet
-X39	Fluororubber seal
-X42	Anti-corrosive guide unit
-X580	Low-speed specification (15 to 50 mm/s)
-X2128	Heat-resistant specification (–10 to 100°C)
-X2192	Dual stroke specification
-X2202	Extension stroke end adjuster fixed from the axial direction

Adjuster Mounting Position (Exception: Centralized Adjuster)



Centralized Adjuster Mounting Position



Moisture Control Tube IDK Series

When operating an actuator with a small diameter and a short stroke at a high frequency, dew condensation (water droplets) may occur inside the piping depending on the conditions. Simply connecting the moisture control tube to the actuator will prevent dew condensation from occurring. For details, refer to the **Web Catalog**.

⚠ Precautions

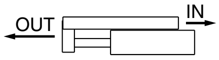
Be sure to read "Specific Product Precautions" before handling. Refer to page 195.

Specifications

Bore size [mm]	6	8	12	16	20	25
Piping port size	M5 x 0.8					
Fluid	Air					
Action	Double acting					
Operating pressure	0.15 to 0.7 MPa*1 (End lock: 0.35 to 0.7 MPa)*1					
Proof pressure	1.05 MPa					
Ambient and fluid temperatures	–10 to 60°C					
Operating speed range (Average operating speed)	50 to 500 mm/s (Metal stopper with bumper: 50 to 300 mm/s) (Metal stopper: 50 to 200 mm/s) * in the standard stroke table on page 11: 50 to 300 mm/s					
Cushion (Without adjuster)	Internal rubber bumper					
Cushion (With adjuster)	Metal stopper with bumper, Rubber stopper, Shock absorber, Metal stopper					
Lubrication	Non-lube					
Auto switch	Solid state auto switch, Reed auto switch (2-wire, 3-wire) 2-color indicator solid state auto switch (2-wire, 3-wire)					
Stroke length tolerance	+2 to 0 mm					

*1 Refer to page 14 for the minimum operating pressure of the metal stopper with bumper. If the operating pressure is lower than the minimum operating pressure, the repeated accuracy will decline.
Minimum operating pressure of the metal stopper with bumper: Pressure required to fully compress the protrusion of the bumper to get in contact with the metal part
The operating pressure of the bore size 20 cylinder with shock absorber is 0.15 to 0.6 MPa.

Theoretical Output



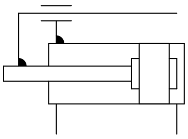
The dual rod ensures an output twice that of current cylinders. [N]

Bore size [mm]	Rod size [mm]	Operating direction	Piston area [mm²]	Operating pressure [MPa]					
				0.2	0.3	0.4	0.5	0.6	0.7
6	3	OUT	57	11	17	23	29	34	40
		IN	42	8	13	17	21	25	29
8	4	OUT	101	20	30	40	51	61	71
		IN	75	15	23	30	38	45	53
12	6	OUT	226	45	68	90	113	136	158
		IN	170	34	51	68	85	102	119
16	6	OUT	402	80	121	161	201	241	281
		IN	346	69	104	138	173	207	242
20	8	OUT	628	126	188	251	314	377	440
		IN	528	106	158	211	264	317	369
25	10	OUT	982	196	295	393	491	589	687
		IN	825	165	247	330	412	495	577

* When the metal stopper with bumper is used for positioning, the theoretical output may vary depending on the full compression force of the bumper. For details, refer to the adjuster specifications on page 14.

Symbol

Rubber bumper



Weight

[g]

Model	Standard stroke [mm]									Reduction of the shorter total length type	Additional weight of adjuster option			Extra for option		
	10	20	30	40	50	75	100	125	150		Extension stroke end	Extension stroke end For end lock	Retraction stroke end	Buffer	End lock	Axial piping
MXQ6A	130	130	170	190	210	—	—	—	—	–6	10	11 (9)	8	30	40	No addition
MXQ8A	140	160	180	210	270	290	—	—	—	–6	10	11 (9)	8	30	60	
MXQ12A	270	290	310	370	400	540	610	—	—	–12	20	22 (20)	16	70	80	
MXQ16A	480	510	550	630	670	810	1,000	1,100	—	–21	40	38 (34)	30	120	150	
MXQ20A	840	840	870	950	1,100	1,300	1,600	1,900	2,000	–33	70	62 (34)	50 (80)	190	400	
MXQ25A	1,400	1,400	1,500	1,500	1,900	2,000	2,300	2,900	3,100	–60	110	102 (95)	80	310	700	

* Value in ( ) is the additional weight of the shock absorber.

Weight of Centralized Adjuster

[g]

Model	Standard stroke [mm]									Reduction only when the product comes with a retraction stroke end adjuster
	10	20	30	40	50	75	100	125	150	
MXQ6A	175	180	225	245	265	—	—	—	—	–10
MXQ8A	190	210	230	260	320	350	—	—	—	–10
MXQ12A	355	385	405	465	495	635	705	—	—	–20
MXQ16A	640	680	720	800	840	980	1,170	1,270	—	–40
MXQ20A	1,110 (–60)	1,140 (–60)	1,170 (–60)	1,250 (–60)	1,400 (–60)	1,600 (–60)	1,950 (–60)	2,250 (–60)	2,350 (–60)	–60 (–25)
MXQ25A	1,880	1,920	2,020	2,020	2,420	2,520	2,930	3,530	3,730	–100

* Value in ( ) is the additional weight of the shock absorber.

Weight of Moving Parts

[g]

Model	Standard stroke [mm]									Reduction of the shorter total length type	Additional weight of adjuster option		Extra for option		
	10	20	30	40	50	75	100	125	150		Extension stroke end	Retraction stroke end	Buffer	End lock	Axial piping
MXQ6A	61	66	80	89	97	—	—	—	—	–6	10	8	30	10	No addition
MXQ8A	68	76	85	97	116	138	—	—	—	–6	10	8	30	10	
MXQ12A	143	154	168	192	206	263	300	—	—	–12	20	16	70	20	
MXQ16A	240	257	277	309	329	389	469	520	—	–21	40	30	120	35	
MXQ20A	408	410	437	464	503	588	747	815	882	–33	70	50 (80)	190	65	
MXQ25A	674	681	721	761	836	935	1,078	1,284	1,384	–60	110	80	310	110	

* Value in ( ) is the additional weight of the shock absorber.

Maximum Load Weight

[kg]

Model	Without adjuster	Adjuster option				
	Internal rubber bumper	Rubber stopper	Metal stopper with bumper	Shock absorber/RJ		Metal stopper
				Horizontal	Vertical	
MXQ6A	0.6	0.6	—	0.6		0.6
MXQ8A	1	1	1	1		1
MXQ12A	2	2	2	1.5	1	2
MXQ16A	4	4	4	4	2.5	4
MXQ20A	6	6	6	6		6
MXQ25A	9	9	9	9	6	9

Allowable Kinetic Energy

[J]

Model	Without adjuster	Adjuster option			
	Internal rubber bumper	Metal stopper with bumper	Rubber stopper	Shock absorber/RJ	Metal stopper
MXQ6A	0.03	—	0.06	0.175	0.009
MXQ8A	0.04	0.018	0.06	0.2	0.009
MXQ12A	0.11	0.04	0.12	0.33	0.02
MXQ16A	0.12	0.08	0.2	0.76	0.04
MXQ20A	0.24	0.12	0.4	1.47	0.06
MXQ25A	0.39	0.18	0.6	1.73	0.09

∗ When selecting a model, refer to Model Selection on page 157 or use the Model Selection Software. Keep in mind that a model cannot be selected with only the allowable kinetic energy.

Optional Specifications

With End Lock

Model	MXQ6A	MXQ8A	MXQ12A	MXQ16A	MXQ20A	MXQ25A
Operating pressure range [MPa]	0.35 to 0.7					
Holding force [N]	12	12	23	45	70	110

With Buffer Mechanism

Model		MXQ6A	MXQ8A	MXQ12A	MXQ16A	MXQ20A	MXQ25A
Operating speed range [mm/s]		50 to 500 (Horizontal mounting 50 to 300)					
Buffer stroke [mm]		5		10			
Buffer stroke load [N]	Stroke at 0 [mm]	3	5	9	16	25	40
	Maximum stroke	6	8	15	24	38	59

Auto Switches Applicable to Buffer

Type	Model	Specifications	Electrical entry direction
Solid state auto switch	D-M9BV	With light, 2-wire	Vertical
	D-M9NV	With light, 3-wire, Output: NPN	
	D-M9PV	With light, 3-wire, Output: PNP	

Adjusters

For adjuster option models and dimensions, refer to pages 123 and 124.

Metal Stopper with Bumper

Model	MXQ8A	MXQ12A	MXQ16A	MXQ20A	MXQ25A
Max. absorbed energy [J]	0.018	0.04	0.08	0.12	0.18
Stroke absorption [mm]	2	2.8	3.6	4.4	5.5
Min. operating pressure of metal stopper with bumper∗1∗2 **[MPa]**	0.3	0.3	0.2	0.2	0.2
(Reference) **Full compression force of bumper [N]**	20	42	65	97	154
Mounting screw size [mm]	M6 x 0.75	M8 x 1	M10 x 1	M12 x 1	M14 x 1.5

∗1 Minimum operating pressure required to fully compress the protrusion of the bumper to get in contact with the metal part
When using the metal stopper with bumper for positioning, use it at a pressure level exceeding the minimum operating pressure. For vertical mounting, the workpiece mass should be taken into consideration. For details, refer to Specific Product Precautions on page 196.
∗2 Not available for ø6

Rubber Stopper

Model	MXQ6A	MXQ8A	MXQ12A	MXQ16A	MXQ20A	MXQ25A
Max. absorbed energy [J]	0.06		0.12	0.2	0.4	0.6
Mounting screw size [mm]	M6 x 0.75		M8 x 1	M10 x 1	M12 x 1	M14 x 1.5

Shock Absorber/RJ

Model	MXQ6A	MXQ8A	MXQ12A	MXQ16A	MXQ20A	MXQ25A
Max. absorbed energy [J]	0.35		0.5	1.5	3	3.7
Stroke absorption [mm]	3		5	6	7	10
Collision speed [mm/s]	50 to 500					
Max. operating frequency [cycle/min]	80		80	70		45
Max. allowable thrust [N]	150		245	422		814
Spring force (Extended) [N]	1.3		2.8	5.4		6.4
Spring force (Compressed) [N]	3.9		4.9	8		15
Mounting screw size [mm]	M6 x 0.75		M8 x 1	M10 x 1		M14 x 1.5

Metal Stopper

Model	MXQ6A	MXQ8A	MXQ12A	MXQ16A	MXQ20A	MXQ25A
Max. absorbed energy [J]	0.009		0.02	0.04	0.06	0.09
Mounting screw size [mm]	M6 x 0.75		M8 x 1	M10 x 1	M12 x 1	M14 x 1.5

With Stable Lubrication Function (Lube-retainer)

· A cylinder for operation in micro-powder (10 to 100 μm) and general environments
· The stable lubrication function (Lube-retainer) is mounted on the piston rod. This prevents the entry of dust and foreign matter and improves durability.

MXQ [Bore size] **A** **M** – [Stroke] [Adjuster option] [Functional option] – [Auto switch] – [Made to order]

Body option (A) · With stable lubrication function (Lube-retainer) (M)

For details, refer to the **Web Catalog**.

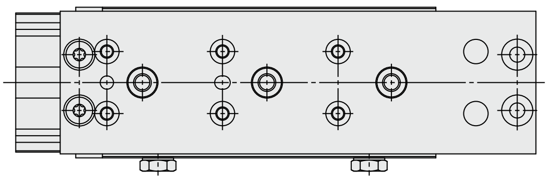
Specifications

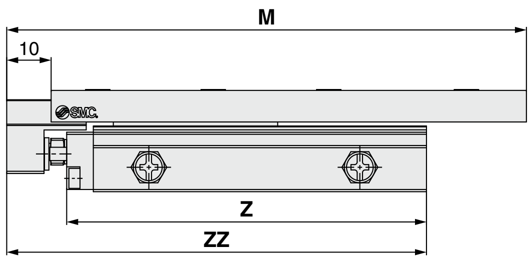
Bore size [mm]		6	8	12	16	20	25
Action		Double acting					
Minimum operating pressure	**Internal rubber bumper**	0.15 MPa					
	Rubber stopper						
	Metal stopper						
	Shock absorber	—	—				
	Metal stopper with bumper	—	0.3 MPa	0.3 MPa	0.2 MPa	0.2 MPa	0.2 MPa

∗ Specifications other than those listed above are the same as those for the standard type.

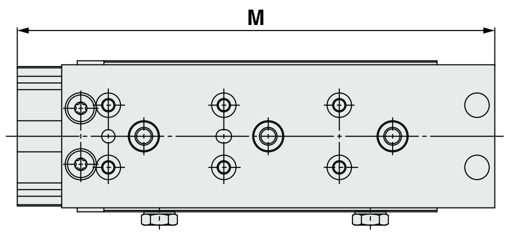
Dimensions (Dimensions other than those shown below are the same as those for the standard type.)

MXQ6AM





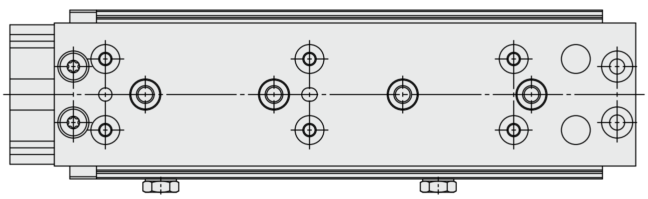
Shorter total length type

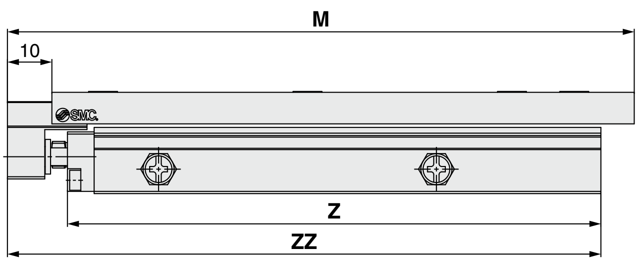


[mm]

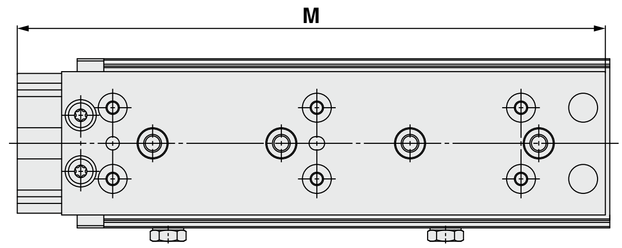
Model	M Standard type	M Shorter total length type	Z	ZZ
MXQ6AM-10Z	74	64.5	56	69.5
MXQ6AM-20Z	84	74.5	56	69.5
MXQ6AM-30Z	105	95.5	69	82.5
MXQ6AM-40Z	117	107.4	81	94.5
MXQ6AM-50Z	127	117.5	91	104.5

MXQ8AM





Shorter total length type



[mm]

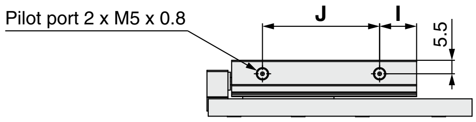
Model	M Standard type	M Shorter total length type	Z	ZZ
MXQ8AM-10Z	78	69.5	57	70.5
MXQ8AM-20Z	88	79.5	67	80.5
MXQ8AM-30Z	98	89.5	77	90.5
MXQ8AM-40Z	114	105.5	93	106.5
MXQ8AM-50Z	141	132.5	120	133.5
MXQ8AM-75Z	166	157.5	122	135.5

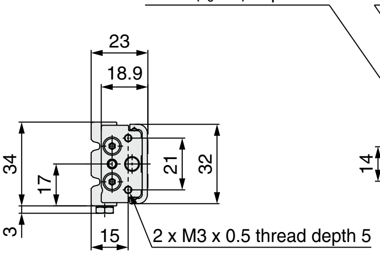
The external dimensions of the ø12 to ø25 sizes are the same as the standard product.

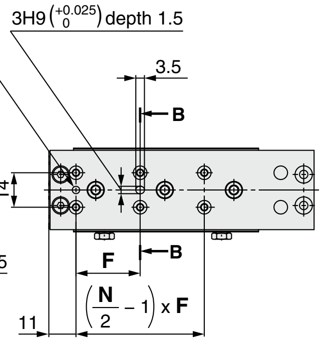
Dimensions: MXQ 6A [Standard]

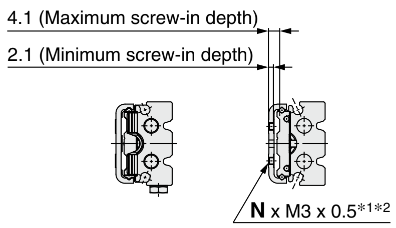
MXQ 6A-□Z Standard type

∗1 If long bolts are used, they may touch the guide block and cause a malfunction, etc. Use a screw which has an intermediate length between the maximum screw-in depth and minimum screw-in depth. Refer to page 196 for details.
∗2 Since the table is made of a magnetic substance, it could become magnetized if touched by a magnet, etc. This could cause an auto switch malfunction.

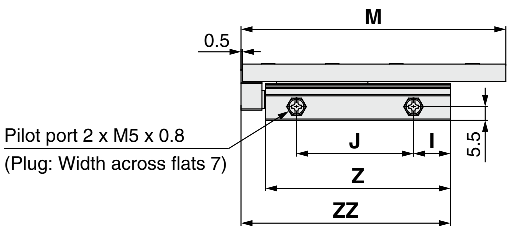


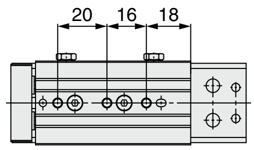




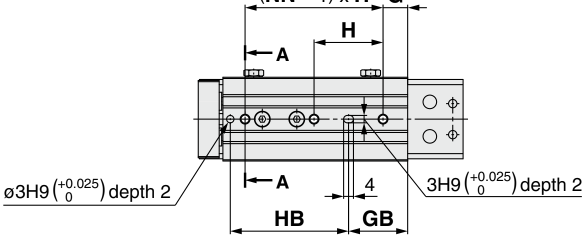


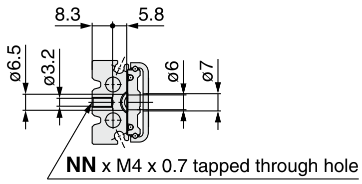
Cross-sectional view B-B





Bottom view of MXQ6A-30Z





Cross-sectional view A-A

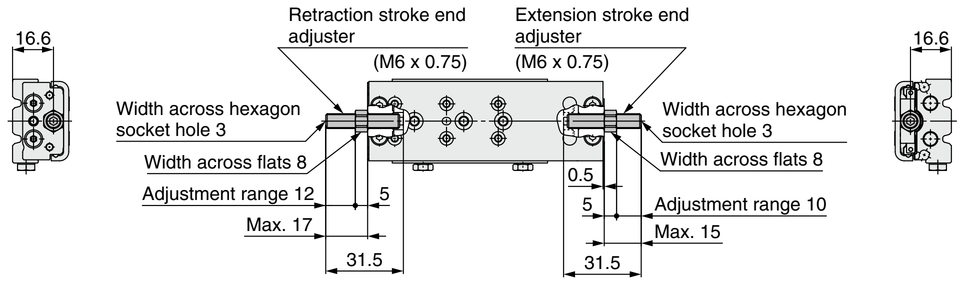
Dimensions [mm]

Model	F	G	GB	H	HB	I	J	M	N	NN	Z	ZZ
MXQ6A-10Z	22	18	9	23	38	10	27.5	64.5	4	2	50	60
MXQ6A-20Z	25	15	9	26	38	10	27.5	74.5	4	2	50	60
MXQ6A-30Z	21	—	12	—	48	13	37.5	95.5	6	3	63	73
MXQ6A-40Z	26	10	24	28	48	15	47.5	107.5	6	3	75	85
MXQ6A-50Z	27	20	34	28	48	15	57.5	117.5	6	3	85	95

Dimensions: MXQ 6A [Adjuster Option]

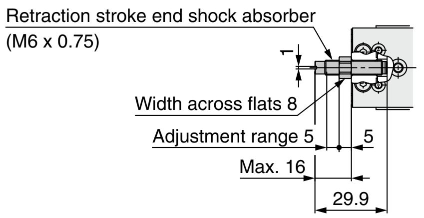
MXQ 6A-□ With adjuster option (ø6)

Rubber stopper ZD: Both ends, ZE: Extension stroke end, ZF: Retraction stroke end, ZP: Retraction stroke end (Shorter total length type)

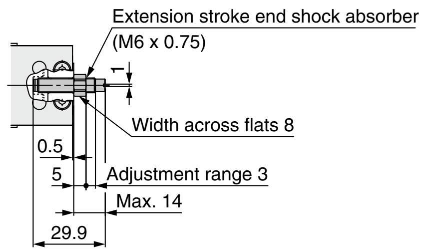


Both ends

Shock absorber/RJ ZG: Both ends, ZH: Extension stroke end, ZJ: Retraction stroke end, ZQ: Retraction stroke end (Shorter total length type)

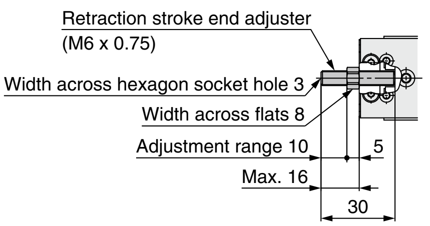


Retraction stroke end

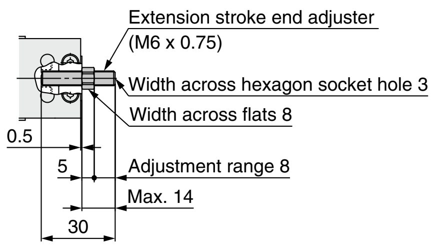


Extension stroke end

Metal stopper ZK: Both ends, ZL: Extension stroke end, ZM: Retraction stroke end, ZT: Retraction stroke end (Shorter total length type)



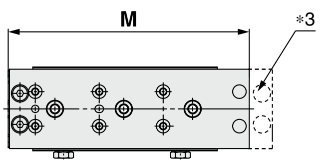
Retraction stroke end



Extension stroke end

* Dimensions other than those listed above are the same as those for the standard type.

MXQ 6A-□ZN Shorter total length type



*3 As the total length has been reduced by removing the extension stroke end adjuster mounting holes, an extension stroke end adjuster cannot be mounted afterward. (Retraction stroke end adjusters can be mounted afterward.)

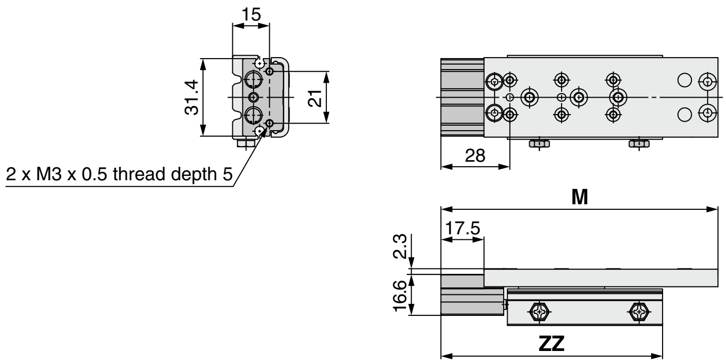
Dimensions [mm]

Model	M
MXQ6A-10ZN	55
MXQ6A-20ZN	65
MXQ6A-30ZN	86
MXQ6A-40ZN	98
MXQ6A-50ZN	108

* Dimensions other than those listed above are the same as those for the standard type.

Dimensions: MXQ 6A [Functional Option]

MXQ 6A-□□1 With buffer (ø6)

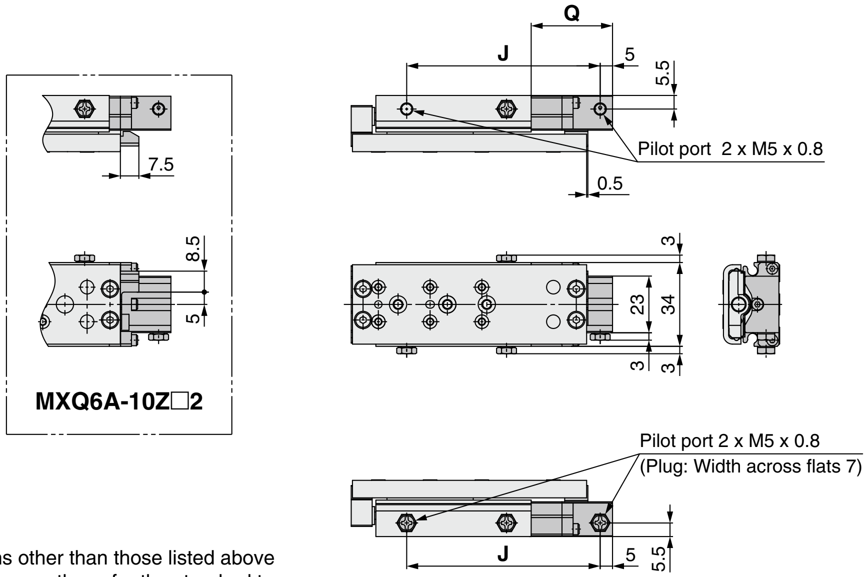


Dimensions [mm]

Model	Standard type M	Shorter total length type M	ZZ
MXQ6A-10Z□1	81.5	72	77
MXQ6A-20Z□1	91.5	82	
MXQ6A-30Z□1	112.5	103	90
MXQ6A-40Z□1	124.5	115	102
MXQ6A-50Z□1	134.5	125	112

∗ Dimensions other than those listed above are the same as those for the standard type.

MXQ 6A-□□2 With end lock (ø6)



Dimensions [mm]

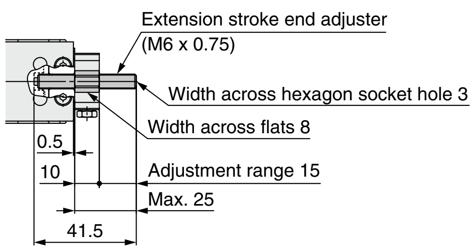
Model	J	Q
MXQ6A-10Z□2	57.5	25
MXQ6A-20Z□2		
MXQ6A-30Z□2	78.5	33
MXQ6A-40Z□2	90.5	
MXQ6A-50Z□2	100.5	

∗ Dimensions other than those listed above are the same as those for the standard type.

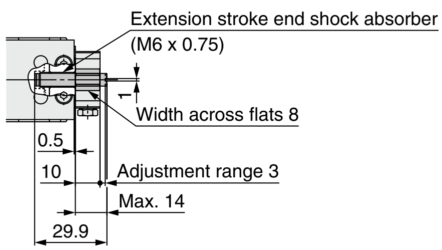
MXQ 6A-□□2 With end lock, extension stroke end adjuster (ø6)

A retraction stroke end adjuster cannot be mounted to the end lock.
For adjuster part numbers, refer to page 124-1.

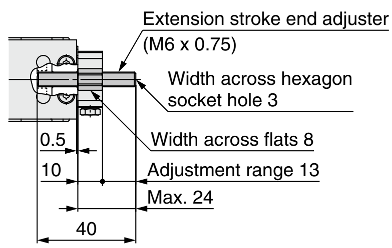
Rubber stopper: ZE



Shock absorber/RJ: ZH



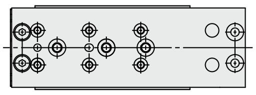
Metal stopper: ZL

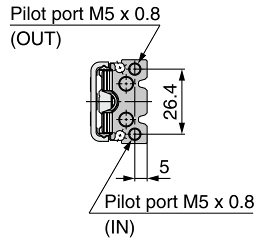


∗ Dimensions other than those listed above are the same as those for the standard type.

Dimensions: MXQ 6A [Functional Option]

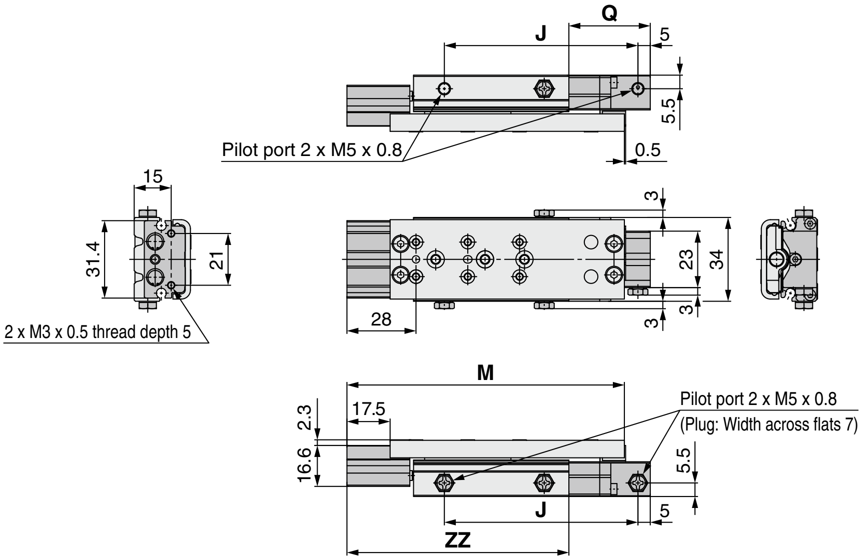
MXQ 6A-□□3 Axial piping (ø6)

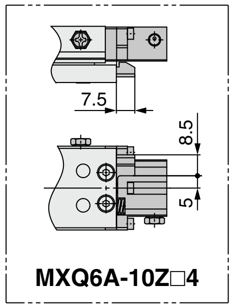




∗ Dimensions other than those listed above are the same as those for the standard type.

MXQ 6A-□□4 With buffer, end lock (ø6)



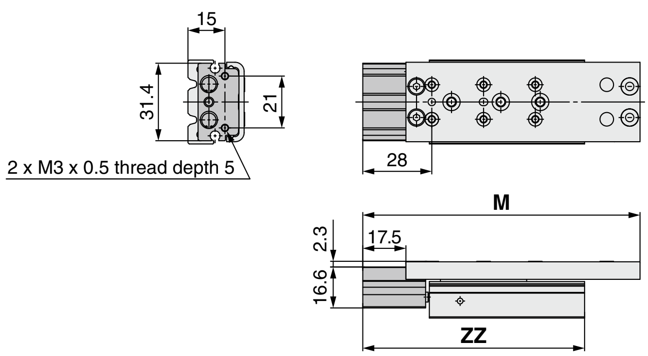


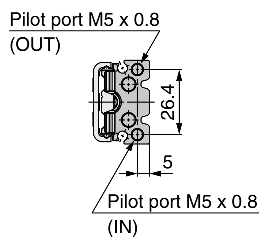
Dimensions [mm]

Model	J	Q	Standard type M	ZZ
MXQ6A-10Z□4	57.5	25	81.5	77
MXQ6A-20Z□4			91.5	
MXQ6A-30Z□4	78.5	33	112.5	90
MXQ6A-40Z□4	90.5		124.5	102
MXQ6A-50Z□4	100.5		134.5	112

∗ Dimensions other than those listed above are the same as those for the standard type.

MXQ 6A-□□5 With buffer, axial piping (ø6)





Dimensions [mm]

Model	Standard type M	Shorter total length type M	ZZ
MXQ6A-10Z□5	81.5	72	77
MXQ6A-20Z□5	91.5	82	
MXQ6A-30Z□5	112.5	103	90
MXQ6A-40Z□5	124.5	115	102
MXQ6A-50Z□5	134.5	125	112

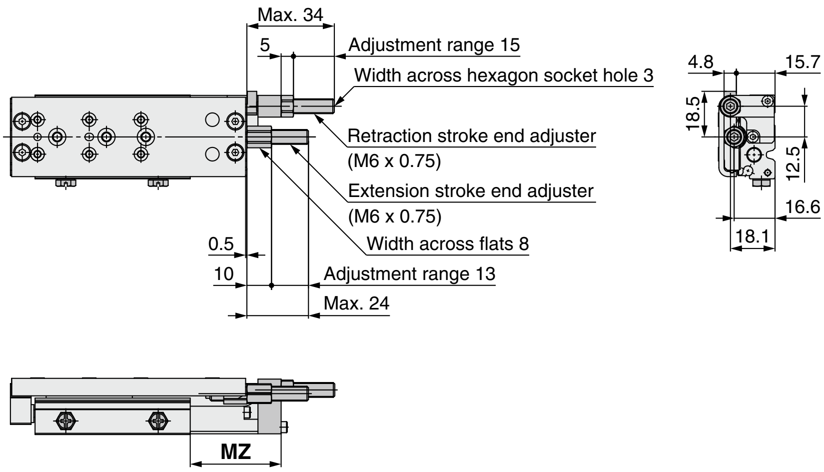
∗ Dimensions other than those listed above are the same as those for the standard type.

Dimensions: MXQ 6A [Functional Option]

MXQ 6A-□□6 Centralized adjuster (ø6)

For adjuster part numbers, refer to page 124-1.

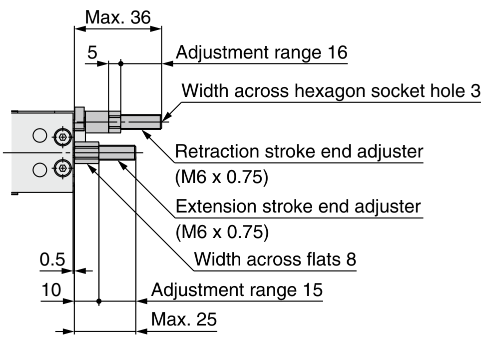
Metal stopper ZK: Both ends,
ZM: Retraction stroke end



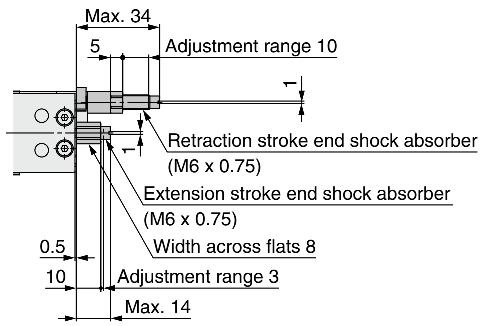
Dimensions [mm]

Model	MZ
MXQ6A-10Z□6	18.9
MXQ6A-20Z□6	28.9
MXQ6A-30Z□6	36.9
MXQ6A-40Z□6	
MXQ6A-50Z□6	

Rubber stopper ZD: Both ends,
ZF: Retraction stroke end



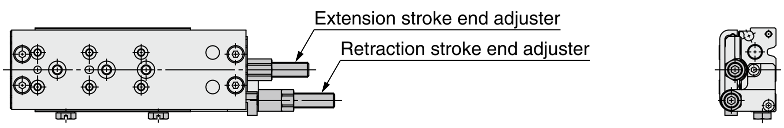
Shock absorber/RJ ZG: Both ends,
ZJ: Retraction stroke end



∗ Dimensions other than those listed above are the same as those for the standard type.
∗ In the case of a short stroke, there are some places where an auto switch cannot be mounted. For details, refer to page 126.

MXQ 6A-□□7 Centralized adjuster / Symmetric type (ø6)

The mounting position of the retraction stroke end adjuster is on the reverse side of functional option 6.
For adjuster part numbers, refer to page 124-1.

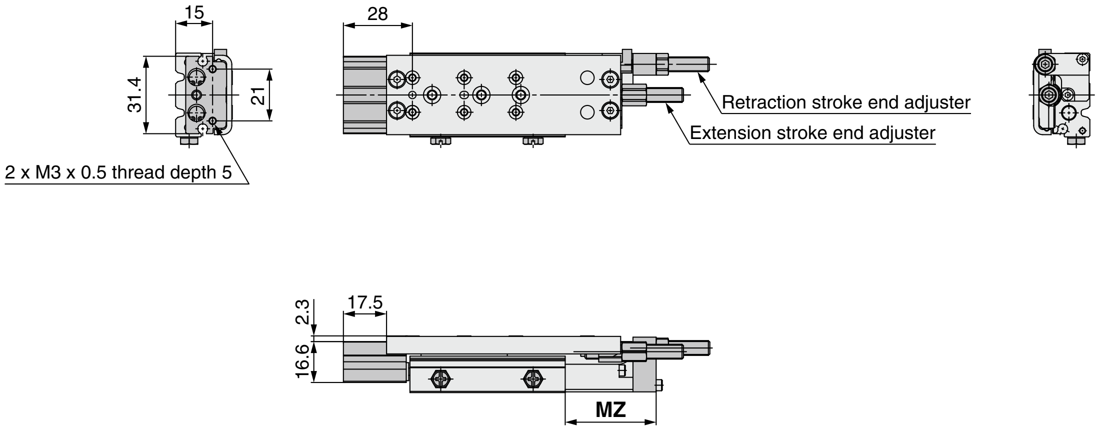


∗ In the case of a short stroke, there are some places where an auto switch cannot be mounted. For details, refer to page 126.

Dimensions: MXQ 6A [Functional Option]

MXQ 6A-□□8 Buffer, Centralized adjuster (ø6)

The extension stroke end adjuster can only be mounted on a rubber stopper type or a metal stopper type.
For adjuster part numbers, refer to page 124-1.



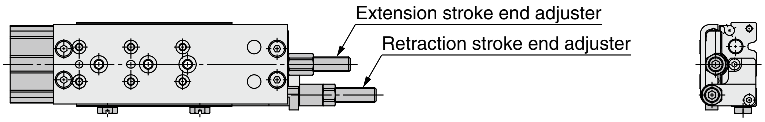
Dimensions [mm]

Model	MZ
MXQ6A-10Z□8	18.9
MXQ6A-20Z□8	28.9
MXQ6A-30Z□8	36.9
MXQ6A-40Z□8	
MXQ6A-50Z□8	

∗ Dimensions other than those listed above are the same as those for the standard type.
∗ In the case of a short stroke, there are some places where an auto switch cannot be mounted. For details, refer to page 126.

MXQ 6A-□□9 Buffer, Centralized adjuster / Symmetric type (ø6)

The extension stroke end adjuster can only be mounted on a rubber stopper type or a metal stopper type.
The mounting position of the retraction stroke end adjuster is on the reverse side of functional option 8.
For adjuster part numbers, refer to page 124-1.

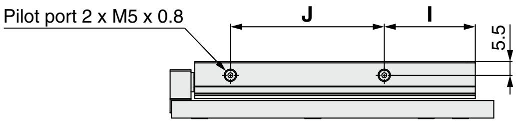


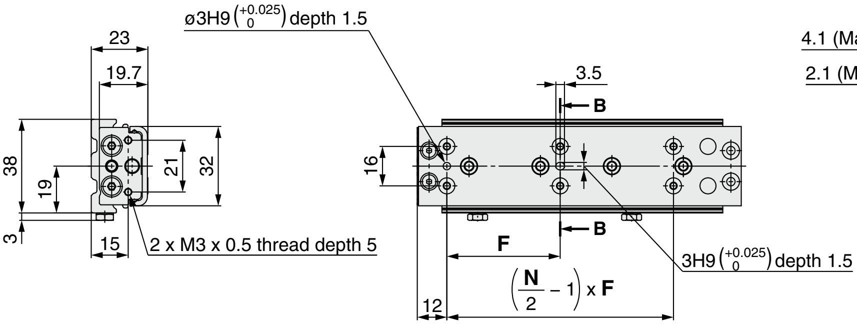
∗ In the case of a short stroke, there are some places where an auto switch cannot be mounted. For details, refer to page 126.

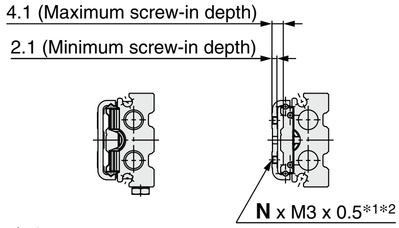
Dimensions: MXQ 8A [Standard]

MXQ 8A-□Z Standard type

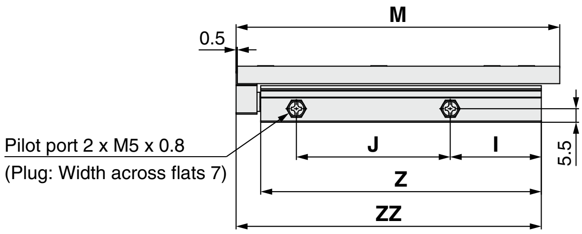
∗1 If long bolts are used, they may touch the guide block and cause a malfunction, etc. Use a screw which has an intermediate length between the maximum screw-in depth and minimum screw-in depth. Refer to page 196 for details.
∗2 Since the table is made of a magnetic substance, it could become magnetized if touched by a magnet, etc. This could cause an auto switch malfunction.

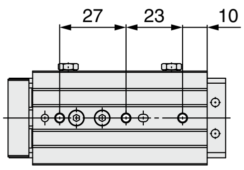




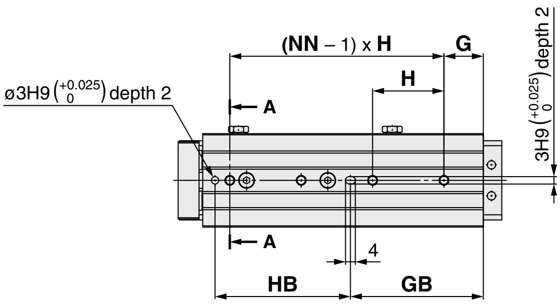


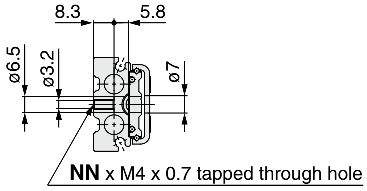
Cross-sectional view B-B





Bottom view of MXQ8A-30Z





Cross-sectional view A-A

Dimensions [mm]

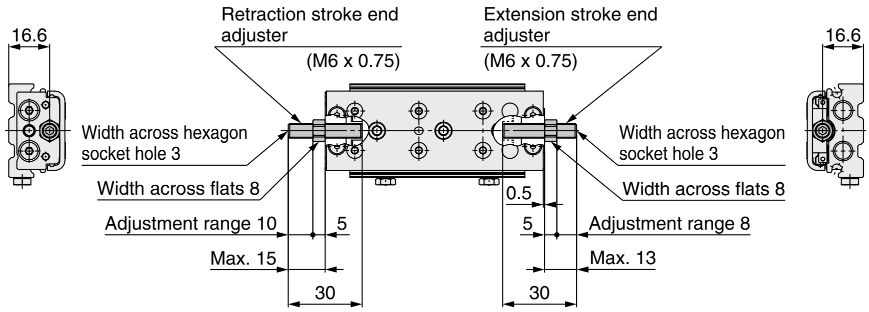
Model	F	G	GB	H	HB	I	J	M	N	NN	Z	ZZ
MXQ8A-10Z	25	15	9	25	37	10	26.5	68.5	4	2	51	61
MXQ8A-20Z	25	22	16	28	40	14	32.5	78.5	4	2	61	71
MXQ8A-30Z	26	—	26	—	40	14.5	42	88.5	6	3	71	81
MXQ8A-40Z	32	14	27	31	55	20	52.5	104.5	6	3	87	97
MXQ8A-50Z	46	16	54	29	55	37	62.5	131.5	6	4	114	124
MXQ8A-75Z	50	15	56	30	55	10	91.5	156.5	6	4	116	126

Dimensions: MXQ 8A [Adjuster Option]

MXQ 8A-□ With adjuster option (ø8)

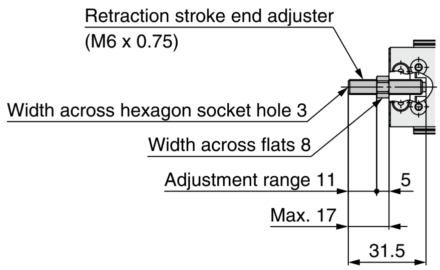
Metal stopper with bumper ZA: Both ends, ZB: Extension stroke end, ZC: Retraction stroke end, ZS: Retraction stroke end (Shorter total length type)

Metal stopper ZK: Both ends, ZL: Extension stroke end, ZM: Retraction stroke end, ZT: Retraction stroke end (Shorter total length type)

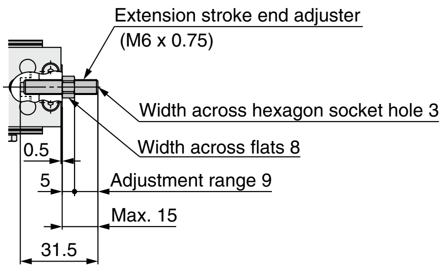


Both ends

Rubber stopper ZD: Both ends, ZE: Extension stroke end, ZF: Retraction stroke end, ZP: Retraction stroke end (Shorter total length type)

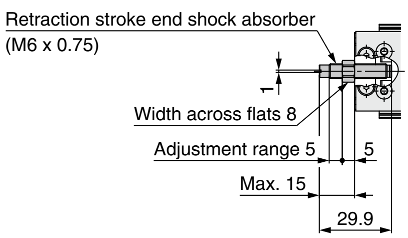


Retraction stroke end

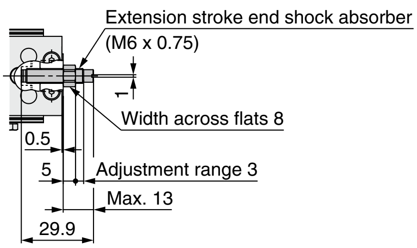


Extension stroke end

Shock absorber/RJ ZG: Both ends, ZH: Extension stroke end, ZJ: Retraction stroke end, ZQ: Retraction stroke end (Shorter total length type)



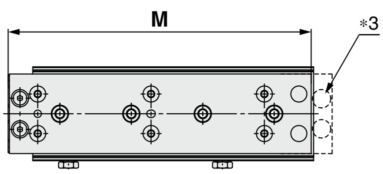
Retraction stroke end



Extension stroke end

∗ Dimensions other than those listed above are the same as those for the standard type.

MXQ 8A-□ZN Shorter total length type



∗3 As the total length has been reduced by removing the extension stroke end adjuster mounting holes, an extension stroke end adjuster cannot be mounted afterward. (Retraction stroke end adjusters can be mounted afterward.)

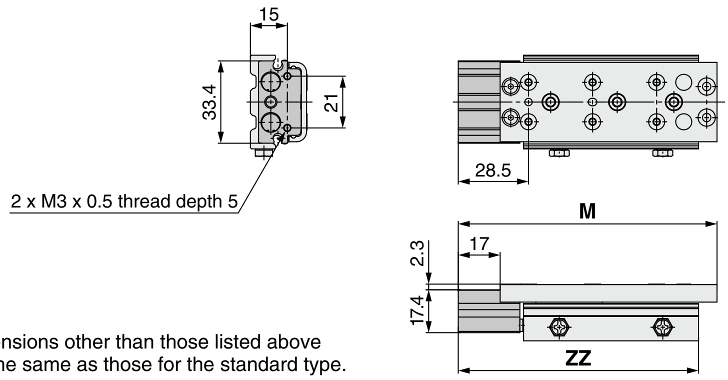
Dimensions [mm]

Model	M
MXQ8A-10ZN	60
MXQ8A-20ZN	70
MXQ8A-30ZN	80
MXQ8A-40ZN	96
MXQ8A-50ZN	123
MXQ8A-75ZN	148

∗ Dimensions other than those listed above are the same as those for the standard type.

Dimensions: MXQ 8A [Functional Option]

MXQ 8A-□□1 With buffer (ø8)

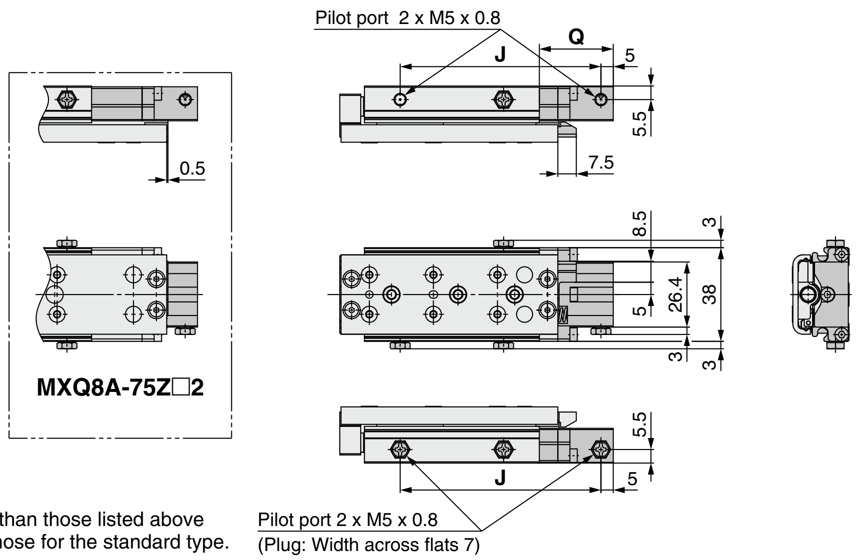


Dimensions [mm]

Model	Standard type M	Shorter total length type M	ZZ
MXQ8A-10Z□1	85	76.5	77.5
MXQ8A-20Z□1	95	86.5	87.5
MXQ8A-30Z□1	105	96.5	97.5
MXQ8A-40Z□1	121	112.5	113.5
MXQ8A-50Z□1	148	139.5	140.5
MXQ8A-75Z□1	173	164.5	142.5

∗ Dimensions other than those listed above are the same as those for the standard type.

MXQ 8A-□□2 With end lock (ø8)



Dimensions [mm]

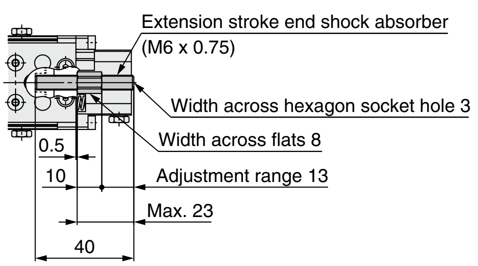
Model	J	Q
MXQ8A-10Z□2	61.5	30
MXQ8A-20Z□2	71.5	
MXQ8A-30Z□2	81.5	
MXQ8A-40Z□2	97.5	
MXQ8A-50Z□2	124.5	
MXQ8A-75Z□2	139.5	43

∗ Dimensions other than those listed above are the same as those for the standard type.

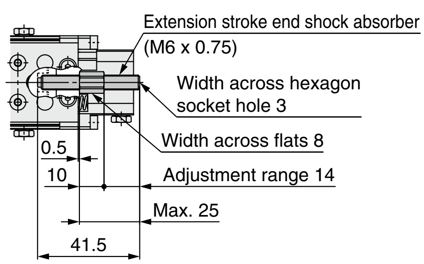
MXQ 8A-□□2 With end lock, extension stroke end adjuster (ø8)

A retraction stroke end adjuster cannot be mounted to the end lock.
For adjuster part numbers, refer to page 124-1.

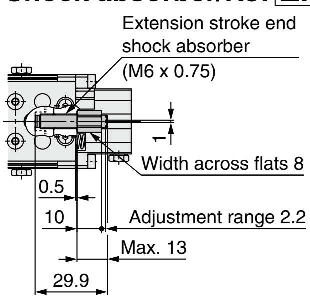
Metal stopper with bumper: ZB
Metal stopper: ZL



Rubber stopper: ZE



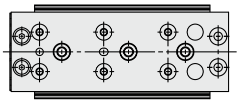
Shock absorber/RJ: ZH

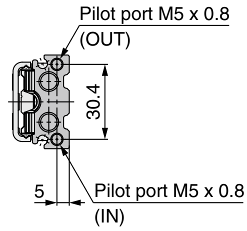


∗ Dimensions other than those listed above are the same as those for the standard type.

Dimensions: MXQ 8A [Functional Option]

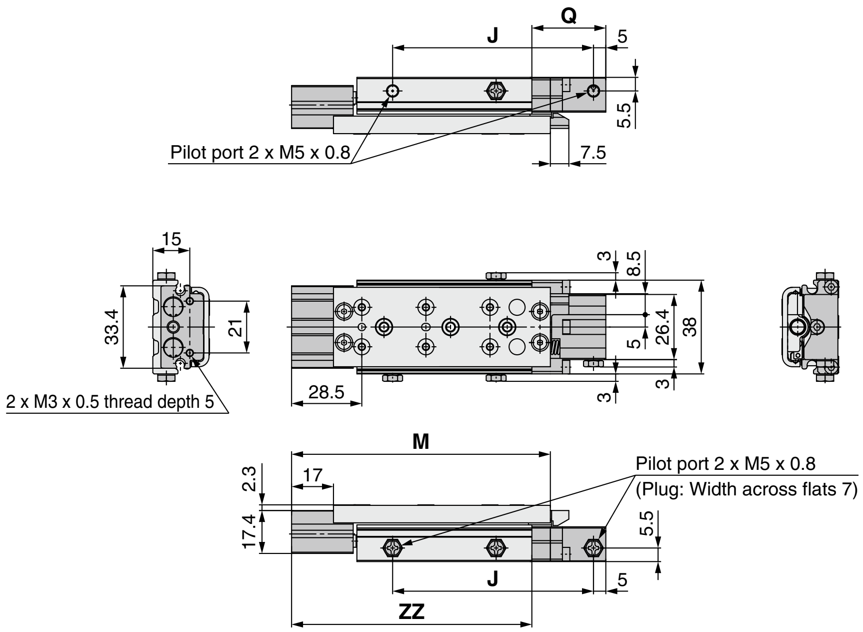
MXQ 8A-□□3 Axial piping (ø8)

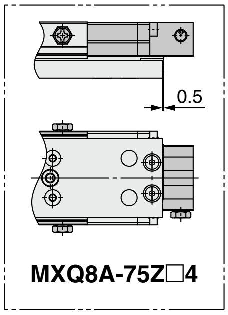




* Dimensions other than those listed above are the same as those for the standard type.

MXQ 8A-□□4 With buffer, end lock (ø8)



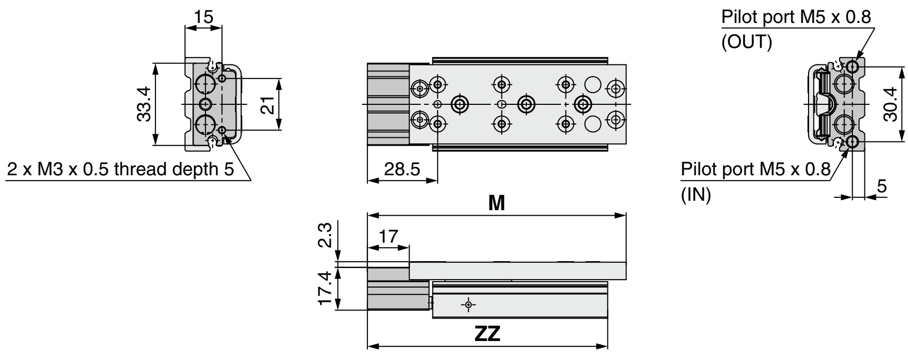


Dimensions [mm]

Model	J	Q	Standard type M	ZZ
MXQ8A-10Z□4	61.5	30	85	77.5
MXQ8A-20Z□4	71.5		95	87.5
MXQ8A-30Z□4	81.5		105	97.5
MXQ8A-40Z□4	97.5		121	113.5
MXQ8A-50Z□4	124.5		148	140.5
MXQ8A-75Z□4	139.5	43	173	142.5

* Dimensions other than those listed above are the same as those for the standard type.

MXQ 8A-□□5 With buffer, axial piping (ø8)



Dimensions [mm]

Model	Standard type M	Shorter total length type M	ZZ
MXQ8A-10Z□5	85	76.5	77.5
MXQ8A-20Z□5	95	86.5	87.5
MXQ8A-30Z□5	105	96.5	97.5
MXQ8A-40Z□5	121	112.5	113.5
MXQ8A-50Z□5	148	139.5	140.5
MXQ8A-75Z□5	173	164.5	142.5

* Dimensions other than those listed above are the same as those for the standard type.

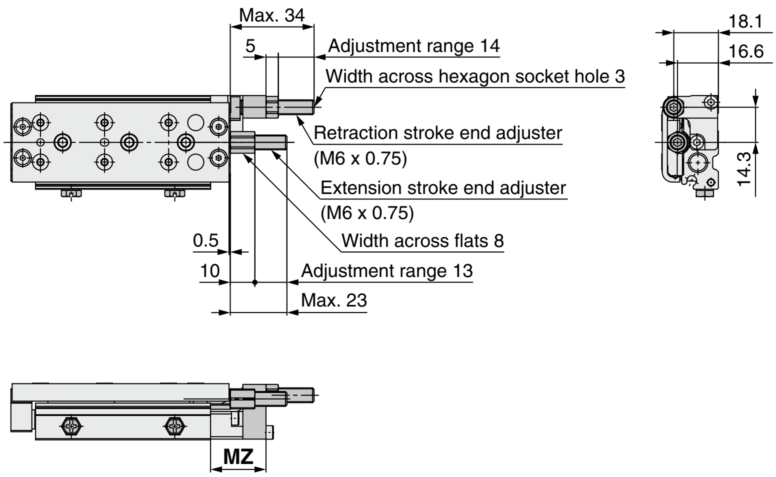
Dimensions: MXQ 8A [Functional Option]

MXQ 8A-□□6 Centralized adjuster (ø8)

For adjuster part numbers, refer to page 124-1.

Metal stopper with bumper ZA: Both ends, ZC: Retraction stroke end

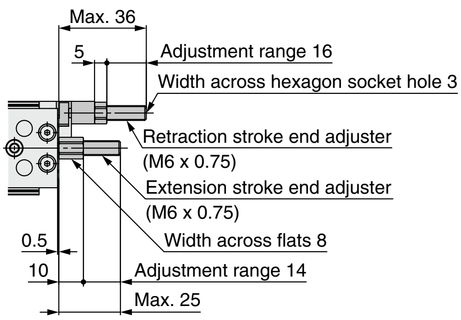
Metal stopper ZK: Both ends, ZM: Retraction stroke end



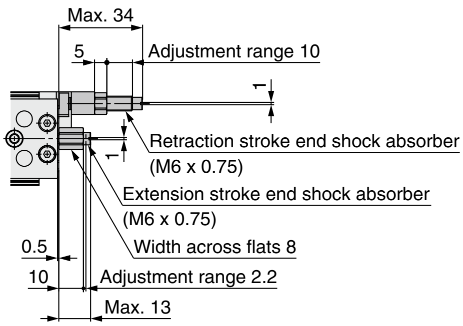
Dimensions [mm]

Model	MZ
MXQ8A-10Z□6	22.5
MXQ8A-20Z□6	
MXQ8A-30Z□6	
MXQ8A-40Z□6	
MXQ8A-50Z□6	
MXQ8A-75Z□6	46.5

Rubber stopper ZD: Both ends,
ZF: Retraction stroke end



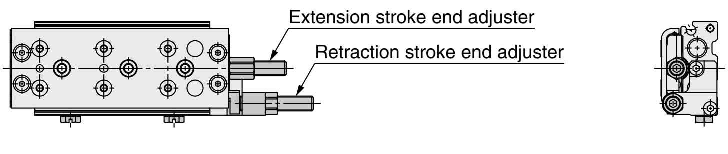
Shock absorber/RJ ZG: Both ends,
ZJ: Retraction stroke end



∗ Dimensions other than those listed above are the same as those for the standard type.
∗ In the case of a short stroke, there are some places where an auto switch cannot be mounted. For details, refer to page 126.

MXQ 8A-□□7 Centralized adjuster / Symmetric type (ø8)

The mounting position of the retraction stroke end adjuster is on the reverse side of functional option 6.
For adjuster part numbers, refer to page 124-1.

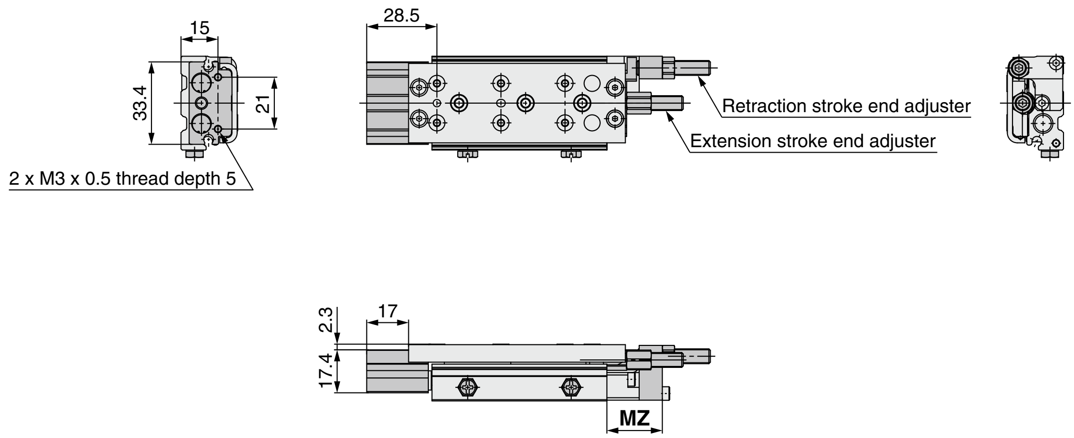


∗ In the case of a short stroke, there are some places where an auto switch cannot be mounted. For details, refer to page 126.

Dimensions: MXQ 8A [Functional Option]

MXQ 8A-□□8 Buffer, Centralized adjuster (ø8)

The extension stroke end adjuster can only be mounted on a rubber stopper type or a metal stopper type.
For adjuster part numbers, refer to page 124-1.



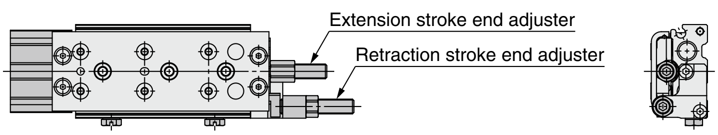
Dimensions [mm]

Model	MZ
MXQ8A-10Z□8	22.5
MXQ8A-20Z□8	
MXQ8A-30Z□8	
MXQ8A-40Z□8	
MXQ8A-50Z□8	
MXQ8A-75Z□8	46.5

∗ Dimensions other than those listed above are the same as those for the standard type.
∗ In the case of a short stroke, there are some places where an auto switch cannot be mounted. For details, refer to page 126.

MXQ 8A-□□9 Buffer, Centralized adjuster / Symmetric type (ø8)

The extension stroke end adjuster can only be mounted on a rubber stopper type or a metal stopper type.
The mounting position of the retraction stroke end adjuster is on the reverse side of functional option 8.
For adjuster part numbers, refer to page 124-1.

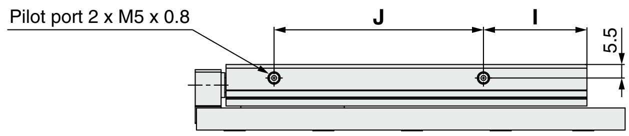


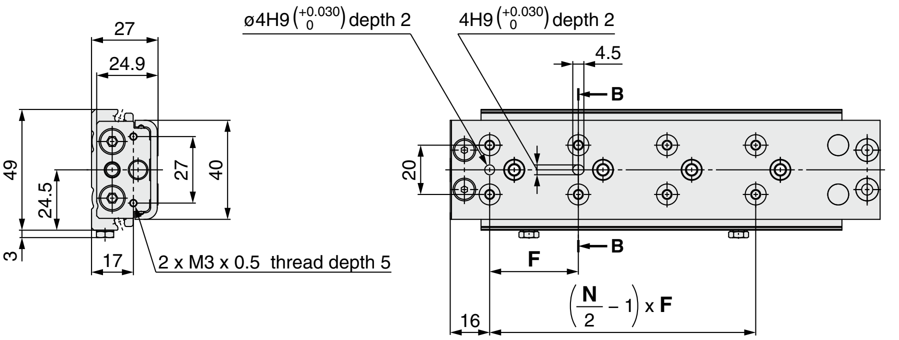
∗ In the case of a short stroke, there are some places where an auto switch cannot be mounted. For details, refer to page 126.

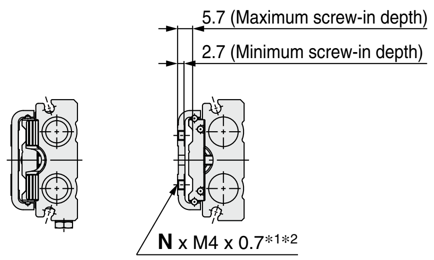
Dimensions: MXQ 12A [Standard]

MXQ 12A-□Z Standard type

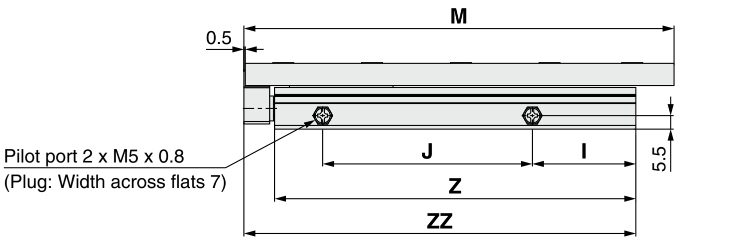
*1 If long bolts are used, they may touch the guide block and cause a malfunction, etc. Use a screw which has an intermediate length between the maximum screw-in depth and minimum screw-in depth. Refer to page 196 for details.
*2 Since the table is made of a magnetic substance, it could become magnetized if touched by a magnet, etc. This could cause an auto switch malfunction.

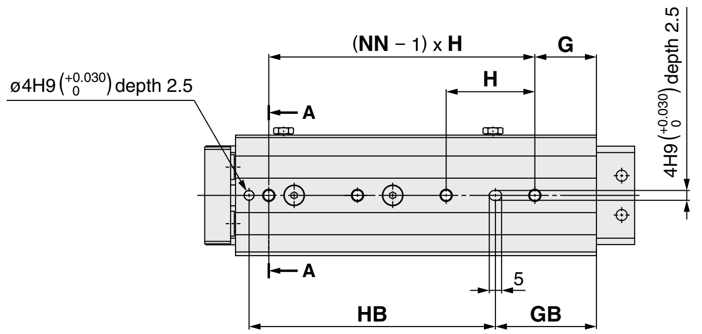


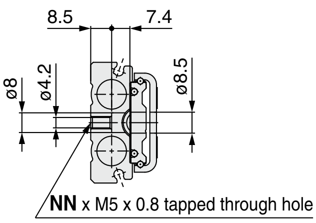




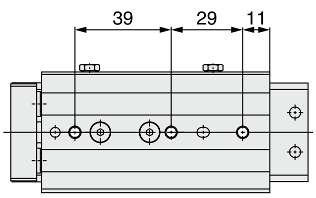
Cross-sectional view B-B







Cross-sectional view A-A



Bottom view of MXQ12A-40Z

Dimensions

[mm]

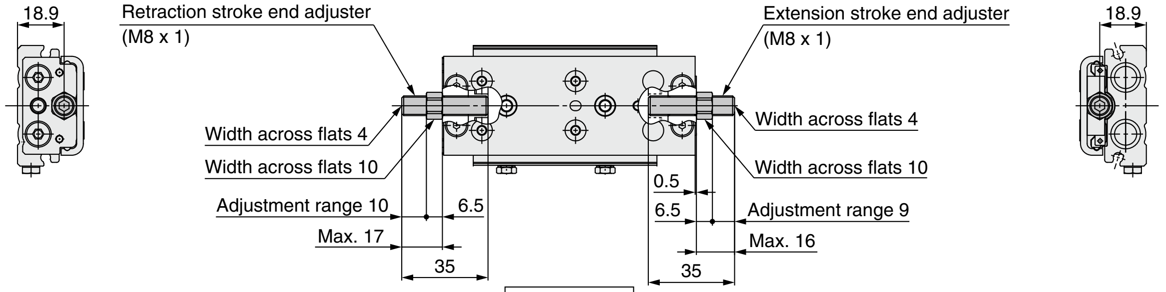
Model	F	G	GB	H	HB	I	J	M	N	NN	Z	ZZ
MXQ12A-10Z	28	17	11	32	46	11	32	82.5	4	2	62.5	75
MXQ12A-20Z	28	19	11	32	48	13	32	92.5	4	2	64.5	77
MXQ12A-30Z	38	21	11	40	58	15	40	102.5	4	2	74.5	87
MXQ12A-40Z	34	—	27	—	60	23	50	120.5	6	3	92.5	105
MXQ12A-50Z	34	11	37	39	60	23	60	130.5	6	3	102.5	115
MXQ12A-75Z	36	25	41	36	100	42	85	174.5	8	4	146.5	159
MXQ12A-100Z	36	14	66	36	100	42	110	199.5	10	5	171.5	184

Dimensions: MXQ 12A [Adjuster Option]

MXQ 12A-□ With adjuster option (ø12)

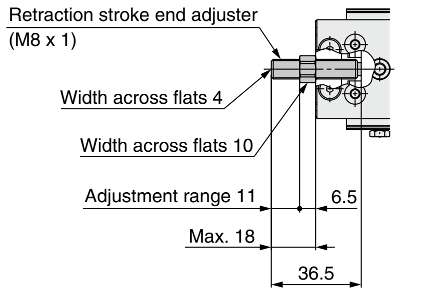
Metal stopper with bumper **ZA**: Both ends, **ZB**: Extension stroke end, **ZC**: Retraction stroke end, **ZS**: Retraction stroke end (Shorter total length type)

Metal stopper **ZK**: Both ends, **ZL**: Extension stroke end, **ZM**: Retraction stroke end, **ZT**: Retraction stroke end (Shorter total length type)

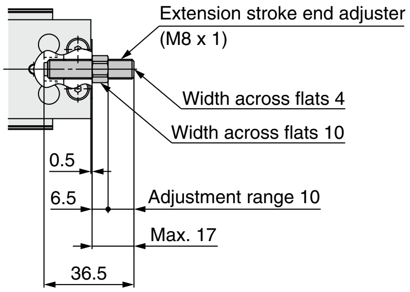


Both ends

Rubber stopper **ZD**: Both ends, **ZE**: Extension stroke end, **ZF**: Retraction stroke end, **ZP**: Retraction stroke end (Shorter total length type)

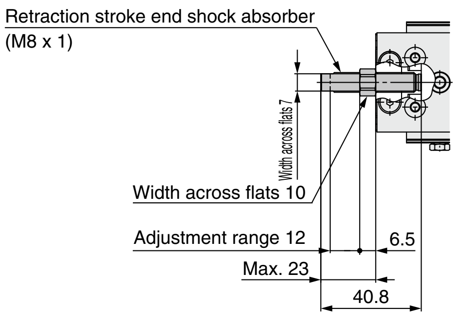


Retraction stroke end

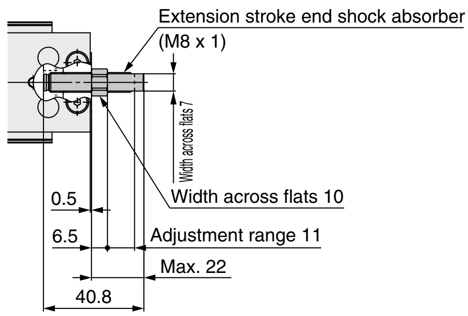


Extension stroke end

Shock absorber/RJ **ZG**: Both ends, **ZH**: Extension stroke end, **ZJ**: Retraction stroke end, **ZQ**: Retraction stroke end (Shorter total length type)



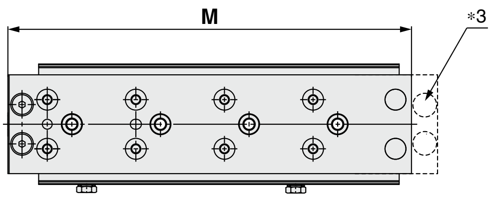
Retraction stroke end



Extension stroke end

∗ Dimensions other than those listed above are the same as those for the standard type.

MXQ 12A-□ZN Shorter total length type



∗3 As the total length has been reduced by removing the extension stroke end adjuster mounting holes, an extension stroke end adjuster cannot be mounted afterward. (Retraction stroke end adjusters can be mounted afterward.)

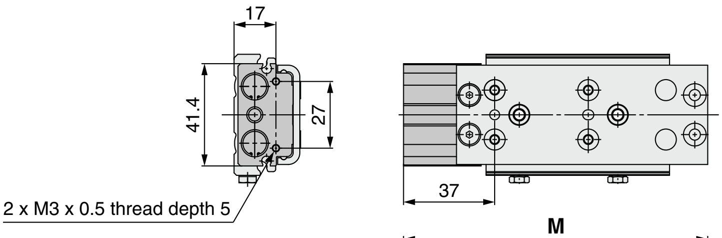
Dimensions [mm]

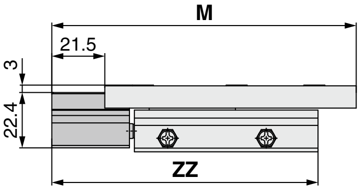
Model	M
MXQ12A-10ZN	72
MXQ12A-20ZN	82
MXQ12A-30ZN	92
MXQ12A-40ZN	110
MXQ12A-50ZN	120
MXQ12A-75ZN	164
MXQ12A-100ZN	189

∗ Dimensions other than those listed above are the same as those for the standard type.

Dimensions: MXQ 12A [Functional Option]

MXQ 12A-□□1 With buffer (ø12)



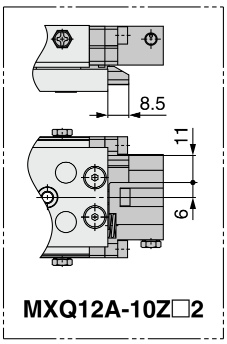


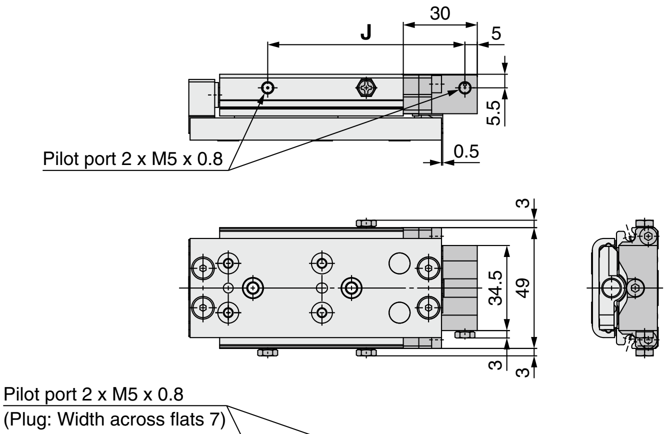
* Dimensions other than those listed above are the same as those for the standard type.

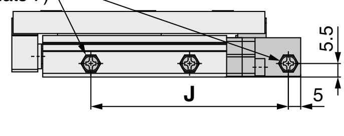
Dimensions [mm]

Model	Standard type M	Shorter total length type M	ZZ
MXQ12A-10Z□1	103.5	93	96
MXQ12A-20Z□1	113.5	103	98
MXQ12A-30Z□1	123.5	113	108
MXQ12A-40Z□1	141.5	131	126
MXQ12A-50Z□1	151.5	141	136
MXQ12A-75Z□1	195.5	185	180
MXQ12A-100Z□1	220.5	210	205

MXQ 12A-□□2 With end lock (ø12)







* Dimensions other than those listed above are the same as those for the standard type.

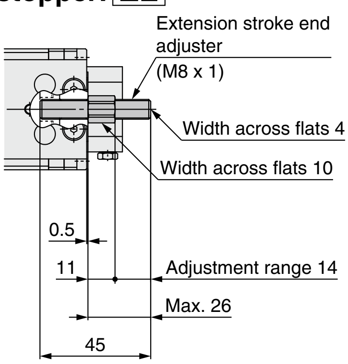
Dimensions [mm]

Model	J
MXQ12A-10Z□2	68
MXQ12A-20Z□2	70
MXQ12A-30Z□2	80
MXQ12A-40Z□2	98
MXQ12A-50Z□2	108
MXQ12A-75Z□2	152
MXQ12A-100Z□2	177

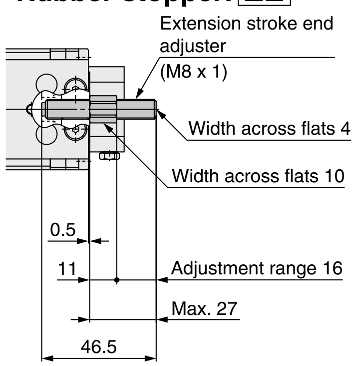
MXQ 12A-□□2 With end lock, extension stroke end adjuster (ø12)

A retraction stroke end adjuster cannot be mounted to the end lock.
For adjuster part numbers, refer to page 124-1.

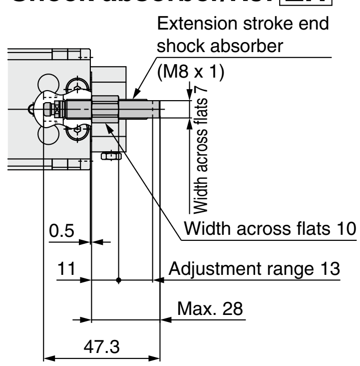
Metal stopper with bumper: ZB
Metal stopper: ZL



Rubber stopper: ZE



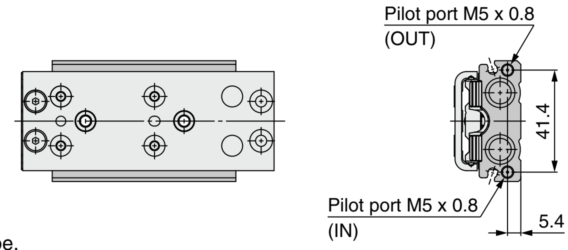
Shock absorber/RJ: ZH



* Dimensions other than those listed above are the same as those for the standard type.

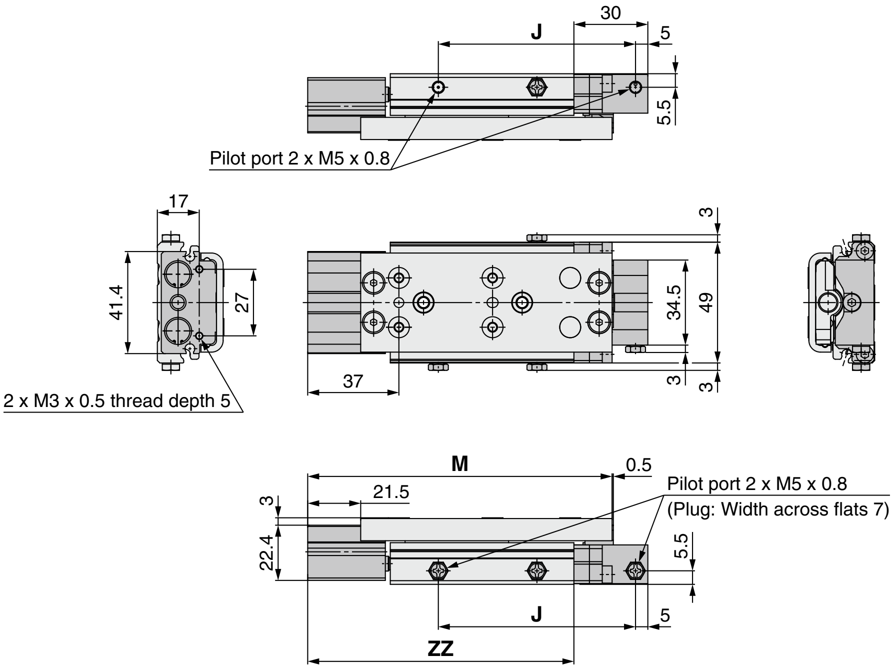
Dimensions: MXQ 12A [Functional Option]

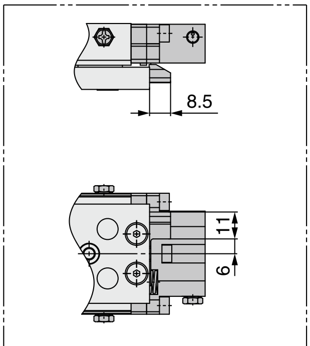
MXQ 12A-□□3 Axial piping (ø12)



∗ Dimensions other than those listed above are the same as those for the standard type.

MXQ 12A-□□4 With buffer, end lock (ø12)





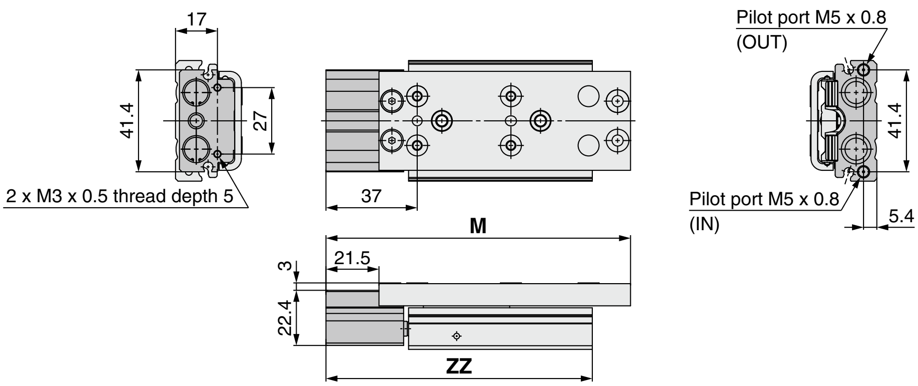
MXQ12A-10Z□4

∗ Dimensions other than those listed above are the same as those for the standard type.

Dimensions [mm]

Model	J	Standard type M	ZZ
MXQ12A-10Z□4	68	103.5	96
MXQ12A-20Z□4	70	113.5	98
MXQ12A-30Z□4	80	123.5	108
MXQ12A-40Z□4	98	141.5	126
MXQ12A-50Z□4	108	151.5	136
MXQ12A-75Z□4	152	195.5	180
MXQ12A-100Z□4	177	220.5	205

MXQ 12A-□□5 With buffer, axial piping (ø12)



Dimensions [mm]

Model	Standard type M	Shorter total length type M	ZZ
MXQ12A-10Z□5	103.5	93	96
MXQ12A-20Z□5	113.5	103	98
MXQ12A-30Z□5	123.5	113	108
MXQ12A-40Z□5	141.5	131	126
MXQ12A-50Z□5	151.5	141	136
MXQ12A-75Z□5	195.5	185	180
MXQ12A-100Z□5	220.5	210	205

∗ Dimensions other than those listed above are the same as those for the standard type.

Double-ported type MXQ□A
Low thrust with high rigidity type MXQ□B
Single side-ported type MXQ□C
Height interchangeable type MXQ□
Common Adjuster Options
Auto Switch Mounting
Made to Order
Model Selection

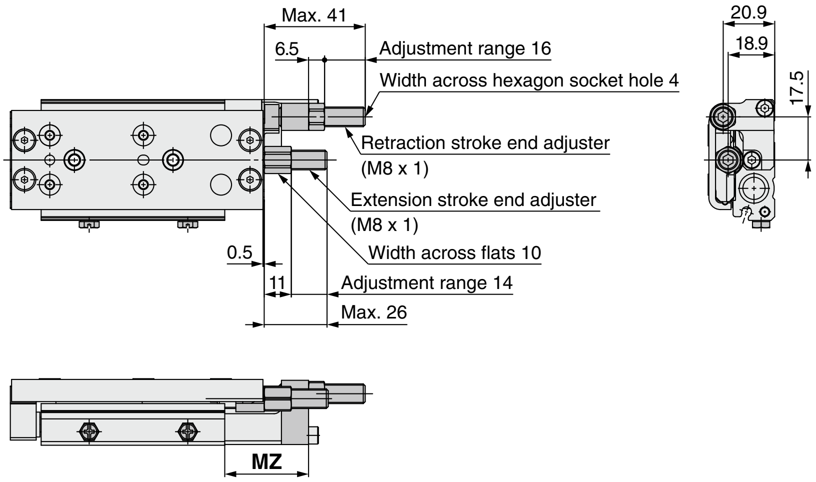
Dimensions: MXQ 12A [Functional Option]

MXQ 12A-□□6 Centralized adjuster (ø12)

For adjuster part numbers, refer to page 124-1.

Metal stopper with bumper ZA: Both ends, ZC: Retraction stroke end

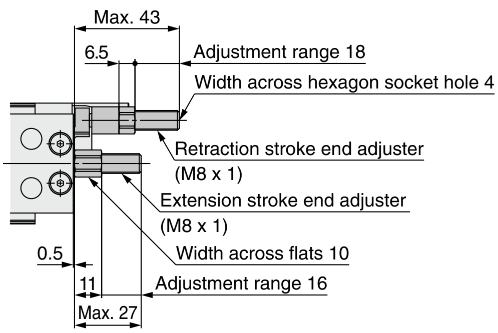
Metal stopper ZK: Both ends, ZM: Retraction stroke end



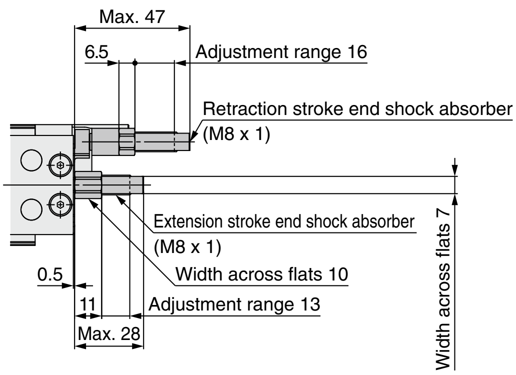
Dimensions [mm]

Model	MZ
MXQ12A-10Z□6	26
MXQ12A-20Z□6	34
MXQ12A-30Z□6	
MXQ12A-40Z□6	
MXQ12A-50Z□6	
MXQ12A-75Z□6	
MXQ12A-100Z□6	

Rubber stopper ZD: Both ends, ZF: Retraction stroke end



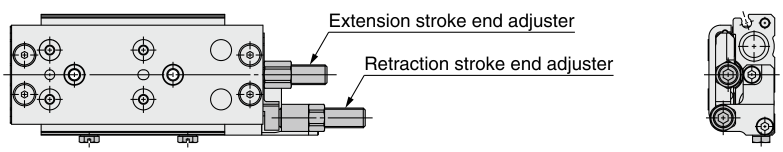
Shock absorber/RJ ZG: Both ends, ZJ: Retraction stroke end



∗ Dimensions other than those listed above are the same as those for the standard type.
∗ In the case of a short stroke, there are some places where an auto switch cannot be mounted. For details, refer to page 126.

MXQ 12A-□□7 Centralized adjuster / Symmetric type (ø12)

The mounting position of the retraction stroke end adjuster is on the reverse side of functional option 6.
For adjuster part numbers, refer to page 124-1.

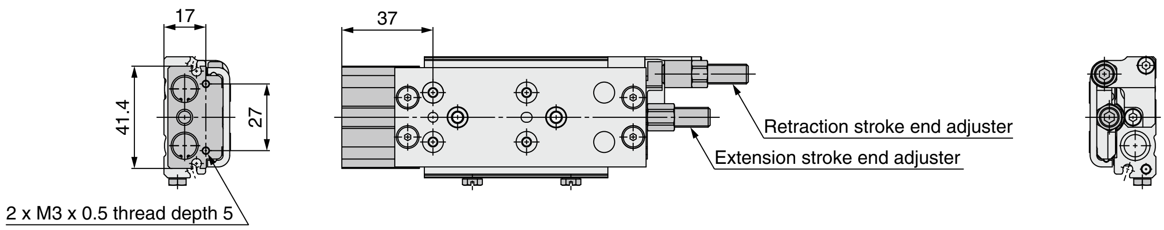


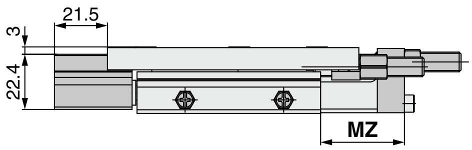
∗ In the case of a short stroke, there are some places where an auto switch cannot be mounted. For details, refer to page 126.

Dimensions: MXQ 12A [Functional Option]

MXQ 12A-□□8 Buffer, Centralized adjuster (ø12)

The extension stroke end adjuster can only be mounted on a rubber stopper type or a metal stopper type.
For adjuster part numbers, refer to page 124-1.





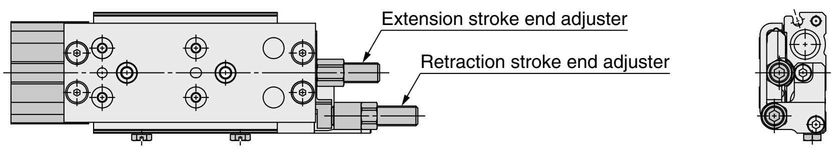
Dimensions [mm]

Model	MZ
MXQ12A-10Z□8	26
MXQ12A-20Z□8	34
MXQ12A-30Z□8	
MXQ12A-40Z□8	
MXQ12A-50Z□8	
MXQ12A-75Z□8	
MXQ12A-100Z□8	

* Dimensions other than those listed above are the same as those for the standard type.
* In the case of a short stroke, there are some places where an auto switch cannot be mounted. For details, refer to page 126.

MXQ 12A-□□9 Buffer, Centralized adjuster / Symmetric type (ø12)

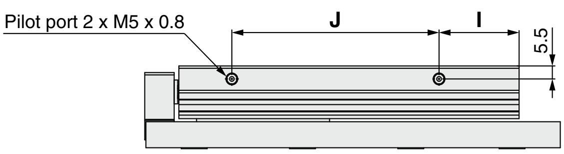
The extension stroke end adjuster can only be mounted on a rubber stopper type or a metal stopper type.
The mounting position of the retraction stroke end adjuster is on the reverse side of functional option 8.
For adjuster part numbers, refer to page 124-1.



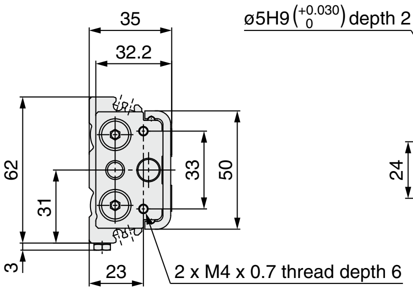
* In the case of a short stroke, there are some places where an auto switch cannot be mounted. For details, refer to page 126.

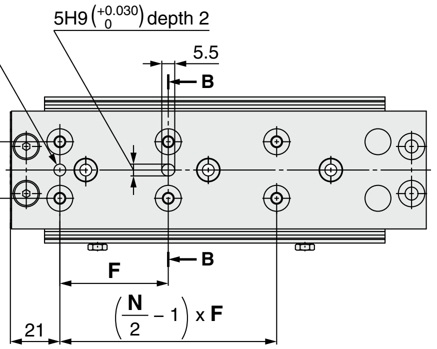
Dimensions: MXQ 16A [Standard]

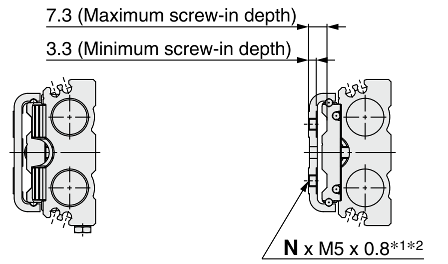
MXQ 16A-□Z Standard type



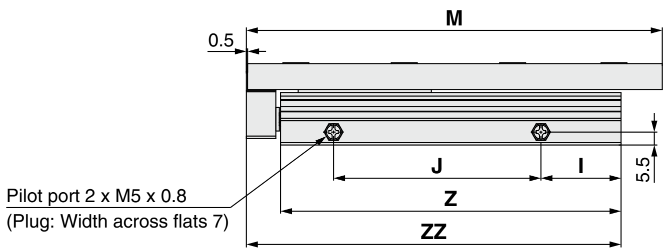
*1 If long bolts are used, they may touch the guide block and cause a malfunction, etc. Use a screw which has an intermediate length between the maximum screw-in depth and minimum screw-in depth. Refer to page 196 for details.
*2 Since the table is made of a magnetic substance, it could become magnetized if touched by a magnet, etc. This could cause an auto switch malfunction.

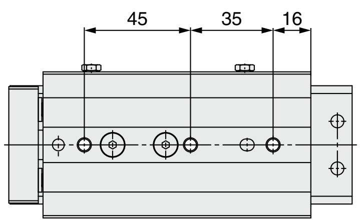




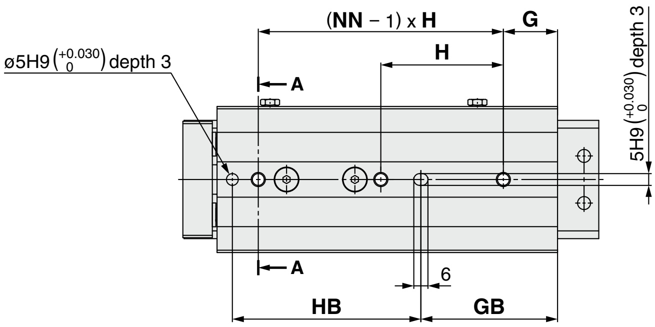


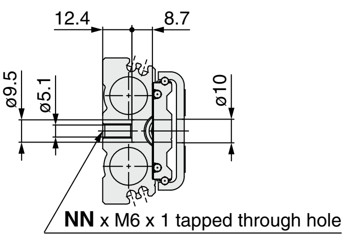
Cross-sectional view B-B





Bottom view of MXQ16A-50Z





Cross-sectional view A-A

Dimensions [mm]

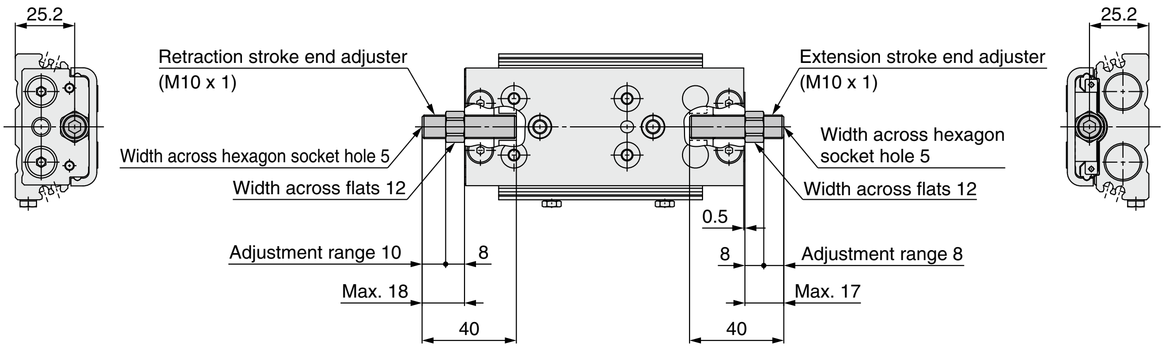
Model	F	G	GB	H	HB	I	J	M	N	NN	Z	ZZ
MXQ16A-10Z	38	16	8	39	58	22	28	98.5	4	2	72.5	87
MXQ16A-20Z	38	20	12	39	58	15	39	108.5	4	2	76.5	91
MXQ16A-30Z	48	21	30	48	50	16	48	118.5	4	2	86.5	101
MXQ16A-40Z	58	28	17	58	80	23	58	135.5	4	2	103.5	118
MXQ16A-50Z	40	—	27	—	80	28	63	145.5	6	3	113.5	128
MXQ16A-75Z	46	23	58	52	80	34	88	176.5	6	3	144.5	159
MXQ16A-100Z	44	39	102	44	80	53	113	220.5	8	4	188.5	203
MXQ16A-125Z	44	20	127	44	80	53	138	245.5	10	5	213.5	228

Dimensions: MXQ 16A [Adjuster Option]

MXQ 16A-□ ☐ With adjuster option (ø16)

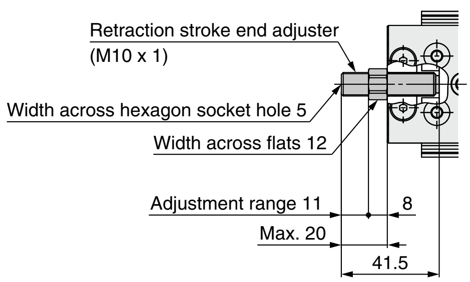
Metal stopper with bumper ZA: Both ends, ZB: Extension stroke end, ZC: Retraction stroke end, ZS: Retraction stroke end (Shorter total length type)

Metal stopper ZK: Both ends, ZL: Extension stroke end, ZM: Retraction stroke end, ZT: Retraction stroke end (Shorter total length type)

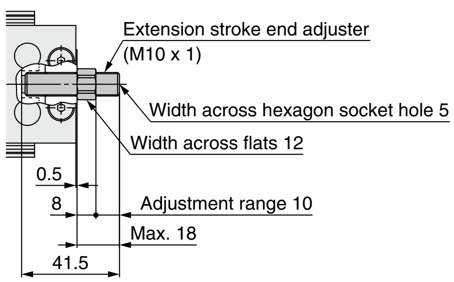


Both ends

Rubber stopper ZD: Both ends, ZE: Extension stroke end, ZF: Retraction stroke end, ZP: Retraction stroke end (Shorter total length type)

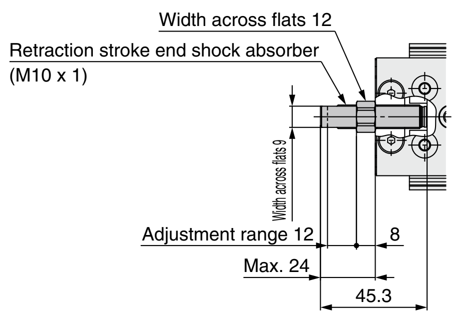


Retraction stroke end

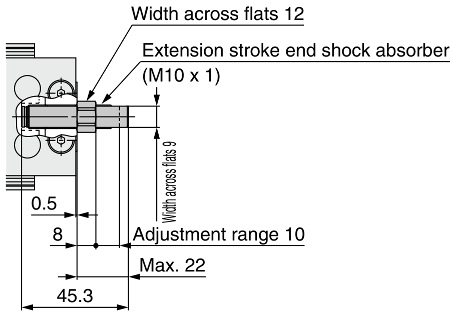


Extension stroke end

Shock absorber/RJ ZG: Both ends, ZH: Extension stroke end, ZJ: Retraction stroke end, ZQ: Retraction stroke end (Shorter total length type)



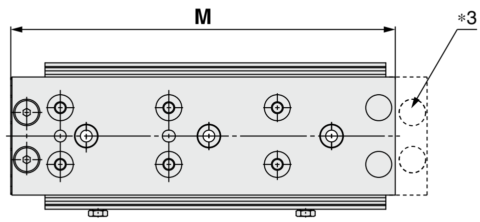
Retraction stroke end



Extension stroke end

∗ Dimensions other than those listed above are the same as those for the standard type.

MXQ 16A-□ZN Shorter total length type



∗3 As the total length has been reduced by removing the extension stroke end adjuster mounting holes, an extension stroke end adjuster cannot be mounted afterward. (Retraction stroke end adjusters can be mounted afterward.)

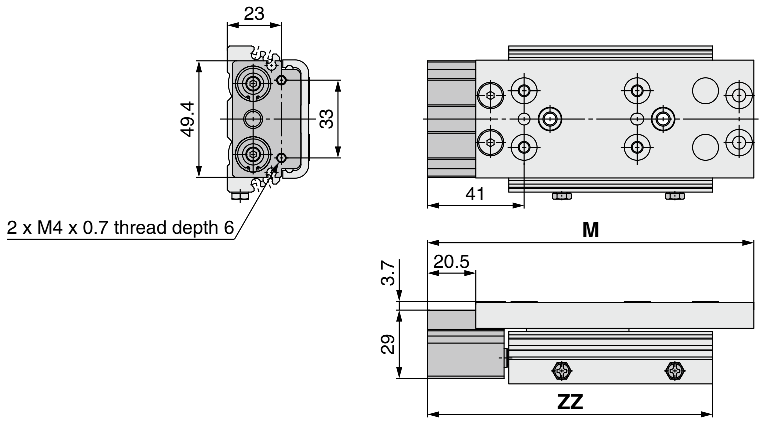
Dimensions [mm]

Model	M
MXQ16A-10ZN	85
MXQ16A-20ZN	95
MXQ16A-30ZN	105
MXQ16A-40ZN	122
MXQ16A-50ZN	132
MXQ16A-75ZN	163
MXQ16A-100ZN	207
MXQ16A-125ZN	232

∗ Dimensions other than those listed above are the same as those for the standard type.

Dimensions: MXQ 16A [Functional Option]

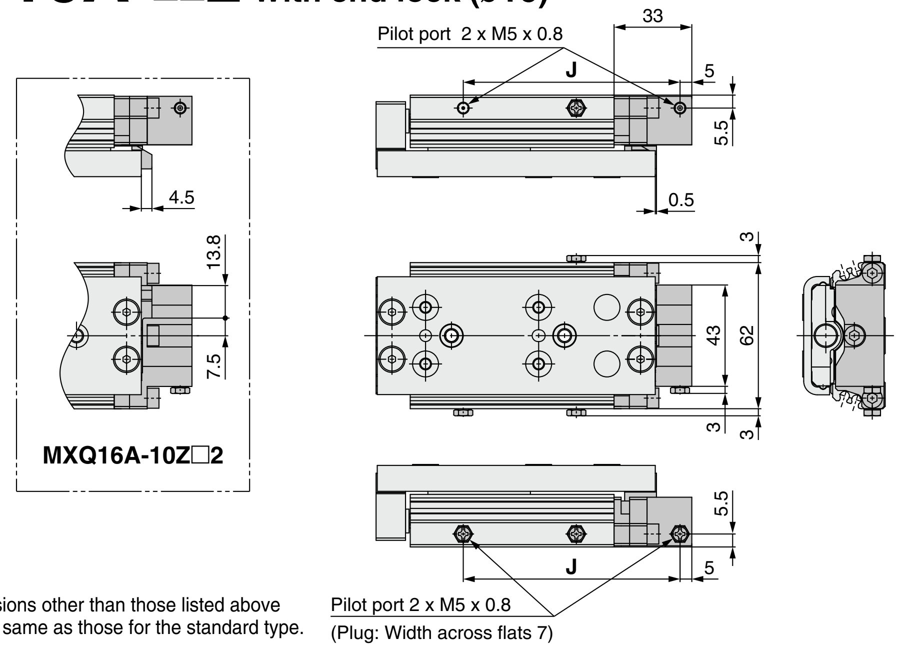
MXQ 16A-□□1 With buffer (ø16)



Dimensions [mm]

Model	Standard type M	Shorter total length type M	ZZ
MXQ16A-10Z□1	118.5	105	107
MXQ16A-20Z□1	128.5	115	111
MXQ16A-30Z□1	138.5	125	121
MXQ16A-40Z□1	155.5	142	138
MXQ16A-50Z□1	165.5	152	148
MXQ16A-75Z□1	196.5	183	179
MXQ16A-100Z□1	240.5	227	223
MXQ16A-125Z□1	265.5	252	248

MXQ 16A-□□2 With end lock (ø16)



Dimensions [mm]

Model	J
MXQ16A-10Z□2	78
MXQ16A-20Z□2	82
MXQ16A-30Z□2	92
MXQ16A-40Z□2	109
MXQ16A-50Z□2	119
MXQ16A-75Z□2	150
MXQ16A-100Z□2	194
MXQ16A-125Z□2	219

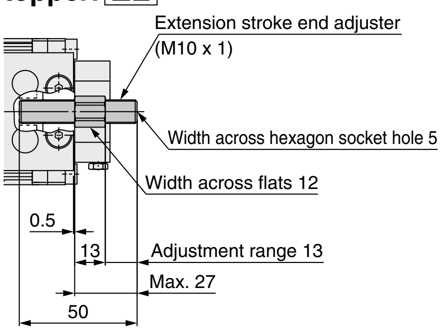
∗ Dimensions other than those listed above are the same as those for the standard type.

MXQ 16A-□□2 With end lock, extension stroke end adjuster (ø16)

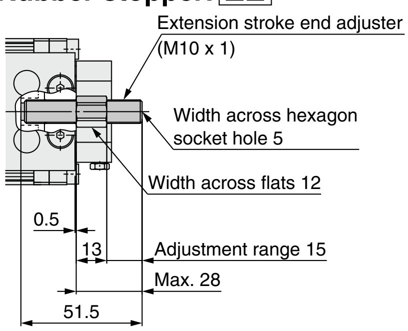
A retraction stroke end adjuster cannot be mounted to the end lock.
For adjuster part numbers, refer to page 124-1.

Metal stopper with bumper: ZB

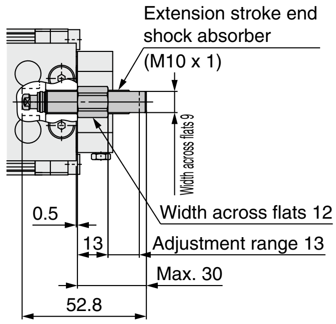
Metal stopper: ZL



Rubber stopper: ZE



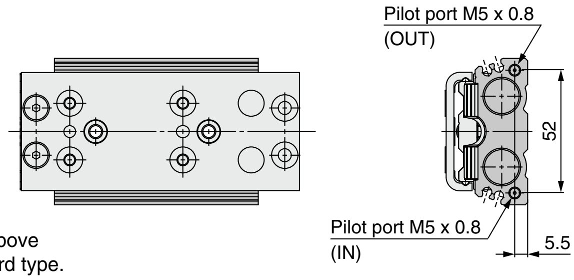
Shock absorber/RJ: ZH



∗ Dimensions other than those listed above are the same as those for the standard type.

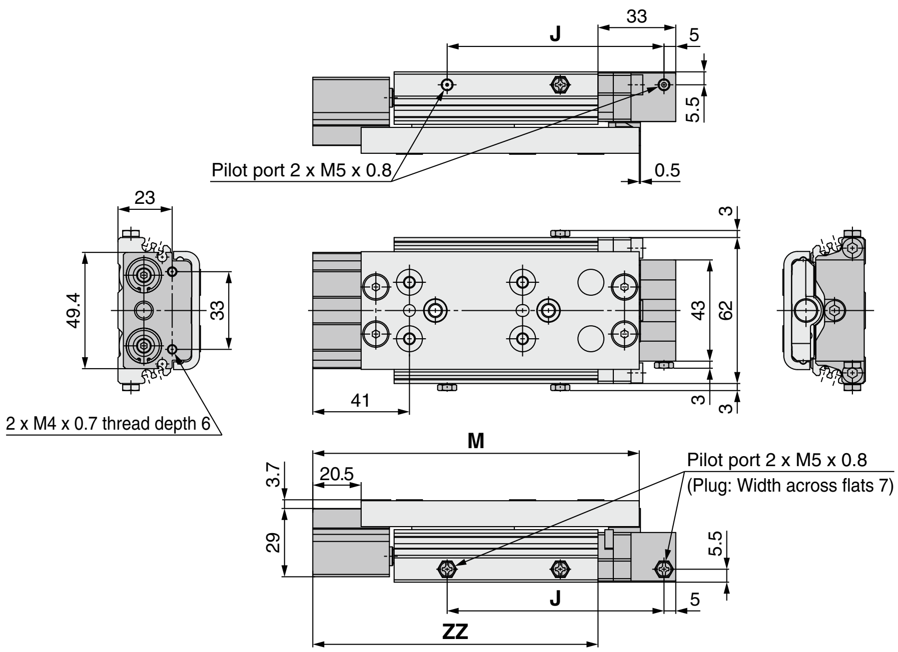
Dimensions: MXQ 16A [Functional Option]

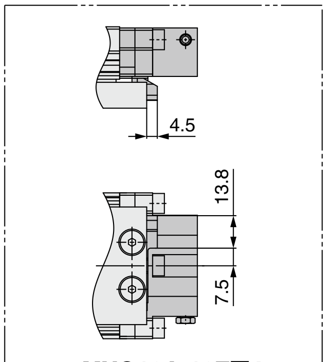
MXQ 16A-□□3 Axial piping (ø16)



* Dimensions other than those listed above are the same as those for the standard type.

MXQ 16A-□□4 With buffer, end lock (ø16)





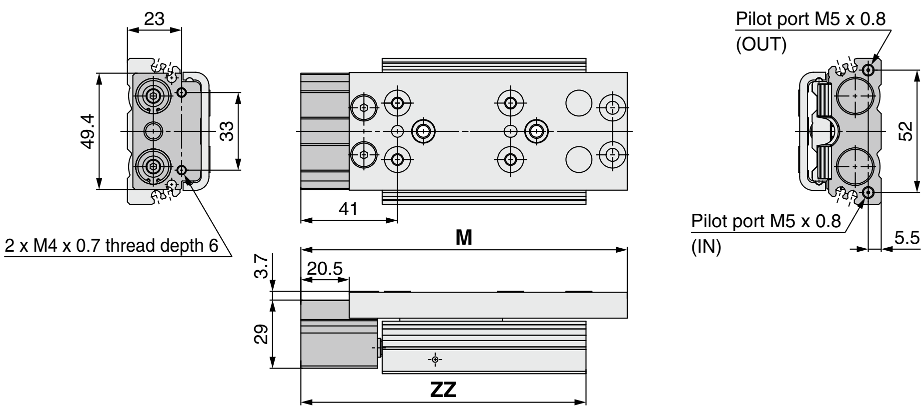
MXQ16A-10Z□4

* Dimensions other than those listed above are the same as those for the standard type.

Dimensions [mm]

Model	J	Standard type M	ZZ
MXQ16A-10Z□4	78	118.5	107
MXQ16A-20Z□4	82	128.5	111
MXQ16A-30Z□4	92	138.5	121
MXQ16A-40Z□4	109	155.5	138
MXQ16A-50Z□4	119	165.5	148
MXQ16A-75Z□4	150	196.5	179
MXQ16A-100Z□4	194	240.5	223
MXQ16A-125Z□4	219	265.5	248

MXQ 16A-□□5 With buffer, axial piping (ø16)



* Dimensions other than those listed above are the same as those for the standard type.

Dimensions [mm]

Model	Standard type M	Shorter total length type M	ZZ
MXQ16A-10Z□5	118.5	105	107
MXQ16A-20Z□5	128.5	115	111
MXQ16A-30Z□5	138.5	125	121
MXQ16A-40Z□5	155.5	142	138
MXQ16A-50Z□5	165.5	152	148
MXQ16A-75Z□5	196.5	183	179
MXQ16A-100Z□5	240.5	227	223
MXQ16A-125Z□5	265.5	252	248

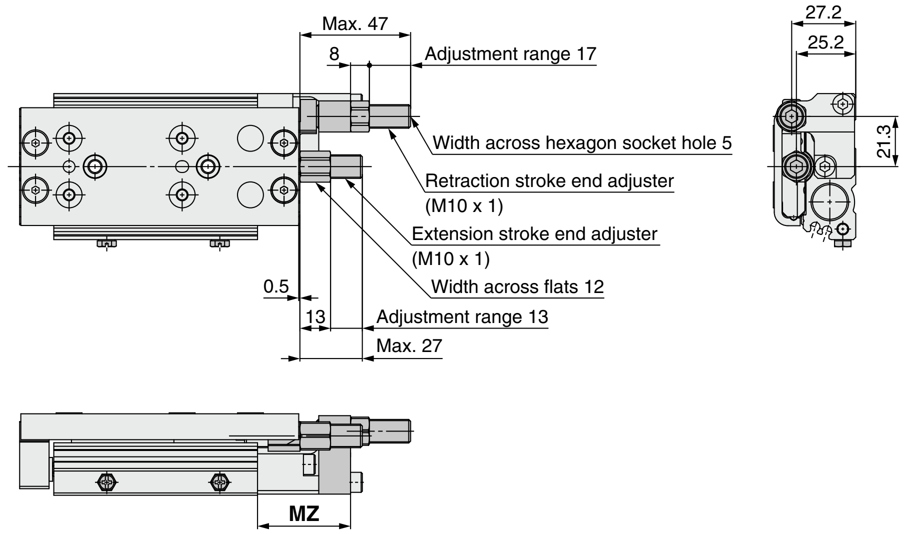
Dimensions: MXQ 16A [Functional Option]

MXQ 16A-□□6 Centralized adjuster (ø16)

For adjuster part numbers, refer to page 124-1.

Metal stopper with bumper ZA: Both ends, ZC: Retraction stroke end

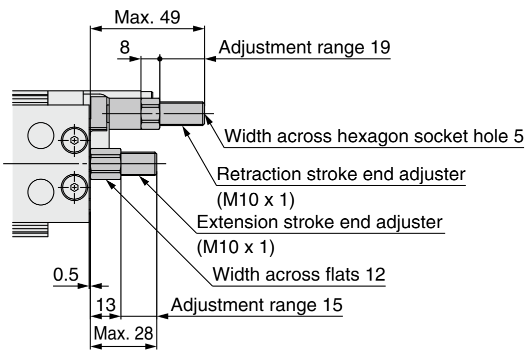
Metal stopper ZK: Both ends, ZM: Retraction stroke end



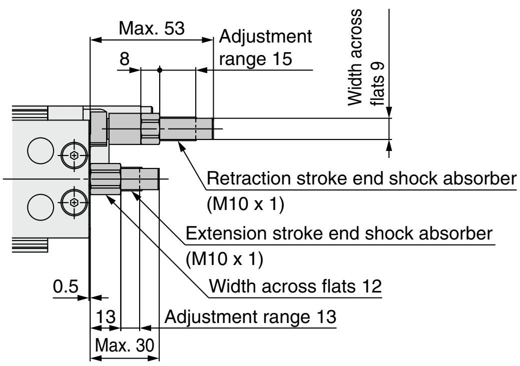
Dimensions [mm]

Model	MZ
MXQ16A-10Z□6	33.5
MXQ16A-20Z□6	39.5
MXQ16A-30Z□6	
MXQ16A-40Z□6	
MXQ16A-50Z□6	
MXQ16A-75Z□6	
MXQ16A-100Z□6	
MXQ16A-125Z□6	

Rubber stopper ZD: Both ends, ZF: Retraction stroke end



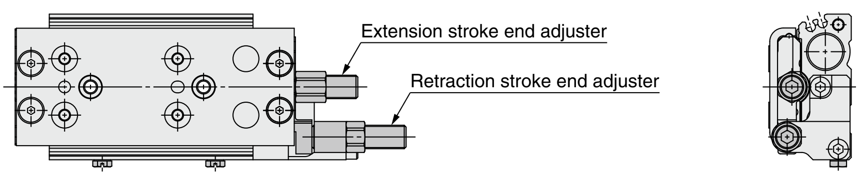
Shock absorber/RJ ZG: Both ends, ZJ: Retraction stroke end



∗ Dimensions other than those listed above are the same as those for the standard type.
∗ In the case of a short stroke, there are some places where an auto switch cannot be mounted. For details, refer to page 126.

MXQ 16A-□□7 Centralized adjuster / Symmetric type (ø16)

The mounting position of the retraction stroke end adjuster is on the reverse side of functional option 6.
For adjuster part numbers, refer to page 124-1.

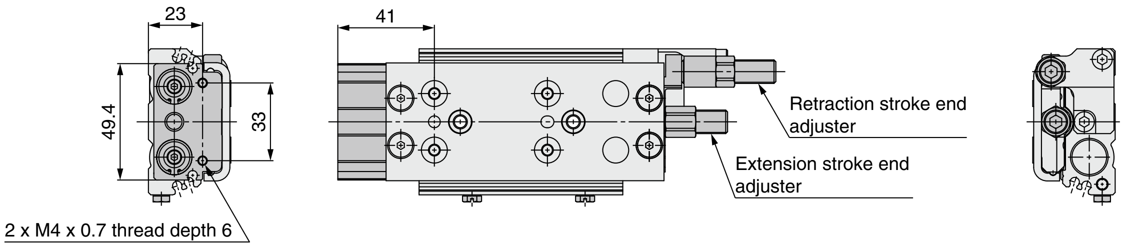


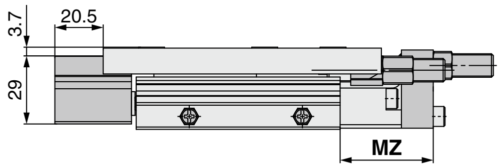
∗ In the case of a short stroke, there are some places where an auto switch cannot be mounted. For details, refer to page 126.

Dimensions: MXQ 16A [Functional Option]

MXQ 16A-□□8 Buffer, Centralized adjuster (ø16)

The extension stroke end adjuster can only be mounted on a rubber stopper type or a metal stopper type.
For adjuster part numbers, refer to page 124-1.





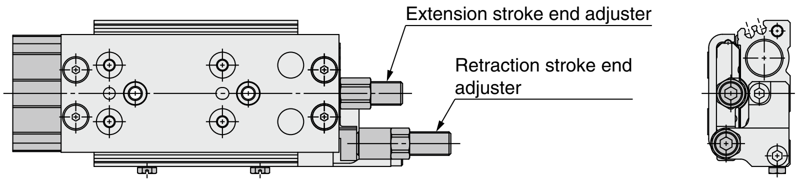
Dimensions [mm]

<table>
<tr><th>Model</th><th>MZ</th></tr>
<tr><td>MXQ16A-10Z□8</td><td>33.5</td></tr>
<tr><td>MXQ16A-20Z□8</td><td rowspan="7">39.5</td></tr>
<tr><td>MXQ16A-30Z□8</td></tr>
<tr><td>MXQ16A-40Z□8</td></tr>
<tr><td>MXQ16A-50Z□8</td></tr>
<tr><td>MXQ16A-75Z□8</td></tr>
<tr><td>MXQ16A-100Z□8</td></tr>
<tr><td>MXQ16A-125Z□8</td></tr>
</table>

∗ Dimensions other than those listed above are the same as those for the standard type.
∗ In the case of a short stroke, there are some places where an auto switch cannot be mounted. For details, refer to page 126.

MXQ 16A-□□9 Buffer, Centralized adjuster / Symmetric type (ø16)

The extension stroke end adjuster can only be mounted on a rubber stopper type or a metal stopper type.
The mounting position of the retraction stroke end adjuster is on the reverse side of functional option 8.
For adjuster part numbers, refer to page 124-1.

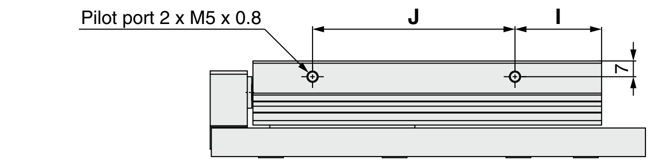


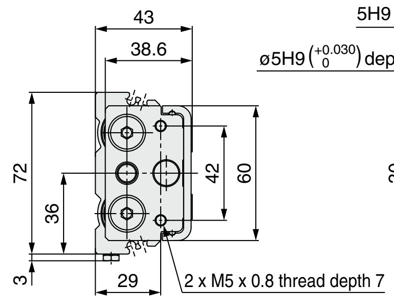
∗ In the case of a short stroke, there are some places where an auto switch cannot be mounted. For details, refer to page 126.

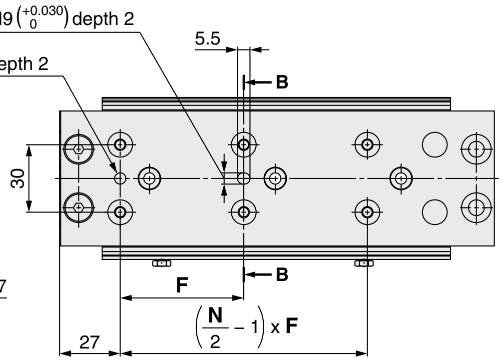
Dimensions: MXQ 20A [Standard]

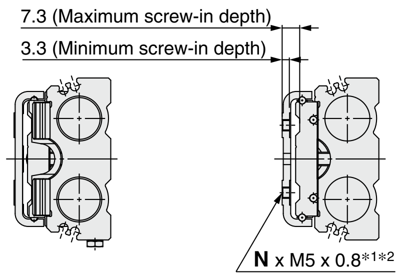
MXQ 20A-□Z Standard type

∗1 If long bolts are used, they may touch the guide block and cause a malfunction, etc. Use a screw which has an intermediate length between the maximum screw-in depth and minimum screw-in depth. Refer to page 196 for details.
∗2 Since the table is made of a magnetic substance, it could become magnetized if touched by a magnet, etc. This could cause an auto switch malfunction.

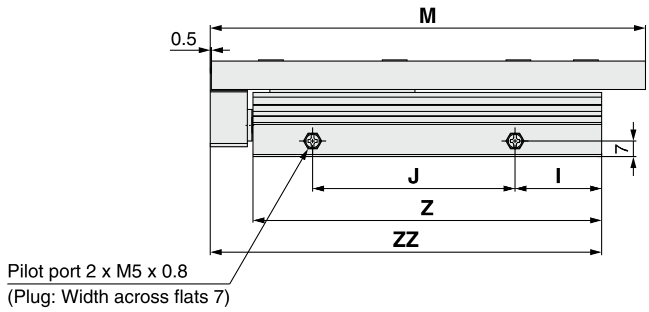


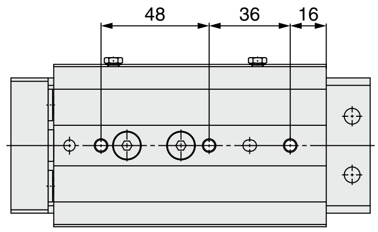




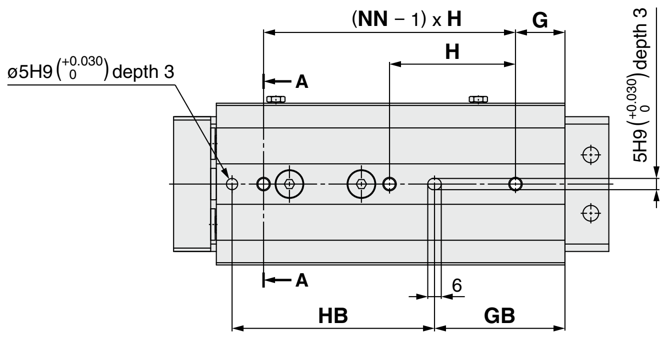


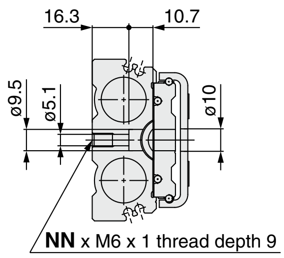
Cross-sectional view B-B





Bottom view of MXQ20A-50Z





Cross-sectional view A-A

Dimensions [mm]

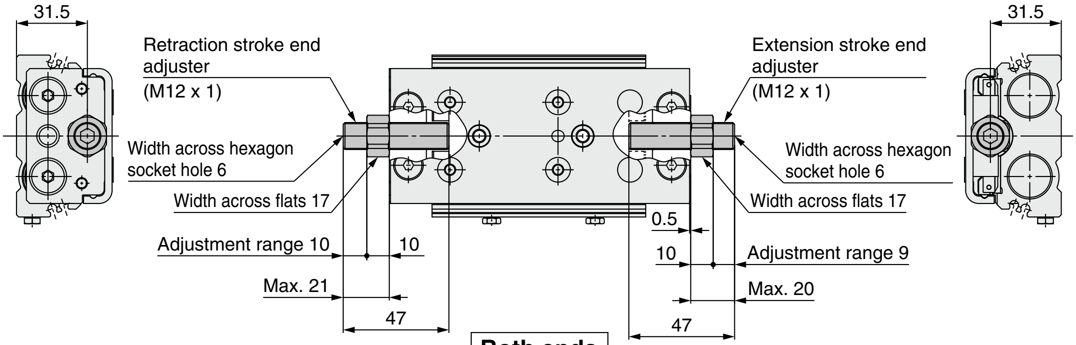
Model	F	G	GB	H	HB	I	J	M	N	NN	Z	ZZ
MXQ20A-10Z	45	18	8	46	70	24.5	34	113.5	4	2	85	104
MXQ20A-20Z	40	18	8	46	70	24.5	34	123.5	4	2	85	104
MXQ20A-30Z	48	28	18	46	70	22.5	46	133.5	4	2	95	114
MXQ20A-40Z	58	28	18	56	80	22.5	56	143.5	4	2	105	124
MXQ20A-50Z	42	—	34	—	80	30.5	64	159.5	6	3	121	140
MXQ20A-75Z	55	22	58	56	90	38.5	90	193.5	6	3	155	174
MXQ20A-100Z	50	16	108	56	90	63.5	115	266.5	8	4	205	224
MXQ20A-125Z	55	32	133	59	90	63.5	140	291.5	8	4	230	249
MXQ20A-150Z	62	48	158	62	90	63.5	165	316.5	8	4	255	274

Dimensions: MXQ 20A [Adjuster Option]

MXQ 20A-□ ☐ With adjuster option (ø20)

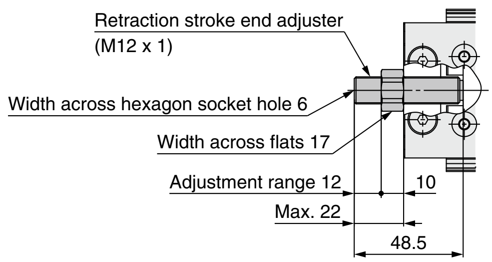
Metal stopper with bumper **ZA**: Both ends, **ZB**: Extension stroke end, **ZC**: Retraction stroke end, **ZS**: Retraction stroke end (Shorter total length type)

Metal stopper **ZK**: Both ends, **ZL**: Extension stroke end, **ZM**: Retraction stroke end, **ZT**: Retraction stroke end (Shorter total length type)

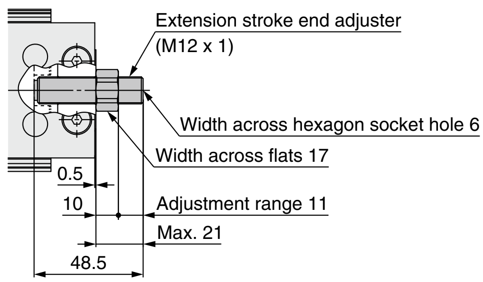


Both ends

Rubber stopper **ZD**: Both ends, **ZE**: Extension stroke end, **ZF**: Retraction stroke end, **ZP**: Retraction stroke end (Shorter total length type)

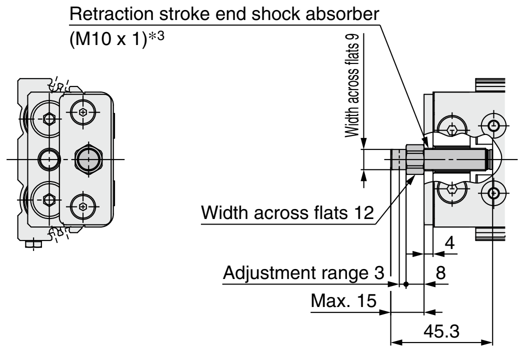


Retraction stroke end

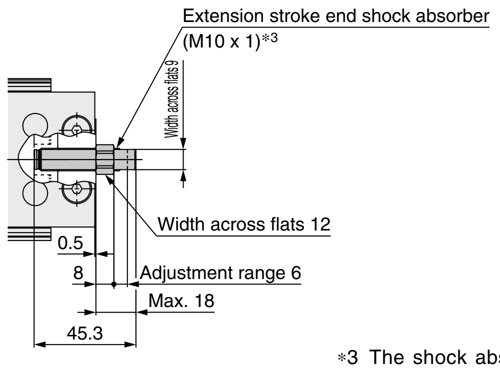


Extension stroke end

Shock absorber/RJ **ZG**: Both ends, **ZH**: Extension stroke end, **ZJ**: Retraction stroke end, **ZQ**: Retraction stroke end (Shorter total length type)



Retraction stroke end

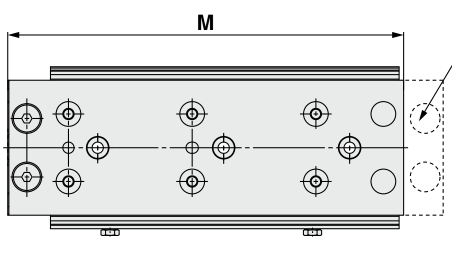


Extension stroke end

* Dimensions other than those listed above are the same as those for the standard type.

*3 The shock absorber uses a different size thread than the other adjusters.

MXQ 20A-□ZN Shorter total length type



*4 As the total length has been reduced by removing the extension stroke end adjuster mounting holes, an extension stroke end adjuster cannot be mounted afterward. (Retraction stroke end adjusters can be mounted afterward.)

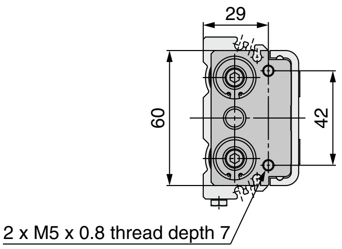
Dimensions [mm]

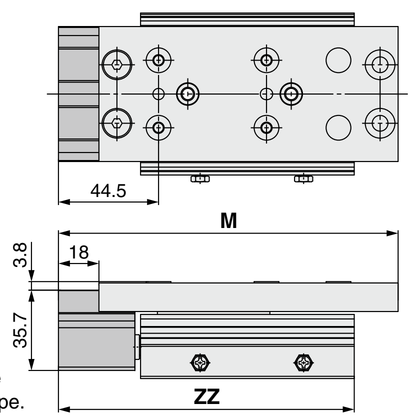
Model	M
MXQ20A-10ZN	96
MXQ20A-20ZN	106
MXQ20A-30ZN	116
MXQ20A-40ZN	126
MXQ20A-50ZN	142
MXQ20A-75ZN	176
MXQ20A-100ZN	249
MXQ20A-125ZN	274
MXQ20A-150ZN	299

* Dimensions other than those listed above are the same as those for the standard type.

Dimensions: MXQ 20A [Functional Option]

MXQ 20A-□□1 With buffer (ø20)



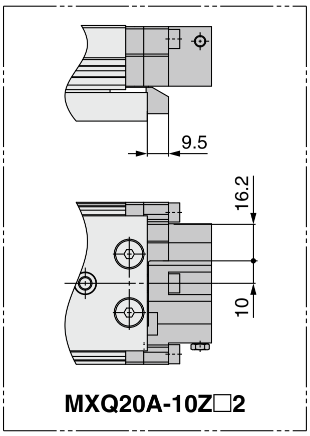


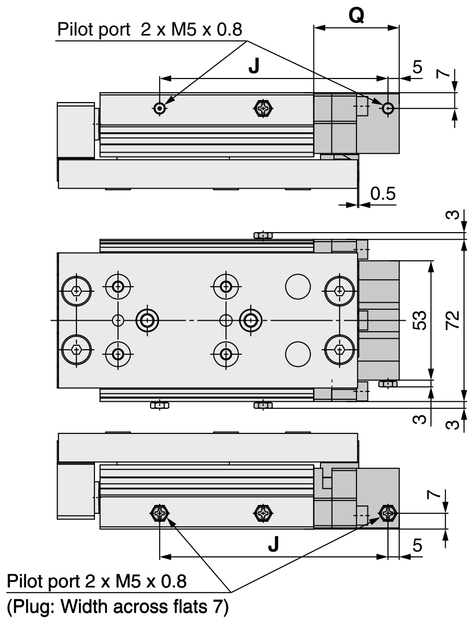
∗ Dimensions other than those listed above are the same as those for the standard type.

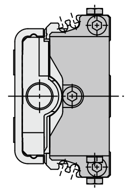
Dimensions [mm]

Model	Standard type M	Shorter total length type M	ZZ
MXQ20A-10Z□1	131	113.5	121.5
MXQ20A-20Z□1	141	123.5	
MXQ20A-30Z□1	151	133.5	131.5
MXQ20A-40Z□1	161	143.5	141.5
MXQ20A-50Z□1	177	159.5	157.5
MXQ20A-75Z□1	211	193.5	191.5
MXQ20A-100Z□1	284	266.5	241.5
MXQ20A-125Z□1	309	291.5	266.5
MXQ20A-150Z□1	334	316.5	291.5

MXQ 20A-□□2 With end lock (ø20)







Dimensions [mm]

Model	J	Q
MXQ20A-10Z□2	91.5	38
MXQ20A-20Z□2		
MXQ20A-30Z□2	101.5	
MXQ20A-40Z□2	111.5	
MXQ20A-50Z□2	127.5	
MXQ20A-75Z□2	161.5	
MXQ20A-100Z□2	234.5	61
MXQ20A-125Z□2	259.5	
MXQ20A-150Z□2	284.5	

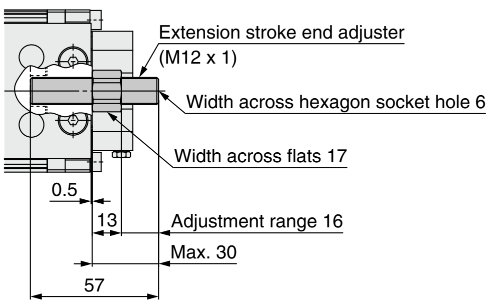
∗ Dimensions other than those listed above are the same as those for the standard type.

MXQ 20A-□□2 With end lock, extension stroke end adjuster (ø20)

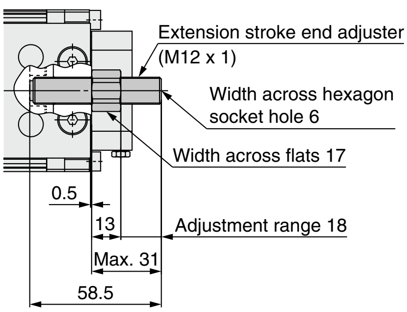
A retraction stroke end adjuster cannot be mounted to the end lock.
For adjuster part numbers, refer to page 124-1.

∗1 The shock absorber uses a different size thread than the other adjusters.

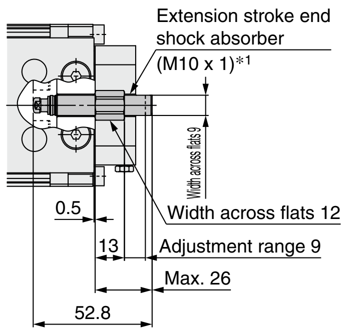
Metal stopper with bumper: ZB
Metal stopper: ZL



Rubber stopper: ZE



Shock absorber/RJ: ZH

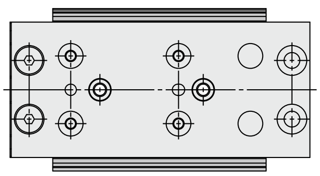


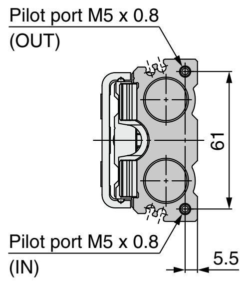
∗ Dimensions other than those listed above are the same as those for the standard type.

Dimensions: MXQ 20A [Functional Option]

MXQ 20A-□□3

Axial piping (ø20)

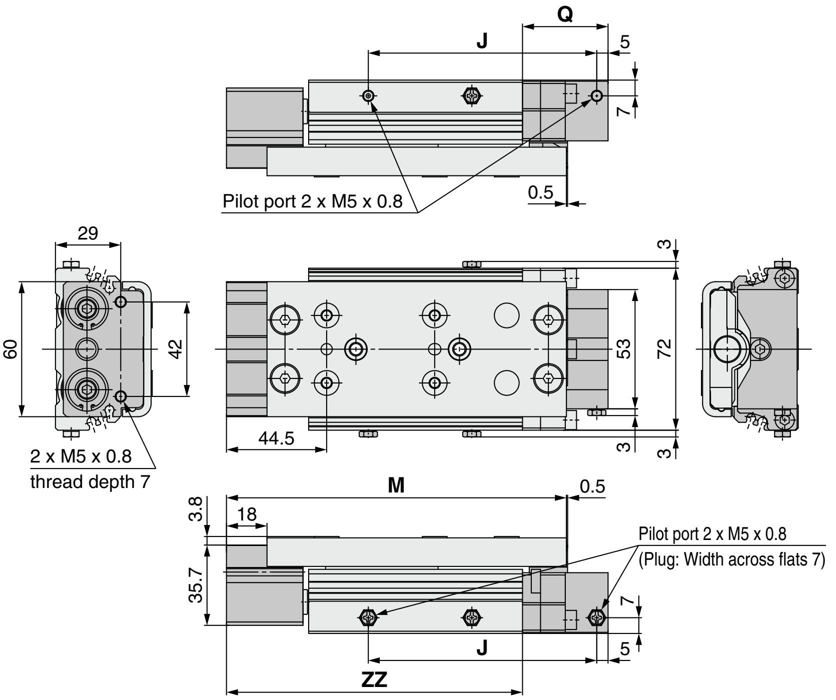


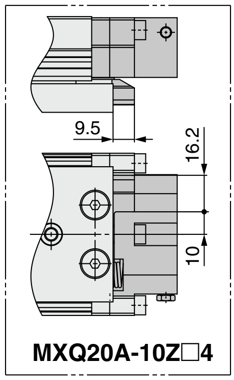


∗ Dimensions other than those listed above are the same as those for the standard type.

MXQ 20A-□□4

With buffer, end lock (ø20)





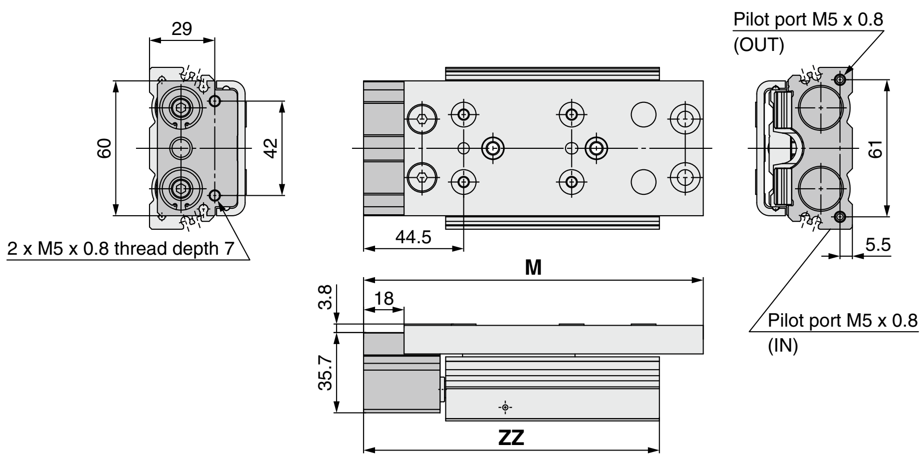
∗ Dimensions other than those listed above are the same as those for the standard type.

Dimensions [mm]

Model	J	Q	Standard type M	ZZ
MXQ20A-10Z□4	91.5	38	131	121.5
MXQ20A-20Z□4			141	
MXQ20A-30Z□4	101.5		151	131.5
MXQ20A-40Z□4	111.5		161	141.5
MXQ20A-50Z□4	127.5		177	157.5
MXQ20A-75Z□4	161.5		211	191.5
MXQ20A-100Z□4	234.5	61	284	241.5
MXQ20A-125Z□4	259.5		309	266.5
MXQ20A-150Z□4	284.5		334	291.5

MXQ 20A-□□5

With buffer, axial piping (ø20)



Dimensions [mm]

Model	Standard type M	Shorter total length type M	ZZ
MXQ20A-10Z□5	131	113.5	121.5
MXQ20A-20Z□5	141	123.5	
MXQ20A-30Z□5	151	133.5	131.5
MXQ20A-40Z□5	161	143.5	141.5
MXQ20A-50Z□5	177	159.5	157.5
MXQ20A-75Z□5	211	193.5	191.5
MXQ20A-100Z□5	284	266.5	241.5
MXQ20A-125Z□5	309	291.5	266.5
MXQ20A-150Z□5	334	316.5	291.5

∗ Dimensions other than those listed above are the same as those for the standard type.

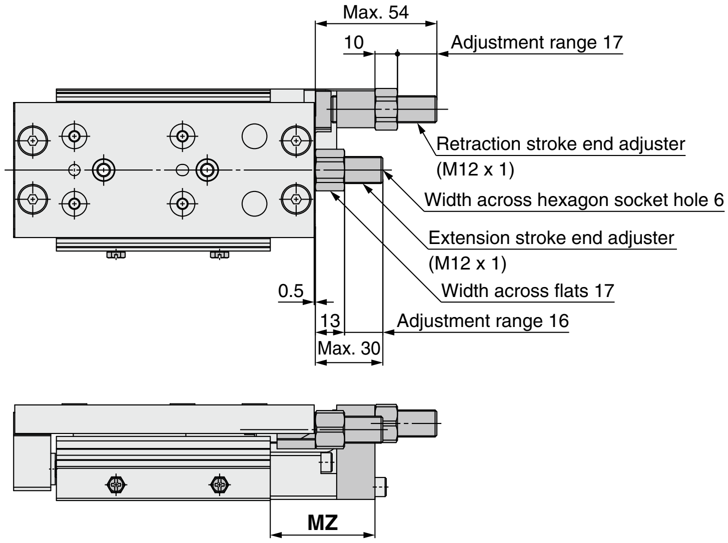
Dimensions: MXQ 20A [Functional Option]

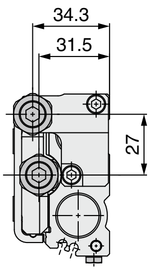
MXQ 20A-□□6 Centralized adjuster (ø20)

For adjuster part numbers, refer to page 124-1.

∗1 The shock absorber uses a different size thread than the other adjusters.

Metal stopper with bumper ZA: Both ends, ZC: Retraction stroke end
Metal stopper ZK: Both ends, ZM: Retraction stroke end

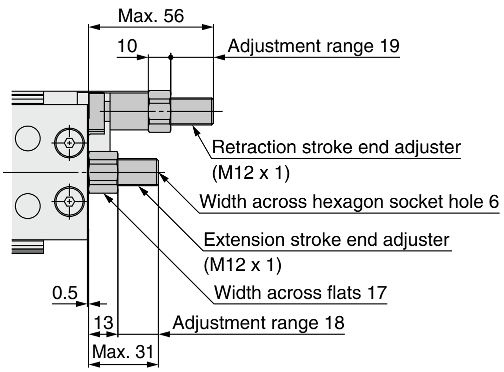




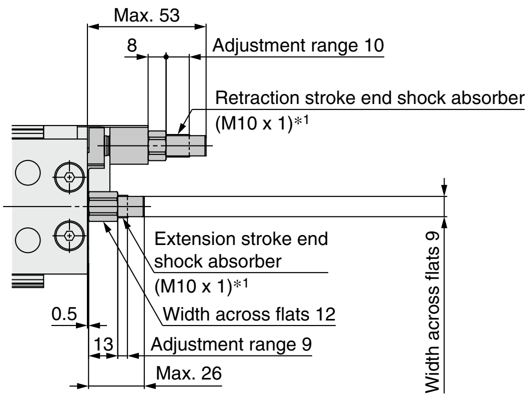
Dimensions [mm]

Model	MZ
MXQ20A-10Z□6	36.5
MXQ20A-20Z□6	46.5
MXQ20A-30Z□6	
MXQ20A-40Z□6	
MXQ20A-50Z□6	
MXQ20A-75Z□6	
MXQ20A-100Z□6	69.5
MXQ20A-125Z□6	
MXQ20A-150Z□6	

Rubber stopper ZD: Both ends,
ZF: Retraction stroke end



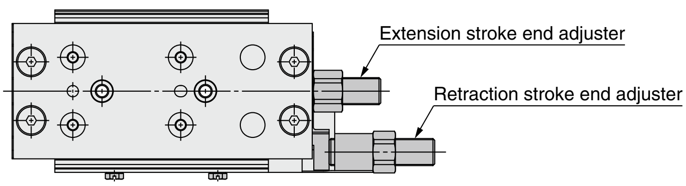
Shock absorber/RJ ZG: Both ends,
ZJ: Retraction stroke end

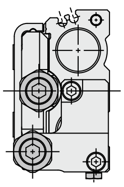


∗ Dimensions other than those listed above are the same as those for the standard type.
∗ In the case of a short stroke, there are some places where an auto switch cannot be mounted. For details, refer to page 126.

MXQ 20A-□□7 Centralized adjuster / Symmetric type (ø20)

The mounting position of the retraction stroke end adjuster is on the reverse side of functional option 6.
For adjuster part numbers, refer to page 124-1.



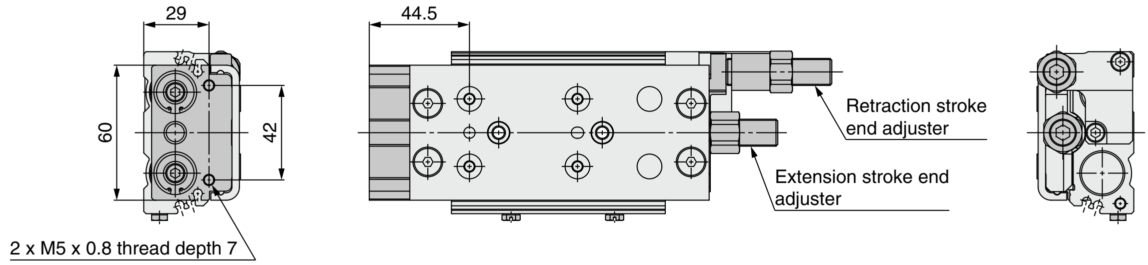


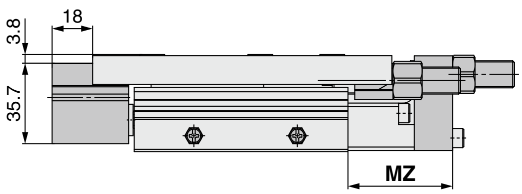
∗ In the case of a short stroke, there are some places where an auto switch cannot be mounted. For details, refer to page 126.

Dimensions: MXQ 20A [Functional Option]

MXQ 20A-□□8 Buffer, Centralized adjuster (ø20)

The extension stroke end adjuster can only be mounted on a rubber stopper type or a metal stopper type.
For adjuster part numbers, refer to page 124-1.





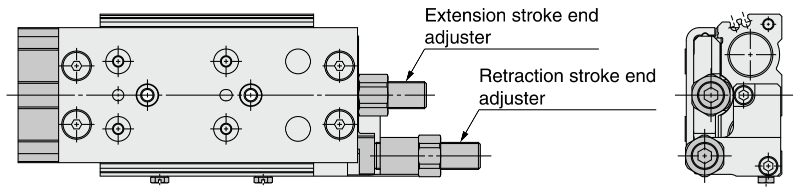
Dimensions [mm]

Model	MZ
MXQ20A-10Z□8	36.5
MXQ20A-20Z□8	46.5
MXQ20A-30Z□8	
MXQ20A-40Z□8	
MXQ20A-50Z□8	
MXQ20A-75Z□8	
MXQ20A-100Z□8	69.5
MXQ20A-125Z□8	
MXQ20A-150Z□8	

∗ Dimensions other than those listed above are the same as those for the standard type.
∗ In the case of a short stroke, there are some places where an auto switch cannot be mounted. For details, refer to page 126.

MXQ 20A-□□9 Buffer, Centralized adjuster / Symmetric type (ø20)

The extension stroke end adjuster can only be mounted on a rubber stopper type or a metal stopper type.
The mounting position of the retraction stroke end adjuster is on the reverse side of functional option 8.
For adjuster part numbers, refer to page 124-1.



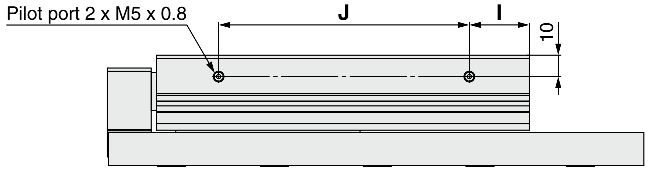
∗ In the case of a short stroke, there are some places where an auto switch cannot be mounted. For details, refer to page 126.

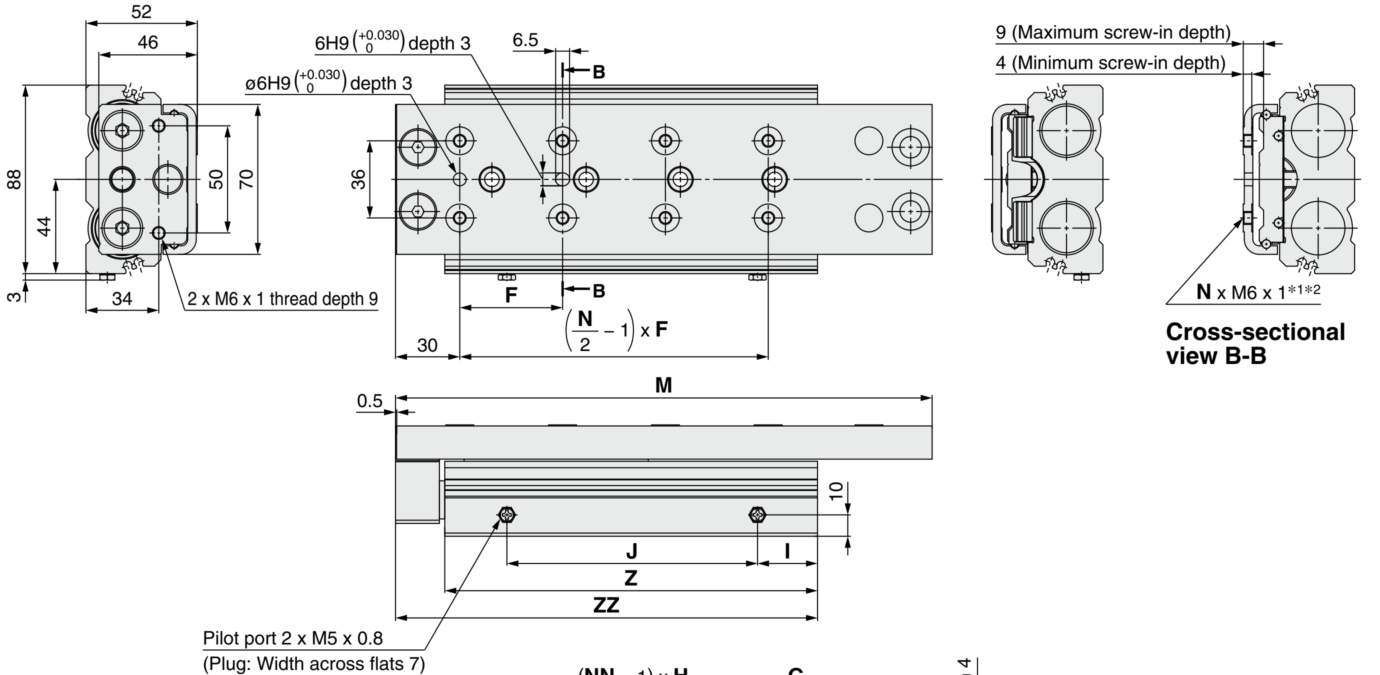
Dimensions: MXQ 25A [Standard]

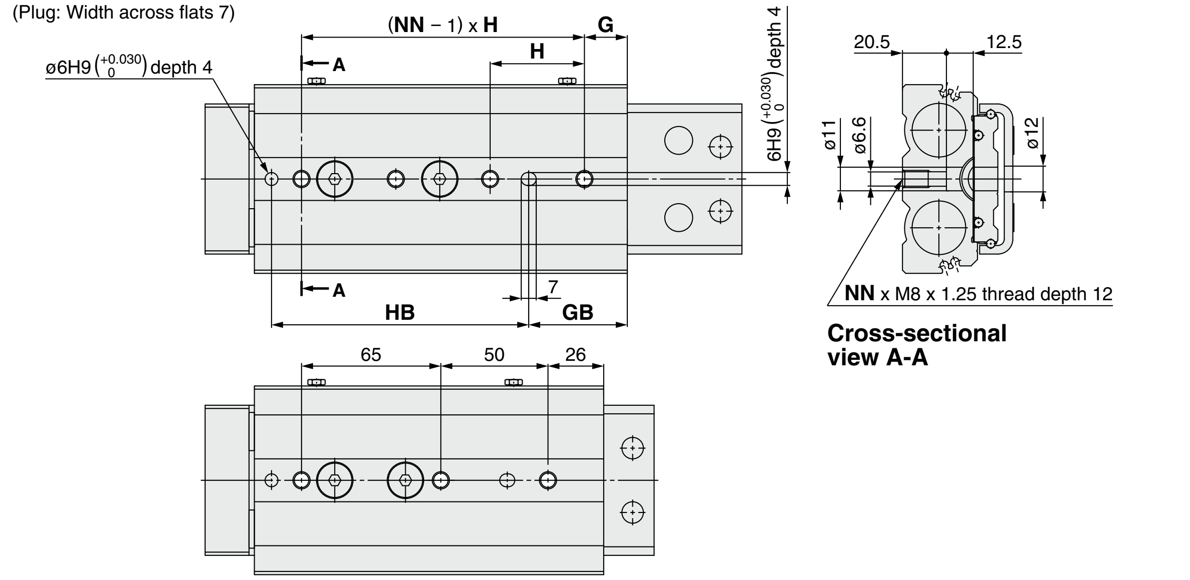
MXQ 25A-□Z Standard type

∗1 If long bolts are used, they may touch the guide block and cause a malfunction, etc. Use a screw which has an intermediate length between the maximum screw-in depth and minimum screw-in depth. Refer to page 196 for details.

∗2 Since the table is made of a magnetic substance, it could become magnetized if touched by a magnet, etc. This could cause an auto switch malfunction.







Bottom view of MXQ25A-75Z

Dimensions

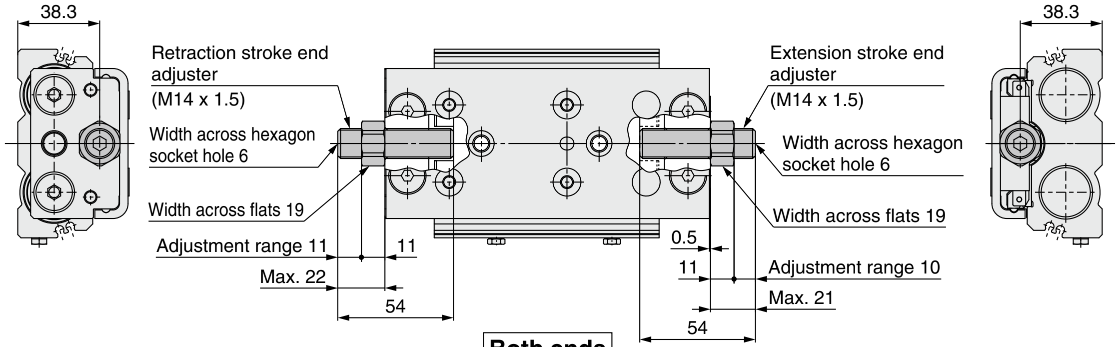
[mm]

Model	F	G	GB	H	HB	I	J	M	N	NN	Z	ZZ
MXQ25A-10Z	55	18	7	55	80	30	36	131.5	4	2	95	118
MXQ25A-20Z	46	18	7	55	80	30	36	141.5	4	2	95	118
MXQ25A-30Z	55	28	17	55	80	22	54	151.5	4	2	105	128
MXQ25A-40Z	65	28	17	65	90	22	64	161.5	4	2	115	138
MXQ25A-50Z	75	36	20	80	110	43	66	184.5	4	2	138	161
MXQ25A-75Z	60	—	45	—	110	42	92	209.5	6	3	163	186
MXQ25A-100Z	48	20	46	44	120	28	117	250.5	8	4	174	197
MXQ25A-125Z	60	18	60	66	170	67	142	314.5	8	4	238	261
MXQ25A-150Z	65	43	85	66	170	66	168	339.5	8	4	263	286

Dimensions: MXQ 25A [Adjuster Option]

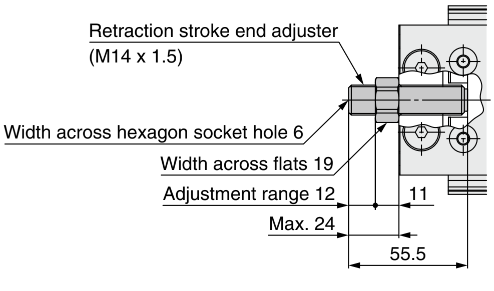
MXQ 25A-□ With adjuster option (ø25)

Metal stopper with bumper ZA: Both ends, ZB: Extension stroke end, ZC: Retraction stroke end, ZS: Retraction stroke end (Shorter total length type)
Metal stopper ZK: Both ends, ZL: Extension stroke end, ZM: Retraction stroke end, ZT: Retraction stroke end (Shorter total length type)

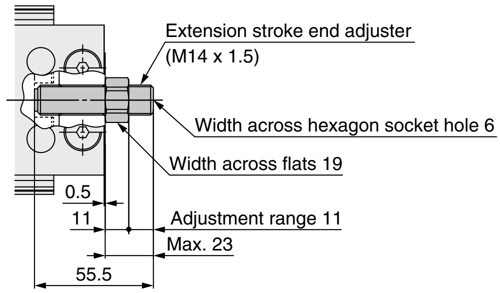


Both ends

Rubber stopper ZD: Both ends, ZE: Extension stroke end, ZF: Retraction stroke end, ZP: Retraction stroke end (Shorter total length type)

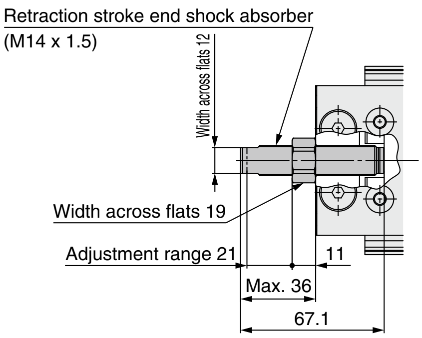


Retraction stroke end

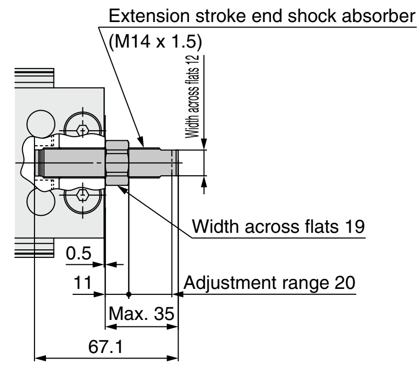


Extension stroke end

Shock absorber/RJ ZG: Both ends, ZH: Extension stroke end, ZJ: Retraction stroke end, ZQ: Retraction stroke end (Shorter total length type)



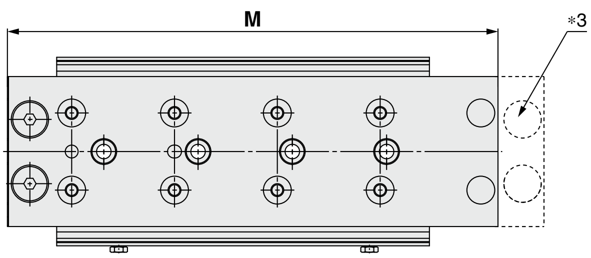
Retraction stroke end



Extension stroke end

∗ Dimensions other than those listed above are the same as those for the standard type.

MXQ 25A-□ZN Shorter total length type



∗3 As the total length has been reduced by removing the extension stroke end adjuster mounting holes, an extension stroke end adjuster cannot be mounted afterward. (Retraction stroke end adjusters can be mounted afterward.)

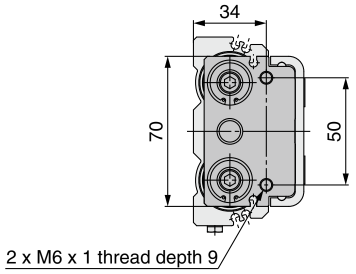
Dimensions [mm]

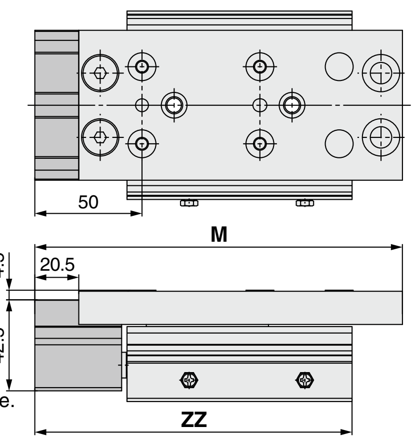
Model	M
MXQ25A-10ZN	110
MXQ25A-20ZN	120
MXQ25A-30ZN	130
MXQ25A-40ZN	140
MXQ25A-50ZN	163
MXQ25A-75ZN	188
MXQ25A-100ZN	229
MXQ25A-125ZN	293
MXQ25A-150ZN	318

∗ Dimensions other than those listed above are the same as those for the standard type.

Dimensions: MXQ 25A [Functional Option]

MXQ 25A-□□1 With buffer (ø25)



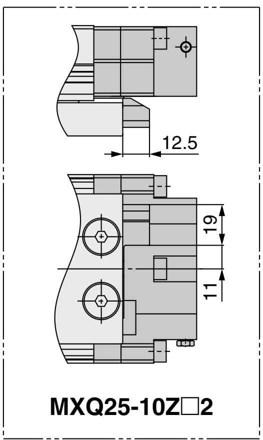


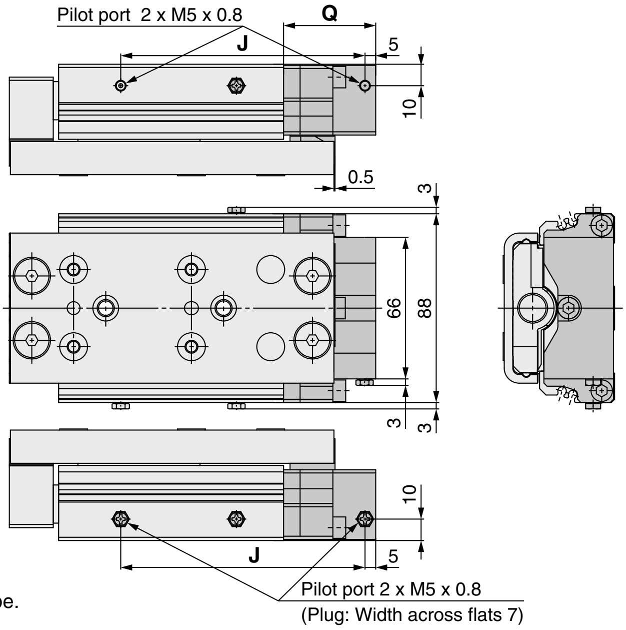
∗ Dimensions other than those listed above are the same as those for the standard type.

Dimensions [mm]

Model	Standard type M	Shorter total length type M	ZZ
MXQ25A-10Z□1	151.5	130	138
MXQ25A-20Z□1	161.5	140	
MXQ25A-30Z□1	171.5	150	148
MXQ25A-40Z□1	181.5	160	158
MXQ25A-50Z□1	204.5	183	181
MXQ25A-75Z□1	229.5	208	206
MXQ25A-100Z□1	270.5	249	217
MXQ25A-125Z□1	334.5	313	281
MXQ25A-150Z□1	359.5	338	306

MXQ 25A-□□2 With end lock (ø25)





Dimensions [mm]

Model	J	Q
MXQ25A-10Z□2	109	48
MXQ25A-20Z□2	104	43
MXQ25A-30Z□2	114	
MXQ25A-40Z□2	124	
MXQ25A-50Z□2	147	
MXQ25A-75Z□2	172	
MXQ25A-100Z□2	213	73
MXQ25A-125Z□2	277	
MXQ25A-150Z□2	302	

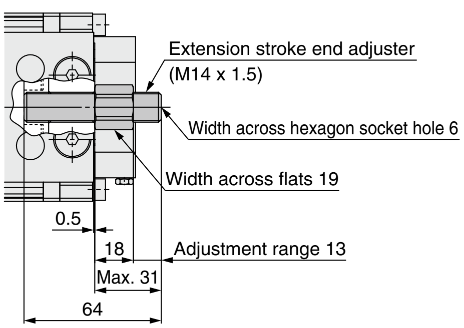
∗ Dimensions other than those listed above are the same as those for the standard type.

MXQ 25A-□□2 With end lock, extension stroke end adjuster (ø25)

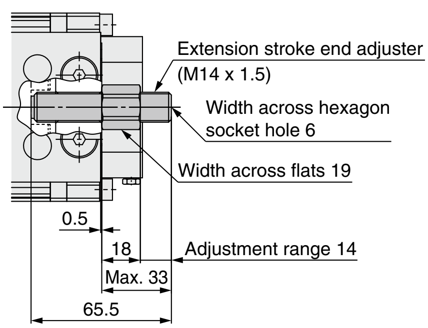
A retraction stroke end adjuster cannot be mounted to the end lock.
For adjuster part numbers, refer to page 124-1.

Metal stopper with bumper: ZB

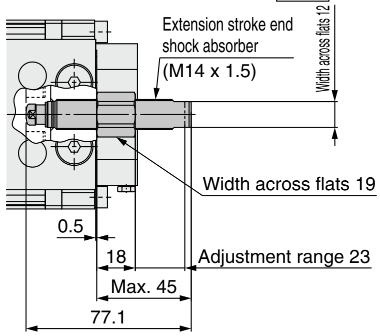
Metal stopper: ZL



Rubber stopper: ZE



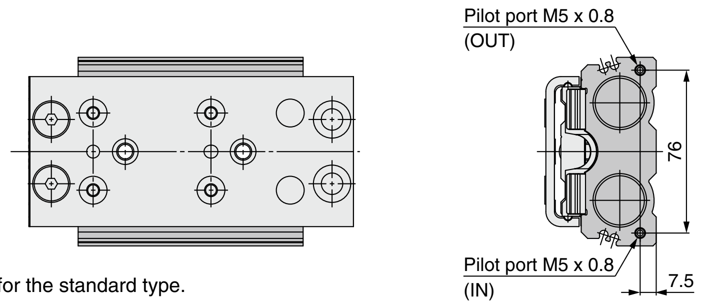
Shock absorber/RJ: ZH



∗ Dimensions other than those listed above are the same as those for the standard type.

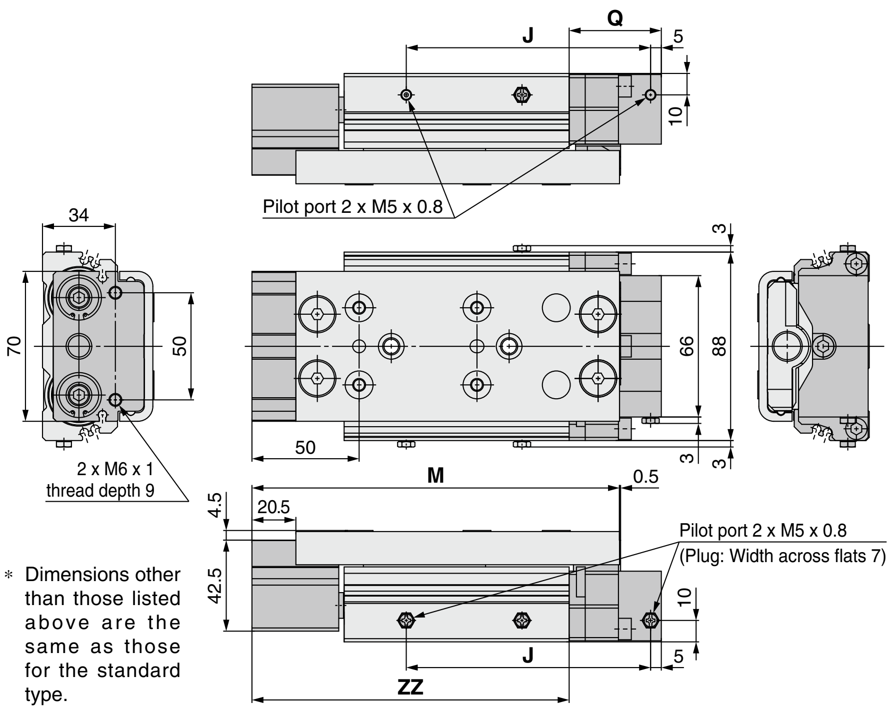
Dimensions: MXQ 25A [Functional Option]

MXQ 25A-□□3
Axial piping (ø25)

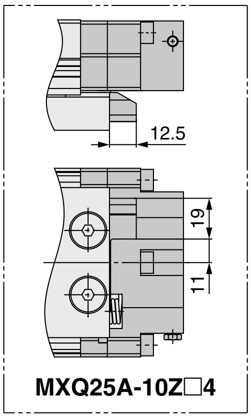


∗ Dimensions other than those listed above are the same as those for the standard type.

MXQ 25A-□□4
With buffer, end lock (ø25)



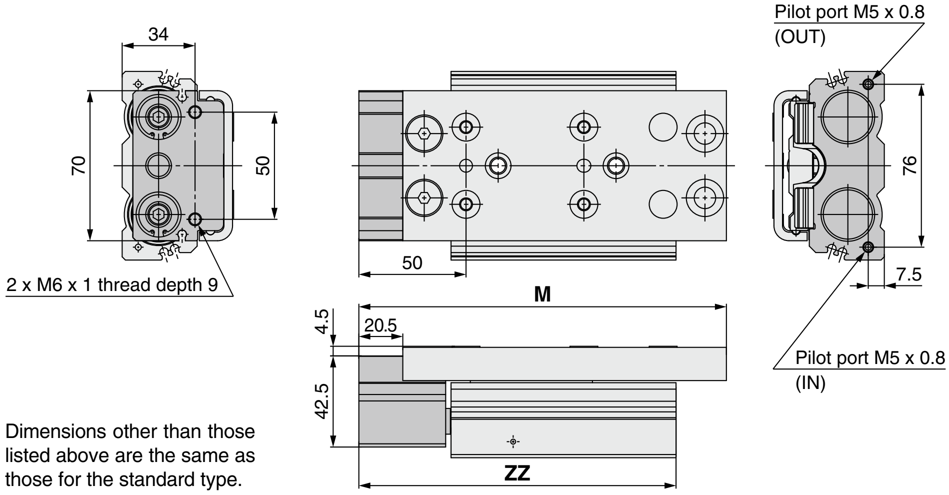
∗ Dimensions other than those listed above are the same as those for the standard type.



Dimensions [mm]

Model	J	Q	Standard type M	ZZ
MXQ25A-10Z□4	109	48	151.5	138
MXQ25A-20Z□4	104		161.5	
MXQ25A-30Z□4	114		171.5	148
MXQ25A-40Z□4	124	43	181.5	158
MXQ25A-50Z□4	147		204.5	181
MXQ25A-75Z□4	172		229.5	206
MXQ25A-100Z□4	213		270.5	217
MXQ25A-125Z□4	277	73	334.5	281
MXQ25A-150Z□4	302		359.5	306

MXQ 25A-□□5
With buffer, axial piping (ø25)



∗ Dimensions other than those listed above are the same as those for the standard type.

Dimensions [mm]

Model	Standard type M	Shorter total length type M	ZZ
MXQ25A-10Z□5	151.5	130	138
MXQ25A-20Z□5	161.5	140	
MXQ25A-30Z□5	171.5	150	148
MXQ25A-40Z□5	181.5	160	158
MXQ25A-50Z□5	204.5	183	181
MXQ25A-75Z□5	229.5	208	206
MXQ25A-100Z□5	270.5	249	217
MXQ25A-125Z□5	334.5	313	281
MXQ25A-150Z□5	359.5	338	306

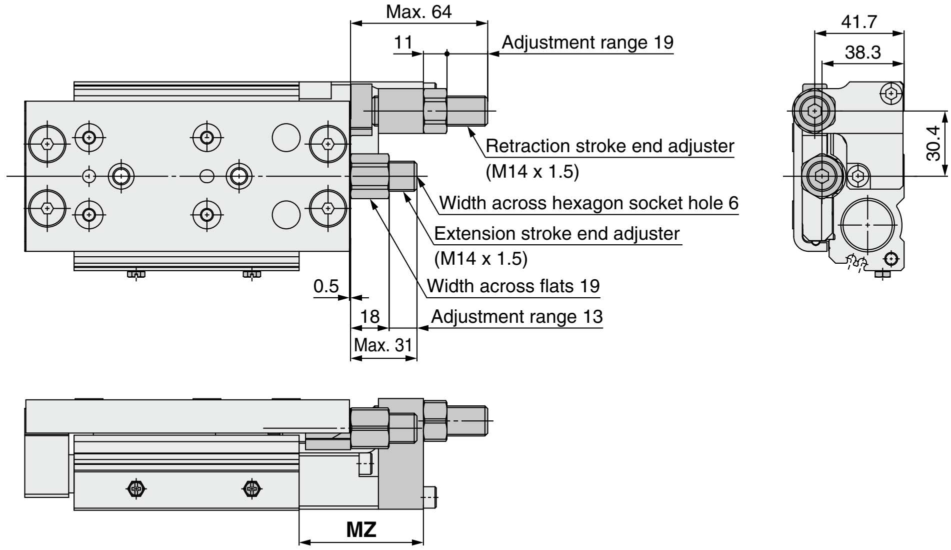
Dimensions: MXQ 25A [Functional Option]

MXQ 25A-□□6 Centralized adjuster (ø25)

For adjuster part numbers, refer to page 124-1.

Metal stopper with bumper ZA: Both ends, ZC: Retraction stroke end

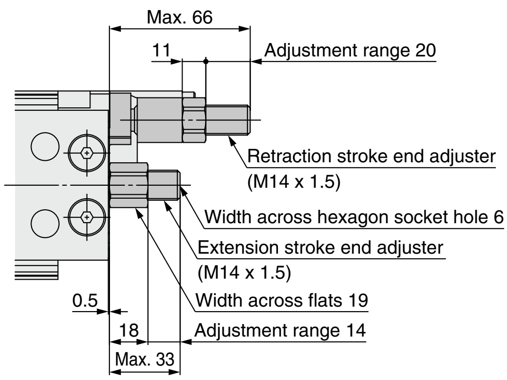
Metal stopper ZK: Both ends, ZM: Retraction stroke end



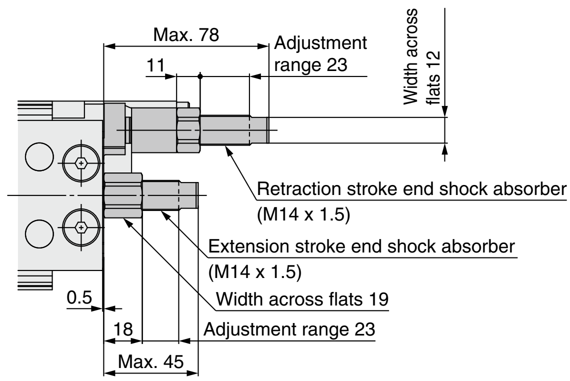
Dimensions [mm]

Model	MZ
MXQ25A-10Z□6	48
MXQ25A-20Z□6	58
MXQ25A-30Z□6	
MXQ25A-40Z□6	
MXQ25A-50Z□6	
MXQ25A-75Z□6	
MXQ25A-100Z□6	88
MXQ25A-125Z□6	
MXQ25A-150Z□6	

Rubber stopper ZD: Both ends, ZF: Retraction stroke end



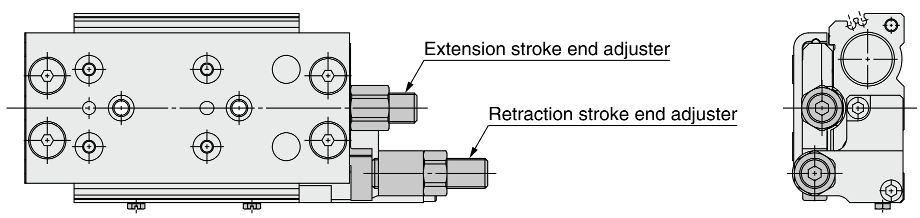
Shock absorber/RJ ZG: Both ends, ZJ: Retraction stroke end



∗ Dimensions other than those listed above are the same as those for the standard type.

MXQ 25A-□□7 Centralized adjuster / Symmetric type (ø25)

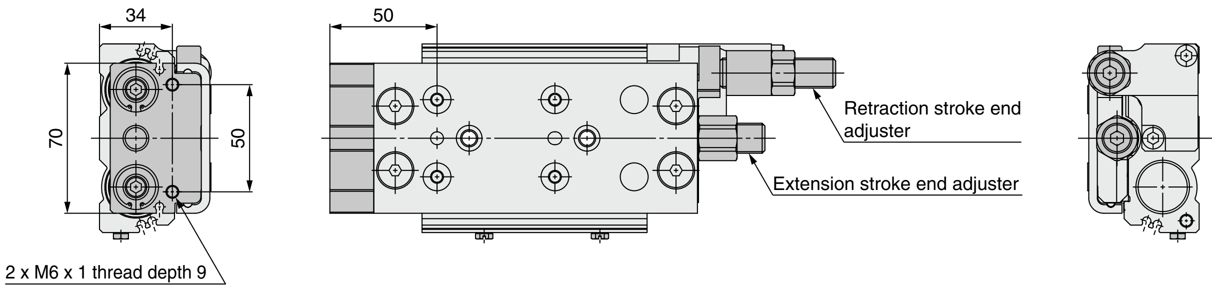
The mounting position of the retraction stroke end adjuster is on the reverse side of functional option 6.
For adjuster part numbers, refer to page 124-1.

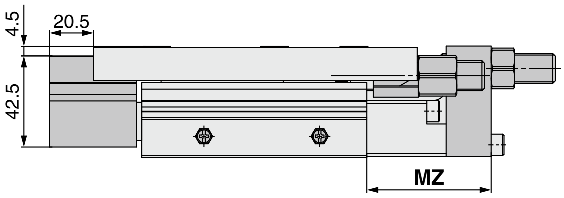


Dimensions: MXQ 25A [Functional Option]

MXQ 25A-□□8 Buffer, Centralized adjuster (ø25)

The extension stroke end adjuster can only be mounted on a rubber stopper type or a metal stopper type.
For adjuster part numbers, refer to page 124-1.





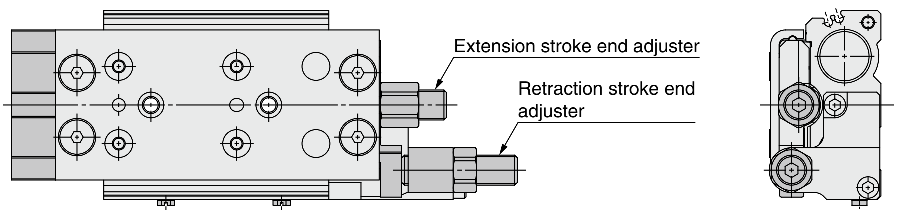
Dimensions [mm]

Model	MZ
MXQ25A-10Z□8	48
MXQ25A-20Z□8	58
MXQ25A-30Z□8	
MXQ25A-40Z□8	
MXQ25A-50Z□8	
MXQ25A-75Z□8	
MXQ25A-100Z□8	88
MXQ25A-125Z□8	
MXQ25A-150Z□8	

∗ Dimensions other than those listed above are the same as those for the standard type.

MXQ 25A-□□9 Buffer, Centralized adjuster / Symmetric type (ø25)

The extension stroke end adjuster can only be mounted on a rubber stopper type or a metal stopper type.
The mounting position of the retraction stroke end adjuster is on the reverse side of functional option 8.
For adjuster part numbers, refer to page 124-1.

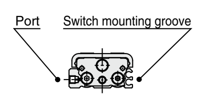
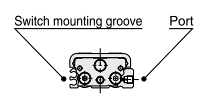
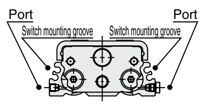


Air Slide Table
Low Thrust with High Rigidity Type
MXQ□B Series
ø6, ø8, ø12, ø16, ø20

RoHS

How to Order

MXQ 12 B − 30 ZA − M9BW □ − □
❶ 12 ❷ B ❸ 30 ❹ ZA ❺ M9BW ❻ □ ❼ □

❶ Bore size	❷ Body option: Standard type B	❷ Body option: Symmetric type BL	❸ Standard stroke [mm]
6			10, 20, 30, 40, 50*, 75*
8			10, 20, 30, 40, 50, 75*, 100*
12			10, 20, 30, 40, 50, 75, 100, 125
16		—*1	10, 20, 30, 40, 50, 75, 100*, 125*, 150*
20			10, 20, 30, 40, 50, 75, 100, 125*, 150*

*1 Not available, as the standard model has piping ports and auto switch mounting grooves on both sides. Please use the standard type.
* The operating speed range of the strokes marked with an asterisk (*) is 50 to 300 mm/s. (Refer to page 55.)

❹ Adjuster options

Symbol	Adjuster type*3		Adjuster mounting position*1: Extension stroke end	Adjuster mounting position*1: Retraction stroke end
Z	Without adjuster			
ZA	Metal stopper with bumper		●	●
ZB	Metal stopper with bumper		●	
ZC	Metal stopper with bumper			●
ZD	Rubber stopper		●	●
ZE	Rubber stopper		●	
ZF	Rubber stopper			●
ZG	Shock absorber/RJ		●	●
ZH	Shock absorber/RJ		●	
ZJ	Shock absorber/RJ			●
ZK	Metal stopper		●	●
ZL	Metal stopper		●	
ZM	Metal stopper			●
ZN	Shorter total length type*2	Retraction stroke end adjuster: Without adjuster		
ZP	Shorter total length type*2	Retraction stroke end adjuster: Rubber stopper		●
ZQ	Shorter total length type*2	Retraction stroke end adjuster: Shock absorber/RJ		●
ZS	Shorter total length type*2	Retraction stroke end adjuster: Metal stopper with bumper		●
ZT	Shorter total length type*2	Retraction stroke end adjuster: Metal stopper		●
ZBF	Extension stroke end adjuster: Metal stopper with bumper	Retraction stroke end adjuster: Rubber stopper	●	●
ZBJ	Extension stroke end adjuster: Metal stopper with bumper	Retraction stroke end adjuster: Shock absorber/RJ	●	●
ZBM	Extension stroke end adjuster: Metal stopper with bumper	Retraction stroke end adjuster: Metal stopper	●	●
ZEC	Extension stroke end adjuster: Rubber stopper	Retraction stroke end adjuster: Metal stopper with bumper	●	●
ZEJ	Extension stroke end adjuster: Rubber stopper	Retraction stroke end adjuster: Shock absorber/RJ	●	●
ZEM	Extension stroke end adjuster: Rubber stopper	Retraction stroke end adjuster: Metal stopper	●	●
ZHC	Extension stroke end adjuster: Shock absorber/RJ	Retraction stroke end adjuster: Metal stopper with bumper	●	●
ZHF	Extension stroke end adjuster: Shock absorber/RJ	Retraction stroke end adjuster: Rubber stopper	●	●
ZHM	Extension stroke end adjuster: Shock absorber/RJ	Retraction stroke end adjuster: Metal stopper	●	●
ZLC	Extension stroke end adjuster: Metal stopper	Retraction stroke end adjuster: Metal stopper with bumper	●	●
ZLF	Extension stroke end adjuster: Metal stopper	Retraction stroke end adjuster: Rubber stopper	●	●
ZLJ	Extension stroke end adjuster: Metal stopper	Retraction stroke end adjuster: Shock absorber/RJ	●	●

*1 ●: Shipped together with the product, but not assembled
Without any symbol for the adjuster mounting position: The adjuster can be mounted afterward.
*2 Extension stroke end adjuster mounting holes have been removed to reduce the total length of the table.
*3 The metal stopper with bumper option is not available for ø6.

❺ Auto switch

Nil	Without auto switch

* For applicable auto switches, refer to the next page.

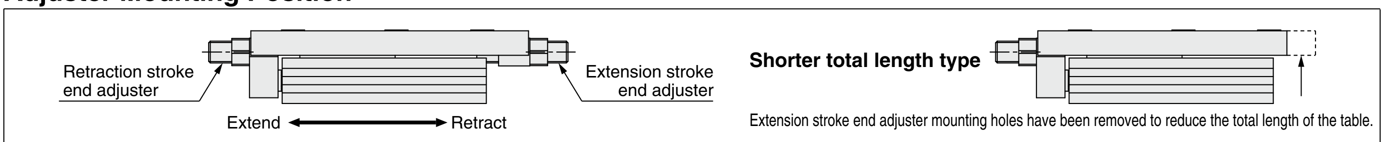
❻ Number of auto switches

Nil	2
S	1
n	n

❼ Made to order

For details, refer to the next page.

Adjuster Mounting Position



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			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 auto 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		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 (Equiv. to NPN)	—	5 V	—	A96V	A96	●	●	●	●	○	IC circuit	—
				2-wire	24 V	12 V	100 V	A93V	A93	●	●	●	●	○*2	—	Relay, PLC
			None				100 V or less	A90V	A90	●	●	●	●	○*2	IC circuit	

*1 Water-resistant type auto switches can be mounted on the above models, but SMC cannot guarantee water resistance.
A water-resistant type cylinder is recommended for use in an environment which requires water resistance.
*2 The load voltage used is 24 VDC.
* 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
* Auto switches marked with "○" are produced upon receipt of order.
* Since there are applicable auto switches other than those listed above, refer to page 125 for details.
* For details about auto switches with pre-wired connectors, refer to the **Web Catalog**.
* Auto switches are shipped together, but not assembled.

Made to Order

Made to Order
(For details, refer to pages 127 to 156.)

Symbol	Specifications
-X7	PTFE grease
-X9	Grease for food processing equipment
-X11	Long adjustment bolt (10 mm longer adjustment range)
-X12	Long adjustment bolt (20 mm longer adjustment range)
-X28	Long adjustment nut and bolt
-X33	Without built-in auto switch magnet
-X39	Fluororubber seal
-X42	Anti-corrosive guide unit
-X580	Low-speed specification (15 to 50 mm/s)
-X2128	Heat-resistant specification (–10 to 100°C)
-X2202	Extension stroke end adjuster fixed from the axial direction

Moisture Control Tube IDK Series

When operating an actuator with a small diameter and a short stroke at a high frequency, dew condensation (water droplets) may occur inside the piping depending on the conditions. Simply connecting the moisture control tube to the actuator will prevent dew condensation from occurring. For details, refer to the **Web Catalog**.

⚠ Precautions

Be sure to read "Specific Product Precautions" before handling. Refer to page 195.

Double-ported type MXQ□A
Low thrust with high rigidity type MXQ□B
Single side-ported type MXQ□C
Height interchangeable type MXQ□
Common Adjuster Options
Auto Switch Mounting
Made to Order
Model Selection

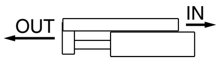
MXQ□B Series

Specifications

Bore size [mm]	6	8	12	16	20
Piping port size	M5 x 0.8				
Fluid	Air				
Action	Double acting				
Operating pressure	0.15 to 0.7 MPa*1				
Proof pressure	1.05 MPa				
Ambient and fluid temperatures	–10 to 60°C				
Operating speed range (Average operating speed)	50 to 500 mm/s (Metal stopper with bumper: 50 to 200 mm/s) (Metal stopper: 50 to 200 mm/s) * in the standard stroke table on page 53: 50 to 300 mm/s				
Cushion (Without adjuster)	Internal rubber bumper				
Cushion (With adjuster)	Metal stopper with bumper, Rubber stopper, Shock absorber, Metal stopper				
Lubrication	Non-lube				
Auto switch	Solid state auto switch, Reed auto switch (2-wire, 3-wire) 2-color indicator solid state auto switch (2-wire, 3-wire)				
Stroke length tolerance	+2 to 0 mm				

*1 Refer to page 56 for the minimum operating pressure of the metal stopper with bumper. If the operating pressure is lower than the minimum operating pressure, the repeated accuracy will decline.
Minimum operating pressure of the metal stopper with bumper: Pressure required to fully compress the protrusion of the bumper to get in contact with the metal part

Theoretical Output



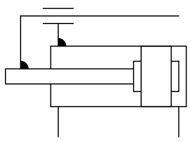
The dual rod ensures an output twice that of current cylinders. [N]

Bore size [mm]	Rod size [mm]	Operating direction	Piston area [mm²]	Operating pressure [MPa]					
				0.2	0.3	0.4	0.5	0.6	0.7
6	3	OUT	57	11	17	23	29	34	40
		IN	42	8	13	17	21	25	29
8	4	OUT	101	20	30	40	51	61	71
		IN	75	15	23	30	38	45	53
12	6	OUT	226	45	68	90	113	136	158
		IN	170	34	51	68	85	102	119
16	6	OUT	402	80	121	161	201	241	281
		IN	346	69	104	138	173	207	242
20	8	OUT	628	126	188	251	314	377	440
		IN	528	106	158	211	264	317	369

* When the metal stopper with bumper is used for positioning, the theoretical output may vary depending on the full compression force of the bumper. For details, refer to the adjuster specifications on page 56.

Symbol

Rubber bumper



Weight

[g]

Model	Standard stroke [mm]									Reduction of the shorter total length type	Additional weight of adjuster option	
	10	20	30	40	50	75	100	125	150		Extension stroke end	Retraction stroke end
MXQ6B	120	140	150	180	230	260	—	—	—	–6	10	8
MXQ8B	220	240	260	310	330	450	500	—	—	–12	20	16
MXQ12B	420	450	480	550	580	700	890	970	—	–21	40	30
MXQ16B	710	730	770	820	920	1,100	1,400	1,700	1,800	–33	70	50 (80)
MXQ20B	1,200	1,200	1,300	1,300	1,600	1,700	2,000	2,600	2,700	–60	110	80

* Value in ( ) is the additional weight of the shock absorber.

Weight of Moving Parts

[g]

Model	Standard stroke [mm]									Reduction of the shorter total length type	Additional weight of adjuster option	
	10	20	30	40	50	75	100	125	150		Extension stroke end	Retraction stroke end
MXQ6B	63	68	76	87	106	125	—	—	—	–6	10	8
MXQ8B	116	128	141	161	174	224	255	—	—	–12	20	16
MXQ12B	226	241	262	293	313	373	454	504	—	–21	40	30
MXQ16B	331	352	375	399	434	510	661	720	779	–33	70	50 (80)
MXQ20B	591	601	637	672	743	831	963	1,157	1,246	–60	110	80

* Value in ( ) is the additional weight of the shock absorber.

Maximum Load Weight

[kg]

Model	Without adjuster	Adjuster option				
	Internal rubber bumper	Rubber stopper	Metal stopper with bumper	Shock absorber/RJ		Metal stopper
				Horizontal	Vertical	
MXQ6B	0.6	1	—	1		1
MXQ8B	1	2	1	1.5	1	2
MXQ12B	2	4	2	4	2.5	4
MXQ16B	4	6	4	6		6
MXQ20B	6	9	6	9	6	9

Allowable Kinetic Energy

[J]

Model	Without adjuster	Adjuster option			
	Internal rubber bumper	Metal stopper with bumper	Rubber stopper	Shock absorber/RJ	Metal stopper
MXQ6B	0.03	—	0.06	0.2	0.009
MXQ8B	0.06	0.018	0.12	0.33	0.02
MXQ12B	0.12	0.04	0.2	0.76	0.04
MXQ16B	0.2	0.08	0.4	1.47	0.06
MXQ20B	0.4	0.12	0.6	1.73	0.09

* When selecting a model, refer to Model Selection on page 157 or use the Model Selection Software. Keep in mind that a model cannot be selected with only the allowable kinetic energy.

Optional Specifications

Adjusters

For adjuster option models and dimensions, refer to pages 123 and 124.

Metal Stopper with Bumper

Model	MXQ8B	MXQ12B	MXQ16B	MXQ20B
Max. absorbed energy [J]	0.018	0.04	0.08	0.12
Stroke absorption [mm]	2	2.8	3.6	4.4
Min. operating pressure of metal stopper with bumper*1*2 [MPa]	0.3	0.3	0.2	0.2
Reference) Full compression force of bumper [N]	20	42	65	97
Mounting screw size [mm]	M8 x 1	M10 x 1	M12 x 1	M14 x 1.5

*1 Minimum operating pressure required to fully compress the protrusion of the bumper to get in contact with the metal part
When using the metal stopper with bumper for positioning, use it at a pressure level exceeding the minimum operating pressure. For vertical mounting, the workpiece mass should be taken into consideration. For details, refer to Specific Product Precautions on page 196.
*2 Not available for ø6

Rubber Stopper

Model	MXQ6B	MXQ8B	MXQ12B	MXQ16B	MXQ20B
Max. absorbed energy [J]	0.06	0.12	0.2	0.4	0.6
Mounting screw size [mm]	M6 x 0.75	M8 x 1	M10 x 1	M12 x 1	M14 x 1.5

Shock Absorber/RJ

Model	MXQ6B	MXQ8B	MXQ12B	MXQ16B	MXQ20B
Max. absorbed energy [J]	0.35	0.5	1.5	3	3.7
Stroke absorption [mm]	3	5	6	7	10
Collision speed [mm/s]	300 to 500	50 to 500			
Max. operating frequency [cycle/min]	80	80	70		45
Max. allowable thrust [N]	150	245	422		814
Spring force (Extended) [N]	1.3	2.8	5.4		6.4
Spring force (Compressed) [N]	3.9	4.9	8		15
Mounting screw size [mm]	M6 x 0.75	M8 x 1	M10 x 1		M14 x 1.5

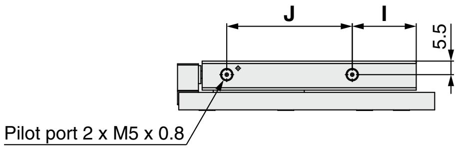
Metal Stopper

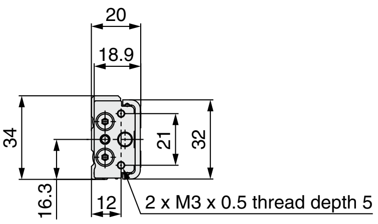
Model	MXQ6B	MXQ8B	MXQ12B	MXQ16B	MXQ20B
Max. absorbed energy [J]	0.009	0.02	0.04	0.06	0.09
Mounting screw size [mm]	M6 x 0.75	M8 x 1	M10 x 1	M12 x 1	M14 x 1.5

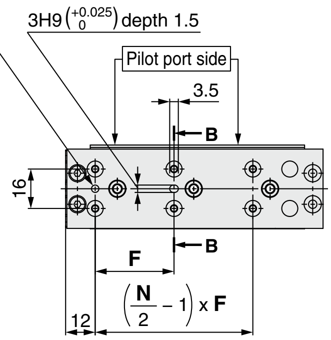
Dimensions: MXQ 6B [Standard]

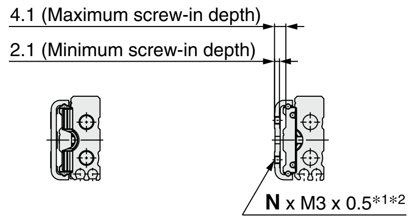
MXQ 6B-□Z Standard type

∗1 If long bolts are used, they may touch the guide block and cause a malfunction, etc. Use a screw which has an intermediate length between the maximum screw-in depth and minimum screw-in depth. Refer to page 196 for details.
∗2 Since the table is made of a magnetic substance, it could become magnetized if touched by a magnet, etc. This could cause an auto switch malfunction.

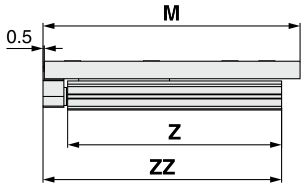


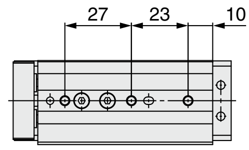




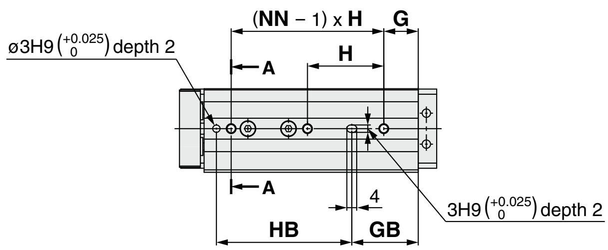


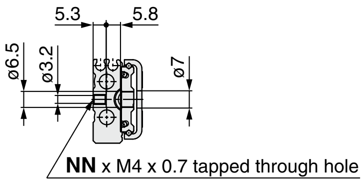
Cross-sectional view B-B





Bottom view of MXQ6B-30Z



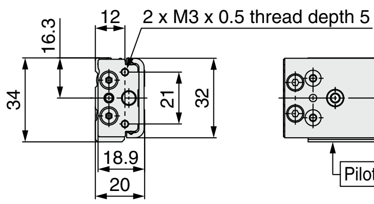


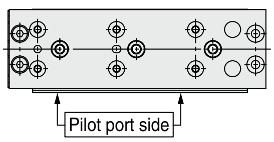
Cross-sectional view A-A

Dimensions [mm]

Model	F	G	GB	H	HB	I	J	M	N	NN	Z	ZZ
MXQ6B-10Z	25	15	9	25	37	10	31	68.5	4	2	51	61
MXQ6B-20Z	25	22	16	28	40	17	34	78.5	4	2	61	71
MXQ6B-30Z	26	—	26	—	40	20	41	88.5	6	3	71	81
MXQ6B-40Z	32	14	27	31	55	26	51	104.5	6	3	87	97
MXQ6B-50Z	46	16	54	29	55	40	64	131.5	6	4	114	124
MXQ6B-75Z	50	15	56	30	55	20	86	156.5	6	4	116	126

MXQ 6BL-□Z Symmetric type



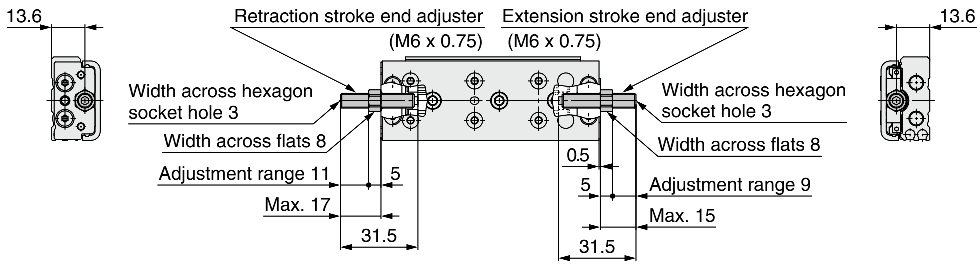


∗ Dimensions other than those listed above are the same as those for the standard type.

Dimensions: MXQ 6B [Adjuster Option]

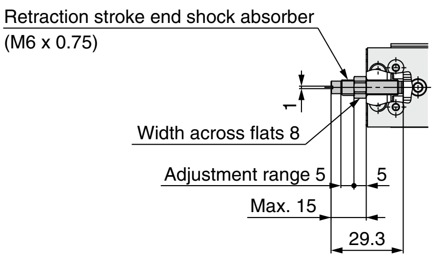
MXQ 6B-□ With adjuster option (ø6)

Rubber stopper ZD: Both ends, ZE: Extension stroke end, ZF: Retraction stroke end, ZP: Retraction stroke end (Shorter total length type)

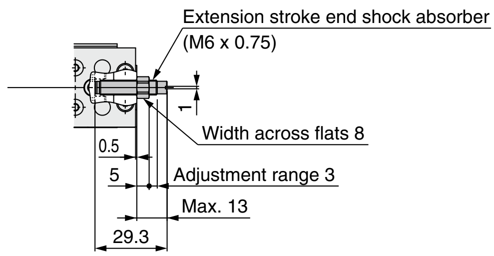


Both ends

Shock absorber/RJ ZG: Both ends, ZH: Extension stroke end, ZJ: Retraction stroke end, ZQ: Retraction stroke end (Shorter total length type)

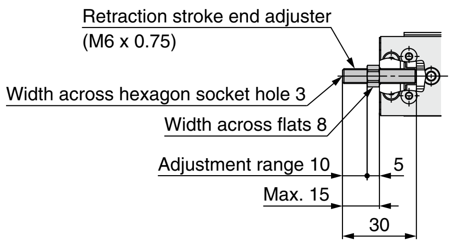


Retraction stroke end

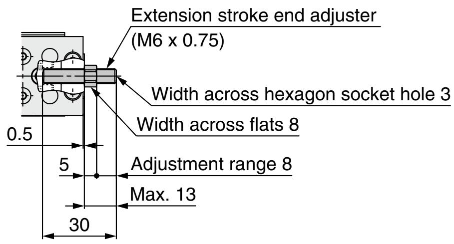


Extension stroke end

Metal stopper ZK: Both ends, ZL: Extension stroke end, ZM: Retraction stroke end, ZT: Retraction stroke end (Shorter total length type)



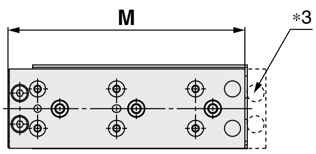
Retraction stroke end



Extension stroke end

∗ Dimensions other than those listed above are the same as those for the standard type.

MXQ 6B-□ZN Shorter total length type



∗3 As the total length has been reduced by removing the extension stroke end adjuster mounting holes, an extension stroke end adjuster cannot be mounted afterward. (Retraction stroke end adjusters can be mounted afterward.)

Dimensions [mm]

Model	M
MXQ6B-10ZN	60
MXQ6B-20ZN	70
MXQ6B-30ZN	80
MXQ6B-40ZN	96
MXQ6B-50ZN	123
MXQ6B-75ZN	148

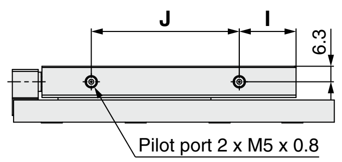
∗ Dimensions other than those listed above are the same as those for the standard type.

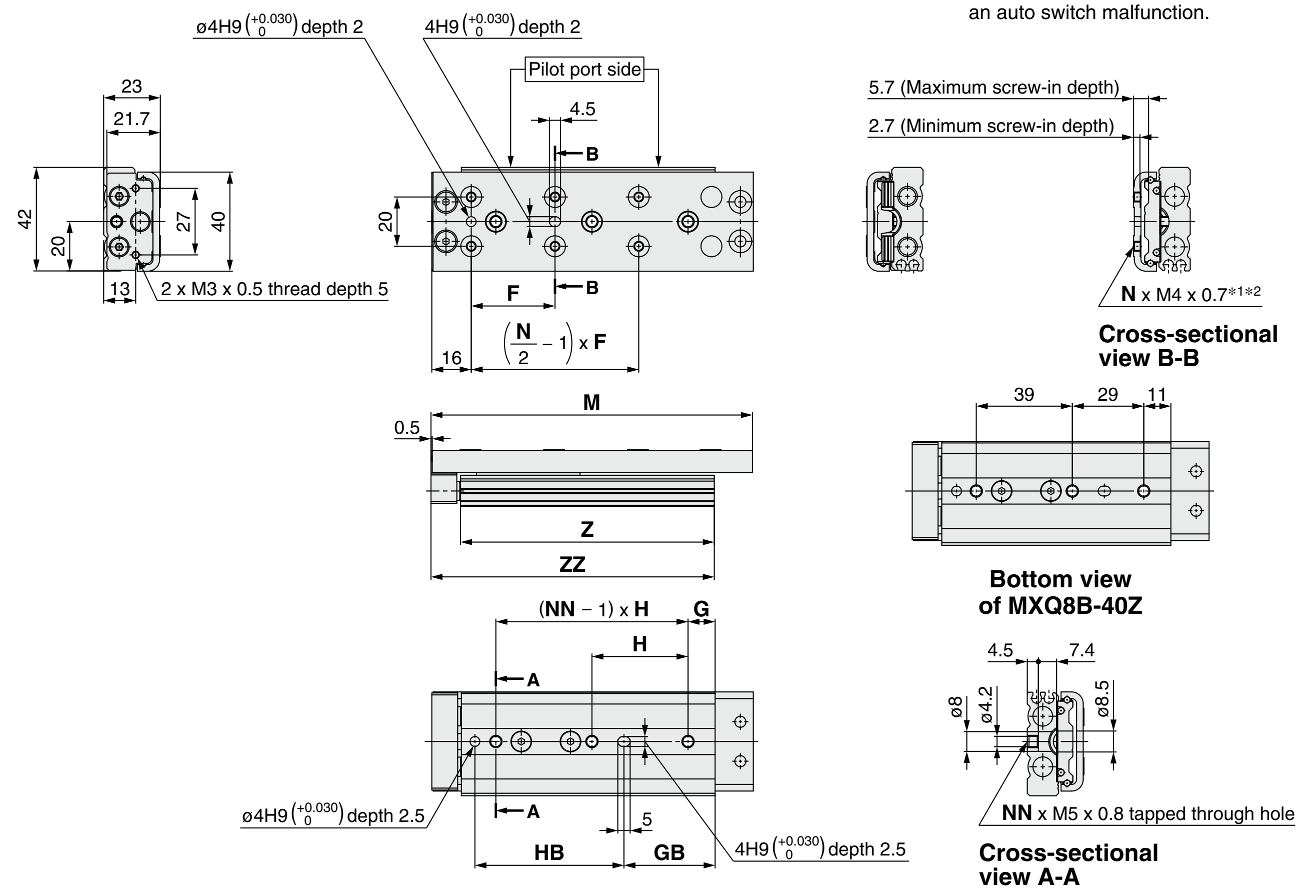
Dimensions: MXQ 8B [Standard]

MXQ 8B-□Z Standard type

∗1 If long bolts are used, they may touch the guide block and cause a malfunction, etc. Use a screw which has an intermediate length between the maximum screw-in depth and minimum screw-in depth. Refer to page 196 for details.

∗2 Since the table is made of a magnetic substance, it could become magnetized if touched by a magnet, etc. This could cause an auto switch malfunction.

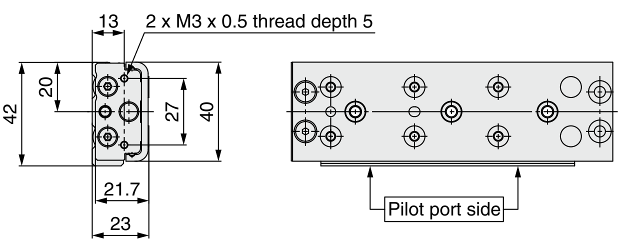




Dimensions [mm]

Model	F	G	GB	H	HB	I	J	M	N	NN	Z	ZZ
MXQ8B-10Z	28	17	11	32	46	11	32	82.5	4	2	63	75
MXQ8B-20Z	28	19	11	32	48	13	32	92.5	4	2	65	77
MXQ8B-30Z	38	21	11	40	58	15	40	102.5	4	2	75	87
MXQ8B-40Z	34	—	27	—	60	23	50	120.5	6	3	93	105
MXQ8B-50Z	34	11	37	39	60	23	60	130.5	6	3	103	115
MXQ8B-75Z	36	25	41	36	100	42	85	174.5	8	4	147	159
MXQ8B-100Z	36	14	66	36	100	42	110	199.5	10	5	172	184

MXQ 8BL-□Z Symmetric type



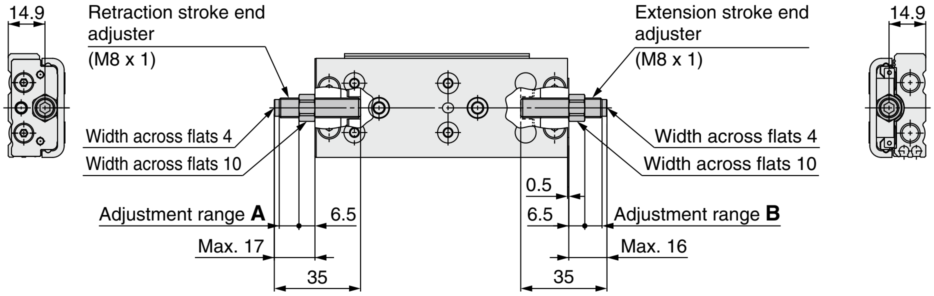
∗ Dimensions other than those listed above are the same as those for the standard type.

Dimensions: MXQ 8B [Adjuster Option]

MXQ 8B-□ With adjuster option (ø8)

Metal stopper with bumper **ZA**: Both ends, **ZB**: Extension stroke end, **ZC**: Retraction stroke end, **ZS**: Retraction stroke end (Shorter total length type)

Metal stopper **ZK**: Both ends, **ZL**: Extension stroke end, **ZM**: Retraction stroke end, **ZT**: Retraction stroke end (Shorter total length type)

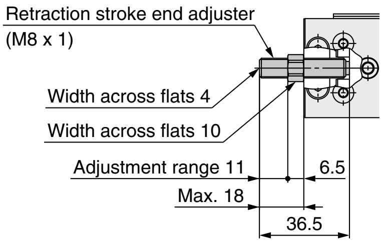


Both ends

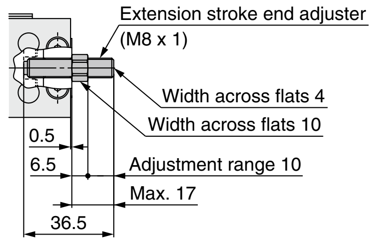
Dimensions [mm]

Adjuster option	A	B
Metal stopper with bumper (ZA, ZB, ZC, ZS)	8	7
Metal stopper (ZK, ZL, ZM, ZT)	10	9

Rubber stopper **ZD**: Both ends, **ZE**: Extension stroke end, **ZF**: Retraction stroke end, **ZP**: Retraction stroke end (Shorter total length type)

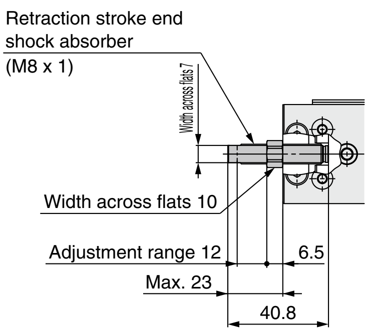


Retraction stroke end

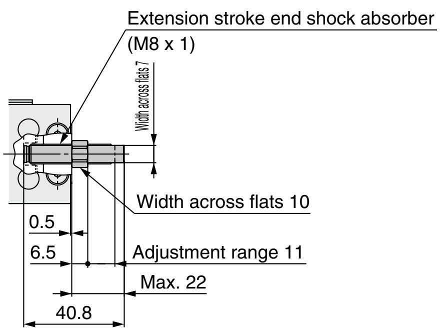


Extension stroke end

Shock absorber/RJ **ZG**: Both ends, **ZH**: Extension stroke end, **ZJ**: Retraction stroke end, **ZQ**: Retraction stroke end (Shorter total length type)



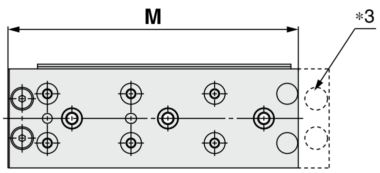
Retraction stroke end



Extension stroke end

∗ Dimensions other than those listed above are the same as those for the standard type.

MXQ 8B-□ZN Shorter total length type



∗3 As the total length has been reduced by removing the extension stroke end adjuster mounting holes, an extension stroke end adjuster cannot be mounted afterward. (Retraction stroke end adjusters can be mounted afterward.)

Dimensions [mm]

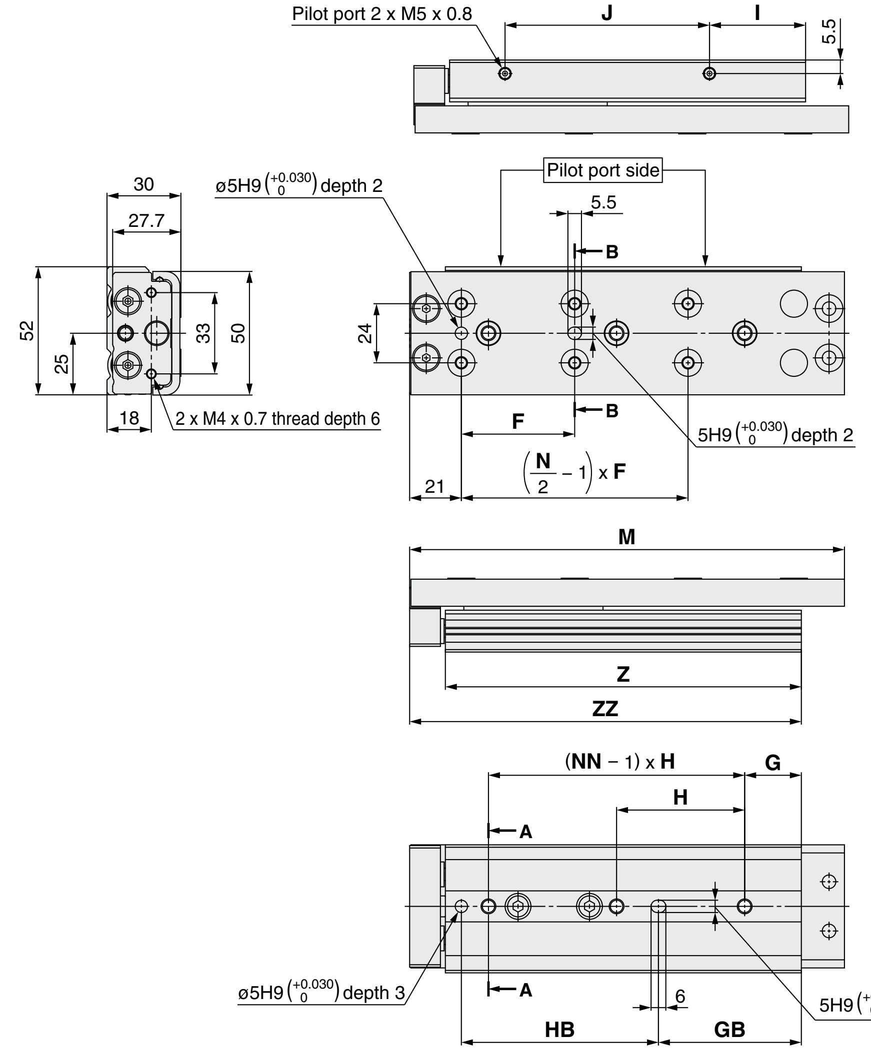
Model	M
MXQ8B-10ZN	72
MXQ8B-20ZN	82
MXQ8B-30ZN	92
MXQ8B-40ZN	110
MXQ8B-50ZN	120
MXQ8B-75ZN	164
MXQ8B-100ZN	189

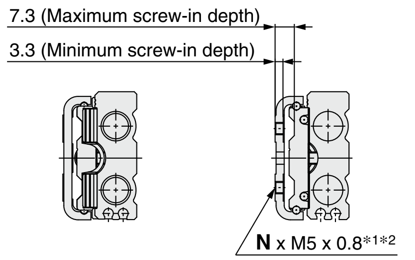
∗ Dimensions other than those listed above are the same as those for the standard type.

Dimensions: MXQ 12B [Standard]

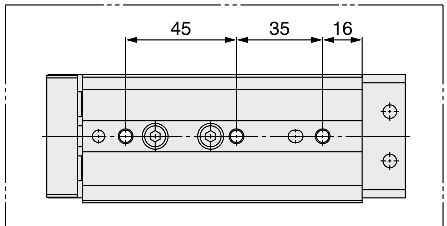
MXQ 12B-□Z Standard type

∗1 If long bolts are used, they may touch the guide block and cause a malfunction, etc. Use a screw which has an intermediate length between the maximum screw-in depth and minimum screw-in depth. Refer to page 196 for details.
∗2 Since the table is made of a magnetic substance, it could become magnetized if touched by a magnet, etc. This could cause an auto switch malfunction.

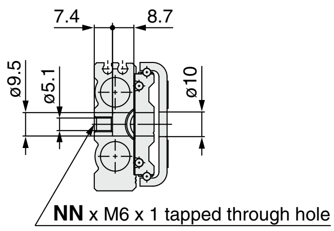




Cross-sectional view B-B



MXQ12B-50Z

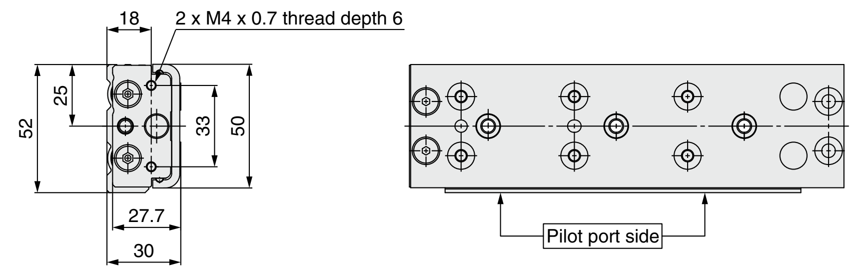


Cross-sectional view A-A

Dimensions [mm]

Model	F	G	GB	H	HB	I	J	M	N	NN	Z	ZZ
MXQ12B-10Z	38	16	8	39	58	21	29	98.5	4	2	72.5	87
MXQ12B-20Z	38	20	12	39	58	25	29	108.5	4	2	76.5	91
MXQ12B-30Z	48	21	30	48	50	26.5	37.5	118.5	4	2	86.5	101
MXQ12B-40Z	58	28	17	58	80	33.5	47.5	135.5	4	2	103.5	118
MXQ12B-50Z	40	—	27	—	80	33	58	145.5	6	3	113.5	128
MXQ12B-75Z	46	23	58	52	80	39	83	176.5	6	3	144.5	159
MXQ12B-100Z	44	39	102	44	80	57	109	220.5	8	4	188.5	203
MXQ12B-125Z	44	20	127	44	80	57	134	245.5	10	5	213.5	228

MXQ 12BL-□Z Symmetric type



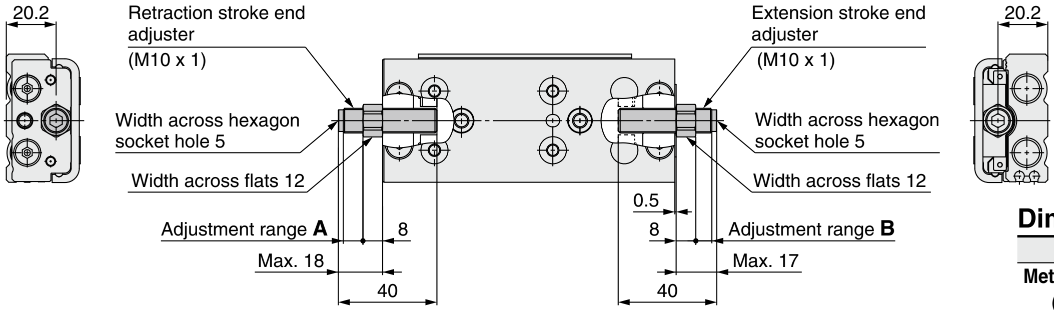
∗ Dimensions other than those listed above are the same as those for the standard type.

Dimensions: MXQ 12B [Adjuster Option]

MXQ 12B-□ ▭ With adjuster option (ø12)

Metal stopper with bumper **ZA**: Both ends, **ZB**: Extension stroke end, **ZC**: Retraction stroke end, **ZS**: Retraction stroke end (Shorter total length type)

Metal stopper **ZK**: Both ends, **ZL**: Extension stroke end, **ZM**: Retraction stroke end, **ZT**: Retraction stroke end (Shorter total length type)

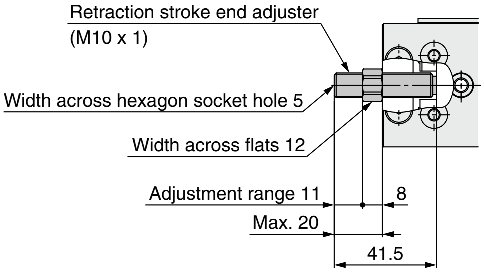


Both ends

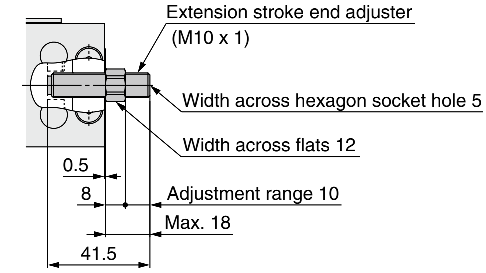
Dimensions [mm]

Adjuster option	A	B
Metal stopper with bumper (ZA, ZB, ZC, ZS)	8	6
Metal stopper (ZK, ZL, ZM, ZT)	10	8

Rubber stopper **ZD**: Both ends, **ZE**: Extension stroke end, **ZF**: Retraction stroke end, **ZP**: Retraction stroke end (Shorter total length type)

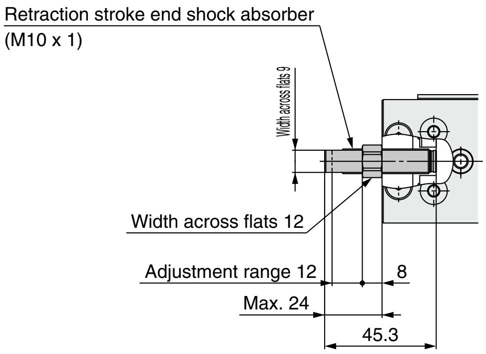


Retraction stroke end

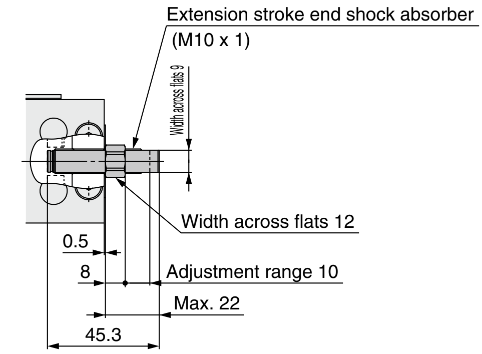


Extension stroke end

Shock absorber/RJ **ZG**: Both ends, **ZH**: Extension stroke end, **ZJ**: Retraction stroke end, **ZQ**: Retraction stroke end (Shorter total length type)



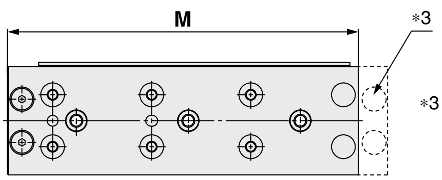
Retraction stroke end



Extension stroke end

∗ Dimensions other than those listed above are the same as those for the standard type.

MXQ 12B-□ZN Shorter total length type



∗3 As the total length has been reduced by removing the extension stroke end adjuster mounting holes, an extension stroke end adjuster cannot be mounted afterward. (Retraction stroke end adjusters can be mounted afterward.)

Dimensions [mm]

Model	M
MXQ12B-10ZN	85
MXQ12B-20ZN	95
MXQ12B-30ZN	105
MXQ12B-40ZN	122
MXQ12B-50ZN	132
MXQ12B-75ZN	163
MXQ12B-100ZN	207
MXQ12B-125ZN	232

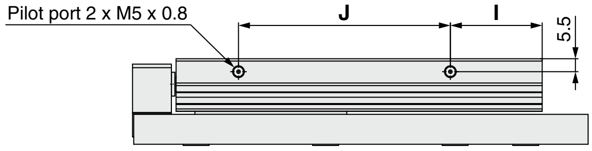
∗ Dimensions other than those listed above are the same as those for the standard type.

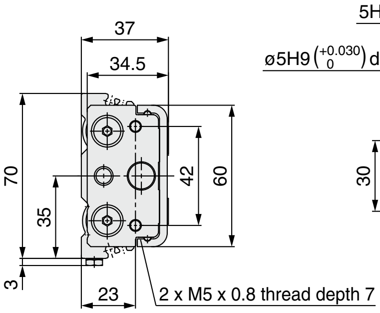
Dimensions: MXQ 16B [Standard]

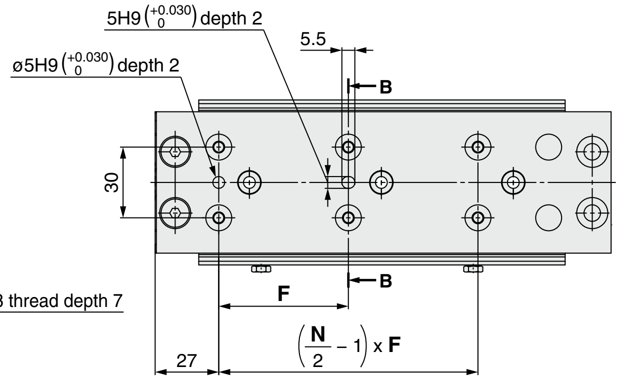
MXQ 16B-□Z Standard type

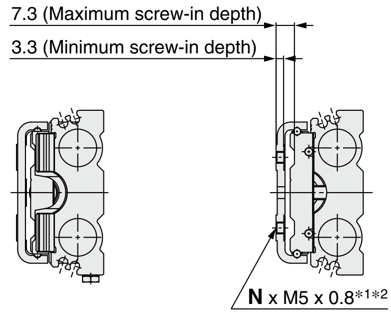
∗1 If long bolts are used, they may touch the guide block and cause a malfunction, etc. Use a screw which has an intermediate length between the maximum screw-in depth and minimum screw-in depth. Refer to page 196 for details.

∗2 Since the table is made of a magnetic substance, it could become magnetized if touched by a magnet, etc. This could cause an auto switch malfunction.

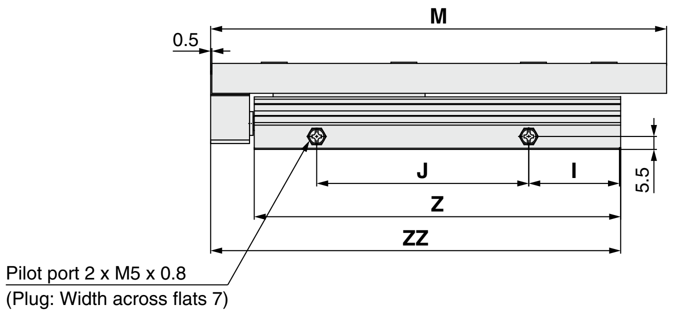


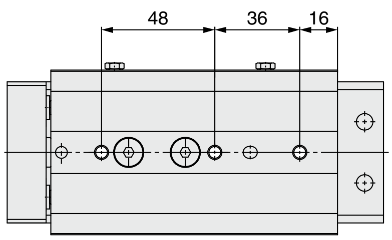




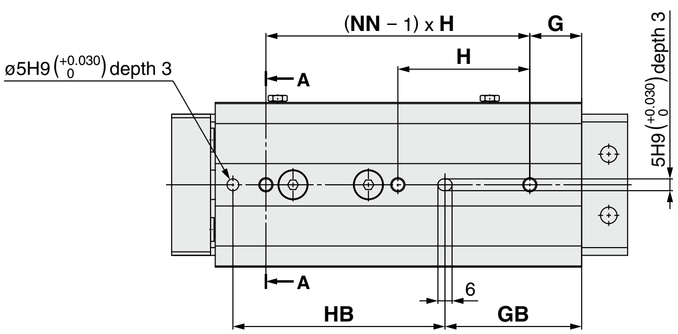


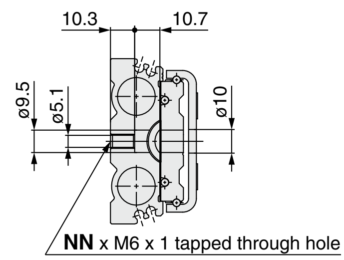
Cross-sectional view B-B





Bottom view of MXQ16B-50Z





Cross-sectional view A-A

Dimensions

[mm]

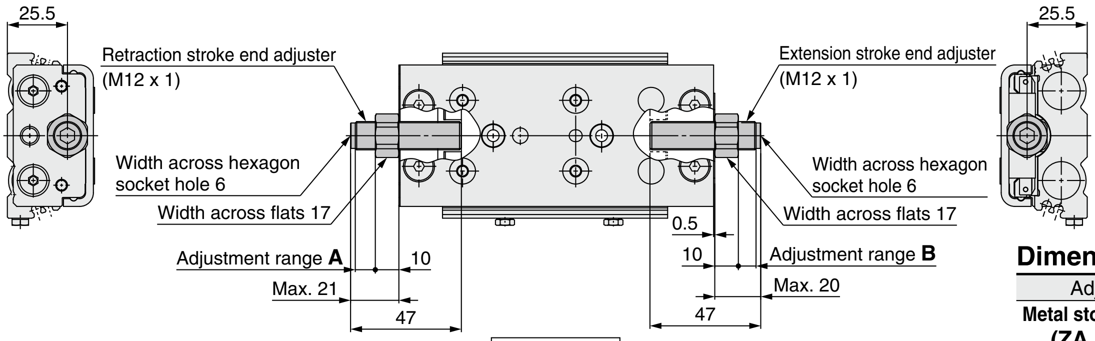
Model	F	G	GB	H	HB	I	J	M	N	NN	Z	ZZ
MXQ16B-10Z	45	18	8	46	70	40	18.5	113.5	4	2	85.5	104
MXQ16B-20Z	40	18	8	46	70	28.5	30	123.5	4	2	85.5	104
MXQ16B-30Z	48	28	18	46	70	22.5	46	133.5	4	2	95.5	114
MXQ16B-40Z	58	28	18	56	80	22.5	56	143.5	4	2	105.5	124
MXQ16B-50Z	42	—	34	—	80	35.5	59	159.5	6	3	121.5	140
MXQ16B-75Z	55	22	58	56	90	44.5	84	193.5	6	3	155.5	174
MXQ16B-100Z	50	16	108	56	90	66.5	112	266.5	8	4	205.5	224
MXQ16B-125Z	55	32	133	59	90	68.5	135	291.5	8	4	230.5	249
MXQ16B-150Z	62	48	158	62	90	68.5	160	316.5	8	4	255.5	274

Dimensions: MXQ 16B [Adjuster Option]

MXQ 16B-□ With adjuster option (ø16)

Metal stopper with bumper ZA: Both ends, ZB: Extension stroke end, ZC: Retraction stroke end, ZS: Retraction stroke end (Shorter total length type)

Metal stopper ZK: Both ends, ZL: Extension stroke end, ZM: Retraction stroke end, ZT: Retraction stroke end (Shorter total length type)



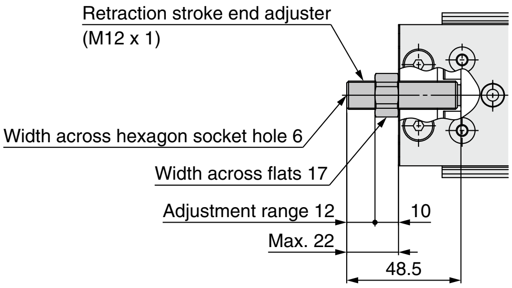
Both ends

Dimensions

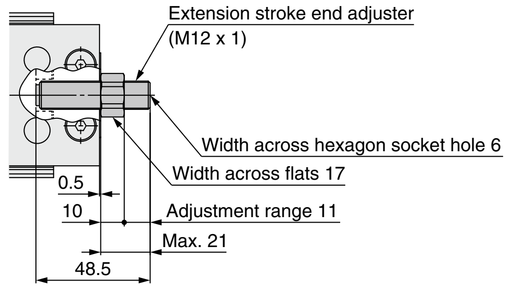
[mm]

Adjuster option	A	B
Metal stopper with bumper (ZA, ZB, ZC, ZS)	8	7
Metal stopper (ZK, ZL, ZM, ZT)	10	9

Rubber stopper ZD: Both ends, ZE: Extension stroke end, ZF: Retraction stroke end, ZP: Retraction stroke end (Shorter total length type)

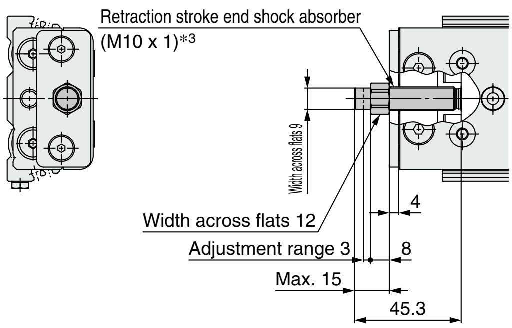


Retraction stroke end

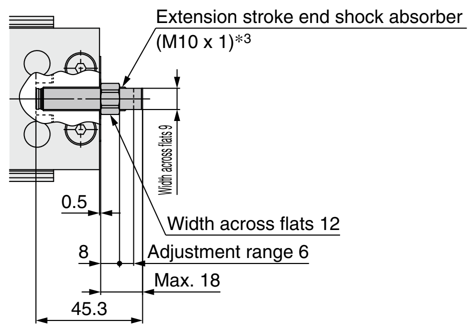


Extension stroke end

Shock absorber/RJ ZG: Both ends, ZH: Extension stroke end, ZJ: Retraction stroke end, ZQ: Retraction stroke end (Shorter total length type)



Retraction stroke end

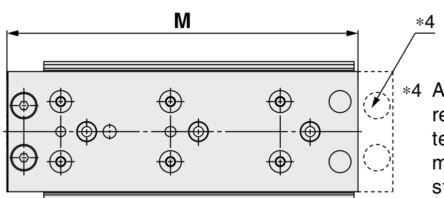


Extension stroke end

* Dimensions other than those listed above are the same as those for the standard type.

*3 The shock absorber uses a different size thread than the other adjusters.

MXQ 16B-□ZN Shorter total length type



*4 As the total length has been reduced by removing the extension stroke end adjuster mounting holes, an extension stroke end adjuster cannot be mounted afterward. (Retraction stroke end adjusters can be mounted afterward.)

* Dimensions other than those listed above are the same as those for the standard type.

Dimensions

[mm]

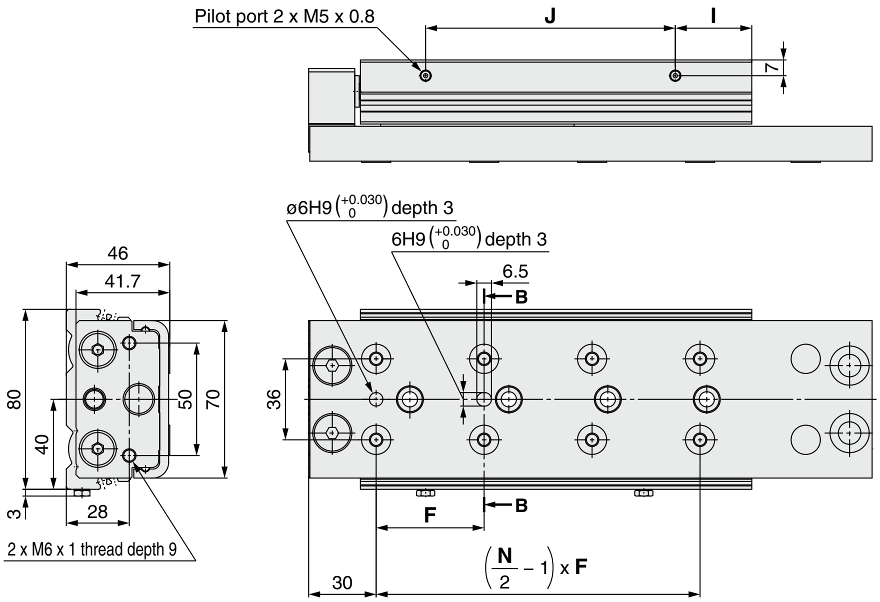
Model	M
MXQ16B-10ZN	96
MXQ16B-20ZN	106
MXQ16B-30ZN	116
MXQ16B-40ZN	126
MXQ16B-50ZN	142
MXQ16B-75ZN	176
MXQ16B-100ZN	249
MXQ16B-125ZN	274
MXQ16B-150ZN	299

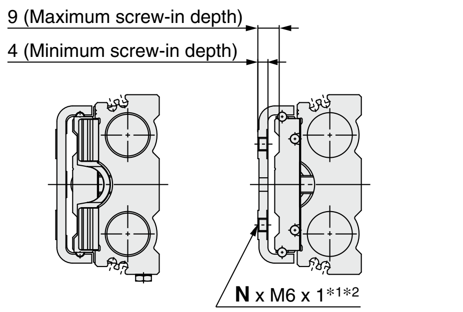
Dimensions: MXQ 20B [Standard]

MXQ 20B-□Z Standard type

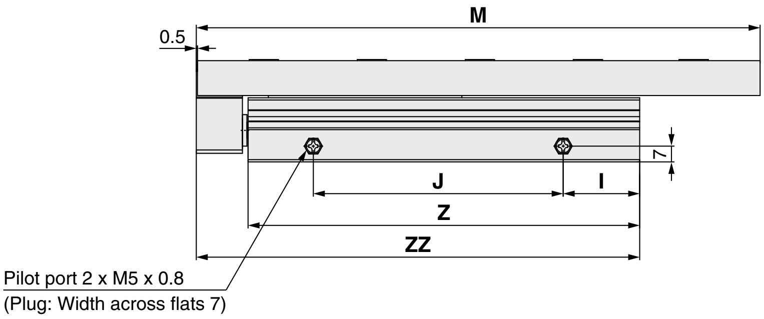
∗1 If long bolts are used, they may touch the guide block and cause a malfunction, etc. Use a screw which has an intermediate length between the maximum screw-in depth and minimum screw-in depth. Refer to page 196 for details.

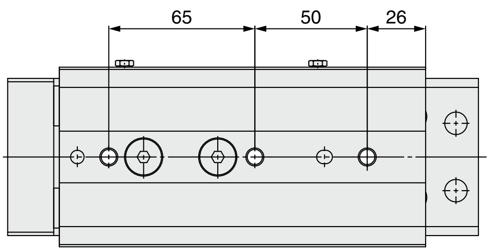
∗2 Since the table is made of a magnetic substance, it could become magnetized if touched by a magnet, etc. This could cause an auto switch malfunction.



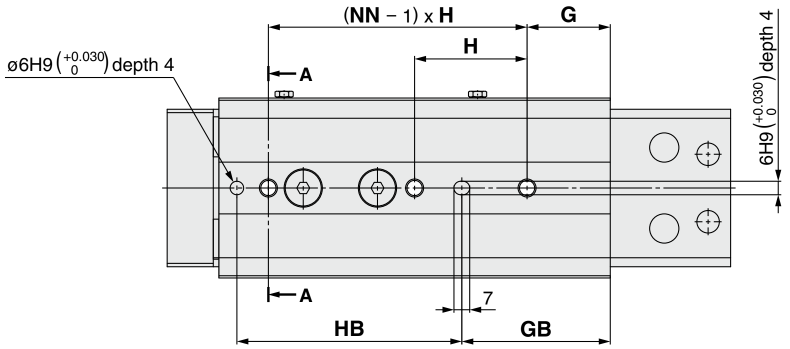


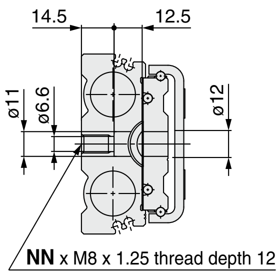
Cross-sectional view B-B





Bottom view of MXQ20B-75Z





Cross-sectional view A-A

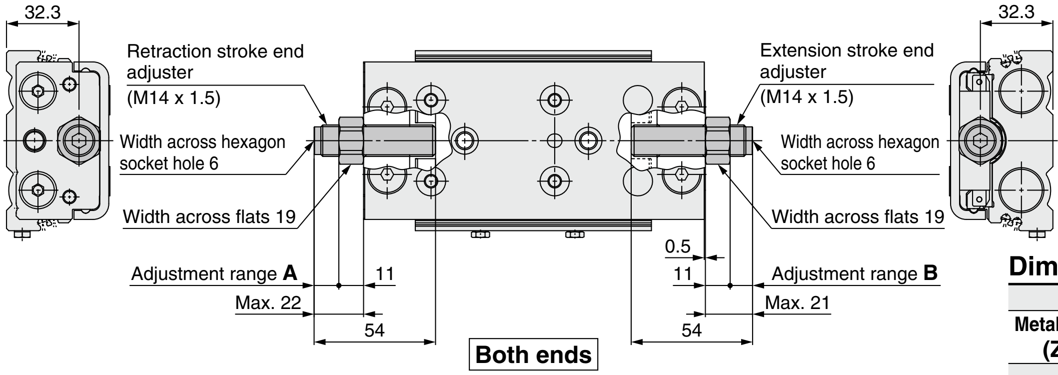
Dimensions [mm]

Model	F	G	GB	H	HB	I	J	M	N	NN	Z	ZZ
MXQ20B-10Z	55	18	7	55	80	30	36	131.5	4	2	95	118
MXQ20B-20Z	46	18	7	55	80	30	36	141.5	4	2	95	118
MXQ20B-30Z	55	28	17	55	80	34	42	151.5	4	2	105	128
MXQ20B-40Z	65	28	17	65	90	34	52	161.5	4	2	115	138
MXQ20B-50Z	75	36	20	80	110	47	62	184.5	4	2	138	161
MXQ20B-75Z	60	—	45	—	110	48	86	209.5	6	3	163	186
MXQ20B-100Z	48	20	46	44	120	34	111	250.5	8	4	174	197
MXQ20B-125Z	60	18	60	66	170	73	136	314.5	8	4	238	261
MXQ20B-150Z	65	43	85	66	170	73	161	339.5	8	4	263	286

Dimensions: MXQ 20B [Adjuster Option]

MXQ 20B-□ With adjuster option (ø20)

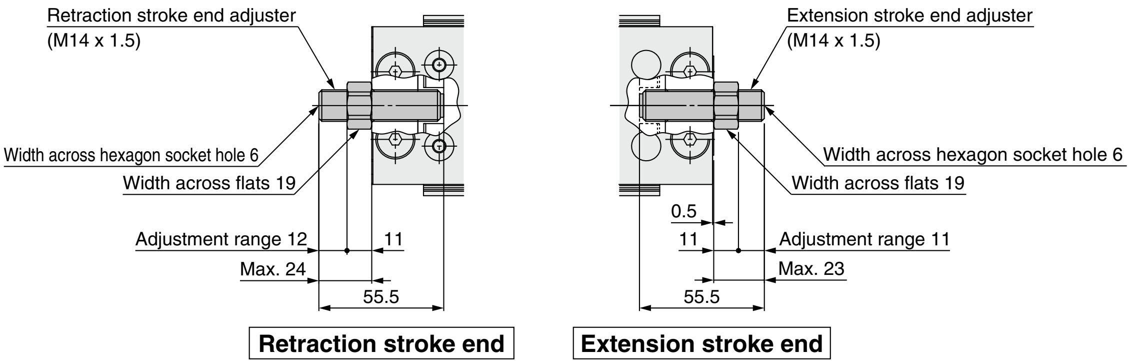
Metal stopper with bumper ZA: Both ends, ZB: Extension stroke end, ZC: Retraction stroke end, ZS: Retraction stroke end (Shorter total length type)
Metal stopper ZK: Both ends, ZL: Extension stroke end, ZM: Retraction stroke end, ZT: Retraction stroke end (Shorter total length type)



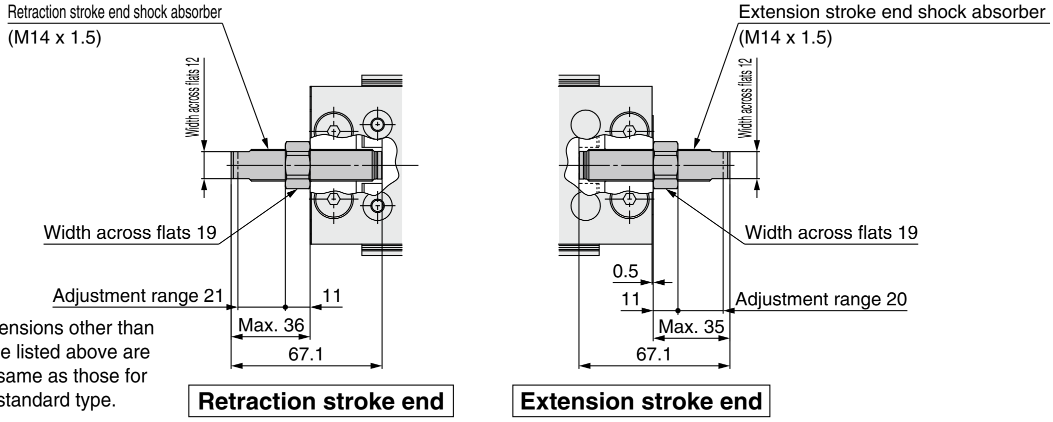
Dimensions [mm]

Adjuster option	A	B
Metal stopper with bumper (ZA, ZB, ZC, ZS)	8	7
Metal stopper (ZK, ZL, ZM, ZT)	11	10

Rubber stopper ZD: Both ends, ZE: Extension stroke end, ZF: Retraction stroke end, ZP: Retraction stroke end (Shorter total length type)

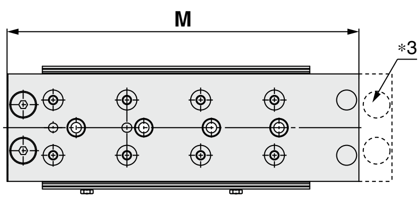


Shock absorber/RJ ZG: Both ends, ZH: Extension stroke end, ZJ: Retraction stroke end, ZQ: Retraction stroke end (Shorter total length type)



∗ Dimensions other than those listed above are the same as those for the standard type.

MXQ 20B-□ZN Shorter total length type



∗3 As the total length has been reduced by removing the extension stroke end adjuster mounting holes, an extension stroke end adjuster cannot be mounted afterward. (Retraction stroke end adjusters can be mounted afterward.)

∗ Dimensions other than those listed above are the same as those for the standard type.

Dimensions [mm]

Model	M
MXQ20B-10ZN	110
MXQ20B-20ZN	120
MXQ20B-30ZN	130
MXQ20B-40ZN	140
MXQ20B-50ZN	163
MXQ20B-75ZN	188
MXQ20B-100ZN	229
MXQ20B-125ZN	293
MXQ20B-150ZN	318

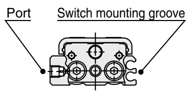
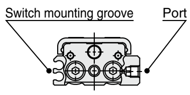
Air Slide Table
Single Side-ported Type
MXQ□C Series
ø8, ø12

RoHS

How to Order

MXQ **12** **C** – **30** **ZA** □ – **M9BW** □ – □

❶ ❷ ❸ ❹ ❺ ❻ ❼ ❽

❶ Bore size	❷ Body option: Standard type C	❷ Body option: Symmetric type CL	❸ Standard stroke [mm]
8			10, 20, 30, 40, 50, 75
12			10, 20, 30, 40, 50, 75, 100

❺ Functional options

Symbol	Functional option	❷ Body option: Standard type C	❷ Body option: Symmetric type CL
Nil	Without functional option	○	
1	With buffer	○	
2	With end lock	○	
3	Axial piping	○	
4	With buffer, end lock	○	
5	With buffer, axial piping	○	
6	Centralized adjuster	○	×
7	Centralized adjuster (Symmetric)	×	○
8	Buffer, Centralized adjuster	○	×
9	Buffer, Centralized adjuster (Symmetric)	×	○

❻ Auto switch

Nil	Without auto switch

* For applicable auto switches, refer to the next page.

❼ Number of auto switches

Nil	2
S	1
n	n

❽ Made to order

For details, refer to the next page.

❹ Adjuster options/Functional option combinations

Symbol	Adjuster type	Adjuster mounting position*1*6: Extension stroke end	Adjuster mounting position*1*6: Retraction stroke end	Nil Without functional option	1 *2*3 With buffer	2 With end lock	3 Axial piping	4 *2 With buffer, end lock	5 *2 With buffer, axial piping	6 *7 Centralized adjuster	7 *8 Centralized adjuster (Symmetric)	8 *2*7 Buffer, Centralized adjuster	9 *2*8 Buffer, Centralized adjuster (Symmetric)
Z	Without adjuster			○	○	○	○	○	○	×	×	×	×
ZA	Metal stopper with bumper	●	●	○	×	×	○	×	×	○	○	×	×
ZB	Metal stopper with bumper	●		○	×	○	○	×	×	×	×	×	×
ZC	Metal stopper with bumper		●	○	×	×	○	×	×	○	○	○	○
ZD	Rubber stopper	●	●	○	×	×	○	×	×	○	○	○	○
ZE	Rubber stopper	●		○	○	○	○	○	○	×	×	×	×
ZF	Rubber stopper		●	○	×	×	○	×	×	○	○	○	○
ZG	Shock absorber/RJ	●	●	○	×	×	○	×	×	○	○	×	×
ZH	Shock absorber/RJ	●		○	×	○	○	×	×	×	×	×	×
ZJ	Shock absorber/RJ		●	○	×	×	○	×	×	○	○	○	○
ZK	Metal stopper	●	●	○	×	×	○	×	×	○	○	○	○
ZL	Metal stopper	●		○	○	○	○	○	○	×	×	×	×
ZM	Metal stopper		●	○	×	×	○	×	×	○	○	○	○
ZN	Shorter overall length type*4 / Retraction stroke end adjuster: Without adjuster			○	○*5	×	○	×	○*5	×	×	×	×
ZP	Shorter overall length type*4 / Retraction stroke end adjuster: Rubber stopper		●	○	×	×	○	×	×	×	×	×	×
ZQ	Shorter overall length type*4 / Retraction stroke end adjuster: Shock absorber/RJ		●	○	×	×	○	×	×	×	×	×	×
ZS	Shorter overall length type*4 / Retraction stroke end adjuster: Metal stopper with bumper		●	○	×	×	○	×	×	×	×	×	×
ZT	Shorter overall length type*4 / Retraction stroke end adjuster: Metal stopper		●	○	×	×	○	×	×	×	×	×	×
ZBF	Extension stroke end adjuster: Metal stopper with bumper / Retraction stroke end adjuster: Rubber stopper	●	●	○	×	×	○	×	×	○	○	×	×
ZBJ	Extension stroke end adjuster: Metal stopper with bumper / Retraction stroke end adjuster: Shock absorber/RJ	●	●	○	×	×	○	×	×	○	○	×	×
ZBM	Extension stroke end adjuster: Metal stopper with bumper / Retraction stroke end adjuster: Metal stopper	●	●	○	×	×	○	×	×	○	○	×	×
ZEC	Extension stroke end adjuster: Rubber stopper / Retraction stroke end adjuster: Metal stopper with bumper	●	●	○	×	×	○	×	×	○	○	○	○
ZEJ	Extension stroke end adjuster: Rubber stopper / Retraction stroke end adjuster: Shock absorber/RJ	●	●	○	×	×	○	×	×	○	○	○	○
ZEM	Extension stroke end adjuster: Rubber stopper / Retraction stroke end adjuster: Metal stopper	●	●	○	×	×	○	×	×	○	○	○	○
ZHC	Extension stroke end adjuster: Shock absorber/RJ / Retraction stroke end adjuster: Metal stopper with bumper	●	●	○	×	×	○	×	×	○	○	×	×
ZHF	Extension stroke end adjuster: Shock absorber/RJ / Retraction stroke end adjuster: Rubber stopper	●	●	○	×	×	○	×	×	○	○	×	×
ZHM	Extension stroke end adjuster: Shock absorber/RJ / Retraction stroke end adjuster: Metal stopper	●	●	○	×	×	○	×	×	○	○	×	×
ZLC	Extension stroke end adjuster: Metal stopper / Retraction stroke end adjuster: Metal stopper with bumper	●	●	○	×	×	○	×	×	○	○	○	○
ZLF	Extension stroke end adjuster: Metal stopper / Retraction stroke end adjuster: Rubber stopper	●	●	○	×	×	○	×	×	○	○	○	○
ZLJ	Extension stroke end adjuster: Metal stopper / Retraction stroke end adjuster: Shock absorber/RJ	●	●	○	×	×	○	×	×	○	○	○	○

*1 ●: Shipped together with the product, but not assembled
Without any symbol for the adjuster mounting position: The adjuster can be mounted afterward.
*2 For the buffer mechanism, the buffer stroke will be shorter for the stroke that is adjusted by the extension stroke end adjuster.
*3 If it is necessary to install a retraction stroke end adjuster with a buffer mechanism, use a buffer and centralized adjuster provided with a retraction stroke end adjuster on the rear end of the body. End lock or axial piping options cannot be mounted to centralized adjuster specification models.
*4 Extension stroke end adjuster mounting holes have been removed to reduce the total length of the table.
*5 The shorter total length type can be used, but a retraction stroke end adjuster cannot be mounted afterward.
*6 For details on the adjuster mounting position, refer to the next page.
*7 Not applicable to the symmetric type
*8 Not applicable to the standard type

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)	Pre-wired connector	Applicable load	
Solid state auto 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		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 (Equiv. to NPN)	—	5 V	—	A96V	A96	●	●	●	●	○	IC circuit	—
				2-wire	24 V	12 V	100 V	A93V	A93	●	●	●	●	○*2	—	Relay, PLC
			None				100 V or less	A90V	A90	●	●	●	●	○*2	IC circuit	

*1 Water-resistant type auto switches can be mounted on the above models, but SMC cannot guarantee water resistance.
A water-resistant type cylinder is recommended for use in an environment which requires water resistance.
*2 The load voltage used is 24 VDC.
* 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
* Auto switches marked with "○" are produced upon receipt of order.
* Since there are applicable auto switches other than those listed above, refer to page 125 for details.
* For details about auto switches with pre-wired connectors, refer to the **Web Catalog**.
* Auto switches are shipped together, but not assembled.

Made to Order

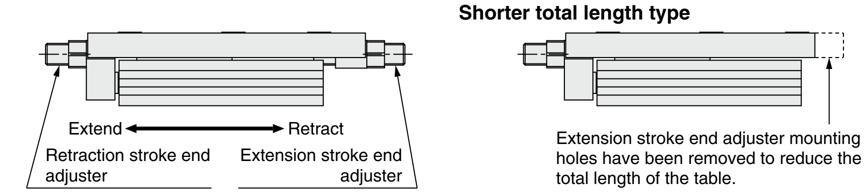
Made to Order
(For details, refer to pages 127 to 156.)

Symbol	Specifications
-X7	PTFE grease
-X9	Grease for food processing equipment
-X11	Long adjustment bolt (10 mm longer adjustment range)
-X12	Long adjustment bolt (20 mm longer adjustment range)
-X28	Long adjustment nut and bolt
-X33	Without built-in auto switch magnet
-X39	Fluororubber seal
-X42	Anti-corrosive guide unit
-X580	Low-speed specification (15 to 50 mm/s)
-X2128	Heat-resistant specification (–10 to 100°C)
-X2202	Extension stroke end adjuster fixed from the axial direction

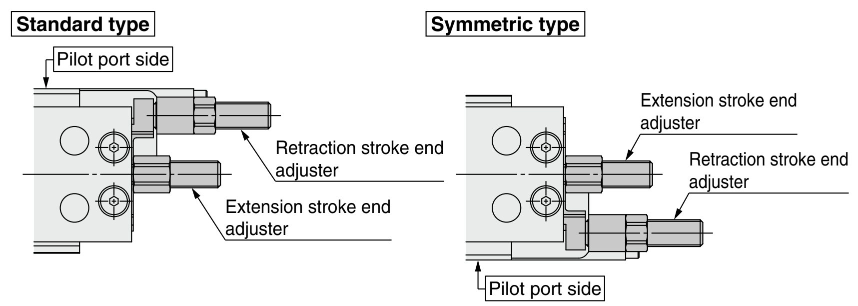
Moisture Control Tube IDK Series

When operating an actuator with a small diameter and a short stroke at a high frequency, dew condensation (water droplets) may occur inside the piping depending on the conditions. Simply connecting the moisture control tube to the actuator will prevent dew condensation from occurring. For details, refer to the **Web Catalog**.

Adjuster Mounting Position (Exception: Centralized Adjuster)



Centralized Adjuster Mounting Position



⚠ Precautions

Be sure to read "Specific Product Precautions" before handling. Refer to page 195.

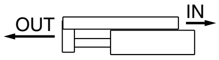
Double-ported type MXQ□A
Low thrust with high rigidity type MXQ□B
Single side-ported type MXQ□C
Height interchangeable type MXQ□
Common Adjuster Options
Auto Switch Mounting
Made to Order
Model Selection

Specifications

Bore size [mm]	8	12
Piping port size	M5 x 0.8	
Fluid	Air	
Action	Double acting	
Operating pressure	0.15 to 0.7 MPa∗1 (End lock: 0.35 to 0.7 MPa)	
Proof pressure	1.05 MPa	
Ambient and fluid temperatures	–10 to 60°C	
Operating speed range (Average operating speed)	50 to 500 mm/s (Metal stopper with bumper: 50 to 300 mm/s) (Metal stopper: 50 to 200 mm/s)	
Cushion (Without adjuster)	Internal rubber bumper	
Cushion (With adjuster)	Metal stopper with bumper, Rubber stopper, Shock absorber, Metal stopper	
Lubrication	Non-lube	
Auto switch	Solid state auto switch, Reed auto switch (2-wire, 3-wire) 2-color indicator solid state auto switch (2-wire, 3-wire)	
Stroke length tolerance	+2 to 0 mm	

∗1 Refer to page 70 for the minimum operating pressure of the metal stopper with bumper. If the operating pressure is lower than the minimum operating pressure, the repeated accuracy will decline.
Minimum operating pressure of the metal stopper with bumper: Pressure required to fully compress the protrusion of the bumper to get in contact with the metal part

Theoretical Output



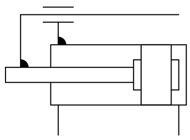
The dual rod ensures an output twice that of current cylinders. [N]

Bore size [mm]	Rod size [mm]	Operating direction	Piston area [mm²]	Operating pressure [MPa]					
				0.2	0.3	0.4	0.5	0.6	0.7
8	4	OUT	101	20	30	40	51	61	71
		IN	75	15	23	30	38	45	53
12	6	OUT	226	45	68	90	113	136	158
		IN	170	34	51	68	85	102	119

∗ When the metal stopper with bumper is used for positioning, the theoretical output may vary depending on the full compression force of the bumper. For details, refer to the adjuster specifications on page 70.

Symbol

Rubber bumper



Weight

[g]

Model	Standard stroke [mm]									Reduction of the shorter total length type	Additional weight of adjuster option			Extra for option		
	10	20	30	40	50	75	100	125	150		Extension stroke end	Extension stroke end For end lock	Retraction stroke end	Buffer	End lock	Axial piping
MXQ8C	140	150	170	200	260	280	—	—	—	–6	10	11 (9)	8	30	60	No addition
MXQ12C	280	290	320	370	400	550	620	—	—	–12	20	22 (20)	16	70	80	

∗ Value in ( ) is the additional weight of the shock absorber.

Weight of Centralized Adjuster

[g]

Model	Standard stroke [mm]							Reduction only when the product comes with a retraction stroke end adjuster
	10	20	30	40	50	75	100	
MXQ8C	185	195	215	245	305	340	—	–10
MXQ12C	365	385	415	465	495	645	715	–20

Weight of Moving Parts

[g]

Model	Standard stroke [mm]									Reduction of the shorter total length type	Additional weight of adjuster option		Extra for option		
	10	20	30	40	50	75	100	125	150		Extension stroke end	Retraction stroke end	Buffer	End lock	Axial piping
MXQ8C	68	76	85	97	116	138	—	—	—	–6	10	8	30	10	No addition
MXQ12C	143	154	168	192	206	263	300	—	—	–12	20	16	70	20	

Maximum Load Weight

[kg]

Model	Without adjuster	Adjuster option				
	Internal rubber bumper	Rubber stopper	Metal stopper with bumper	Shock absorber/RJ		Metal stopper
				Horizontal	Vertical	
MXQ8C	1	1	1	1		1
MXQ12C	2	2	2	1.5	1	2

Allowable Kinetic Energy

[J]

Model	Without adjuster	Adjuster option			
	Internal rubber bumper	Metal stopper with bumper	Rubber stopper	Shock absorber/RJ	Metal stopper
MXQ8C	0.04	0.018	0.06	0.2	0.009
MXQ12C	0.11	0.04	0.12	0.33	0.02

* When selecting a model, refer to Model Selection on page 157 or use the Model Selection Software. Keep in mind that a model cannot be selected with only the allowable kinetic energy.

Optional Specifications

With End Lock

Model	MXQ8C	MXQ12C
Operating pressure range [MPa]	0.35 to 0.7	
Holding force [N]	12	23

With Buffer Mechanism

Model		MXQ8C	MXQ12C
Operating speed range [mm/s]		50 to 500 (Horizontal mounting 50 to 300)	
Buffer stroke [mm]		5	10
Buffer stroke load [N]	Stroke at 0 [mm]	5	9
	Maximum stroke	8	15

Auto Switches Applicable to Buffer

Type	Model	Specifications	Electrical entry direction
Solid state auto switch	D-M9BV	With light, 2-wire	Vertical
	D-M9NV	With light, 3-wire, Output: NPN	
	D-M9PV	With light, 3-wire, Output: PNP	

Adjusters

For adjuster option models and dimensions, refer to pages 123 and 124.

Metal Stopper with Bumper

Model	MXQ8C	MXQ12C
Max. absorbed energy [J]	0.018	0.04
Stroke absorption [mm]	2	2.8
Min. operating pressure of metal stopper with bumper*1*2 [MPa]	0.3	0.3
Reference) Full compression force of bumper [N]	20	42
Mounting screw size [mm]	M6 x 0.75	M8 x 1

*1 Minimum operating pressure required to fully compress the protrusion of the bumper to get in contact with the metal part
When using the metal stopper with bumper for positioning, use it at a pressure level exceeding the minimum operating pressure. For vertical mounting, the workpiece mass should be taken into consideration. For details, refer to Specific Product Precautions on page 196.
*2 Not available for ø6

Rubber Stopper

Model	MXQ8C	MXQ12C
Max. absorbed energy [J]	0.06	0.12
Mounting screw size [mm]	M6 x 0.75	M8 x 1

Shock Absorber/RJ

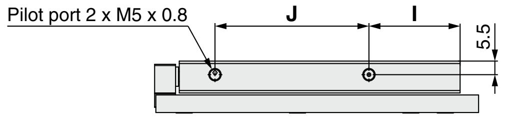
Model	MXQ8C	MXQ12C
Max. absorbed energy [J]	0.35	0.5
Stroke absorption [mm]	3	5
Collision speed [mm/s]	50 to 500	50 to 500
Max. operating frequency [cycle/min]	80	80
Max. allowable thrust [N]	150	245
Spring force (Extended) [N]	1.3	2.8
Spring force (Compressed) [N]	3.9	4.9
Mounting screw size [mm]	M6 x 0.75	M8 x 1

Metal Stopper

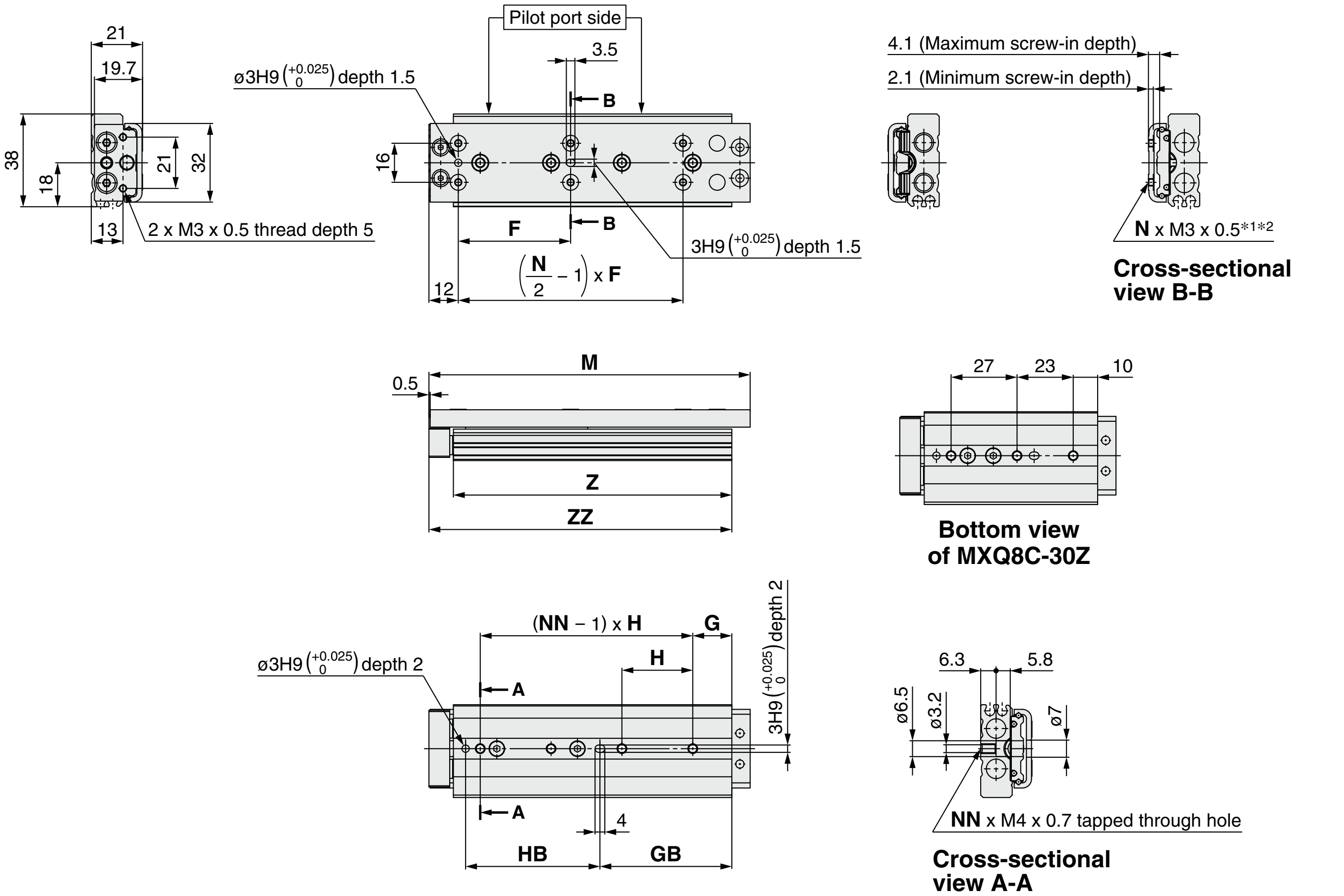
Model	MXQ8C	MXQ12C
Max. absorbed energy [J]	0.009	0.02
Mounting screw size [mm]	M6 x 0.75	M8 x 1

Dimensions: MXQ 8C [Standard]

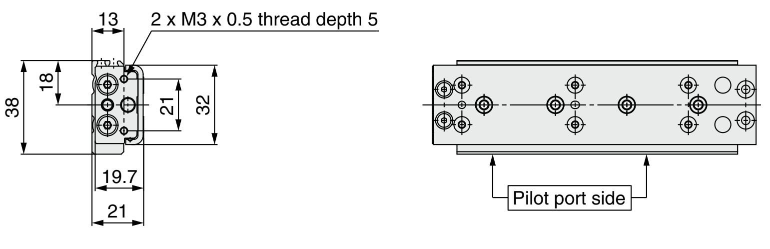
MXQ 8C-□Z Standard type



∗1 If long bolts are used, they may touch the guide block and cause a malfunction, etc. Use a screw which has an intermediate length between the maximum screw-in depth and minimum screw-in depth. Refer to page 196 for details.
∗2 Since the table is made of a magnetic substance, it could become magnetized if touched by a magnet, etc. This could cause an auto switch malfunction.



MXQ 8CL-□Z Symmetric type



∗ Dimensions other than those listed above are the same as those for the standard type.

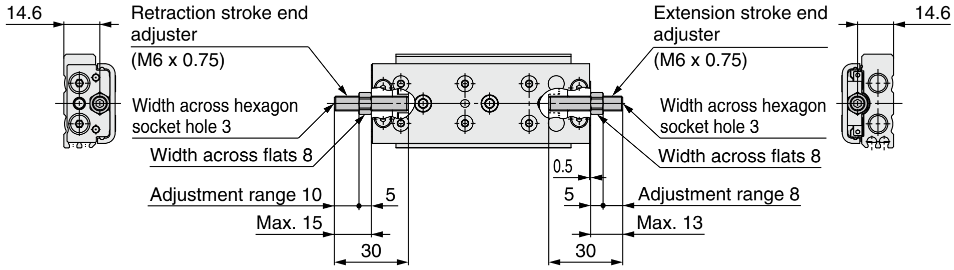
Dimensions [mm]

Model	F	G	GB	H	HB	I	J	M	N	NN	Z	ZZ
MXQ8C-10Z	25	15	9	25	37	10	26.5	68.5	4	2	51	61
MXQ8C-20Z	25	22	16	28	40	14	32.5	78.5	4	2	61	71
MXQ8C-30Z	26	—	26	—	40	14.5	42	88.5	6	3	71	81
MXQ8C-40Z	32	14	27	31	55	20	52.5	104.5	6	3	87	97
MXQ8C-50Z	46	16	54	29	55	37	62.5	131.5	6	4	114	124
MXQ8C-75Z	50	15	56	30	55	10	91.5	156.5	6	4	116	126

Dimensions: MXQ 8C [Adjuster Option]

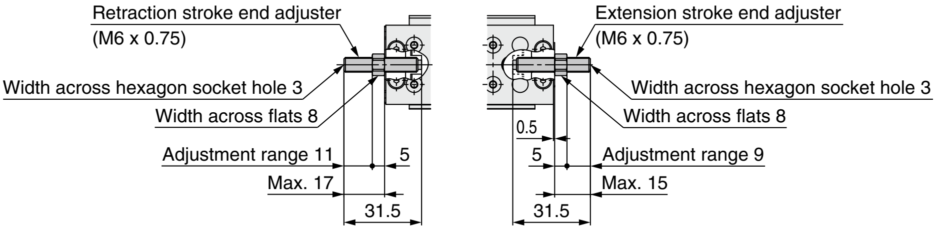
MXQ 8C-□ With adjuster option (ø8)

Metal stopper with bumper **ZA**: Both ends, **ZB**: Extension stroke end, **ZC**: Retraction stroke end, **ZS**: Retraction stroke end (Shorter total length type)
Metal stopper **ZK**: Both ends, **ZL**: Extension stroke end, **ZM**: Retraction stroke end, **ZT**: Retraction stroke end (Shorter total length type)



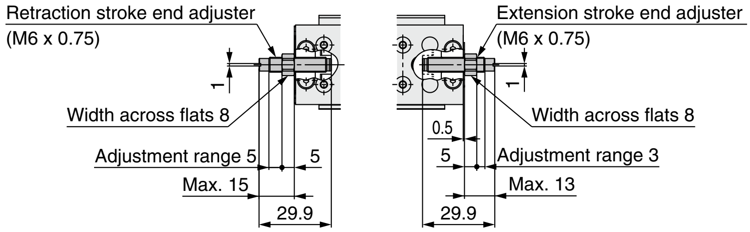
Both ends

Rubber stopper **ZD**: Both ends, **ZE**: Extension stroke end, **ZF**: Retraction stroke end, **ZP**: Retraction stroke end (Shorter total length type)



Retraction stroke end **Extension stroke end**

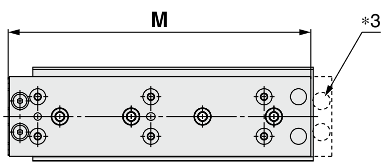
Shock absorber/RJ **ZG**: Both ends, **ZH**: Extension stroke end, **ZJ**: Retraction stroke end, **ZQ**: Retraction stroke end (Shorter total length type)



Retraction stroke end **Extension stroke end**

∗ Dimensions other than those listed above are the same as those for the standard type.

MXQ 8C-□ZN Shorter total length type



∗3 As the total length has been reduced by removing the extension stroke end adjuster mounting holes, an extension stroke end adjuster cannot be mounted afterward. (Retraction stroke end adjusters can be mounted afterward.)

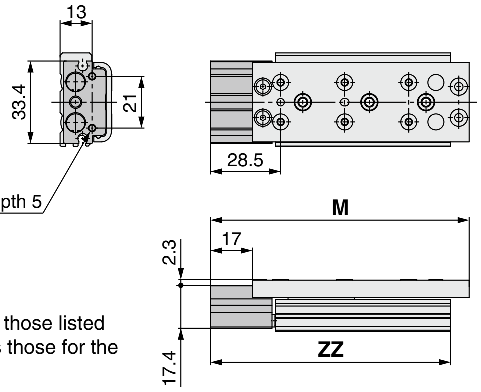
∗ Dimensions other than those listed above are the same as those for the standard type.

Dimensions [mm]

Model	M
MXQ8C-10ZN	60
MXQ8C-20ZN	70
MXQ8C-30ZN	80
MXQ8C-40ZN	96
MXQ8C-50ZN	123
MXQ8C-75ZN	148

Dimensions: MXQ 8C [Functional Option]

MXQ 8C-□□1 With buffer (ø8)



∗ Dimensions other than those listed above are the same as those for the standard type.

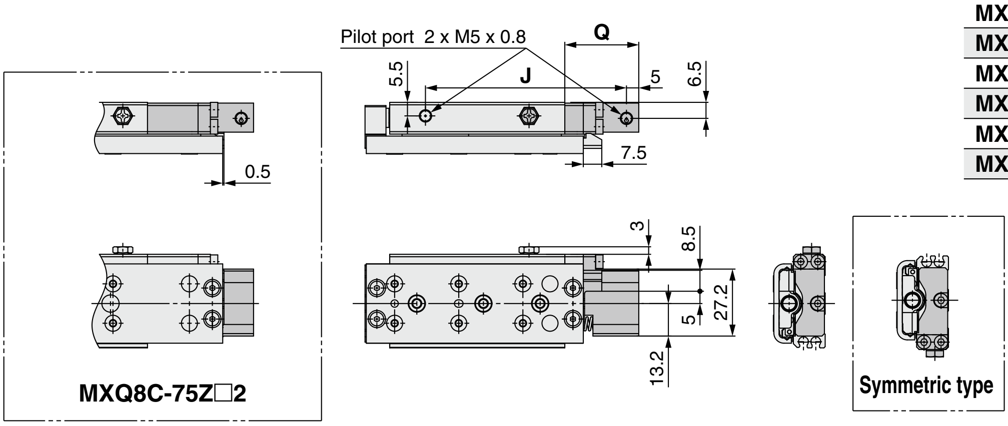
Dimensions [mm]

Model	Standard type M	Shorter total length type M	ZZ
MXQ8C-10Z□1	85	76.5	77.5
MXQ8C-20Z□1	95	86.5	87.5
MXQ8C-30Z□1	105	96.5	97.5
MXQ8C-40Z□1	121	112.5	113.5
MXQ8C-50Z□1	148	139.5	140.5
MXQ8C-75Z□1	173	164.5	142.5

MXQ 8C-□□2 With end lock (ø8)

Dimensions [mm]

Model	J	Q
MXQ8C-10Z□2	61.5	30
MXQ8C-20Z□2	71.5	
MXQ8C-30Z□2	81.5	
MXQ8C-40Z□2	97.5	
MXQ8C-50Z□2	124.5	
MXQ8C-75Z□2	139.5	43

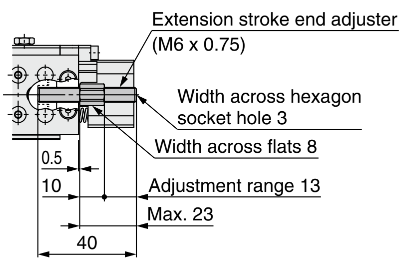


∗ Dimensions other than those listed above are the same as those for the standard type.

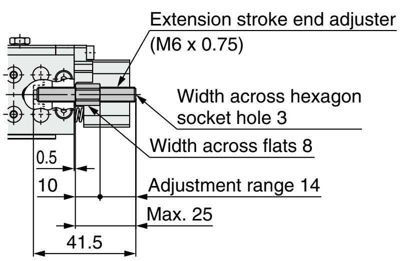
MXQ 8C-□□2 With end lock, extension stroke end adjuster (ø8)

A retraction stroke end adjuster cannot be mounted to the end lock.
For adjuster part numbers, refer to page 124-1.

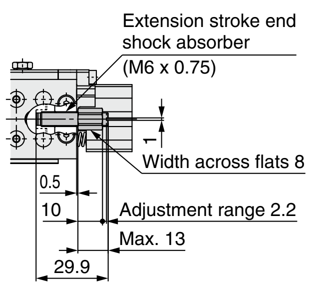
Metal stopper with bumper: ZB
Metal stopper: ZL



Rubber stopper: ZE



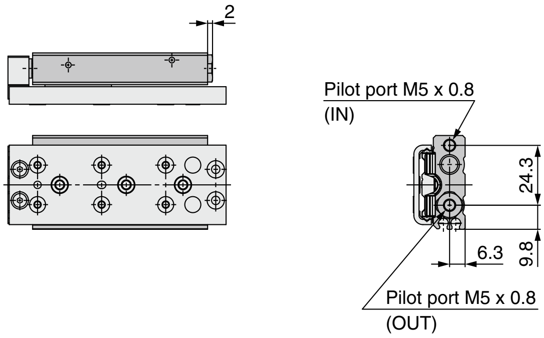
Shock absorber/RJ: ZH

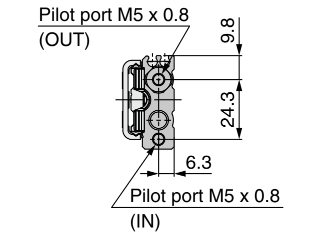


∗ Dimensions other than those listed above are the same as those for the standard type.

Dimensions: MXQ 8C [Functional Option]

MXQ 8C-□□3 Axial piping (ø8)

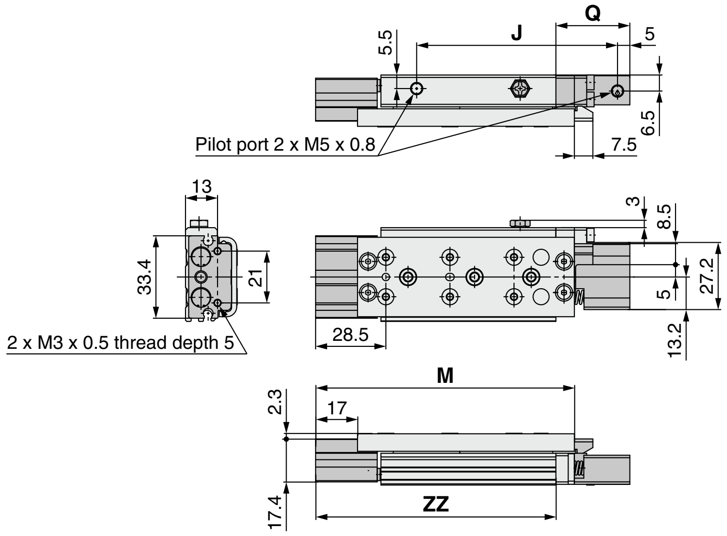


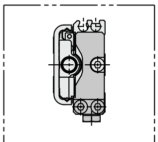


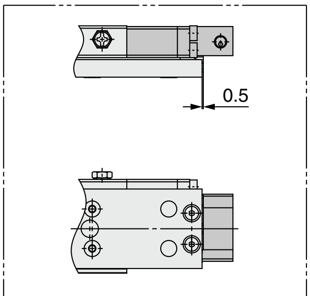
Symmetric type

∗ Dimensions other than those listed above are the same as those for the standard type.

MXQ 8C-□□4 With buffer, end lock (ø8)




Symmetric type



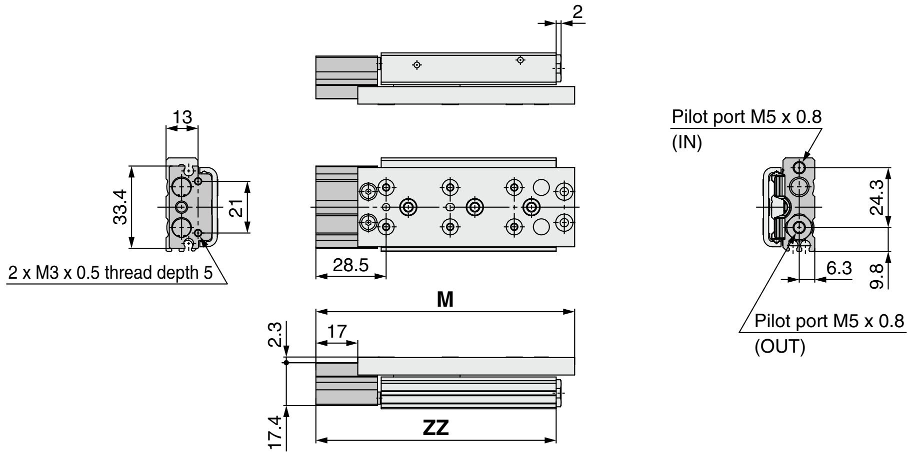
MXQ8C-75Z□4

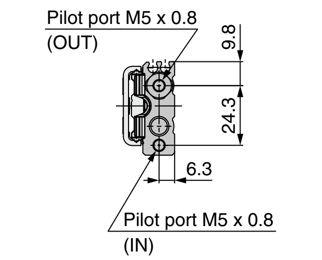
Dimensions [mm]

Model	J	Q	Standard type M	ZZ
MXQ8C-10Z□4	61.5		85	77.5
MXQ8C-20Z□4	71.5		95	87.5
MXQ8C-30Z□4	81.5	30	105	97.5
MXQ8C-40Z□4	97.5		121	113.5
MXQ8C-50Z□4	124.5		148	140.5
MXQ8C-75Z□4	139.5	43	173	142.5

∗ Dimensions other than those listed above are the same as those for the standard type.

MXQ 8C-□□5 With buffer, axial piping (ø8)





Symmetric type

Dimensions [mm]

Model	Standard type M	Shorter total length type M	ZZ
MXQ8C-10Z□5	85	76.5	77.5
MXQ8C-20Z□5	95	86.5	87.5
MXQ8C-30Z□5	105	96.5	97.5
MXQ8C-40Z□5	121	112.5	113.5
MXQ8C-50Z□5	148	139.5	140.5
MXQ8C-75Z□5	173	164.5	142.5

∗ Dimensions other than those listed above are the same as those for the standard type.

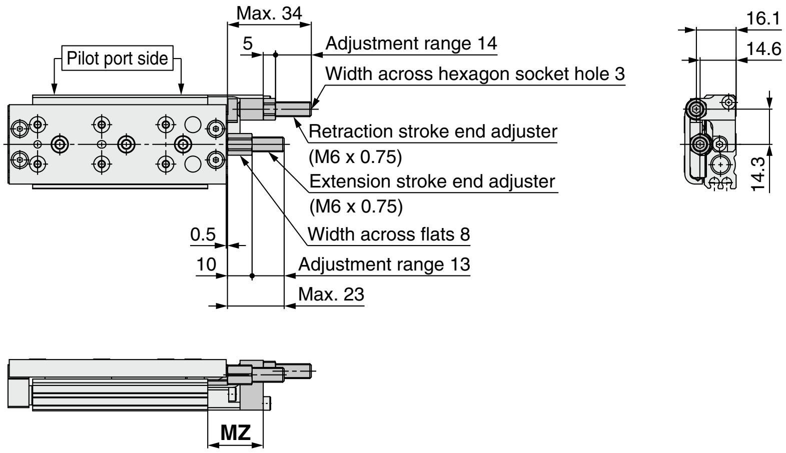
Dimensions: MXQ 8C [Functional Option]

MXQ 8C-□□6 Centralized adjuster (ø8)

For adjuster part numbers, refer to page 124-1.

Metal stopper with bumper ZA: Both ends, ZC: Retraction stroke end

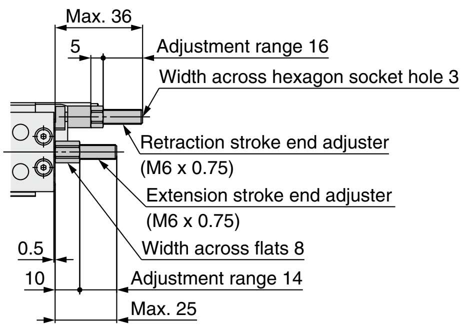
Metal stopper ZK: Both ends, ZM: Retraction stroke end



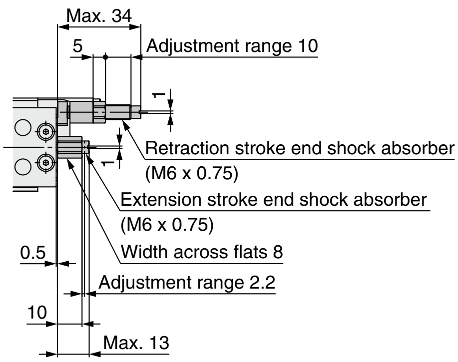
Dimensions [mm]

Model	MZ
MXQ8C-10Z□6	22.5
MXQ8C-20Z□6	
MXQ8C-30Z□6	
MXQ8C-40Z□6	
MXQ8C-50Z□6	
MXQ8C-75Z□6	46.5

Rubber stopper ZD: Both ends, ZF: Retraction stroke end



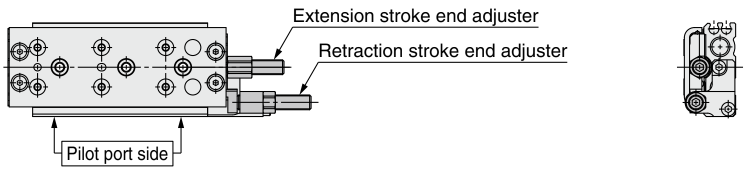
Shock absorber/RJ ZG: Both ends, ZJ: Retraction stroke end



∗ Dimensions other than those listed above are the same as those for the standard type.

MXQ 8CL-□□7 Centralized adjuster / Symmetric type (ø8)

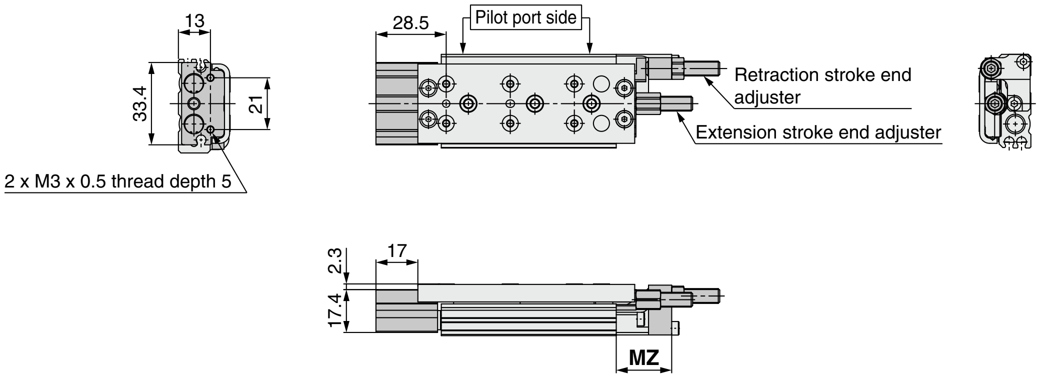
The mounting position of the retraction stroke end adjuster is on the reverse side of functional option 6.
For adjuster part numbers, refer to page 124-1.



Dimensions: MXQ 8C [Functional Option]

MXQ 8C-□□8 Buffer, Centralized adjuster (ø8)

The extension stroke end adjuster can only be mounted on a rubber stopper type or a metal stopper type.
For adjuster part numbers, refer to page 124-1.



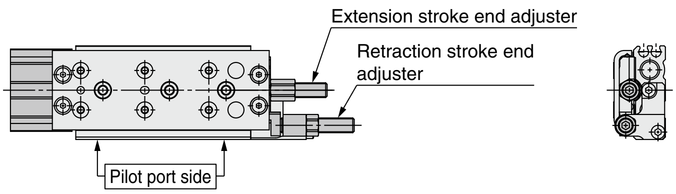
Dimensions [mm]

Model	MZ
MXQ8C-10Z□8	22.5
MXQ8C-20Z□8	
MXQ8C-30Z□8	
MXQ8C-40Z□8	
MXQ8C-50Z□8	
MXQ8C-75Z□8	46.5

∗ Dimensions other than those listed above are the same as those for the standard type.

MXQ 8CL-□□9 Buffer, Centralized adjuster / Symmetric type (ø8)

The extension stroke end adjuster can only be mounted on a rubber stopper type or a metal stopper type.
The mounting position of the retraction stroke end adjuster is on the reverse side of functional option 8.
For adjuster part numbers, refer to page 124-1.

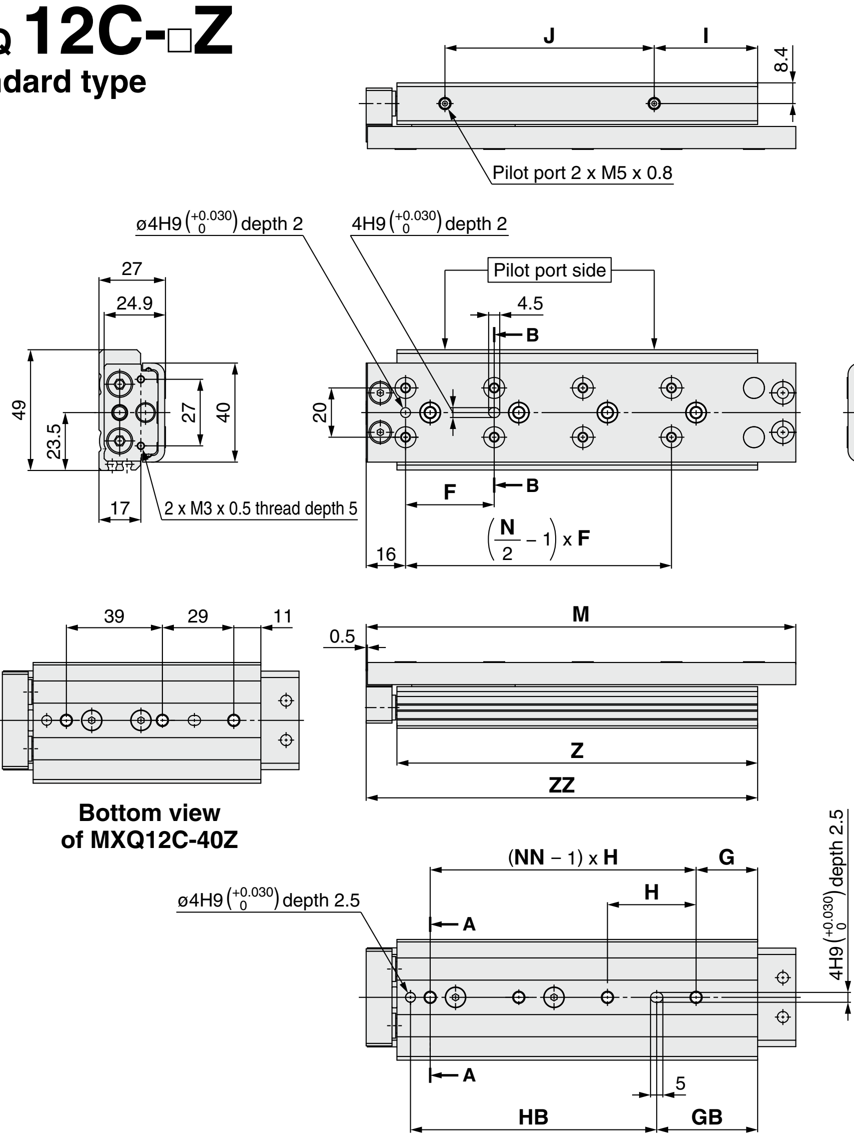


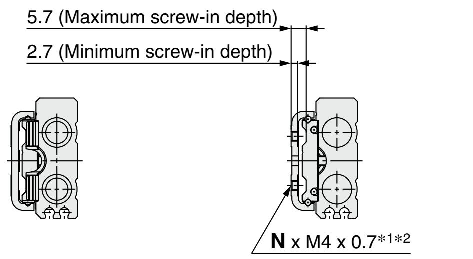
Double-ported type MXQ□A
Low thrust with high rigidity type MXQ□B
Single side-ported type MXQ□C
Height interchangeable type MXQ□
Common Adjuster Options
Auto Switch Mounting
Made to Order
Model Selection

Dimensions: MXQ 12C [Standard]

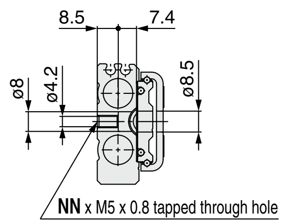
MXQ 12C-□Z
Standard type

*1 If long bolts are used, they may touch the guide block and cause a malfunction, etc. Use a screw which has an intermediate length between the maximum screw-in depth and minimum screw-in depth. Refer to page 196 for details.
*2 Since the table is made of a magnetic substance, it could become magnetized if touched by a magnet, etc. This could cause an auto switch malfunction.



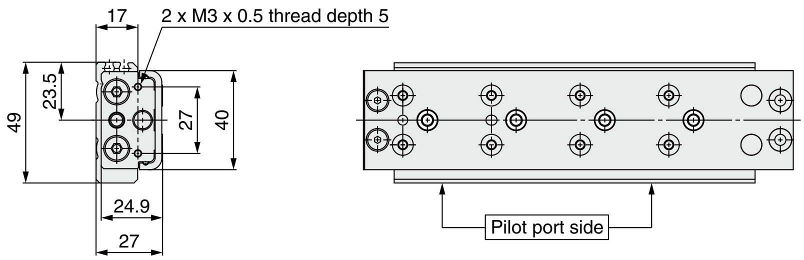


Cross-sectional view B-B



Cross-sectional view A-A

MXQ 12CL-□Z
Symmetric type



* Dimensions other than those listed above are the same as those for the standard type.

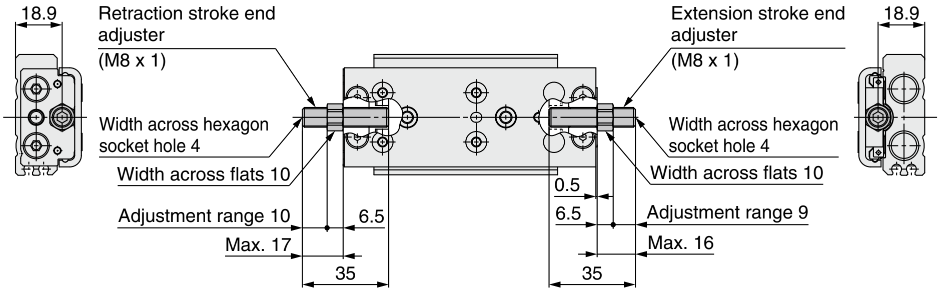
Dimensions [mm]

Model	F	G	GB	H	HB	I	J	M	N	NN	Z	ZZ
MXQ12C-10Z	28	17	11	32	46	11	32	82.5	4	2	62.5	75
MXQ12C-20Z	28	19	11	32	48	13	32	92.5	4	2	64.5	77
MXQ12C-30Z	38	21	11	40	58	15	40	102.5	4	2	74.5	87
MXQ12C-40Z	34	—	27	—	60	23	50	120.5	6	3	92.5	105
MXQ12C-50Z	34	11	37	39	60	23	60	130.5	6	3	102.5	115
MXQ12C-75Z	36	25	41	36	100	42	85	174.5	8	4	146.5	159
MXQ12C-100Z	36	14	66	36	100	42	110	199.5	10	5	171.5	184

Dimensions: MXQ 12C [Adjuster Option]

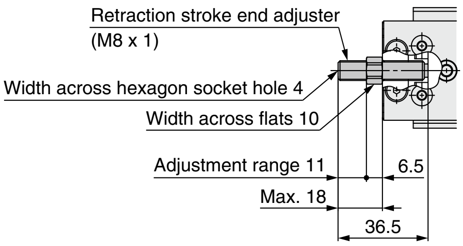
MXQ 12C-□ With adjuster option (ø12)

Metal stopper with bumper ZA: Both ends, ZB: Extension stroke end, ZC: Retraction stroke end, ZS: Retraction stroke end (Shorter total length type)
Metal stopper ZK: Both ends, ZL: Extension stroke end, ZM: Retraction stroke end, ZT: Retraction stroke end (Shorter total length type)

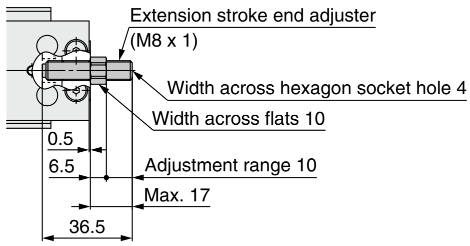


Both ends

Rubber stopper ZD: Both ends, ZE: Extension stroke end, ZF: Retraction stroke end, ZP: Retraction stroke end (Shorter total length type)

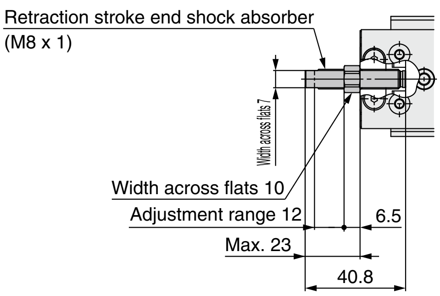


Retraction stroke end

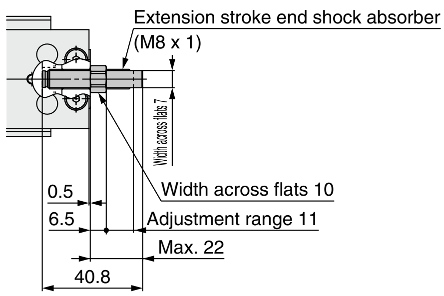


Extension stroke end

Shock absorber/RJ ZG: Both ends, ZH: Extension stroke end, ZJ: Retraction stroke end, ZQ: Retraction stroke end (Shorter total length type)



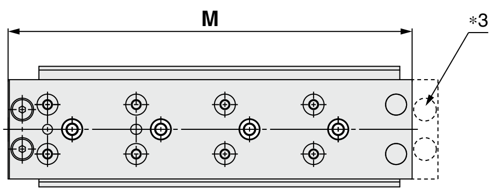
Retraction stroke end



Extension stroke end

∗ Dimensions other than those listed above are the same as those for the standard type.

MXQ 12C-□ZN Shorter total length type



∗3 As the total length has been reduced by removing the extension stroke end adjuster mounting holes, an extension stroke end adjuster cannot be mounted afterward. (Retraction stroke end adjusters can be mounted afterward.)

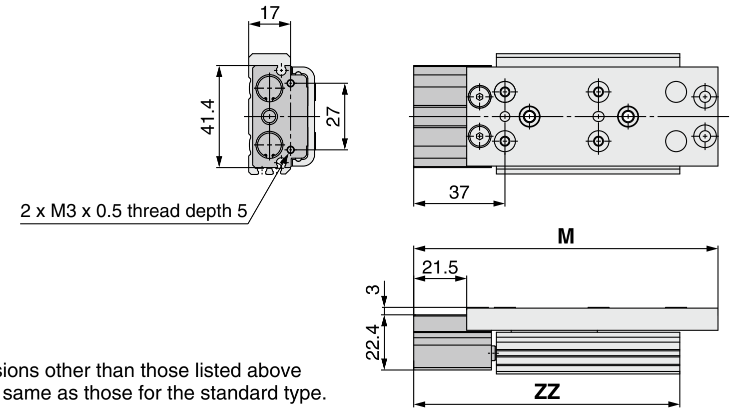
Dimensions [mm]

Model	M
MXQ12C-10ZN	72
MXQ12C-20ZN	82
MXQ12C-30ZN	92
MXQ12C-40ZN	110
MXQ12C-50ZN	120
MXQ12C-75ZN	164
MXQ12C-100ZN	189

∗ Dimensions other than those listed above are the same as those for the standard type.

Dimensions: MXQ 12C [Functional Option]

MXQ 12C-□□1 With buffer (ø12)



∗ Dimensions other than those listed above are the same as those for the standard type.

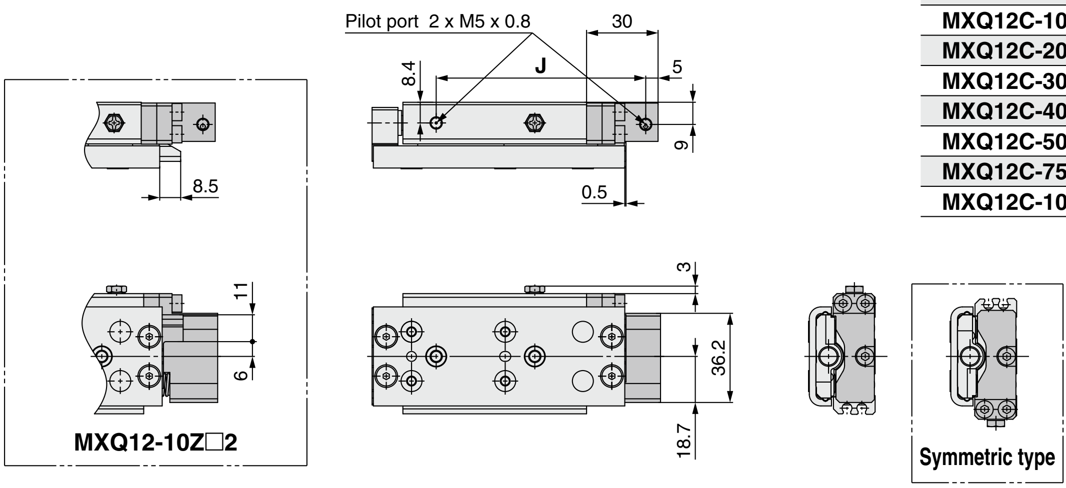
Dimensions [mm]

Model	Standard type M	Shorter total length type M	ZZ
MXQ12C-10Z□1	103.5	93	96
MXQ12C-20Z□1	113.5	103	98
MXQ12C-30Z□1	123.5	113	108
MXQ12C-40Z□1	141.5	131	126
MXQ12C-50Z□1	151.5	141	136
MXQ12C-75Z□1	195.5	185	180
MXQ12C-100Z□1	220.5	210	205

MXQ 12C-□□2 With end lock (ø12)

Dimensions [mm]

Model	J
MXQ12C-10Z□2	68
MXQ12C-20Z□2	70
MXQ12C-30Z□2	80
MXQ12C-40Z□2	98
MXQ12C-50Z□2	108
MXQ12C-75Z□2	152
MXQ12C-100Z□2	177

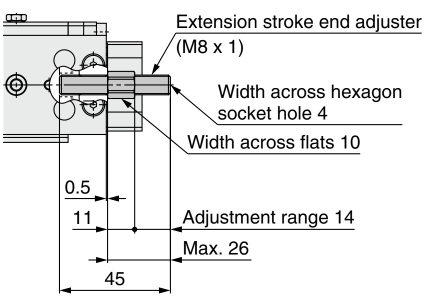


∗ Dimensions other than those listed above are the same as those for the standard type.

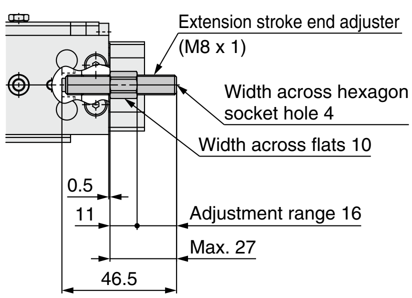
MXQ 12C-□□2 With end lock, extension stroke end adjuster (ø12)

A retraction stroke end adjuster cannot be mounted to the end lock.
For adjuster part numbers, refer to page 124-1.

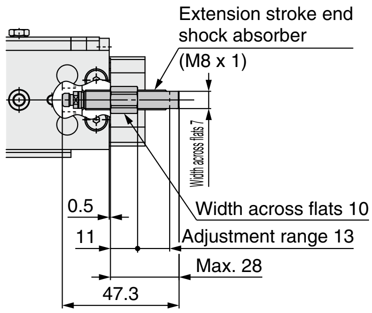
Metal stopper with bumper: ZB
Metal stopper: ZL



Rubber stopper: ZE



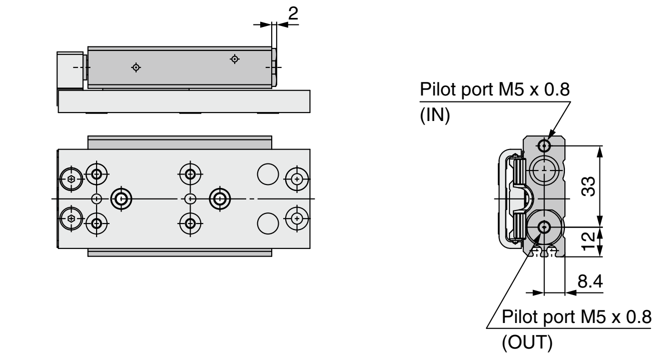
Shock absorber/RJ: ZH

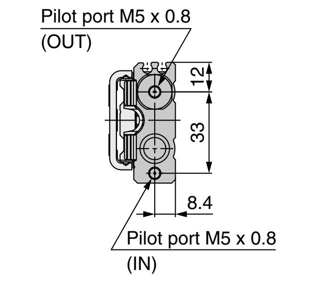


∗ Dimensions other than those listed above are the same as those for the standard type.

Dimensions: MXQ 12C [Functional Option]

MXQ 12C-□□3 Axial piping (ø12)

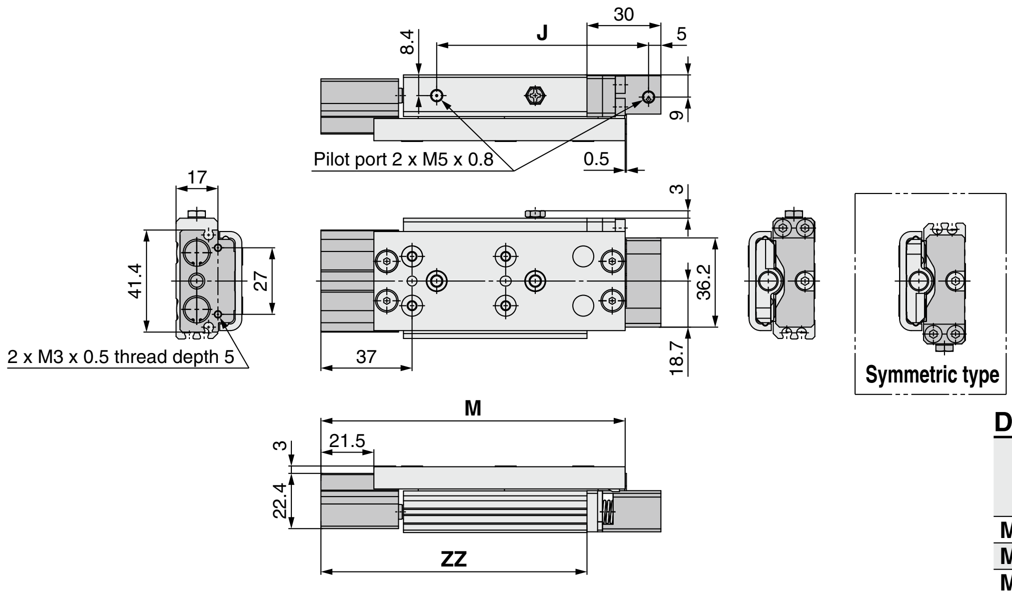


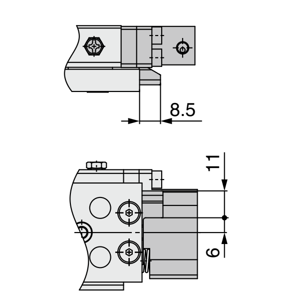


Symmetric type

＊ Dimensions other than those listed above are the same as those for the standard type.

MXQ 12C-□□4 With buffer, end lock (ø12)





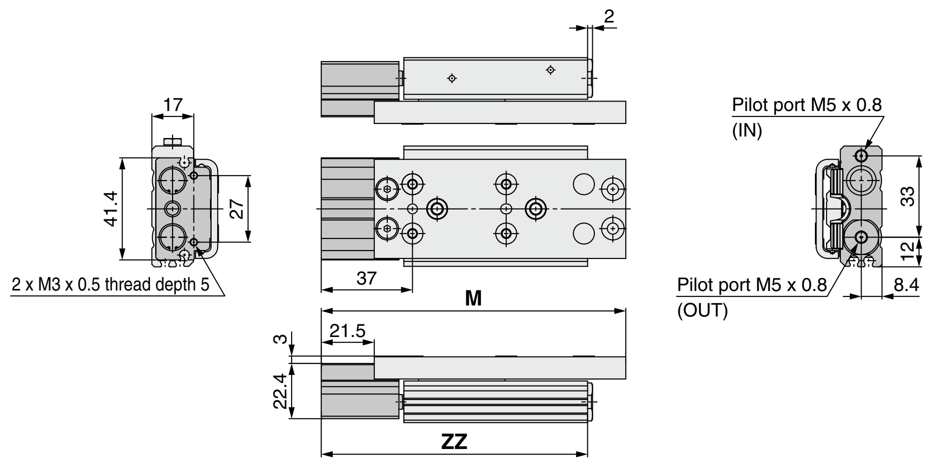
MXQ12C-10Z□4

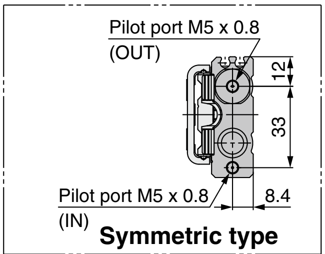
Dimensions [mm]

Model	J	Standard type M	ZZ
MXQ12C-10Z□4	68	103.5	96
MXQ12C-20Z□4	70	113.5	98
MXQ12C-30Z□4	80	123.5	108
MXQ12C-40Z□4	98	141.5	126
MXQ12C-50Z□4	108	151.5	136
MXQ12C-75Z□4	152	195.5	180
MXQ12C-100Z□4	177	220.5	205

＊ Dimensions other than those listed above are the same as those for the standard type.

MXQ 12C-□□5 With buffer, axial piping (ø12)





Symmetric type

Dimensions [mm]

Model	Standard type M	Shorter total length type M	ZZ
MXQ12C-10Z□5	103.5	93	96
MXQ12C-20Z□5	113.5	103	98
MXQ12C-30Z□5	123.5	113	108
MXQ12C-40Z□5	141.5	131	126
MXQ12C-50Z□5	151.5	141	136
MXQ12C-75Z□5	195.5	185	180
MXQ12C-100Z□5	220.5	210	205

＊ Dimensions other than those listed above are the same as those for the standard type.

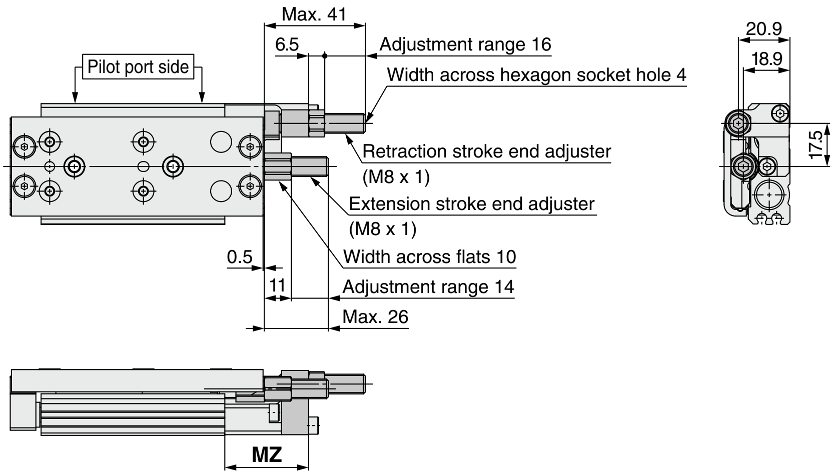
Dimensions: MXQ 12C [Functional Option]

MXQ 12C-□□6 Centralized adjuster (ø12)

For adjuster part numbers, refer to page 124-1.

Metal stopper with bumper ZA: Both ends, ZC: Retraction stroke end

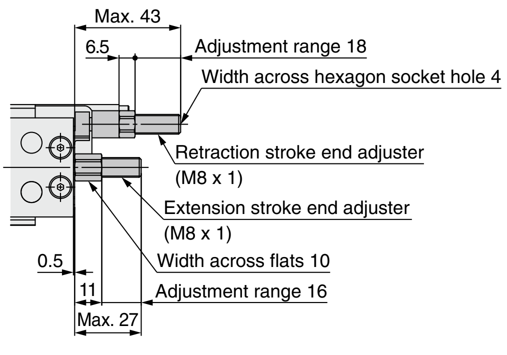
Metal stopper ZK: Both ends, ZM: Retraction stroke end



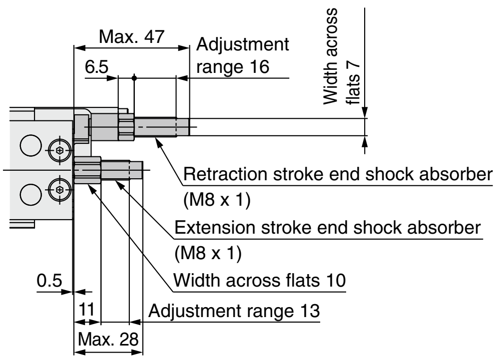
Dimensions [mm]

Model	MZ
MXQ12C-10Z□6	26
MXQ12C-20Z□6	34
MXQ12C-30Z□6	
MXQ12C-40Z□6	
MXQ12C-50Z□6	
MXQ12C-75Z□6	
MXQ12C-100Z□6	

Rubber stopper ZD: Both ends, ZF: Retraction stroke end



Shock absorber/RJ ZG: Both ends, ZJ: Retraction stroke end

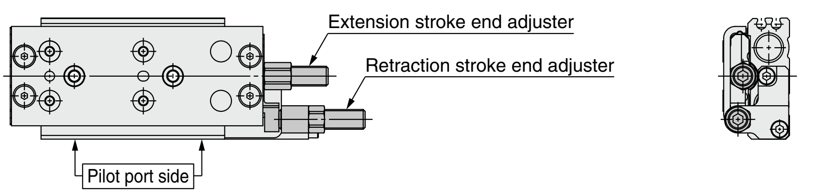


∗ Dimensions other than those listed above are the same as those for the standard type.

MXQ 12CL-□□7 Centralized adjuster / Symmetric type (ø12)

The mounting position of the retraction stroke end adjuster is on the reverse side of functional option 6.

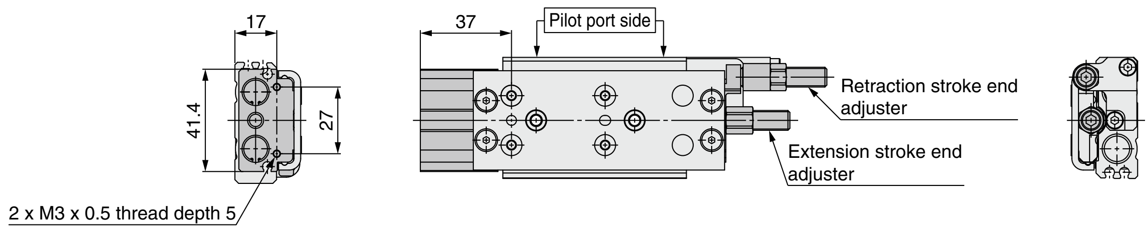
For adjuster part numbers, refer to page 124-1.

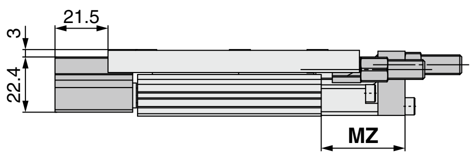


Dimensions: MXQ 12C [Functional Option]

MXQ 12C-□□8 Buffer, Centralized adjuster (ø12)

The extension stroke end adjuster can only be mounted on a rubber stopper type or a metal stopper type.
For adjuster part numbers, refer to page 124-1.





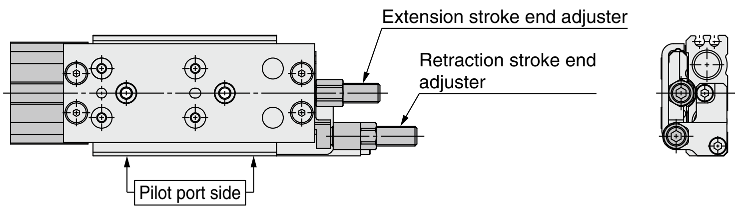
∗ Dimensions other than those listed above are the same as those for the standard type.

Dimensions [mm]

Model	MZ
MXQ12C-10Z□8	26
MXQ12C-20Z□8	34
MXQ12C-30Z□8	
MXQ12C-40Z□8	
MXQ12C-50Z□8	
MXQ12C-75Z□8	
MXQ12C-100Z□8	

MXQ 12CL-□□9 Buffer, Centralized adjuster / Symmetric type (ø12)

The extension stroke end adjuster can only be mounted on a rubber stopper type or a metal stopper type.
The mounting position of the retraction stroke end adjuster is on the reverse side of functional option 8.
For adjuster part numbers, refer to page 124-1.



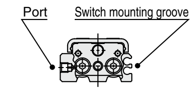
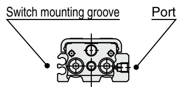
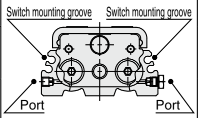
Air Slide Table
Height Interchangeable Type
MXQ Series
ø6, ø8, ø12, ø16, ø20, ø25

RoHS

How to Order

MXQ 12 [ ] - 30 ZA [ ] - M9BW [ ] - [ ]

❶ 12 ❷ [ ] ❸ 30 ❹ ZA ❺ [ ] ❻ M9BW ❼ [ ] ❽ [ ]

❶ Bore size	❷ Body option: Standard type Nil	❷ Body option: Symmetric type L	❸ Standard stroke [mm]
6			10, 20, 30, 40, 50
8			10, 20, 30, 40, 50, 75
12			10, 20, 30, 40, 50, 75, 100
16		—*1	10, 20, 30, 40, 50, 75, 100, 125
20			10, 20, 30, 40, 50, 75, 100, 125, 150
25			10, 20, 30, 40, 50, 75, 100, 125, 150*

*1 Not available, as the standard model has piping ports and auto switch mounting grooves on both sides. Please use the standard type. Only the adjuster part of the centralized adjuster is symmetric.
* The operating speed range of the stroke marked with an asterisk (*) is 50 to 300 mm/s. (Refer to page 85.)

❺ Functional options

Symbol	Functional option	❷ Body option / Bore size 6, 8, 12 / Standard type Nil	6, 8, 12 / Symmetric type L	16, 20, 25 / Standard type Nil
Nil	Without functional option	○		
1	With buffer	○		
2	With end lock	○		
3	Axial piping	○		
4	With buffer, end lock	○		
5	With buffer, axial piping	○		
6	Centralized adjuster	○	×	○
7	Centralized adjuster (Symmetric)	×	○	○
8	Buffer, Centralized adjuster	○	×	○
9	Buffer, Centralized adjuster (Symmetric)	×	○	○

❻ Auto switch

Nil	Without auto switch

* For applicable auto switches, refer to the next page.

❼ Number of auto switches

Nil	2
S	1
n	n

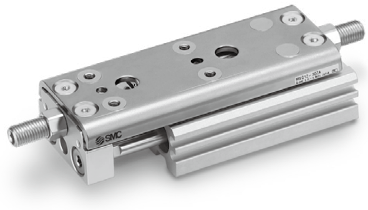
❽ Made to order

For details, refer to the next page.

❹ Adjuster options/Functional option combinations

Symbol	Adjuster type*9		Adjuster mounting position*1*8: Extension stroke end	Retraction stroke end	Nil: Without functional option	1: With buffer *2*3	2: With end lock	3: Axial piping *6	4: With buffer, end lock *2	5: With buffer, axial piping *2*6	6: Centralized adjuster *10	7: Centralized adjuster (Symmetric) *7*11	8: Buffer, Centralized adjuster *2*10	9: Buffer, Centralized adjuster (Symmetric) *2*7*11
Z	Without adjuster				○	○	○	○	○	○	×	×	×	×
ZA	Metal stopper with bumper		●	●	○	×	×	○	×	×	○	○	×	×
ZB	Metal stopper with bumper		●		○	×	○	○	×	×	×	×	×	×
ZC	Metal stopper with bumper			●	○	×	×	○	×	×	○	○	○	○
ZD	Rubber stopper		●	●	○	×	×	○	×	×	○	○	○	○
ZE	Rubber stopper		●		○	○	○	○	○	○	×	×	×	×
ZF	Rubber stopper			●	○	×	×	○	×	×	○	○	○	○
ZG	Shock absorber/RJ		●	●	○	×	×	○	×	×	○	○	×	×
ZH	Shock absorber/RJ		●		○	×	○	○	×	×	×	×	×	×
ZJ	Shock absorber/RJ			●	○	×	×	○	×	×	○	○	○	○
ZK	Metal stopper		●	●	○	×	×	○	×	×	○	○	○	○
ZL	Metal stopper		●		○	○	○	○	○	○	×	×	×	×
ZM	Metal stopper			●	○	×	×	○	×	×	○	○	○	○
ZN	Shorter total length type*4	Retraction stroke end adjuster: Without adjuster			○	○*5	×	○	×	○*5	×	×	×	×
ZP	Shorter total length type*4	Retraction stroke end adjuster: Rubber stopper		●	○	×	×	○	×	×	×	×	×	×
ZQ	Shorter total length type*4	Retraction stroke end adjuster: Shock absorber/RJ		●	○	×	×	○	×	×	×	×	×	×
ZS	Shorter total length type*4	Retraction stroke end adjuster: Metal stopper with bumper		●	○	×	×	○	×	×	×	×	×	×
ZT	Shorter total length type*4	Retraction stroke end adjuster: Metal stopper		●	○	×	×	○	×	×	×	×	×	×
ZBF	Extension stroke end adjuster: Metal stopper with bumper	Retraction stroke end adjuster: Rubber stopper	●	●	○	×	×	○	×	×	○	○	×	×
ZBJ	Extension stroke end adjuster: Metal stopper with bumper	Retraction stroke end adjuster: Shock absorber/RJ	●	●	○	×	×	○	×	×	○	○	×	×
ZBM	Extension stroke end adjuster: Metal stopper with bumper	Retraction stroke end adjuster: Metal stopper	●	●	○	×	×	○	×	×	○	○	×	×
ZEC	Extension stroke end adjuster: Rubber stopper	Retraction stroke end adjuster: Metal stopper with bumper	●	●	○	×	×	○	×	×	○	○	○	○
ZEJ	Extension stroke end adjuster: Rubber stopper	Retraction stroke end adjuster: Shock absorber/RJ	●	●	○	×	×	○	×	×	○	○	○	○
ZEM	Extension stroke end adjuster: Rubber stopper	Retraction stroke end adjuster: Metal stopper	●	●	○	×	×	○	×	×	○	○	○	○
ZHC	Extension stroke end adjuster: Shock absorber/RJ	Retraction stroke end adjuster: Metal stopper with bumper	●	●	○	×	×	○	×	×	○	○	×	×
ZHF	Extension stroke end adjuster: Shock absorber/RJ	Retraction stroke end adjuster: Rubber stopper	●	●	○	×	×	○	×	×	○	○	×	×
ZHM	Extension stroke end adjuster: Shock absorber/RJ	Retraction stroke end adjuster: Metal stopper	●	●	○	×	×	○	×	×	○	○	×	×
ZLC	Extension stroke end adjuster: Metal stopper	Retraction stroke end adjuster: Metal stopper with bumper	●	●	○	×	×	○	×	×	○	○	○	○
ZLF	Extension stroke end adjuster: Metal stopper	Retraction stroke end adjuster: Rubber stopper	●	●	○	×	×	○	×	×	○	○	○	○
ZLJ	Extension stroke end adjuster: Metal stopper	Retraction stroke end adjuster: Shock absorber/RJ	●	●	○	×	×	○	×	×	○	○	○	○

*1 ●: Shipped together with the product, but not assembled
Without any symbol for the adjuster mounting position: The adjuster can be mounted afterward.
*2 For the buffer mechanism, the buffer stroke will be shorter for the stroke that is adjusted by the extension stroke end adjuster.
*3 If it is necessary to install a retraction stroke end adjuster with a buffer mechanism, use a buffer and centralized adjuster provided with a retraction stroke end adjuster on the rear end of the body. End lock or axial piping options cannot be mounted to centralized adjuster specification models.
*4 Extension stroke end adjuster mounting holes have been removed to reduce the total length of the table.
*5 The shorter total length type can be used, but a retraction stroke end adjuster cannot be mounted afterward.
*6 For axial piping, there is no piping port on the side.
*7 For ø16 to ø25, only the centralized adjuster is symmetric.
*8 For details on the adjuster mounting position, refer to the next page.
*9 The metal stopper with bumper option is not available for ø6.
*10 Not applicable to the symmetric type
*11 Not applicable to the standard type



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)	Pre-wired connector	Applicable load	
Solid state auto 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		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 (Equiv. to NPN)	—	5 V	—	A96V	A96	●	●	●	●	○	IC circuit	—
				2-wire	24 V	12 V	100 V	A93V	A93	●	●	●	●	○*2	—	Relay, PLC
			None				100 V or less	A90V	A90	●	●	●	●	○*2	IC circuit	

*1 Water-resistant type auto switches can be mounted on the above models, but SMC cannot guarantee water resistance. A water-resistant type cylinder is recommended for use in an environment which requires water resistance.
*2 The load voltage used is 24 VDC.
* 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

* Auto switches marked with "○" are produced upon receipt of order.
* Since there are applicable auto switches other than those listed above, refer to page 125 for details.
* For details about auto switches with pre-wired connectors, refer to the **Web Catalog**.
* Auto switches are shipped together, but not assembled.

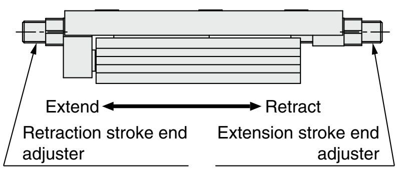
Made to Order
(For details, refer to pages 127 to 156.)

Symbol	Specifications
-X7	PTFE grease
-X9	Grease for food processing equipment
-X11	Long adjustment bolt (10 mm longer adjustment range)
-X12	Long adjustment bolt (20 mm longer adjustment range)
-X28	Long adjustment nut and bolt
-X33	Without built-in auto switch magnet
-X39	Fluororubber seal
-X42	Anti-corrosive guide unit
-X580	Low-speed specification (15 to 50 mm/s)
-X2100	End plate compatible with the current MXQ series
-X2128	Heat-resistant specification (–10 to 100°)
-X2200	Side adjuster specification
-X2201	Combined use of shock absorber + metal stopper
-X2202	Extension stroke end adjuster fixed from the axial direction

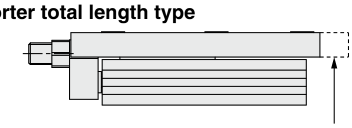
Moisture Control Tube IDK Series

When operating an actuator with a small diameter and a short stroke at a high frequency, dew condensation (water droplets) may occur inside the piping depending on the conditions. Simply connecting the moisture control tube to the actuator will prevent dew condensation from occurring. For details, refer to the **Web Catalog**.

Adjuster Mounting Position (Exception: Centralized Adjuster)



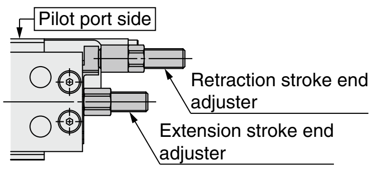
Shorter total length type



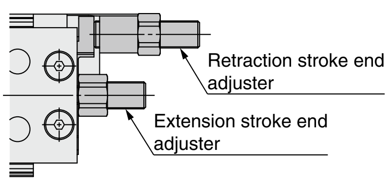
Extension stroke end adjuster mounting holes have been removed to reduce the total length of the table.

Centralized Adjuster Mounting Position

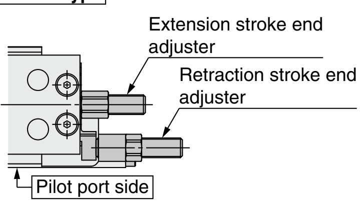
Standard type ø6 to ø12



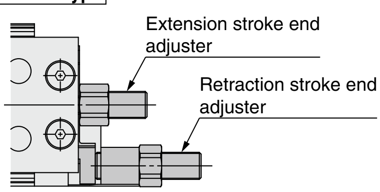
Standard type ø16 to ø25



Symmetric type ø6 to ø12



Symmetric type ø16 to ø25



⚠ Precautions

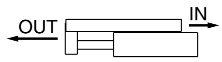
Be sure to read "Specific Product Precautions" before handling. Refer to page 195.

Specifications

Bore size [mm]	6	8	12	16	20	25
Piping port size	M5 x 0.8					
Fluid	Air					
Action	Double acting					
Operating pressure	0.15 to 0.7 MPa*1 (End lock: 0.35 to 0.7 MPa)					
Proof pressure	1.05 MPa					
Ambient and fluid temperatures	–10 to 60°C					
Operating speed range (Average operating speed)	50 to 500 mm/s (Metal stopper with bumper: 50 to 300 mm/s) (Metal stopper: 50 to 200 mm/s) * in the standard stroke table on page 83: 50 to 300 mm/s					
Cushion (Without adjuster)	Internal rubber bumper					
Cushion (With adjuster)	Metal stopper with bumper, Rubber stopper, Shock absorber, Metal stopper					
Lubrication	Non-lube					
Auto switch	Solid state auto switch, Reed auto switch (2-wire, 3-wire) 2-color indicator solid state auto switch (2-wire, 3-wire)					
Stroke length tolerance	+2 to 0 mm					

*1 Refer to page 86 for the minimum operating pressure of the metal stopper with bumper. If the operating pressure is lower than the minimum operating pressure, the repeated accuracy will decline.
Minimum operating pressure of the metal stopper with bumper: Pressure required to fully compress the protrusion of the bumper to get in contact with the metal part
The operating pressure of the bore size 20 cylinder with shock absorber is 0.15 to 0.6 MPa.

Theoretical Output



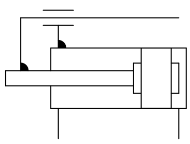
The dual rod ensures an output twice that of current cylinders. [N]

Bore size [mm]	Rod size [mm]	Operating direction	Piston area [mm²]	Operating pressure [MPa]					
				0.2	0.3	0.4	0.5	0.6	0.7
6	3	OUT	57	11	17	23	29	34	40
		IN	42	8	13	17	21	25	29
8	4	OUT	101	20	30	40	51	61	71
		IN	75	15	23	30	38	45	53
12	6	OUT	226	45	68	90	113	136	158
		IN	170	34	51	68	85	102	119
16	6	OUT	402	80	121	161	201	241	281
		IN	346	69	104	138	173	207	242
20	8	OUT	628	126	188	251	314	377	440
		IN	528	106	158	211	264	317	369
25	10	OUT	982	196	295	393	491	589	687
		IN	825	165	247	330	412	495	577

* When the metal stopper with bumper is used for positioning, the theoretical output may vary depending on the full compression force of the bumper. For details, refer to the adjuster specifications on page 86.

Symbol

Rubber bumper



Weight

[g]

Model	Standard stroke [mm]									Reduction of the shorter total length type	Additional weight of adjuster option			Extra for option		
	10	20	30	40	50	75	100	125	150		Extension stroke end	Extension stroke end For end lock	Retraction stroke end	Buffer	End lock	Axial piping
MXQ6	120	120	160	180	190	—	—	—	—	–6	10	11 (9)	8	30	40	No addition
MXQ8	150	180	190	230	310	350	—	—	—	–6	10	11 (9)	8	30	60	
MXQ12	290	310	340	400	430	590	670	—	—	–12	20	22 (20)	16	70	80	
MXQ16	500	520	570	650	690	840	1,100	1,200	—	–21	40	38 (34)	30	120	150	
MXQ20	870	870	900	990	1,100	1,300	1,700	2,000	2,100	–33	70	62 (34)	50 (80)	190	400	
MXQ25	1,400	1,400	1,500	1,600	1,900	2,100	2,300	3,000	3,300	–60	110	102 (95)	80	310	700	

* Value in ( ) is the additional weight of the shock absorber.

Weight of Centralized Adjuster

[g]

Model	Standard stroke [mm]									Reduction only when the product comes with a retraction stroke end adjuster
	10	20	30	40	50	75	100	125	150	
MXQ6	160	165	210	230	240	—	—	—	—	–10
MXQ8	195	225	235	275	355	410	—	—	—	–10
MXQ12	375	405	435	495	525	685	765	—	—	–20
MXQ16	660	690	740	820	860	1,010	1,270	1,370	—	–40
MXQ20	1,140 (–60)	1,170 (–60)	1,200 (–60)	1,290 (–60)	1,400 (–60)	1,600 (–60)	2,050 (–60)	2,350 (–60)	2,450 (–60)	–60 (–25)
MXQ25	1,880	1,920	2,020	2,120	2,420	2,620	2,930	3,630	3,930	–100

* Value in ( ) is the additional weight of the shock absorber.

Weight of Moving Parts

[g]

Model	Standard stroke [mm]									Reduction of the shorter total length type	Additional weight of adjuster option		Extra for option		
	10	20	30	40	50	75	100	125	150		Extension stroke end	Retraction stroke end	Buffer	End lock	Axial piping
MXQ6	61	66	80	89	97	—	—	—	—	–6	10	8	30	10	No addition
MXQ8	68	76	85	97	116	138	—	—	—	–6	10	8	30	10	
MXQ12	143	154	168	192	206	263	300	—	—	–12	20	16	70	20	
MXQ16	240	257	277	309	329	389	469	520	—	–21	40	30	120	35	
MXQ20	408	410	437	464	503	588	747	815	882	–33	70	50 (80)	190	65	
MXQ25	674	681	721	761	836	935	1,078	1,284	1,384	–60	110	80	310	110	

* Value in ( ) is the additional weight of the shock absorber.

Maximum Load Weight

[kg]

Model	Without adjuster	Adjuster option				
	Internal rubber bumper	Rubber stopper	Metal stopper with bumper	Shock absorber/RJ		Metal stopper
				Horizontal	Vertical	
MXQ6	0.6	0.6	—	0.6		0.6
MXQ8	1	1	1	1		1
MXQ12	2	2	2	1.5	1	2
MXQ16	4	4	4	4	2.5	4
MXQ20	6	6	6	6		6
MXQ25	9	9	9	9	6	9

Allowable Kinetic Energy

[J]

Model	Without adjuster	Adjuster option			
	Internal rubber bumper	Metal stopper with bumper	Rubber stopper	Shock absorber/RJ	Metal stopper
MXQ6	0.03	—	0.06	0.175	0.009
MXQ8	0.04	0.018	0.06	0.2	0.009
MXQ12	0.11	0.04	0.12	0.33	0.02
MXQ16	0.12	0.08	0.2	0.76	0.04
MXQ20	0.24	0.12	0.4	1.47	0.06
MXQ25	0.39	0.18	0.6	1.73	0.09

* When selecting a model, refer to Model Selection on page 157 or use the Model Selection Software. Keep in mind that a model cannot be selected with only the allowable kinetic energy.

Optional Specifications

With End Lock

Model	MXQ6	MXQ8	MXQ12	MXQ16	MXQ20	MXQ25
Operating pressure range [MPa]	0.35 to 0.7					
Holding force [N]	12	12	23	45	70	110

With Buffer Mechanism

Model		MXQ6	MXQ8	MXQ12	MXQ16	MXQ20	MXQ25
Operating speed range [mm/s]		50 to 500 (Horizontal mounting 50 to 300)					
Buffer stroke [mm]		5		10			
Buffer stroke load [N]	Stroke at 0 [mm]	3	5	9	16	25	40
	Maximum stroke	6	8	15	24	38	59

Auto Switches Applicable to Buffer

Type	Model	Specifications	Electrical entry direction
Solid state auto switch	D-M9BV	With light, 2-wire	Vertical
	D-M9NV	With light, 3-wire, Output: NPN	
	D-M9PV	With light, 3-wire, Output: PNP	

Adjusters

For adjuster option models and dimensions, refer to pages 123 and 124.

Metal Stopper with Bumper

Model	MXQ8	MXQ12	MXQ16	MXQ20	MXQ25
Max. absorbed energy [J]	0.018	0.04	0.08	0.12	0.18
Stroke absorption [mm]	2	2.8	3.6	4.4	5.5
Min. operating pressure of metal stopper with bumper*1*2 [MPa]	0.3	0.3	0.2	0.2	0.2
Reference) **Full compression force of bumper [N]**	20	42	65	97	154
Mounting screw size [mm]	M6 x 0.75	M8 x 1	M10 x 1	M12 x 1	M14 x 1.5

*1 Minimum operating pressure required to fully compress the protrusion of the bumper to get in contact with the metal part
When using the metal stopper with bumper for positioning, use it at a pressure level exceeding the minimum operating pressure. For vertical mounting, the workpiece mass should be taken into consideration. For details, refer to Specific Product Precautions on page 196.
*2 Not available for ø6

Rubber Stopper

Model	MXQ6	MXQ8	MXQ12	MXQ16	MXQ20	MXQ25
Max. absorbed energy [J]	0.06		0.12	0.2	0.4	0.6
Mounting screw size [mm]	M6 x 0.75		M8 x 1	M10 x 1	M12 x 1	M14 x 1.5

Shock Absorber/RJ

Model	MXQ6	MXQ8	MXQ12	MXQ16	MXQ20	MXQ25
Max. absorbed energy [J]	0.35		0.5	1.5	3	3.7
Stroke absorption [mm]	3		5	6	7	10
Collision speed [mm/s]	50 to 500					
Max. operating frequency [cycle/min]	80		80	70		45
Max. allowable thrust [N]	150		245	422		814
Spring force (Extended) [N]	1.3		2.8	5.4		6.4
Spring force (Compressed) [N]	3.9		4.9	8		15
Mounting screw size [mm]	M6 x 0.75		M8 x 1	M10 x 1		M14 x 1.5

Metal Stopper

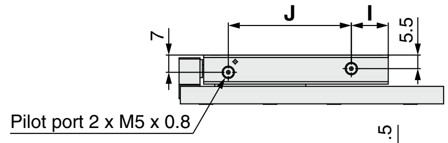
Model	MXQ6	MXQ8	MXQ12	MXQ16	MXQ20	MXQ25
Max. absorbed energy [J]	0.009		0.02	0.04	0.06	0.09
Mounting screw size [mm]	M6 x 0.75		M8 x 1	M10 x 1	M12 x 1	M14 x 1.5

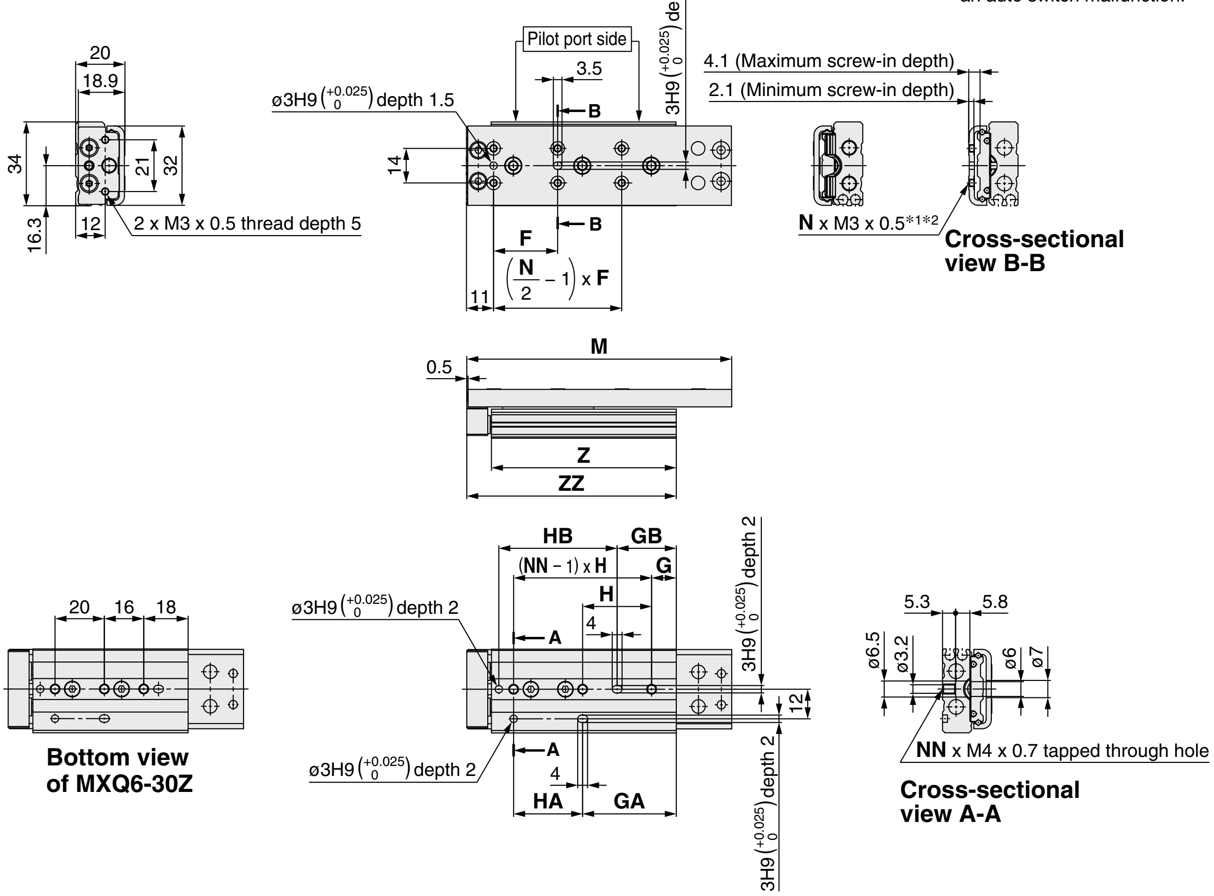
Dimensions: MXQ 6 [Standard]

MXQ 6-□Z Standard type

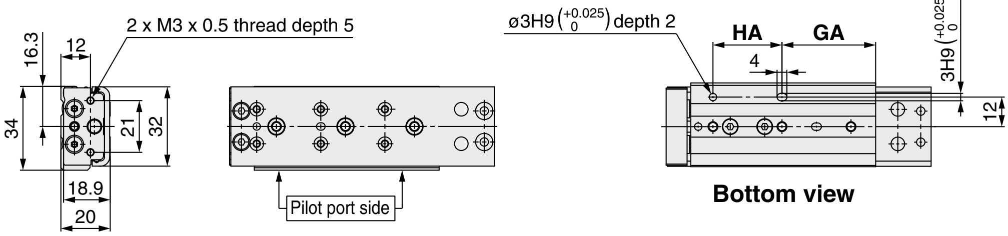
∗1 If long bolts are used, they may touch the guide block and cause a malfunction, etc. Use a screw which has an intermediate length between the maximum screw-in depth and minimum screw-in depth. Refer to page 196 for details.

∗2 Since the table is made of a magnetic substance, it could become magnetized if touched by a magnet, etc. This could cause an auto switch malfunction.





MXQ 6L-□Z Symmetric type



∗ Dimensions other than those listed above are the same as those for the standard type.

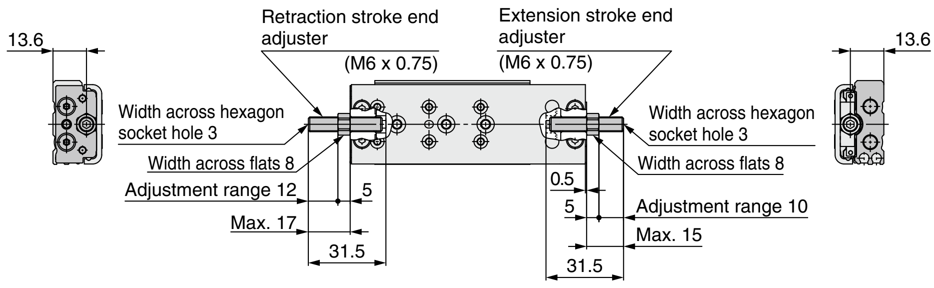
Dimensions [mm]

Model	F	G	GA	GB	H	HA	HB	I	J	M	N	NN	Z	ZZ
MXQ6-10Z	22	18	25	9	23	16	38	10	30	64.5	4	2	50	60
MXQ6-20Z	25	15	15	9	26	26	38	10	30	74.5	4	2	50	60
MXQ6-30Z	21	—	34	12	—	20	48	13	40	95.5	6	3	63	73
MXQ6-40Z	26	10	38	24	28	28	48	15	50	107.5	6	3	75	85
MXQ6-50Z	27	20	48	34	28	28	48	15	60	117.5	6	3	85	95

Dimensions: MXQ 6 [Adjuster Option]

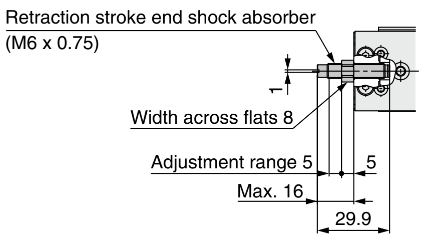
MXQ 6-□ With adjuster option (ø6)

Rubber stopper ZD: Both ends, ZE: Extension stroke end, ZF: Retraction stroke end, ZP: Retraction stroke end (Shorter total length type)

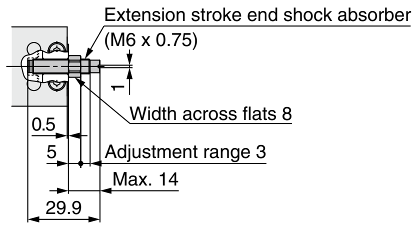


Both ends

Shock absorber/RJ ZG: Both ends, ZH: Extension stroke end, ZJ: Retraction stroke end, ZQ: Retraction stroke end (Shorter total length type)

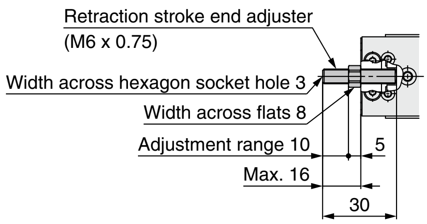


Retraction stroke end

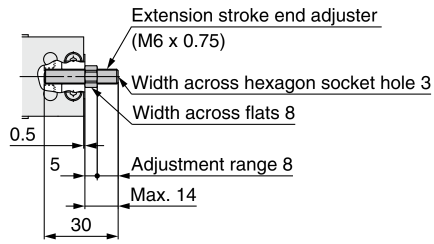


Extension stroke end

Metal stopper ZK: Both ends, ZL: Extension stroke end, ZM: Retraction stroke end, ZT: Retraction stroke end (Shorter total length type)



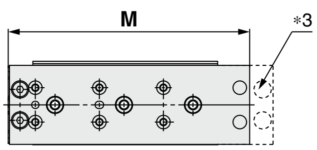
Retraction stroke end



Extension stroke end

∗ Dimensions other than those listed above are the same as those for the standard type.

MXQ 6-□ZN Shorter total length type



∗3 As the total length has been reduced by removing the extension stroke end adjuster mounting holes, an extension stroke end adjuster cannot be mounted afterward. (Retraction stroke end adjusters can be mounted afterward.)

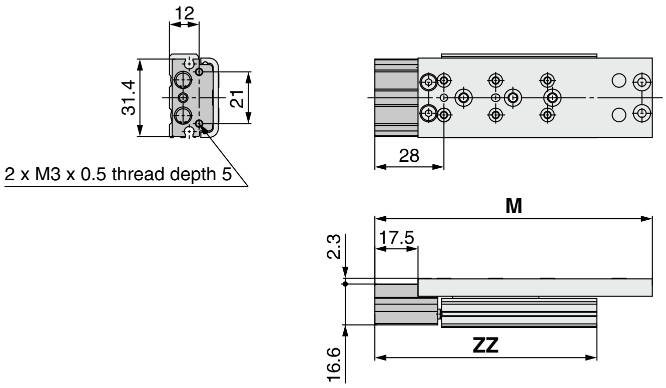
Dimensions [mm]

Model	M
MXQ6-10ZN	55
MXQ6-20ZN	65
MXQ6-30ZN	86
MXQ6-40ZN	98
MXQ6-50ZN	108

∗ Dimensions other than those listed above are the same as those for the standard type.

Dimensions: MXQ 6 [Functional Option]

MXQ 6-□□1 With buffer (ø6)

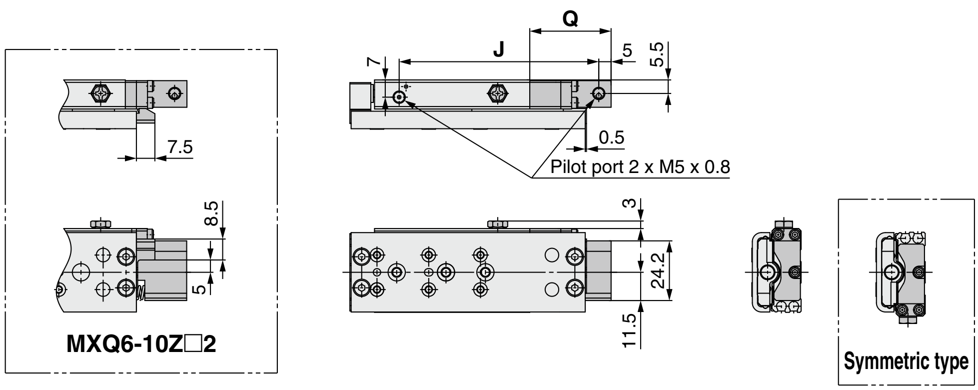


Dimensions [mm]

Model	Standard type M	Shorter total length type M	ZZ
MXQ6-10Z□1	81.5	72	77
MXQ6-20Z□1	91.5	82	
MXQ6-30Z□1	112.5	103	90
MXQ6-40Z□1	124.5	115	102
MXQ6-50Z□1	134.5	125	112

∗ Dimensions other than those listed above are the same as those for the standard type.

MXQ 6-□□2 With end lock (ø6)



Dimensions [mm]

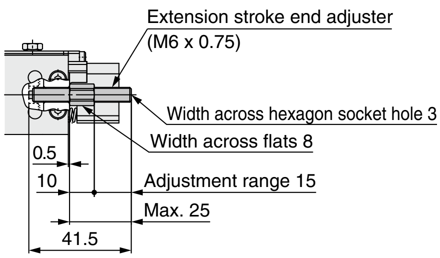
Model	J	Q
MXQ6-10Z□2	60	25
MXQ6-20Z□2		
MXQ6-30Z□2	81	33
MXQ6-40Z□2	93	
MXQ6-50Z□2	103	

∗ Dimensions other than those listed above are the same as those for the standard type.

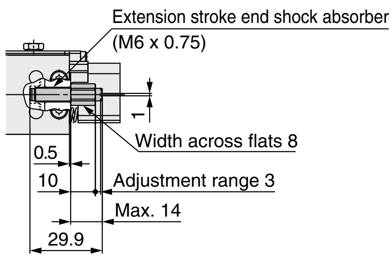
MXQ 6-□□2 With end lock, extension stroke end adjuster (ø6)

A retraction stroke end adjuster cannot be mounted to the end lock.
For adjuster part numbers, refer to page 124-1.

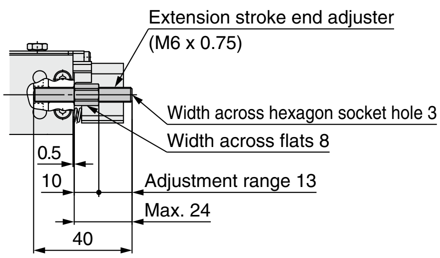
Rubber stopper: ZE



Shock absorber/RJ: ZH



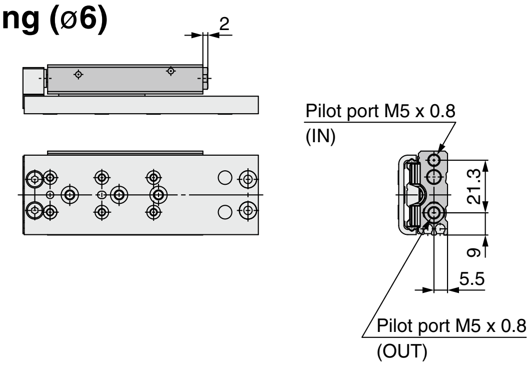
Metal stopper: ZL

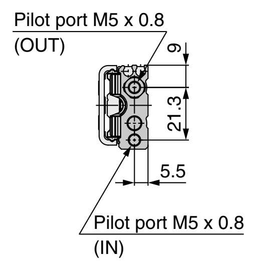


∗ Dimensions other than those listed above are the same as those for the standard type.

Dimensions: MXQ 6 [Functional Option]

MXQ 6-□□3 Axial piping (ø6)

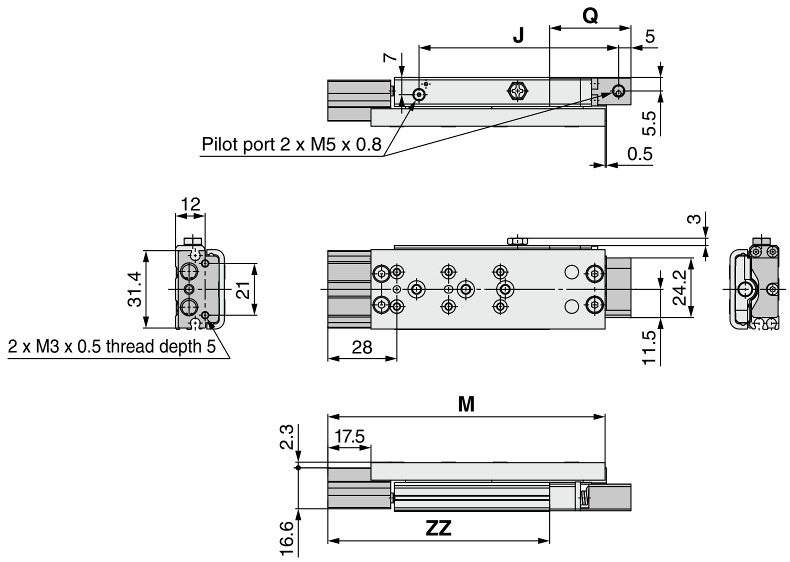


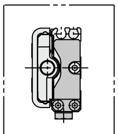


Symmetric type

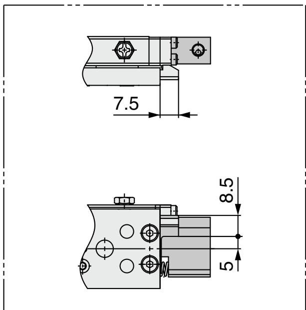
* Dimensions other than those listed above are the same as those for the standard type.

MXQ 6-□□4 With buffer, end lock (ø6)





Symmetric type



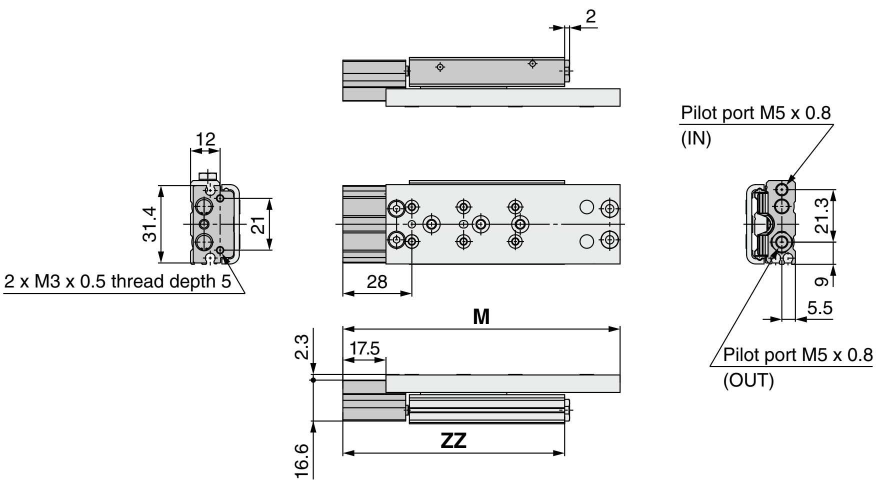
MXQ6-10Z□4

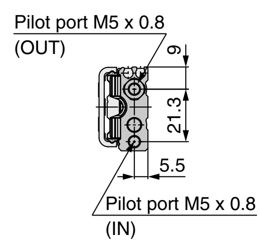
Dimensions [mm]

Model	J	Q	Standard type M	ZZ
MXQ6-10Z□4	60	25	81.5	77
MXQ6-20Z□4			91.5	
MXQ6-30Z□4	81	33	112.5	90
MXQ6-40Z□4	93		124.5	102
MXQ6-50Z□4	103		134.5	112

* Dimensions other than those listed above are the same as those for the standard type.

MXQ 6-□□5 With buffer, axial piping (ø6)





Symmetric type

Dimensions [mm]

Model	Standard type M	Shorter total length type M	ZZ
MXQ6-10Z□5	81.5	72	77
MXQ6-20Z□5	91.5	82	
MXQ6-30Z□5	112.5	103	90
MXQ6-40Z□5	124.5	115	102
MXQ6-50Z□5	134.5	125	112

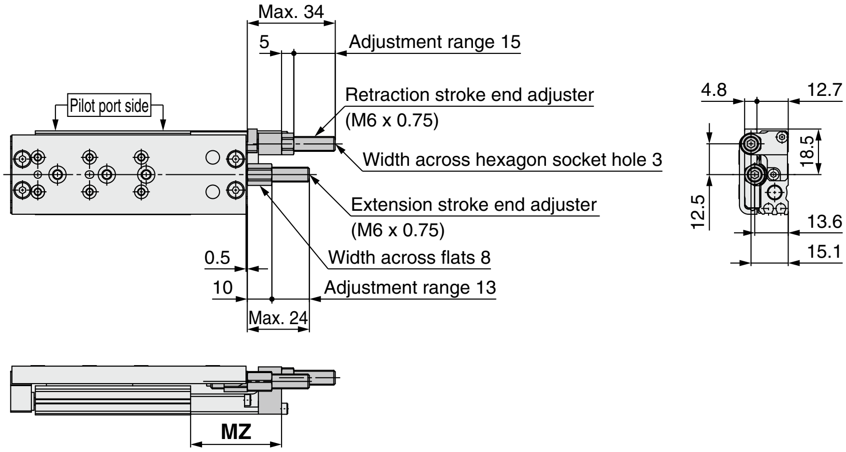
* Dimensions other than those listed above are the same as those for the standard type.

Dimensions: MXQ 6 [Functional Option]

MXQ 6-□□6 Centralized adjuster (ø6)

For adjuster part numbers, refer to page 124-1.

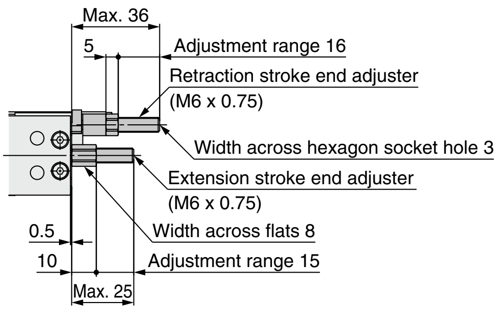
Metal stopper ZK: Both ends,
ZM: Retraction stroke end



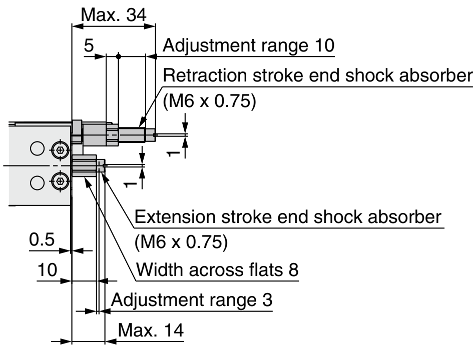
Dimensions [mm]

Model	MZ
MXQ6-10Z□6	18.9
MXQ6-20Z□6	28.9
MXQ6-30Z□6	36.9
MXQ6-40Z□6	
MXQ6-50Z□6	

Rubber stopper ZD: Both ends,
ZF: Retraction stroke end



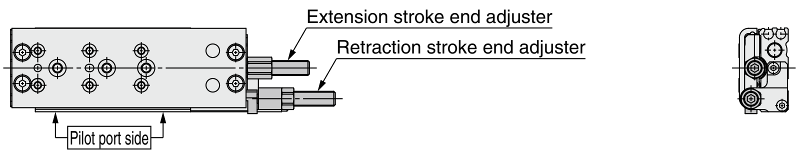
Shock absorber/RJ ZG: Both ends,
ZJ: Retraction stroke end



∗ Dimensions other than those listed above are the same as those for the standard type.

MXQ 6L-□□7 Centralized adjuster / Symmetric type (ø6)

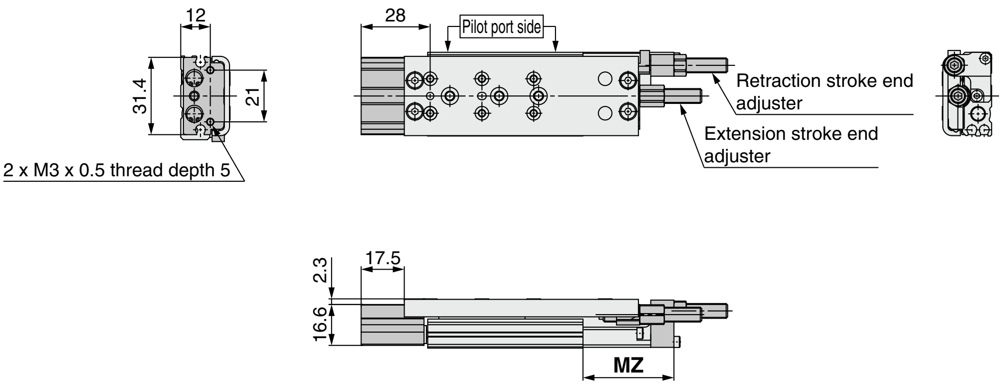
The mounting position of the retraction stroke end adjuster is on the reverse side of functional option 6.
For adjuster part numbers, refer to page 124-1.



Dimensions: MXQ 6 [Functional Option]

MXQ 6-□□8 Buffer, Centralized adjuster (ø6)

The extension stroke end adjuster can only be mounted on a rubber stopper type or a metal stopper type.
For adjuster part numbers, refer to page 124-1.



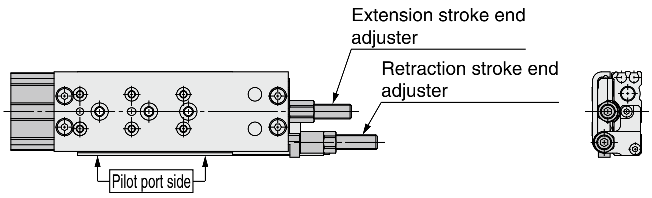
Dimensions [mm]

Model	MZ
MXQ6-10Z□8	18.9
MXQ6-20Z□8	28.9
MXQ6-30Z□8	36.9
MXQ6-40Z□8	
MXQ6-50Z□8	

∗ Dimensions other than those listed above are the same as those for the standard type.

MXQ 6L-□□9 Buffer, Centralized adjuster / Symmetric type (ø6)

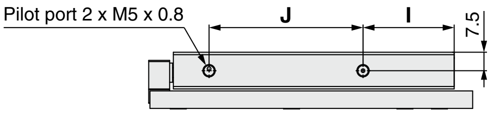
The extension stroke end adjuster can only be mounted on a rubber stopper type or a metal stopper type.
The mounting position of the retraction stroke end adjuster is on the reverse side of functional option 8.
For adjuster part numbers, refer to page 124-1.

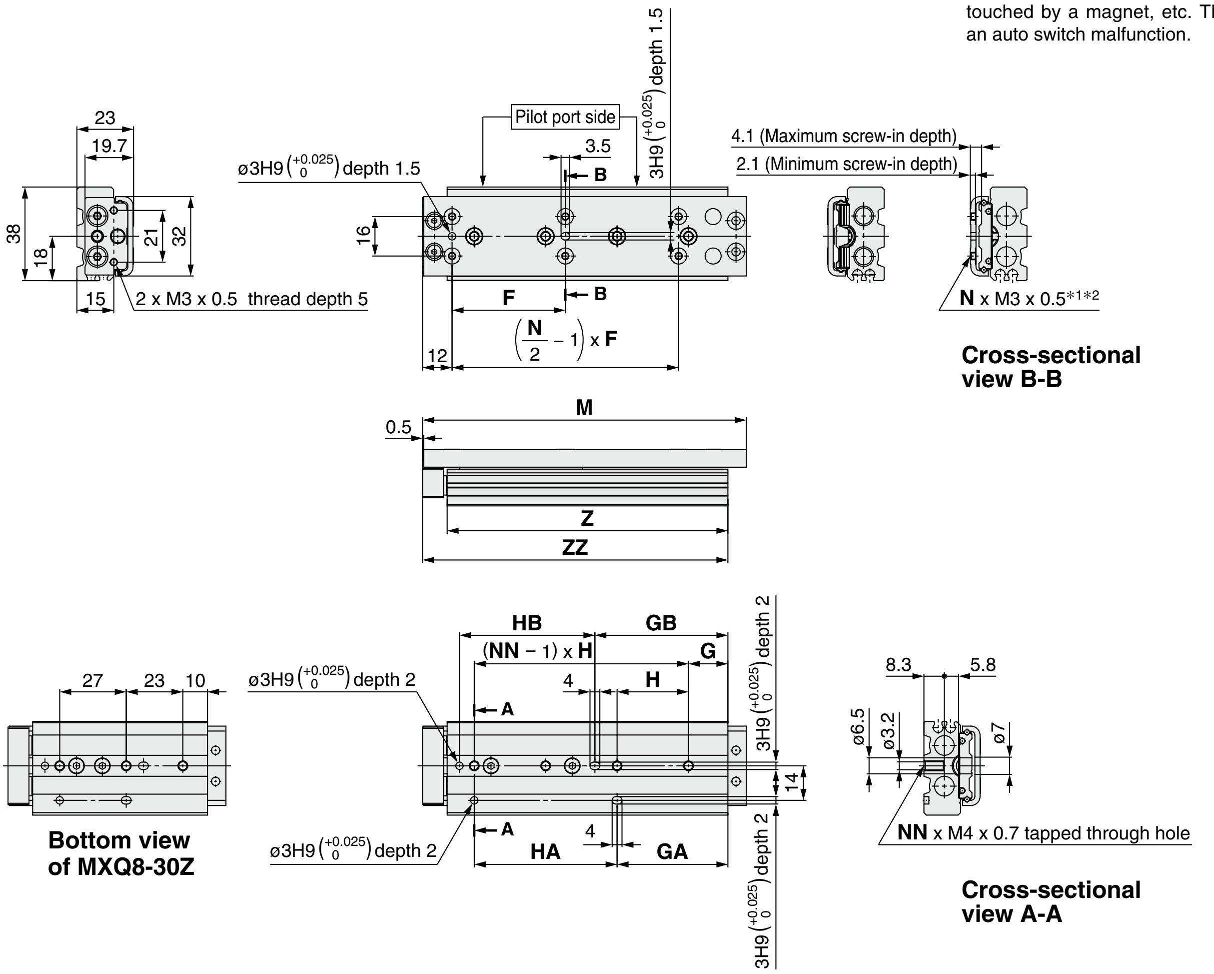


Dimensions: MXQ 8 [Standard]

MXQ 8-□Z Standard type

∗1 If long bolts are used, they may touch the guide block and cause a malfunction, etc. Use a screw which has an intermediate length between the maximum screw-in depth and minimum screw-in depth. Refer to page 196 for details.
∗2 Since the table is made of a magnetic substance, it could become magnetized if touched by a magnet, etc. This could cause an auto switch malfunction.



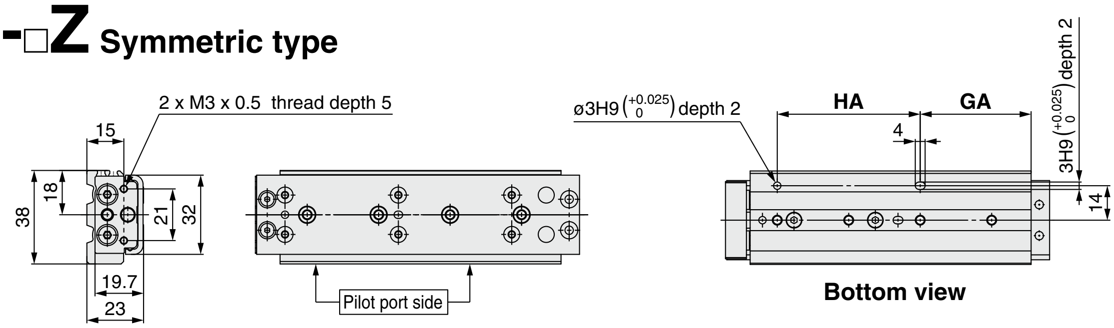


Cross-sectional view B-B

Bottom view of MXQ8-30Z

Cross-sectional view A-A

MXQ 8L-□Z Symmetric type



Bottom view

∗ Dimensions other than those listed above are the same as those for the standard type.

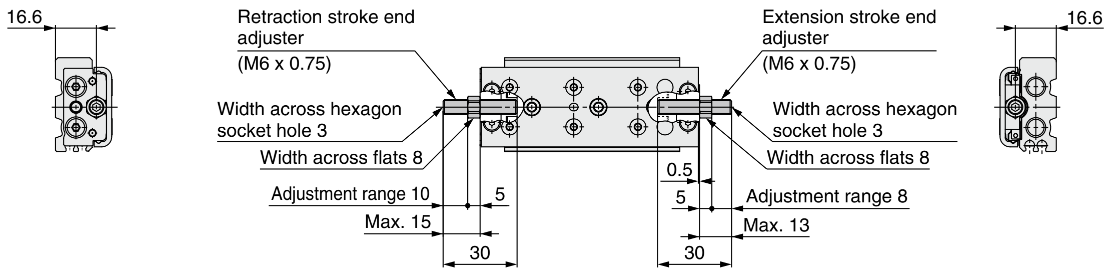
Dimensions [mm]

Model	F	G	GA	GB	H	HA	HB	I	J	M	N	NN	Z	ZZ
MXQ8-10Z	25	15	21	9	25	19	37	10	26.5	68.5	4	2	51	61
MXQ8-20Z	25	22	22	16	28	28	40	14	32.5	78.5	4	2	61	71
MXQ8-30Z	26	—	33	26	—	27	40	14.5	42	88.5	6	3	71	81
MXQ8-40Z	32	14	45	27	31	31	55	20	52.5	104.5	6	3	87	97
MXQ8-50Z	46	16	45	54	29	58	55	37	62.5	131.5	6	4	114	124
MXQ8-75Z	50	15	45	56	30	60	55	10	91.5	156.5	6	4	116	126

Dimensions: MXQ 8 [Adjuster Option]

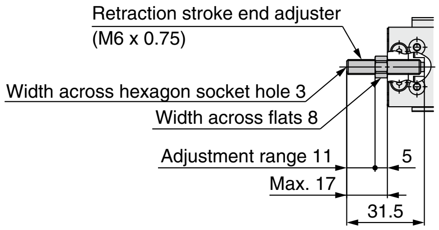
MXQ 8-□ With adjuster option (ø8)

Metal stopper with bumper ZA: Both ends, ZB: Extension stroke end, ZC: Retraction stroke end, ZS: Retraction stroke end (Shorter total length type)
Metal stopper ZK: Both ends, ZL: Extension stroke end, ZM: Retraction stroke end, ZT: Retraction stroke end (Shorter total length type)

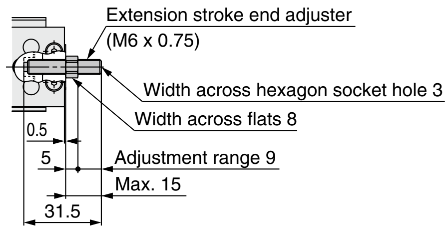


Both ends

Rubber stopper ZD: Both ends, ZE: Extension stroke end, ZF: Retraction stroke end, ZP: Retraction stroke end (Shorter total length type)

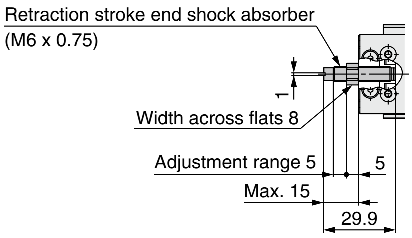


Retraction stroke end

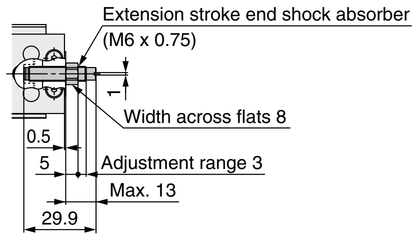


Extension stroke end

Shock absorber/RJ ZG: Both ends, ZH: Extension stroke end, ZJ: Retraction stroke end, ZQ: Retraction stroke end (Shorter total length type)



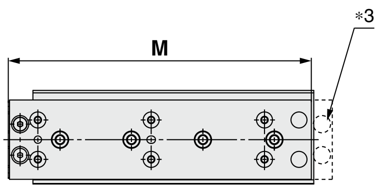
Retraction stroke end



Extension stroke end

∗ Dimensions other than those listed above are the same as those for the standard type.

MXQ 8-□ZN Shorter total length type



∗3 As the total length has been reduced by removing the extension stroke end adjuster mounting holes, an extension stroke end adjuster cannot be mounted afterward. (Retraction stroke end adjusters can be mounted afterward.)

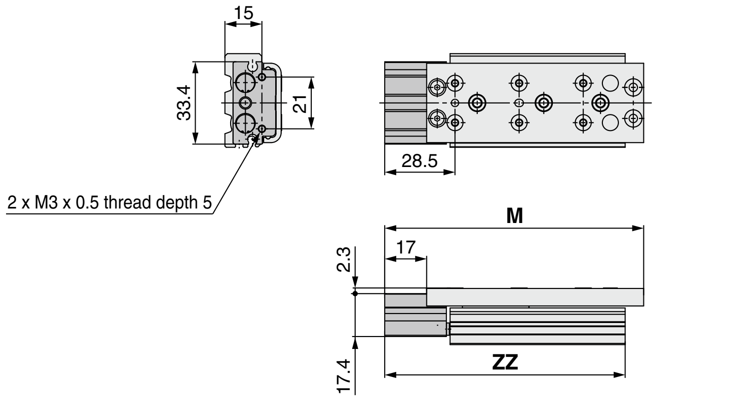
Dimensions [mm]

Model	M
MXQ8-10ZN	60
MXQ8-20ZN	70
MXQ8-30ZN	80
MXQ8-40ZN	96
MXQ8-50ZN	123
MXQ8-75ZN	148

∗ Dimensions other than those listed above are the same as those for the standard type.

Dimensions: MXQ 8 [Functional Option]

MXQ 8-□□1 With buffer (ø8)

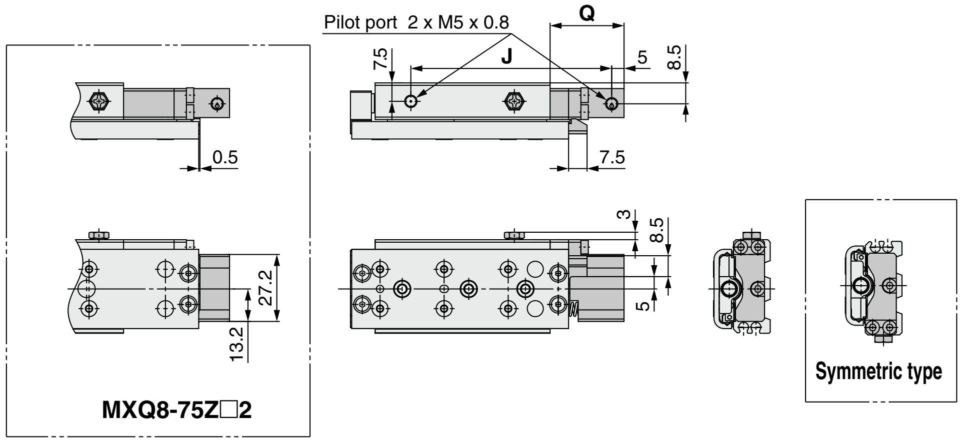


Dimensions [mm]

Model	Standard type M	Shorter total length type M	ZZ
MXQ8-10Z□1	85	76.5	77.5
MXQ8-20Z□1	95	86.5	87.5
MXQ8-30Z□1	105	96.5	97.5
MXQ8-40Z□1	121	112.5	113.5
MXQ8-50Z□1	148	139.5	140.5
MXQ8-75Z□1	173	164.5	142.5

∗ Dimensions other than those listed above are the same as those for the standard type.

MXQ 8-□□2 With end lock (ø8)



Dimensions [mm]

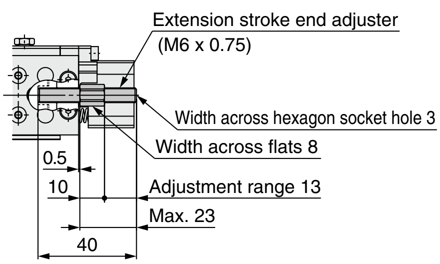
Model	J	Q
MXQ8-10Z□2	61.5	30
MXQ8-20Z□2	71.5	
MXQ8-30Z□2	81.5	
MXQ8-40Z□2	97.5	
MXQ8-50Z□2	124.5	
MXQ8-75Z□2	139.5	43

∗ Dimensions other than those listed above are the same as those for the standard type.

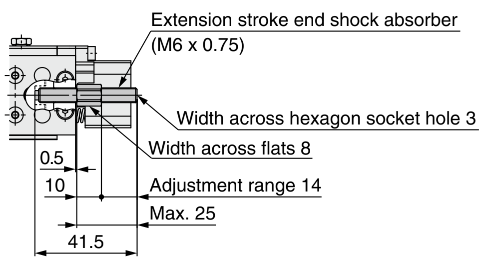
MXQ 8-□□2 With end lock, extension stroke end adjuster (ø8)

A retraction stroke end adjuster cannot be mounted to the end lock.
For adjuster part numbers, refer to page 124-1.

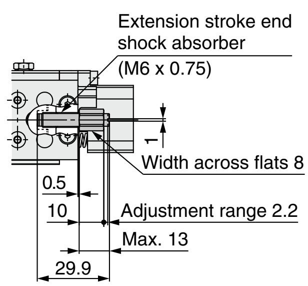
Metal stopper with bumper: ZB
Metal stopper: ZL



Rubber stopper: ZE



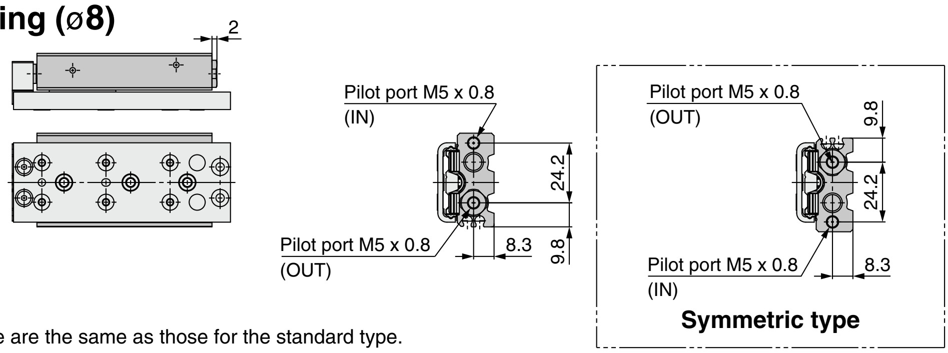
Shock absorber/RJ: ZH



∗ Dimensions other than those listed above are the same as those for the standard type.

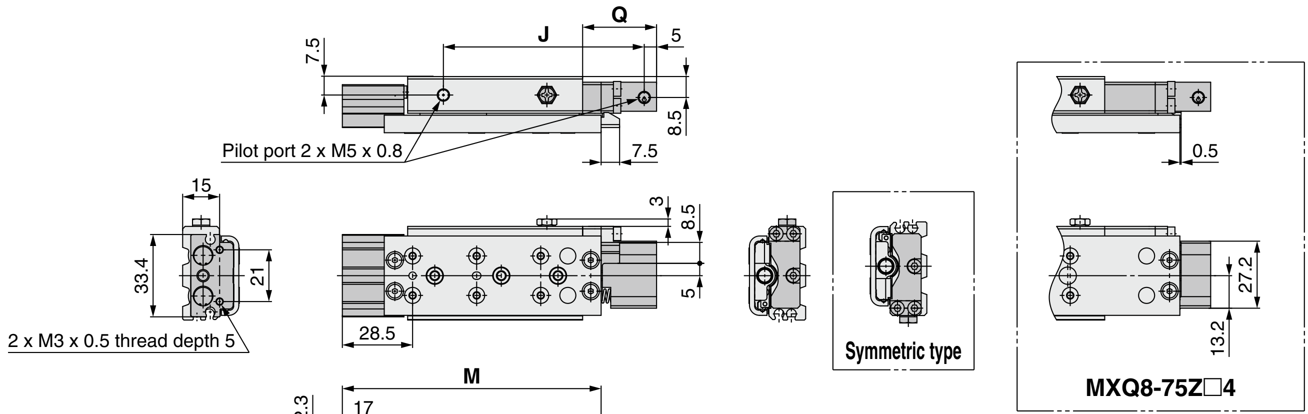
Dimensions: MXQ 8 [Functional Option]

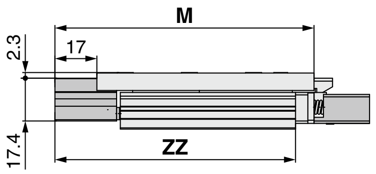
MXQ 8-□□3 Axial piping (ø8)



∗ Dimensions other than those listed above are the same as those for the standard type.

MXQ 8-□□4 With buffer, end lock (ø8)



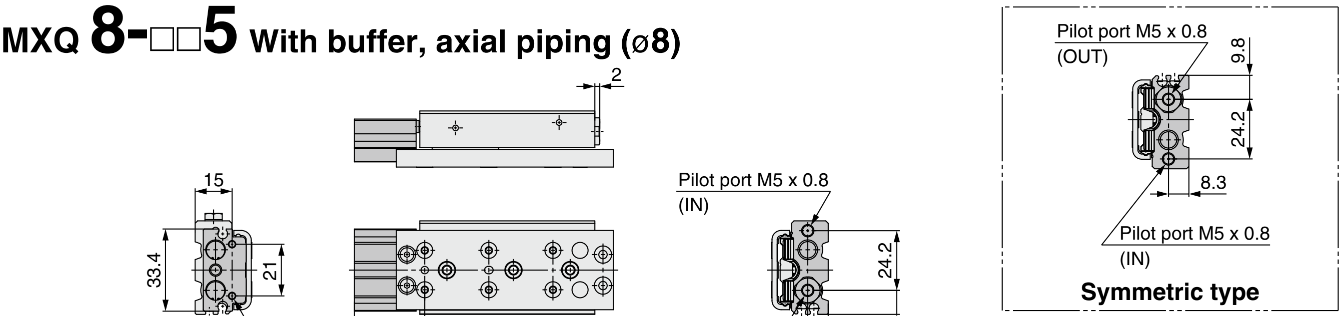


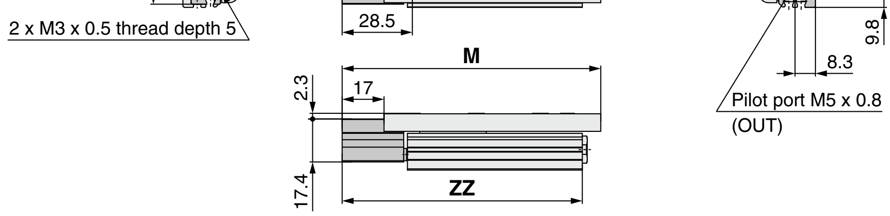
∗ Dimensions other than those listed above are the same as those for the standard type.

Dimensions [mm]

Model	J	Q	Standard type M	ZZ
MXQ8-10Z□4	61.5	30	85	77.5
MXQ8-20Z□4	71.5		95	87.5
MXQ8-30Z□4	81.5		105	97.5
MXQ8-40Z□4	97.5		121	113.5
MXQ8-50Z□4	124.5		148	140.5
MXQ8-75Z□4	139.5	43	173	142.5

MXQ 8-□□5 With buffer, axial piping (ø8)





∗ Dimensions other than those listed above are the same as those for the standard type.

Dimensions [mm]

Model	Standard type M	Shorter total length type M	ZZ
MXQ8-10Z□5	85	76.5	77.5
MXQ8-20Z□5	95	86.5	87.5
MXQ8-30Z□5	105	96.5	97.5
MXQ8-40Z□5	121	112.5	113.5
MXQ8-50Z□5	148	139.5	140.5
MXQ8-75Z□5	173	164.5	142.5

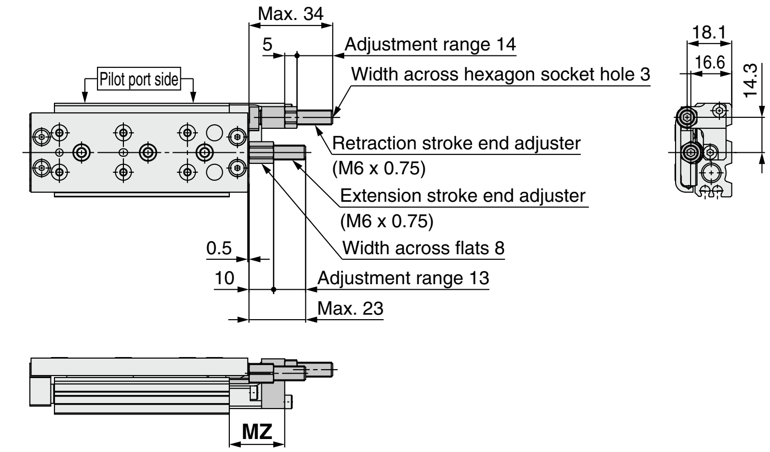
Dimensions: MXQ 8 [Functional Option]

MXQ 8-□□6 Centralized adjuster (ø8)

For adjuster part numbers, refer to page 124-1.

Metal stopper with bumper ZA: Both ends, ZC: Retraction stroke end

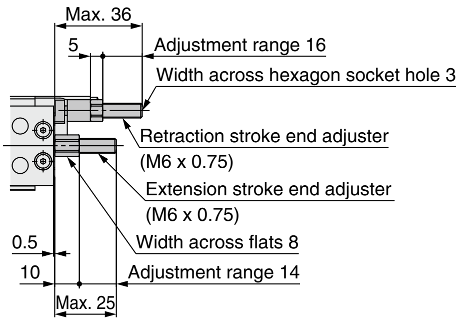
Metal stopper ZK: Both ends, ZM: Retraction stroke end



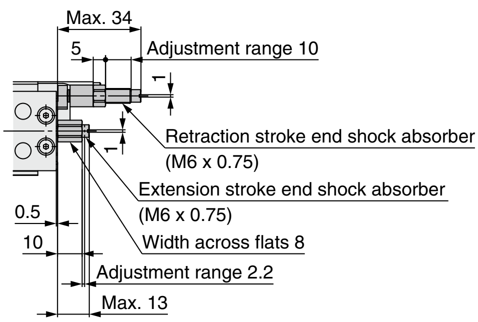
Dimensions [mm]

Model	MZ
MXQ8-10Z□6	22.5
MXQ8-20Z□6	
MXQ8-30Z□6	
MXQ8-40Z□6	
MXQ8-50Z□6	
MXQ8-75Z□6	46.5

Rubber stopper ZD: Both ends,
ZF: Retraction stroke end



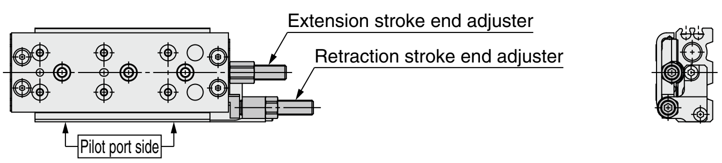
Shock absorber/RJ ZG: Both ends,
ZJ: Retraction stroke end



∗ Dimensions other than those listed above are the same as those for the standard type.

MXQ 8L-□□7 Centralized adjuster / Symmetric type (ø8)

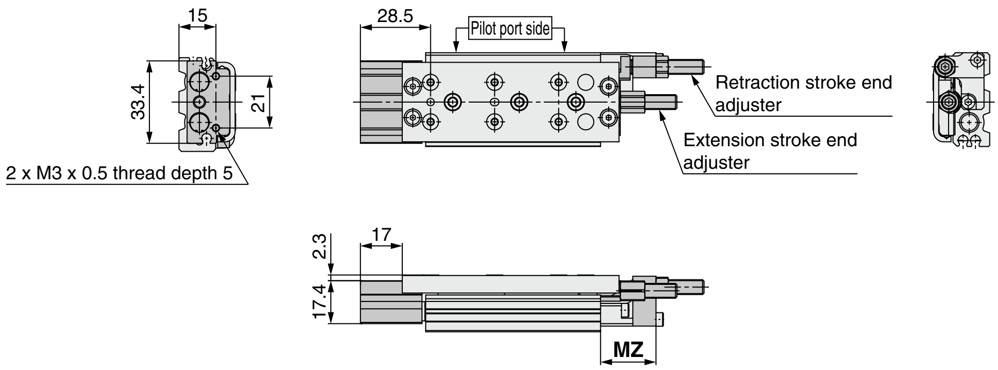
The mounting position of the retraction stroke end adjuster is on the reverse side of functional option 6.
For adjuster part numbers, refer to page 124-1.



Dimensions: MXQ 8 [Functional Option]

MXQ 8-□□8 Buffer, Centralized adjuster (ø8)

The extension stroke end adjuster can only be mounted on a rubber stopper type or a metal stopper type.
For adjuster part numbers, refer to page 124-1.



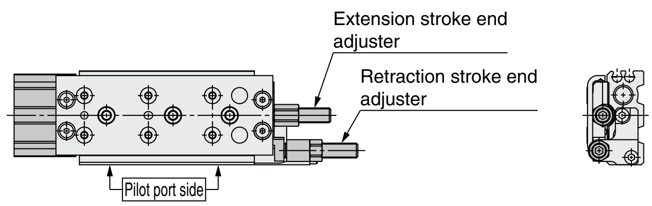
Dimensions [mm]

Model	MZ
MXQ8-10Z□8	22.5
MXQ8-20Z□8	
MXQ8-30Z□8	
MXQ8-40Z□8	
MXQ8-50Z□8	
MXQ8-75Z□8	46.5

∗ Dimensions other than those listed above are the same as those for the standard type.

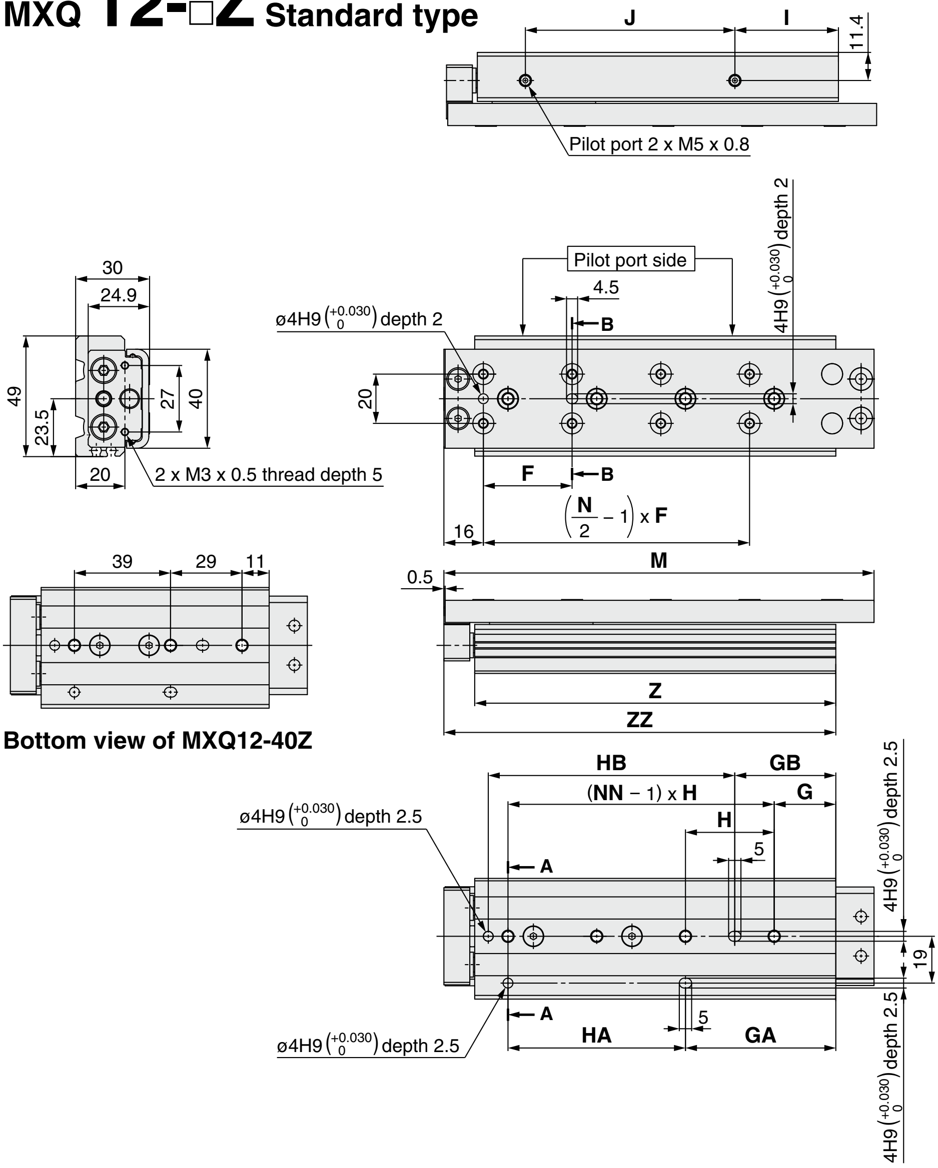
MXQ 8L-□□9 Buffer, Centralized adjuster / Symmetric type (ø8)

The extension stroke end adjuster can only be mounted on a rubber stopper type or a metal stopper type.
The mounting position of the retraction stroke end adjuster is on the reverse side of functional option 8.
For adjuster part numbers, refer to page 124-1.

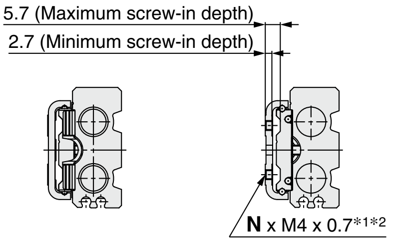


Dimensions: MXQ 12 [Standard]

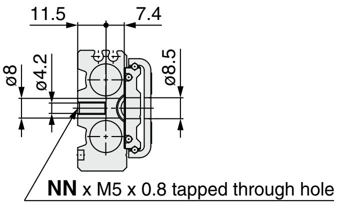
MXQ 12-□Z Standard type



∗1 If long bolts are used, they may touch the guide block and cause a malfunction, etc. Use a screw which has an intermediate length between the maximum screw-in depth and minimum screw-in depth. Refer to page 196 for details.
∗2 Since the table is made of a magnetic substance, it could become magnetized if touched by a magnet, etc. This could cause an auto switch malfunction.

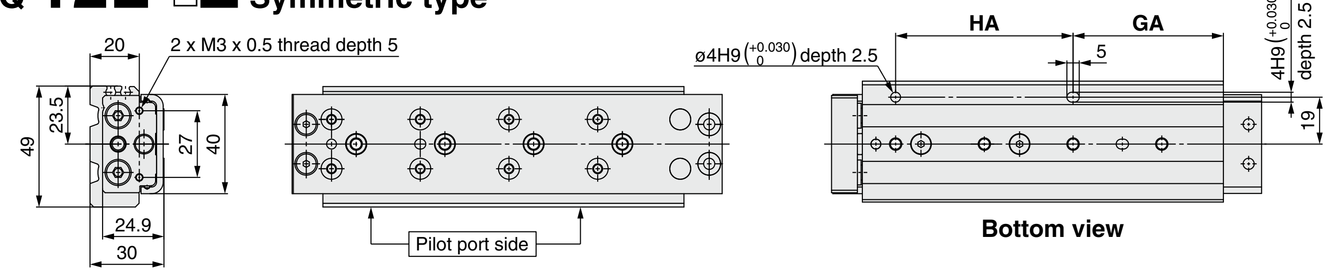


Cross-sectional view B-B



Cross-sectional view A-A

MXQ 12L-□Z Symmetric type



∗ Dimensions other than those listed above are the same as those for the standard type.

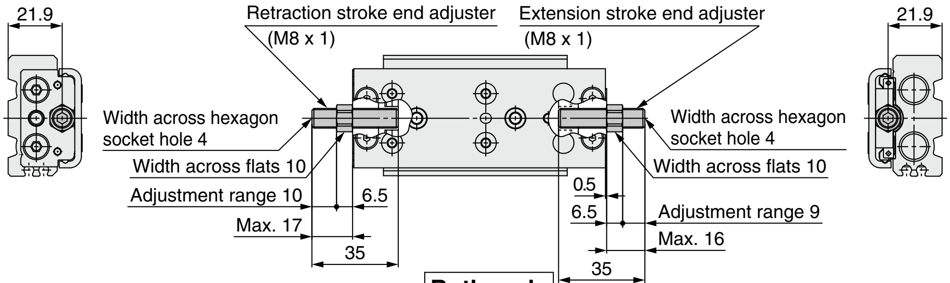
Dimensions [mm]

Model	F	G	GA	GB	H	HA	HB	I	J	M	N	NN	Z	ZZ
MXQ12-10Z	28	17	17	11	32	32	46	11	32	82.5	4	2	62.5	75
MXQ12-20Z	28	19	19	11	32	32	48	13	32	92.5	4	2	64.5	77
MXQ12-30Z	38	21	21	11	40	40	58	15	40	102.5	4	2	74.5	87
MXQ12-40Z	34	—	40	27	—	39	60	23	50	120.5	6	3	92.5	105
MXQ12-50Z	34	11	50	37	39	39	60	23	60	130.5	6	3	102.5	115
MXQ12-75Z	36	25	61	41	36	72	100	42	85	174.5	8	4	146.5	159
MXQ12-100Z	36	14	86	66	36	72	100	42	110	199.5	10	5	171.5	184

Dimensions: MXQ 12 [Adjuster Option]

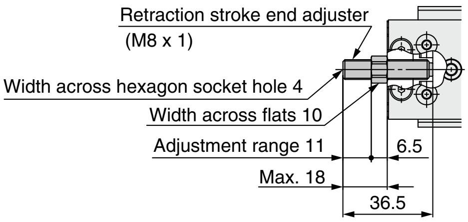
MXQ 12-□ ☐ With adjuster option (ø12)

Metal stopper with bumper ZA: Both ends, ZB: Extension stroke end, ZC: Retraction stroke end, ZS: Retraction stroke end (Shorter total length type)
Metal stopper ZK: Both ends, ZL: Extension stroke end, ZM: Retraction stroke end, ZT: Retraction stroke end (Shorter total length type)

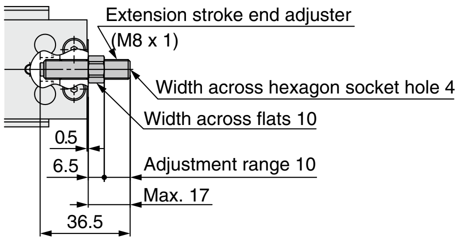


Both ends

Rubber stopper ZD: Both ends, ZE: Extension stroke end, ZF: Retraction stroke end, ZP: Retraction stroke end (Shorter total length type)

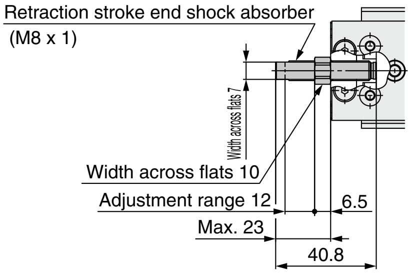


Retraction stroke end

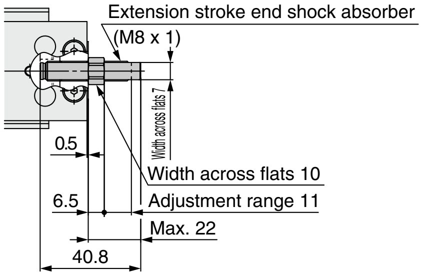


Extension stroke end

Shock absorber/RJ ZG: Both ends, ZH: Extension stroke end, ZJ: Retraction stroke end, ZQ: Retraction stroke end (Shorter total length type)



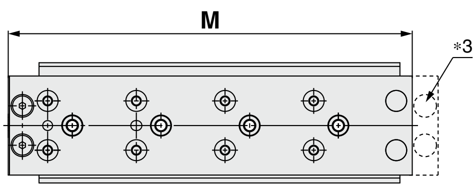
Retraction stroke end



Extension stroke end

∗ Dimensions other than those listed above are the same as those for the standard type.

MXQ 12-□ZN Shorter total length type



∗ Dimensions other than those listed above are the same as those for the standard type.

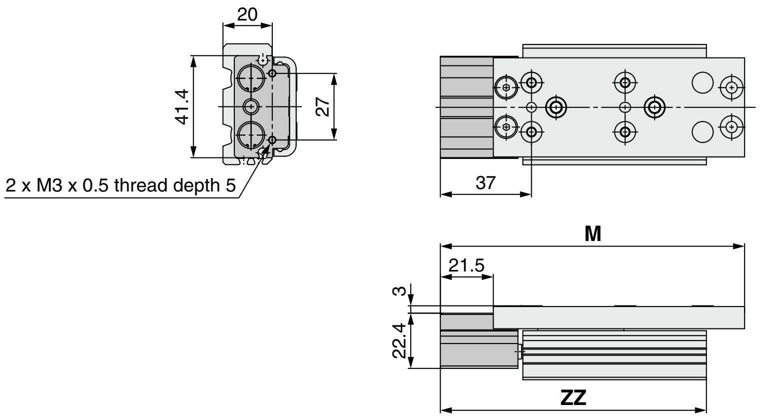
∗3 As the total length has been reduced by removing the extension stroke end adjuster mounting holes, an extension stroke end adjuster cannot be mounted afterward. (Retraction stroke end adjusters can be mounted afterward.)

Dimensions [mm]

Model	M
MXQ12-10ZN	72
MXQ12-20ZN	82
MXQ12-30ZN	92
MXQ12-40ZN	110
MXQ12-50ZN	120
MXQ12-75ZN	164
MXQ12-100ZN	189

Dimensions: MXQ 12 [Functional Option]

MXQ 12-□□1 With buffer (ø12)

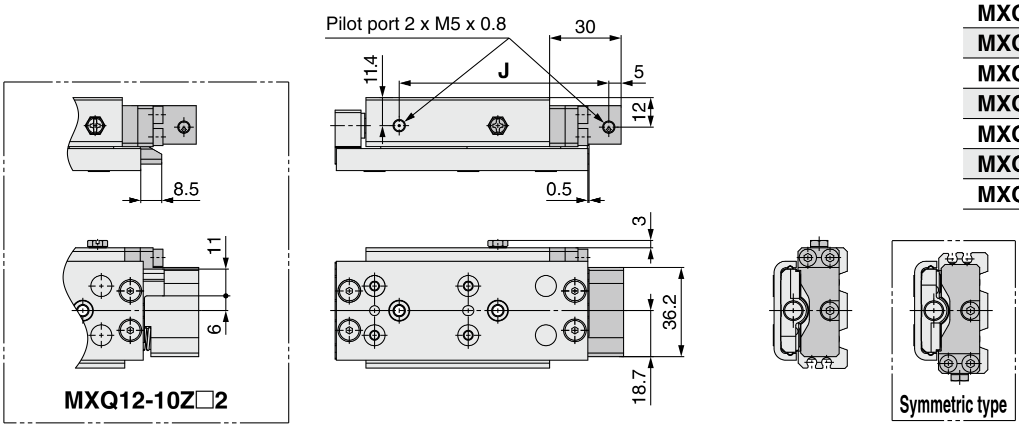


Dimensions [mm]

Model	Standard type M	Shorter total length type M	ZZ
MXQ12-10Z□1	103.5	93	96
MXQ12-20Z□1	113.5	103	98
MXQ12-30Z□1	123.5	113	108
MXQ12-40Z□1	141.5	131	126
MXQ12-50Z□1	151.5	141	136
MXQ12-75Z□1	195.5	185	180
MXQ12-100Z□1	220.5	210	205

∗ Dimensions other than those listed above are the same as those for the standard type.

MXQ 12-□□2 With end lock (ø12)



Dimensions [mm]

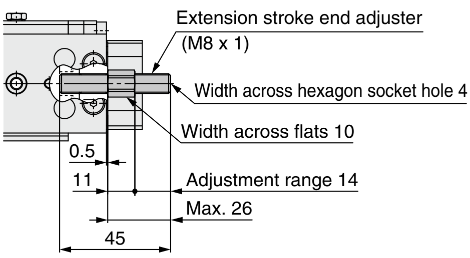
Model	J
MXQ12-10Z□2	68
MXQ12-20Z□2	70
MXQ12-30Z□2	80
MXQ12-40Z□2	98
MXQ12-50Z□2	108
MXQ12-75Z□2	152
MXQ12-100Z□2	177

∗ Dimensions other than those listed above are the same as those for the standard type.

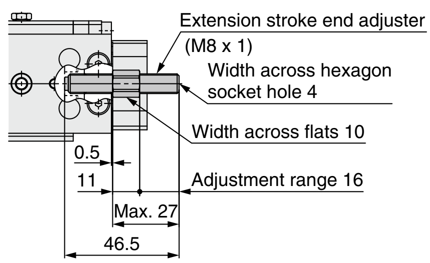
MXQ 12-□□2 With end lock, extension stroke end adjuster (ø12)

A retraction stroke end adjuster cannot be mounted to the end lock.
For adjuster part numbers, refer to page 124-1.

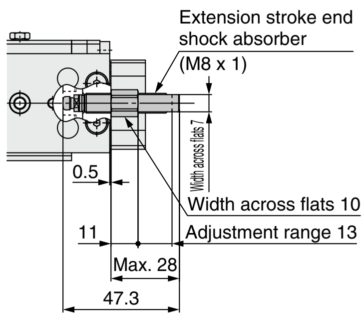
Metal stopper with bumper: ZB
Metal stopper: ZL



Rubber stopper: ZE



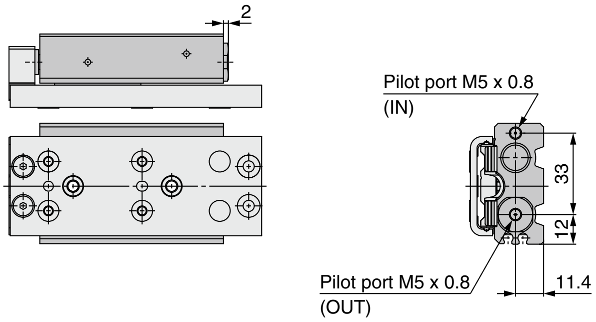
Shock absorber/RJ: ZH

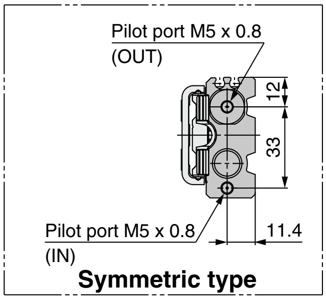


∗ Dimensions other than those listed above are the same as those for the standard type.

Dimensions: MXQ 12 [Functional Option]

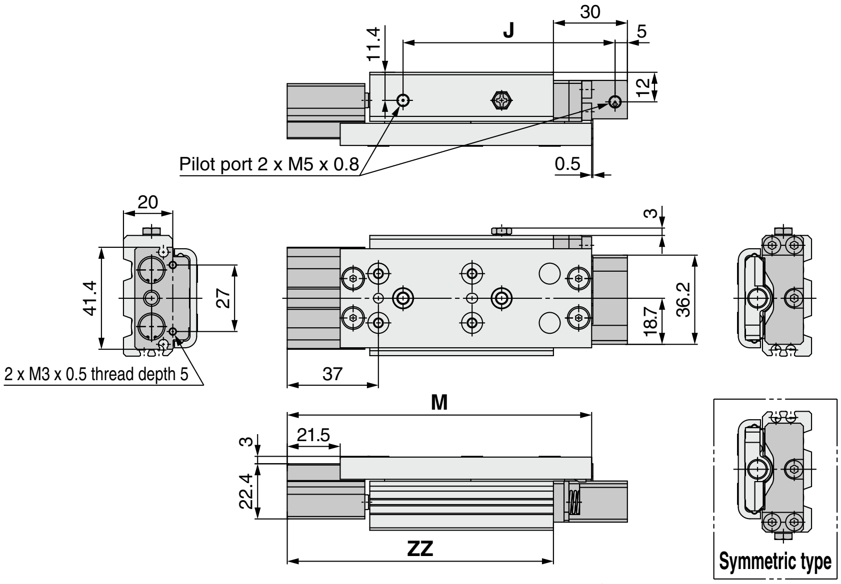
MXQ 12-□□3 Axial piping (ø12)

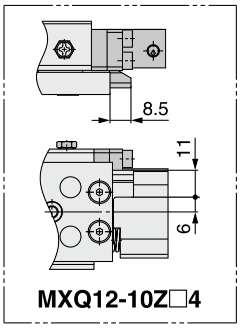




∗ Dimensions other than those listed above are the same as those for the standard type.

MXQ 12-□□4 With buffer, end lock (ø12)



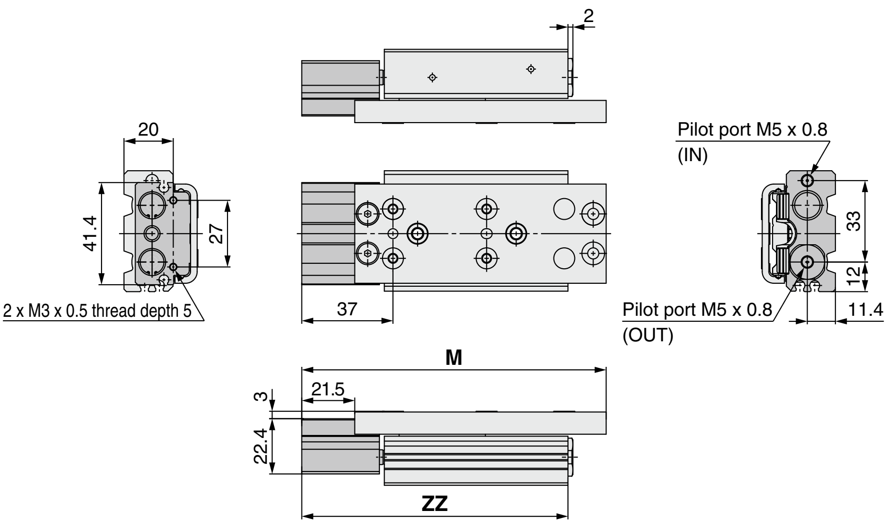


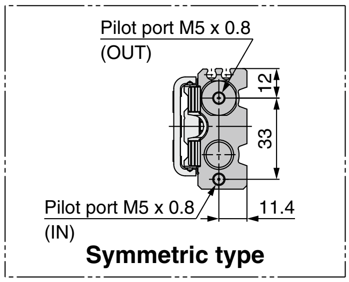
∗ Dimensions other than those listed above are the same as those for the standard type.

Dimensions [mm]

Model	J	Standard type M	ZZ
MXQ12-10Z□4	68	103.5	96
MXQ12-20Z□4	70	113.5	98
MXQ12-30Z□4	80	123.5	108
MXQ12-40Z□4	98	141.5	126
MXQ12-50Z□4	108	151.5	136
MXQ12-75Z□4	152	195.5	180
MXQ12-100Z□4	177	220.5	205

MXQ 12-□□5 With buffer, axial piping (ø12)





∗ Dimensions other than those listed above are the same as those for the standard type.

Dimensions [mm]

Model	Standard type M	Shorter total length type M	ZZ
MXQ12-10Z□5	103.5	93	96
MXQ12-20Z□5	113.5	103	98
MXQ12-30Z□5	123.5	113	108
MXQ12-40Z□5	141.5	131	126
MXQ12-50Z□5	151.5	141	136
MXQ12-75Z□5	195.5	185	180
MXQ12-100Z□5	220.5	210	205

Double-ported type MXQ□A
Low thrust with high rigidity type MXQ□B
Single side-ported type MXQ□C
Height interchangeable type MXQ□
Common Adjuster Options
Auto Switch Mounting
Made to Order
Model Selection

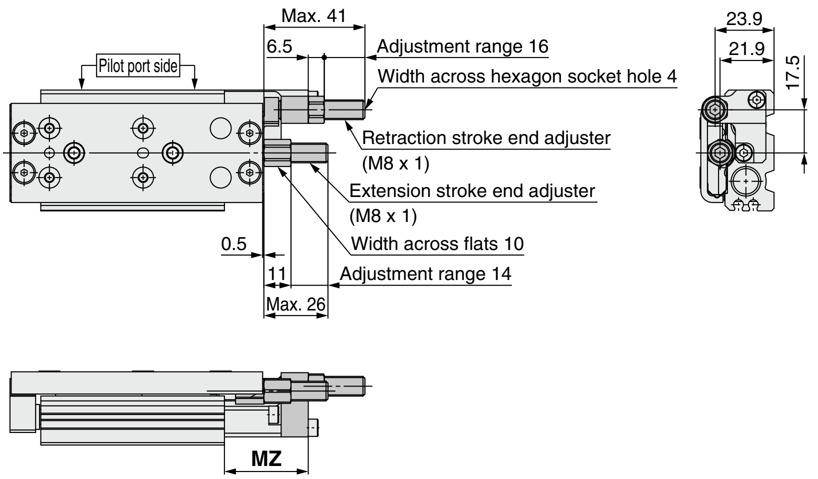
Dimensions: MXQ 12 [Functional Option]

MXQ 12-□□6 Centralized adjuster (ø12)

For adjuster part numbers, refer to page 124-1.

Metal stopper with bumper ZA: Both ends, ZC: Retraction stroke end

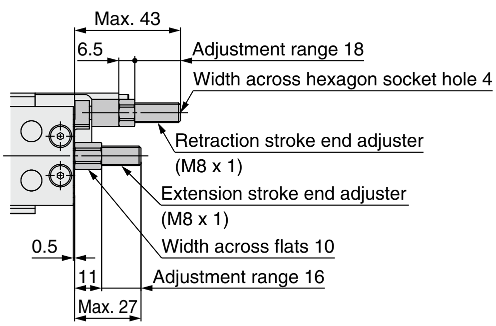
Metal stopper ZK: Both ends, ZM: Retraction stroke end



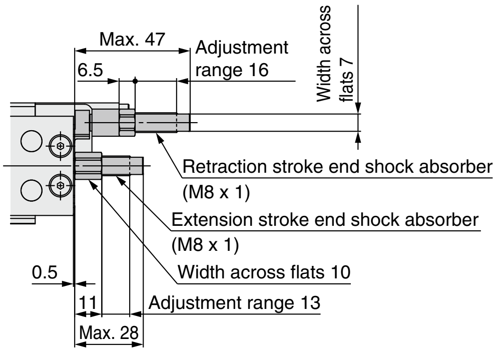
Dimensions [mm]

Model	MZ
MXQ12-10Z□6	26
MXQ12-20Z□6	34
MXQ12-30Z□6	
MXQ12-40Z□6	
MXQ12-50Z□6	
MXQ12-75Z□6	
MXQ12-100Z□6	

Rubber stopper ZD: Both ends, ZF: Retraction stroke end



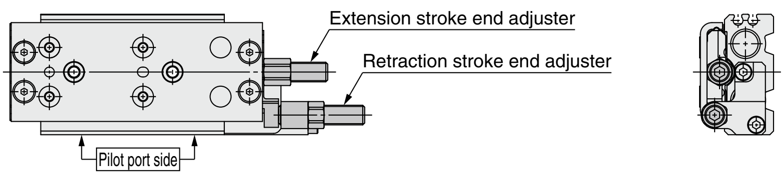
Shock absorber/RJ ZG: Both ends, ZJ: Retraction stroke end



* Dimensions other than those listed above are the same as those for the standard type.

MXQ 12L-□□7 Centralized adjuster / Symmetric type (ø12)

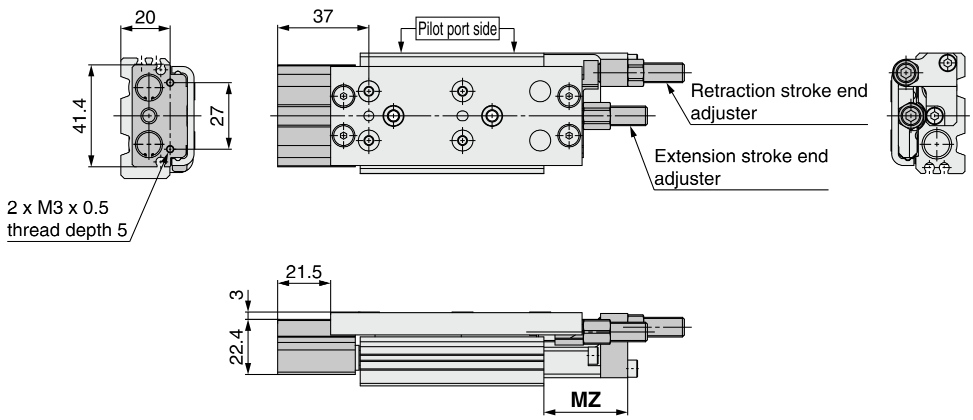
The mounting position of the retraction stroke end adjuster is on the reverse side of functional option 6.
For adjuster part numbers, refer to page 124-1.



Dimensions: MXQ 12 [Functional Option]

MXQ 12-□□8 Buffer, Centralized adjuster (ø12)

The extension stroke end adjuster can only be mounted on a rubber stopper type or a metal stopper type.
For adjuster part numbers, refer to page 124-1.



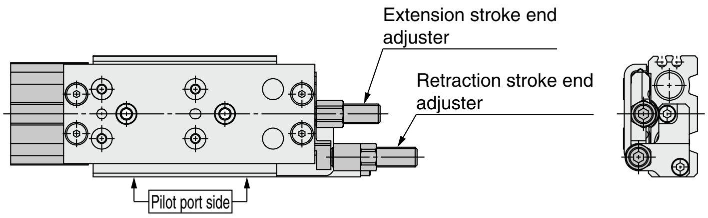
Dimensions [mm]

<table>
<tr><th>Model</th><th>MZ</th></tr>
<tr><td>MXQ12-10Z□8</td><td>26</td></tr>
<tr><td>MXQ12-20Z□8</td><td rowspan="6">34</td></tr>
<tr><td>MXQ12-30Z□8</td></tr>
<tr><td>MXQ12-40Z□8</td></tr>
<tr><td>MXQ12-50Z□8</td></tr>
<tr><td>MXQ12-75Z□8</td></tr>
<tr><td>MXQ12-100Z□8</td></tr>
</table>

∗ Dimensions other than those listed above are the same as those for the standard type.

MXQ 12L-□□9 Buffer, Centralized adjuster / Symmetric type (ø12)

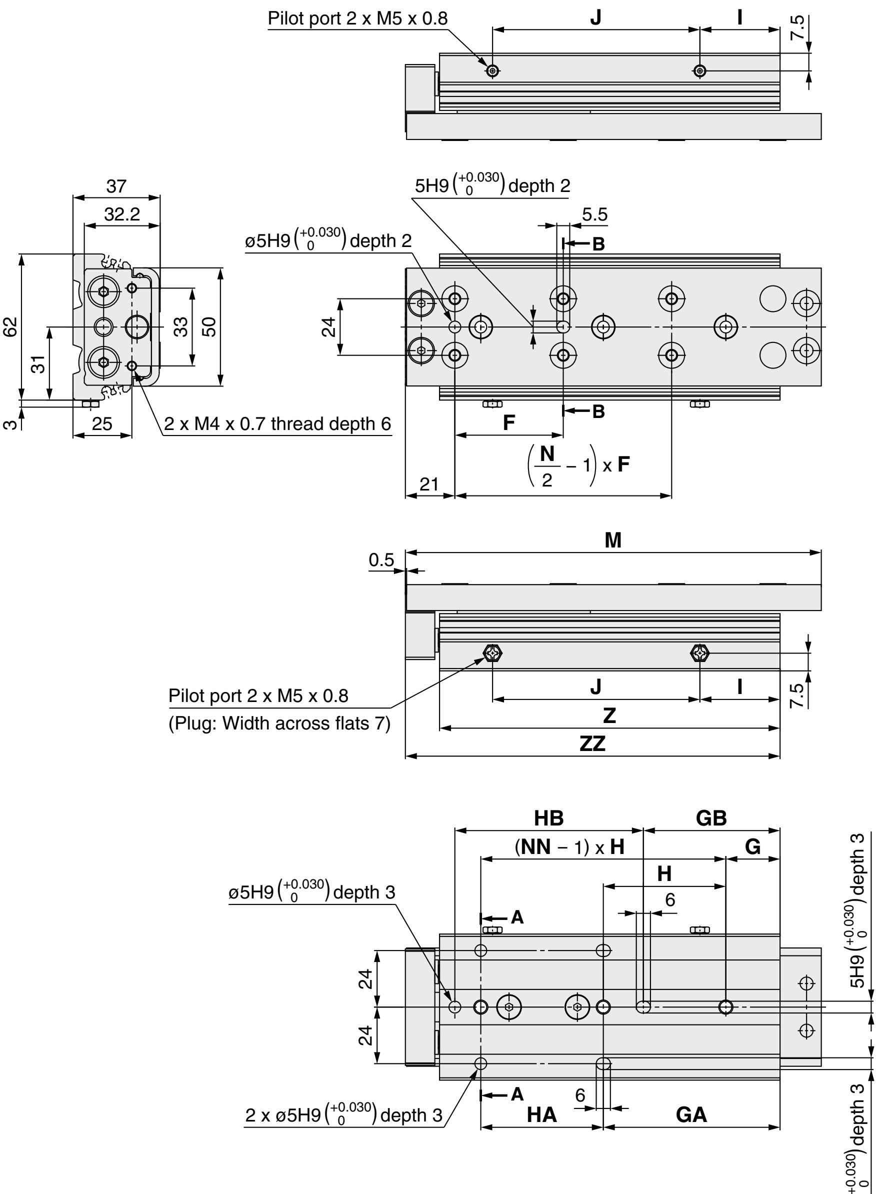
The extension stroke end adjuster can only be mounted on a rubber stopper type or a metal stopper type.
The mounting position of the retraction stroke end adjuster is on the reverse side of functional option 8.
For adjuster part numbers, refer to page 124-1.

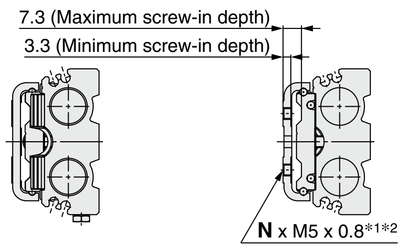


Dimensions: MXQ 16 [Standard]

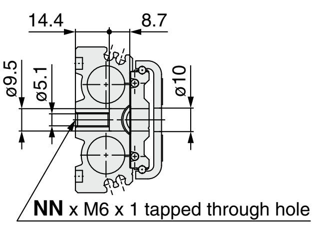
MXQ 16-□Z Standard type

*1 If long bolts are used, they may touch the guide block and cause a malfunction, etc. Use a screw which has an intermediate length between the maximum screw-in depth and minimum screw-in depth. Refer to page 196 for details.
*2 Since the table is made of a magnetic substance, it could become magnetized if touched by a magnet, etc. This could cause an auto switch malfunction.

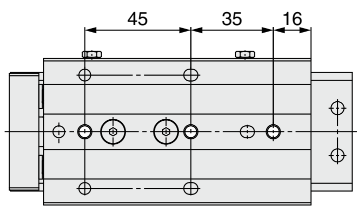




Cross-sectional view B-B



Cross-sectional view A-A



Bottom view of MXQ16-50Z

Dimensions [mm]

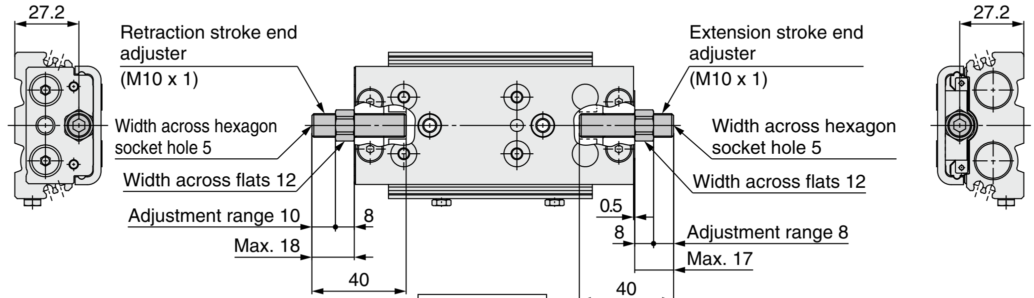
Model	F	G	GA	GB	H	HA	HB	I	J	M	N	NN	Z	ZZ
MXQ16-10Z	38	16	16	8	39	39	58	22	28	98.5	4	2	72.5	87
MXQ16-20Z	38	20	20	12	39	39	58	15	39	108.5	4	2	76.5	91
MXQ16-30Z	48	21	21	30	48	48	50	16	48	118.5	4	2	86.5	101
MXQ16-40Z	58	28	28	17	58	58	80	23	58	135.5	4	2	103.5	118
MXQ16-50Z	40	—	51	27	—	45	80	28	63	145.5	6	3	113.5	128
MXQ16-75Z	46	23	75	58	52	52	80	34	88	176.5	6	3	144.5	159
MXQ16-100Z	44	39	83	102	44	88	80	53	113	220.5	8	4	188.5	203
MXQ16-125Z	44	20	108	127	44	88	80	53	138	245.5	10	5	213.5	228

Dimensions: MXQ 16 [Adjuster Option]

MXQ 16-□ ☐ With adjuster option (ø16)

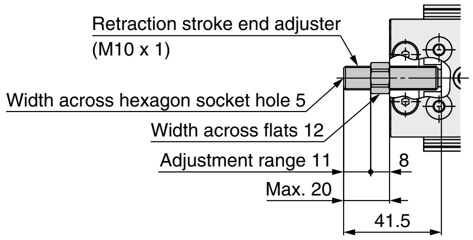
Metal stopper with bumper ZA: Both ends, ZB: Extension stroke end, ZC: Retraction stroke end, ZS: Retraction stroke end (Shorter total length type)

Metal stopper ZK: Both ends, ZL: Extension stroke end, ZM: Retraction stroke end, ZT: Retraction stroke end (Shorter total length type)

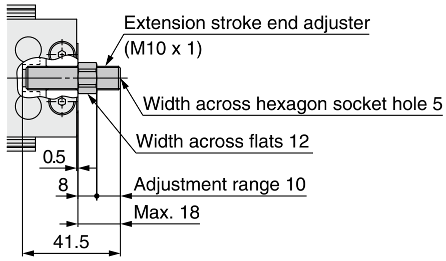


Both ends

Rubber stopper ZD: Both ends, ZE: Extension stroke end, ZF: Retraction stroke end, ZP: Retraction stroke end (Shorter total length type)

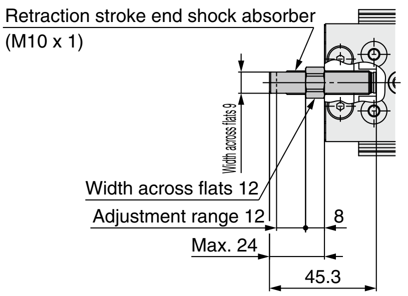


Retraction stroke end

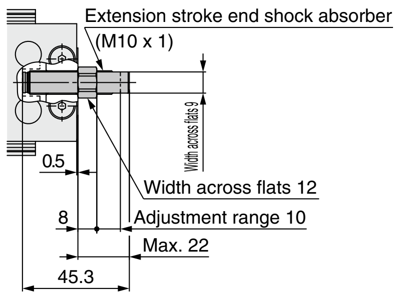


Extension stroke end

Shock absorber/RJ ZG: Both ends, ZH: Extension stroke end, ZJ: Retraction stroke end, ZQ: Retraction stroke end (Shorter total length type)

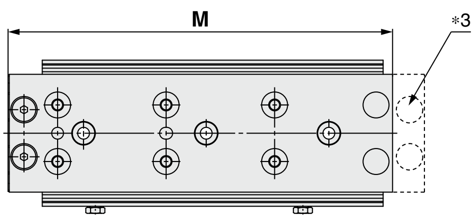


Retraction stroke end



Extension stroke end

MXQ 16-□ZN Shorter total length type



Dimensions [mm]

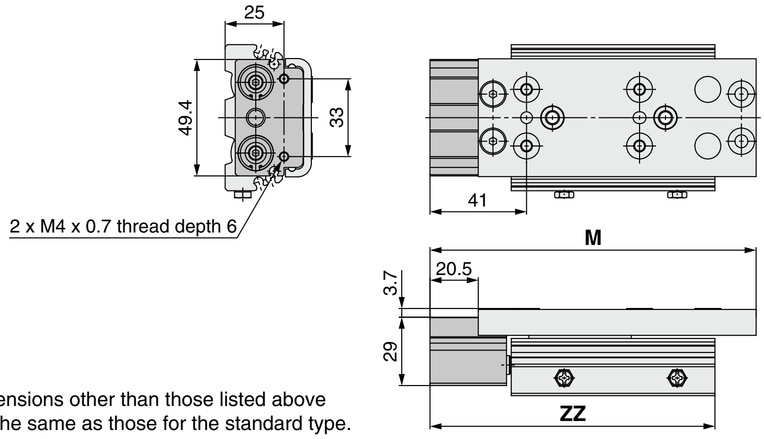
Model	M
MXQ16-10ZN	85
MXQ16-20ZN	95
MXQ16-30ZN	105
MXQ16-40ZN	122
MXQ16-50ZN	132
MXQ16-75ZN	163
MXQ16-100ZN	207
MXQ16-125ZN	232

*3 As the total length has been reduced by removing the extension stroke end adjuster mounting holes, an extension stroke end adjuster cannot be mounted afterward. (Retraction stroke end adjusters can be mounted afterward.)

* Dimensions other than those listed above are the same as those for the standard type.

Dimensions: MXQ 16 [Functional Option]

MXQ 16-□□1 With buffer (ø16)

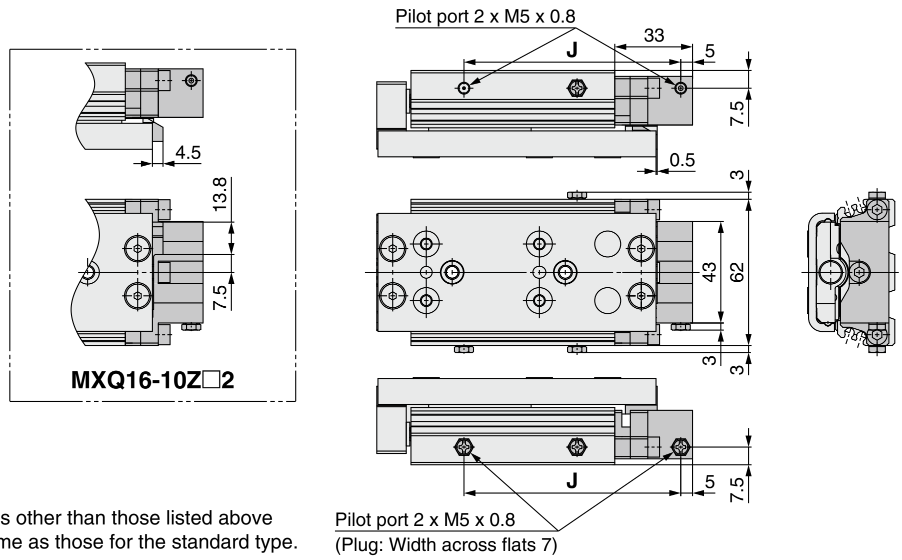


Dimensions [mm]

Model	Standard type M	Shorter total length type M	ZZ
MXQ16-10Z□1	118.5	105	107
MXQ16-20Z□1	128.5	115	111
MXQ16-30Z□1	138.5	125	121
MXQ16-40Z□1	155.5	142	138
MXQ16-50Z□1	165.5	152	148
MXQ16-75Z□1	196.5	183	179
MXQ16-100Z□1	240.5	227	223
MXQ16-125Z□1	265.5	252	248

∗ Dimensions other than those listed above are the same as those for the standard type.

MXQ 16-□□2 With end lock (ø16)



Dimensions [mm]

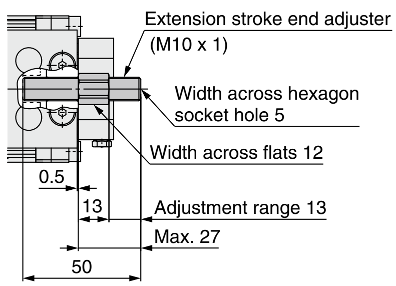
Model	J
MXQ16-10Z□2	78
MXQ16-20Z□2	82
MXQ16-30Z□2	92
MXQ16-40Z□2	109
MXQ16-50Z□2	119
MXQ16-75Z□2	150
MXQ16-100Z□2	194
MXQ16-125Z□2	219

∗ Dimensions other than those listed above are the same as those for the standard type.

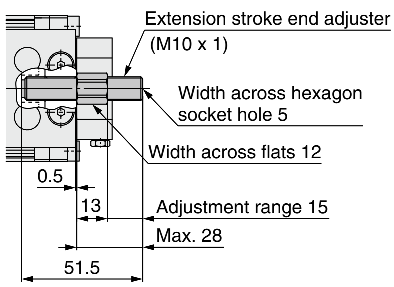
MXQ 16-□□2 With end lock, extension stroke end adjuster (ø16)

A retraction stroke end adjuster cannot be mounted to the end lock.
For adjuster part numbers, refer to page 124-1.

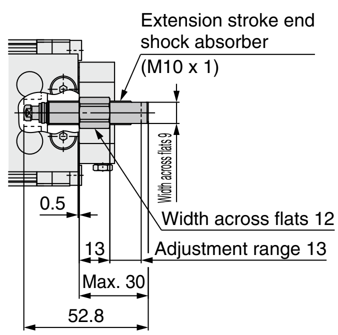
Metal stopper with bumper: ZB
Metal stopper: ZL



Rubber stopper: ZE



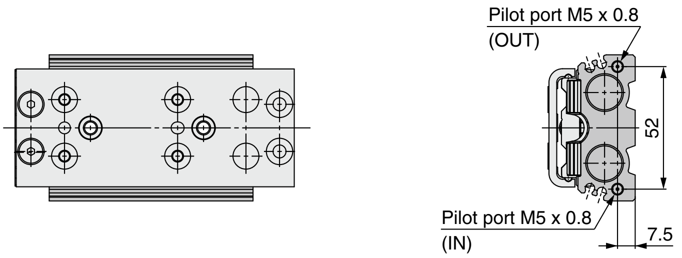
Shock absorber/RJ: ZH



∗ Dimensions other than those listed above are the same as those for the standard type.

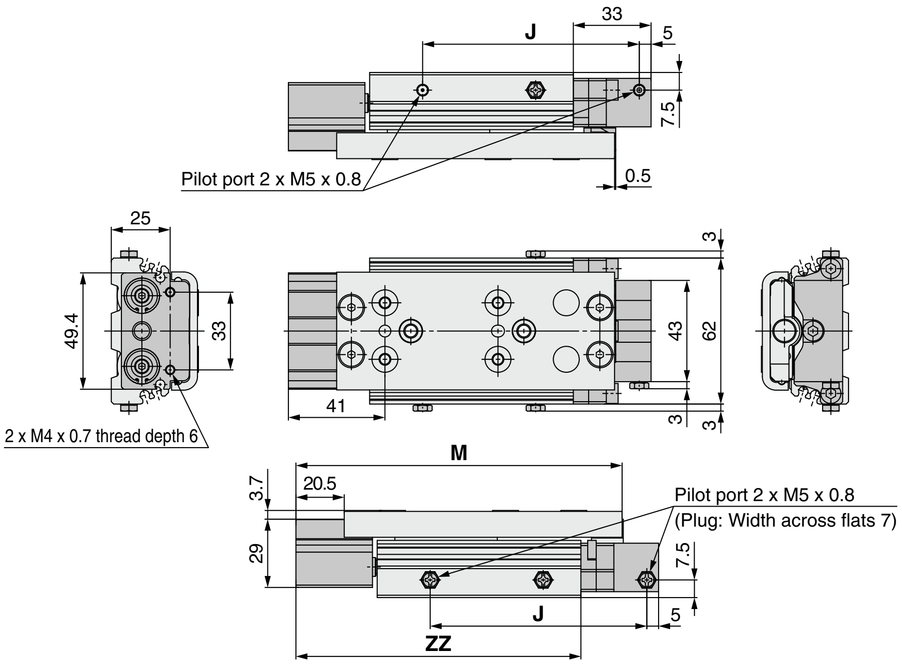
Dimensions: MXQ 16 [Functional Option]

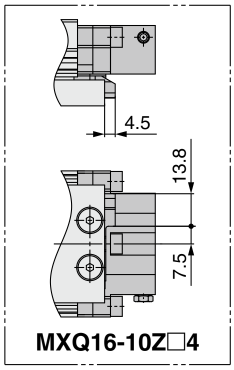
MXQ 16-□□3 Axial piping (ø16)



∗ Dimensions other than those listed above are the same as those for the standard type.

MXQ 16-□□4 With buffer, end lock (ø16)





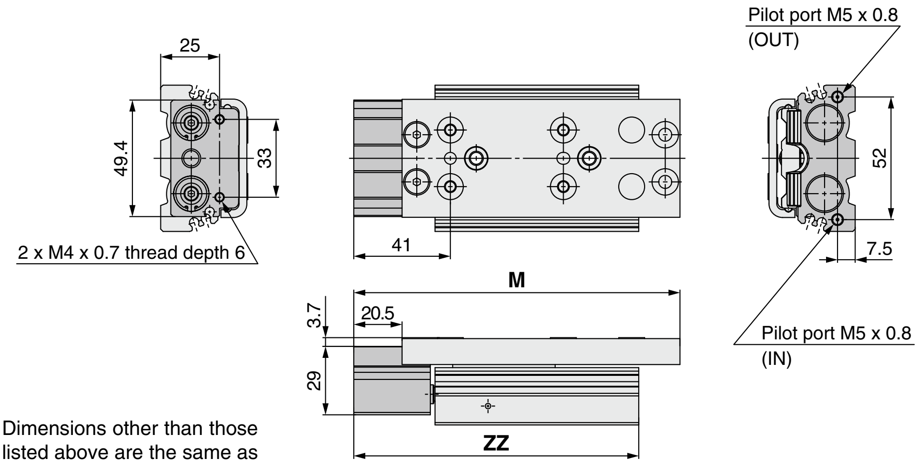
∗ Dimensions other than those listed above are the same as those for the standard type.

Dimensions

[mm]

Model	J	Standard type M	ZZ
MXQ16-10Z□4	78	118.5	107
MXQ16-20Z□4	82	128.5	111
MXQ16-30Z□4	92	138.5	121
MXQ16-40Z□4	109	155.5	138
MXQ16-50Z□4	119	165.5	148
MXQ16-75Z□4	150	196.5	179
MXQ16-100Z□4	194	240.5	223
MXQ16-125Z□4	219	265.5	248

MXQ 16-□□5 With buffer, axial piping (ø16)



∗ Dimensions other than those listed above are the same as those for the standard type.

Dimensions

[mm]

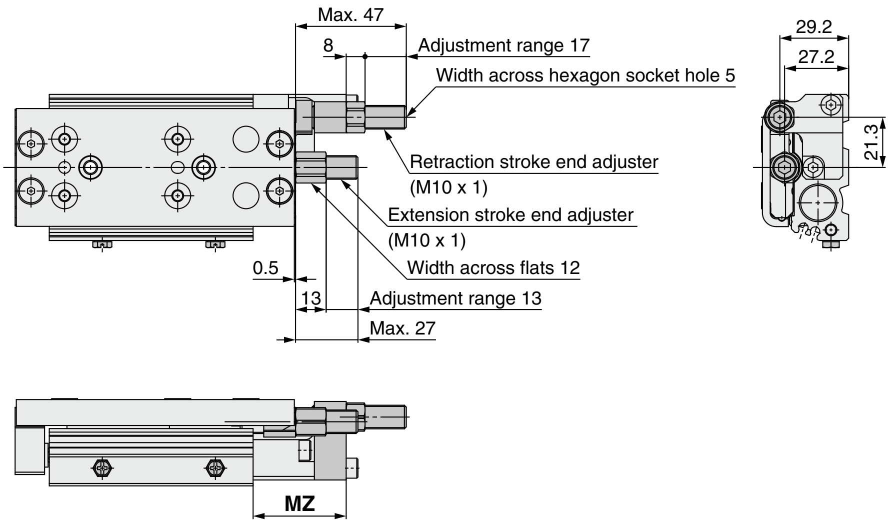
Model	Standard type M	Shorter total length type M	ZZ
MXQ16-10Z□5	118.5	105	107
MXQ16-20Z□5	128.5	115	111
MXQ16-30Z□5	138.5	125	121
MXQ16-40Z□5	155.5	142	138
MXQ16-50Z□5	165.5	152	148
MXQ16-75Z□5	196.5	183	179
MXQ16-100Z□5	240.5	227	223
MXQ16-125Z□5	265.5	252	248

Dimensions: MXQ 16 [Functional Option]

MXQ 16-□□6 Centralized adjuster (ø16)

For adjuster part numbers, refer to page 124-1.

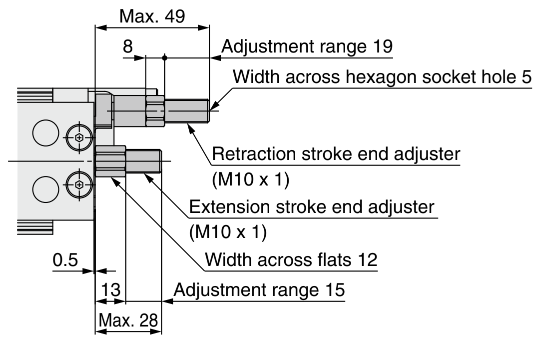
Metal stopper with bumper ZA: Both ends, ZC: Retraction stroke end
Metal stopper ZK: Both ends, ZM: Retraction stroke end



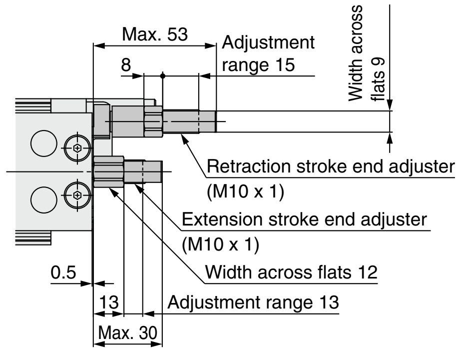
Dimensions [mm]

Model	MZ
MXQ16-10Z□6	33.5
MXQ16-20Z□6	39.5
MXQ16-30Z□6	
MXQ16-40Z□6	
MXQ16-50Z□6	
MXQ16-75Z□6	
MXQ16-100Z□6	
MXQ16-125Z□6	

Rubber stopper ZD: Both ends,
ZF: Retraction stroke end



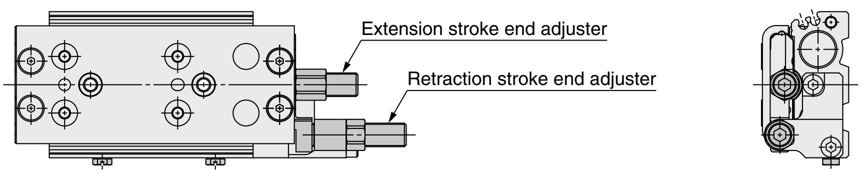
Shock absorber/RJ ZG: Both ends,
ZJ: Retraction stroke end



∗ Dimensions other than those listed above are the same as those for the standard type.
∗ In the case of a short stroke, there are some places where an auto switch cannot be mounted. For details, refer to page 126.

MXQ 16-□□7 Centralized adjuster / Symmetric type (ø16)

The mounting position of the retraction stroke end adjuster is on the reverse side of functional option 6.
For adjuster part numbers, refer to page 124-1.

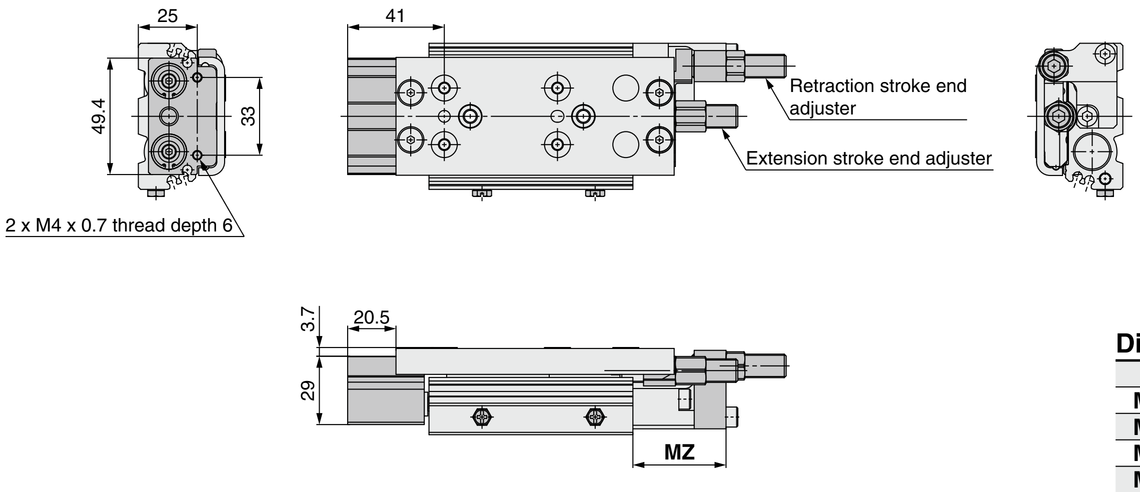


∗ In the case of a short stroke, there are some places where an auto switch cannot be mounted. For details, refer to page 126.

Dimensions: MXQ 16 [Functional Option]

MXQ 16-□□8 Buffer, Centralized adjuster (ø16)

The extension stroke end adjuster can only be mounted on a rubber stopper type or a metal stopper type.
For adjuster part numbers, refer to page 124-1.



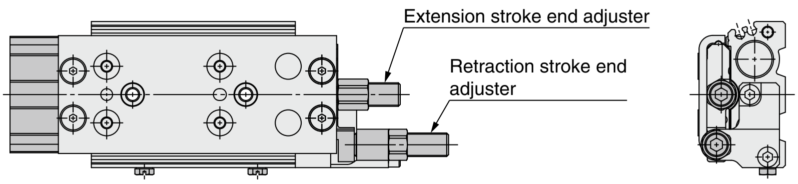
Dimensions [mm]

Model	MZ
MXQ16-10Z□8	33.5
MXQ16-20Z□8	39.5
MXQ16-30Z□8	
MXQ16-40Z□8	
MXQ16-50Z□8	
MXQ16-75Z□8	
MXQ16-100Z□8	
MXQ16-125Z□8	

∗ Dimensions other than those listed above are the same as those for the standard type.
∗ In the case of a short stroke, there are some places where an auto switch cannot be mounted. For details, refer to page 126.

MXQ 16-□□9 Buffer, Centralized adjuster / Symmetric type (ø16)

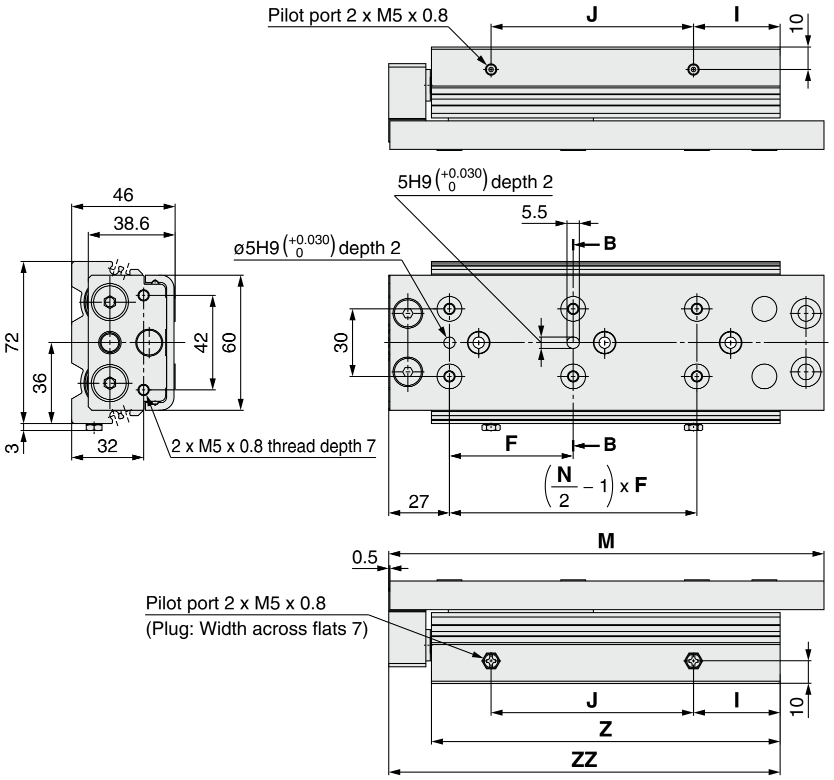
The extension stroke end adjuster can only be mounted on a rubber stopper type or a metal stopper type.
The mounting position of the retraction stroke end adjuster is on the reverse side of functional option 8.
For adjuster part numbers, refer to page 124-1.



∗ In the case of a short stroke, there are some places where an auto switch cannot be mounted. For details, refer to page 126.

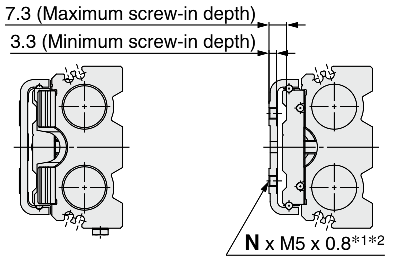
Dimensions: MXQ 20 [Standard]

MXQ 20-□Z Standard type

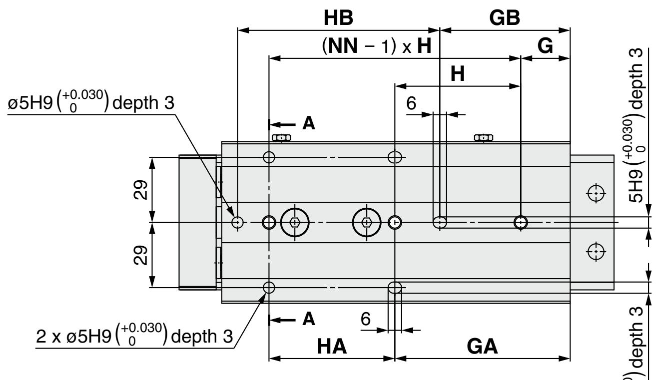


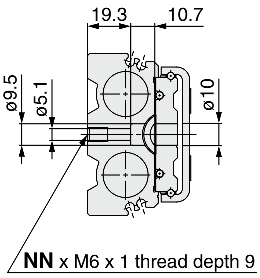
∗1 If long bolts are used, they may touch the guide block and cause a malfunction, etc. Use a screw which has an intermediate length between the maximum screw-in depth and minimum screw-in depth. Refer to page 196 for details.

∗2 Since the table is made of a magnetic substance, it could become magnetized if touched by a magnet, etc. This could cause an auto switch malfunction.

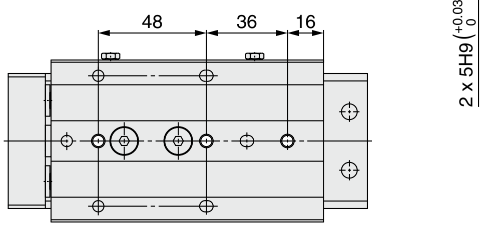


Cross-sectional view B-B





Cross-sectional view A-A



Bottom view of MXQ20-50Z

Dimensions

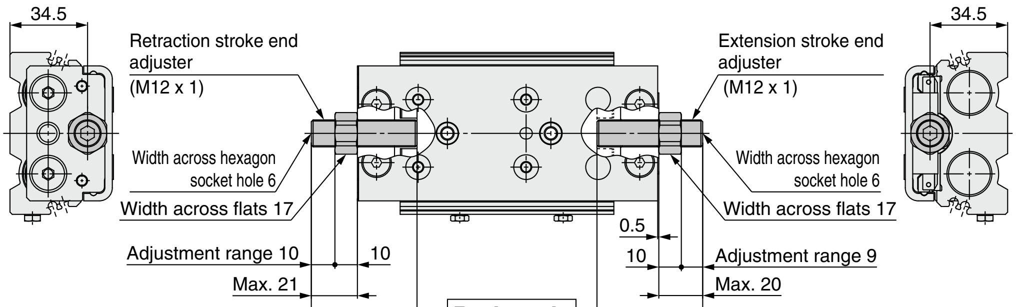
[mm]

Model	F	G	GA	GB	H	HA	HB	I	J	M	N	NN	Z	ZZ
MXQ20-10Z	45	18	14	8	46	50	70	24.5	34	113.5	4	2	85	104
MXQ20-20Z	40	18	14	8	46	50	70	24.5	34	123.5	4	2	85	104
MXQ20-30Z	48	28	24	18	46	50	70	22.5	46	133.5	4	2	95	114
MXQ20-40Z	58	28	28	18	56	56	80	22.5	56	143.5	4	2	105	124
MXQ20-50Z	42	—	52	34	—	48	80	30.5	64	159.5	6	3	121	140
MXQ20-75Z	55	22	78	58	56	56	90	38.5	90	193.5	6	3	155	174
MXQ20-100Z	50	16	72	108	56	112	90	63.5	115	266.5	8	4	205	224
MXQ20-125Z	55	32	91	133	59	118	90	63.5	140	291.5	8	4	230	249
MXQ20-150Z	62	48	110	158	62	124	90	63.5	165	316.5	8	4	255	274

Dimensions: MXQ 20 [Adjuster Option]

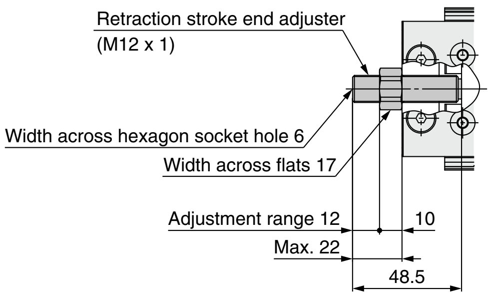
MXQ 20-□ [ ] With adjuster option (ø20)

Metal stopper with bumper **ZA**: Both ends, **ZB**: Extension stroke end, **ZC**: Retraction stroke end, **ZS**: Retraction stroke end (Shorter total length type)
Metal stopper **ZK**: Both ends, **ZL**: Extension stroke end, **ZM**: Retraction stroke end, **ZT**: Retraction stroke end (Shorter total length type)

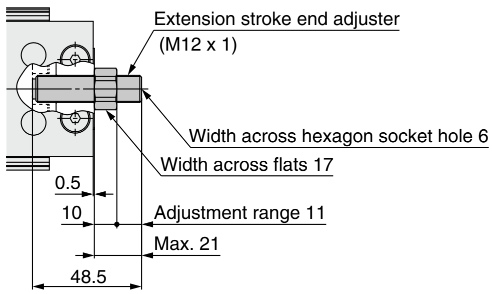


Both ends

Rubber stopper **ZD**: Both ends, **ZE**: Extension stroke end, **ZF**: Retraction stroke end, **ZP**: Retraction stroke end (Shorter total length type)

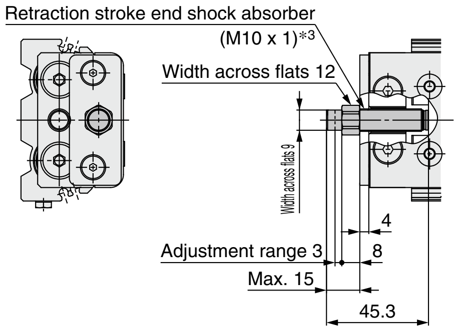


Retraction stroke end

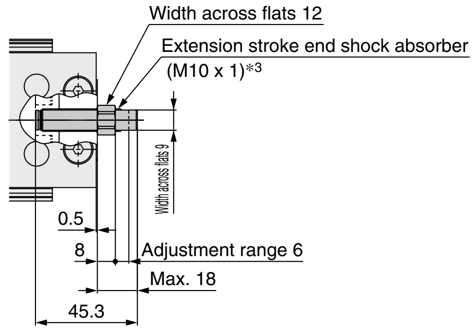


Extension stroke end

Shock absorber/RJ **ZG**: Both ends, **ZH**: Extension stroke end, **ZJ**: Retraction stroke end, **ZQ**: Retraction stroke end (Shorter total length type)



Retraction stroke end

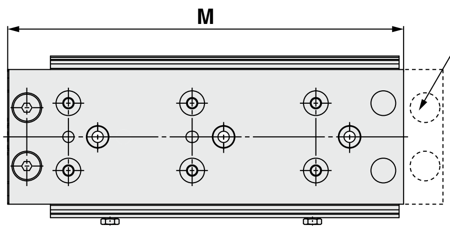


Extension stroke end

* Dimensions other than those listed above are the same as those for the standard type.

*3 The shock absorber uses a different size thread than the other adjusters.

MXQ 20-□ZN Shorter total length type



*4 As the total length has been reduced by removing the extension stroke end adjuster mounting holes, an extension stroke end adjuster cannot be mounted afterward. (Retraction stroke end adjusters can be mounted afterward.)

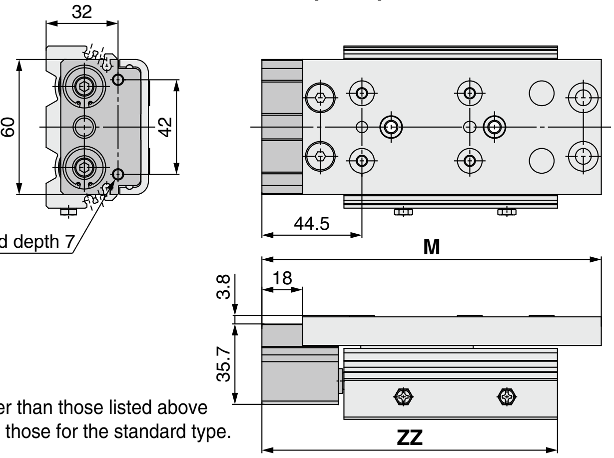
Dimensions [mm]

Model	M
MXQ20-10ZN	96
MXQ20-20ZN	106
MXQ20-30ZN	116
MXQ20-40ZN	126
MXQ20-50ZN	142
MXQ20-75ZN	176
MXQ20-100ZN	249
MXQ20-125ZN	274
MXQ20-150ZN	299

* Dimensions other than those listed above are the same as those for the standard type.

Dimensions: MXQ 20 [Functional Option]

MXQ 20-□□1 With buffer (ø20)

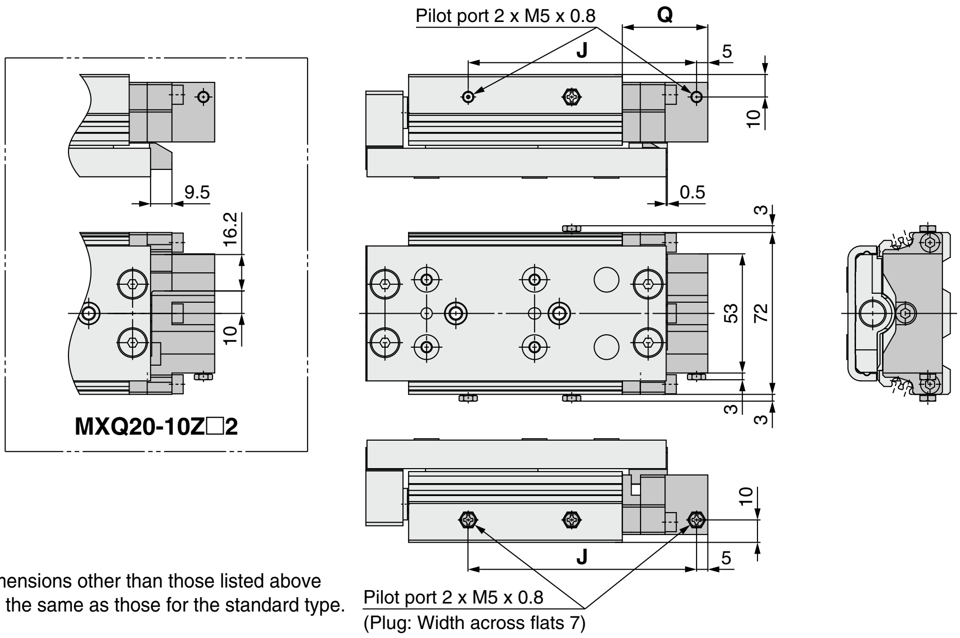


∗ Dimensions other than those listed above are the same as those for the standard type.

Dimensions [mm]

Model	Standard type M	Shorter total length type M	ZZ
MXQ20-10Z□1	131	113.5	121.5
MXQ20-20Z□1	141	123.5	
MXQ20-30Z□1	151	133.5	131.5
MXQ20-40Z□1	161	143.5	141.5
MXQ20-50Z□1	177	159.5	157.5
MXQ20-75Z□1	211	193.5	191.5
MXQ20-100Z□1	284	266.5	241.5
MXQ20-125Z□1	309	291.5	266.5
MXQ20-150Z□1	334	316.5	291.5

MXQ 20-□□2 With end lock (ø20)



∗ Dimensions other than those listed above are the same as those for the standard type.

Dimensions [mm]

Model	J	Q
MXQ20-10Z□2	91.5	38
MXQ20-20Z□2		
MXQ20-30Z□2	101.5	
MXQ20-40Z□2	111.5	
MXQ20-50Z□2	127.5	
MXQ20-75Z□2	161.5	
MXQ20-100Z□2	234.5	61
MXQ20-125Z□2	259.5	
MXQ20-150Z□2	284.5	

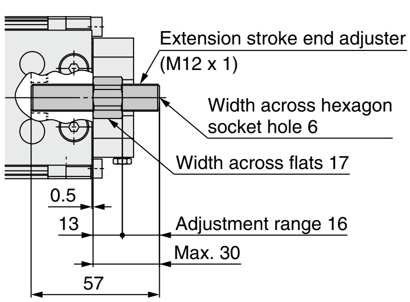
MXQ 20-□□2 With end lock, extension stroke end adjuster (ø20)

A retraction stroke end adjuster cannot be mounted to the end lock.
For adjuser part numbers, refer to page 124-1.

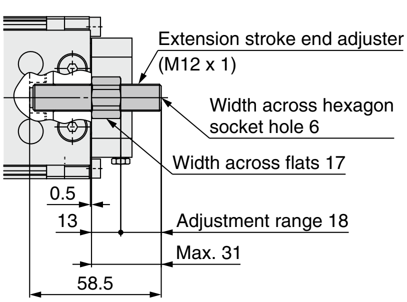
∗1 The shock absorber uses a different size thread than the other adjusters.

Metal stopper with bumper: ZB

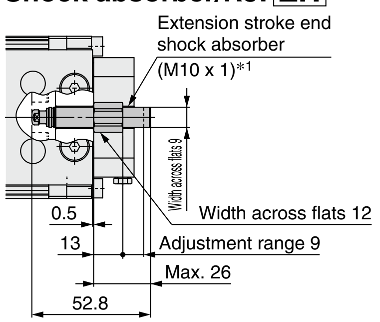
Metal stopper: ZL



Rubber stopper: ZE



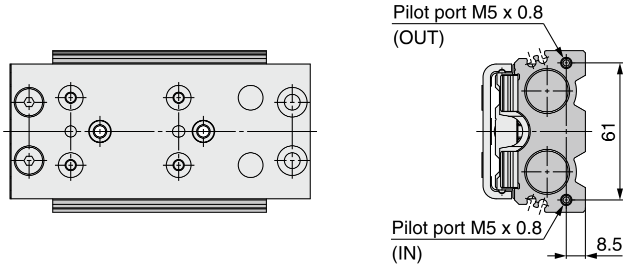
Shock absorber/RJ: ZH



∗ Dimensions other than those listed above are the same as those for the standard type.

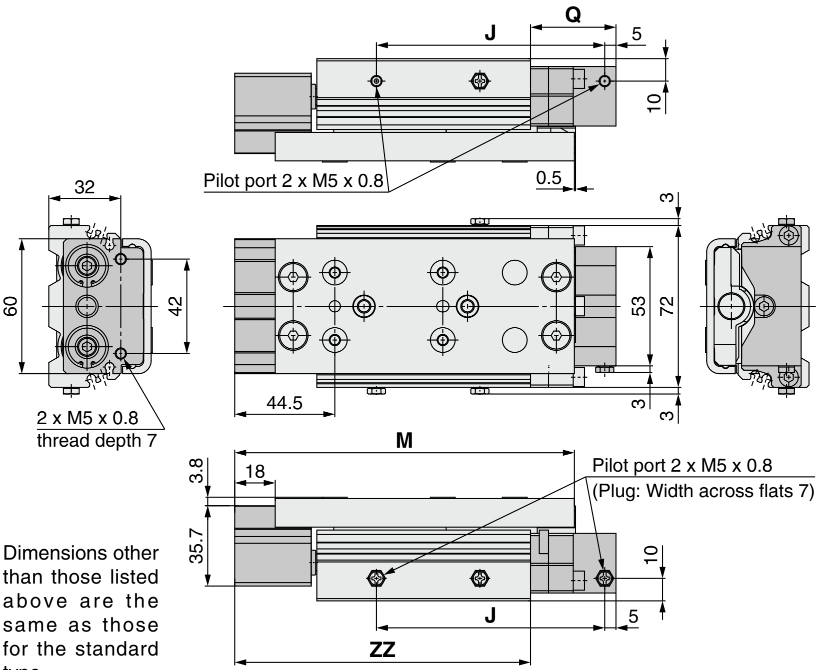
Dimensions: MXQ 20 [Functional Option]

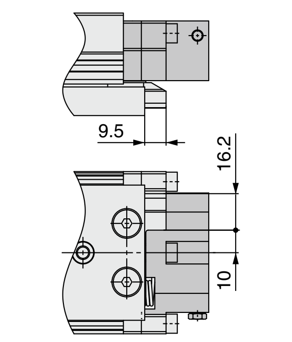
MXQ 20-□□3 Axial piping (ø20)



* Dimensions other than those listed above are the same as those for the standard type.

MXQ 20-□□4 With buffer, end lock (ø20)





MXQ20-10Z□4

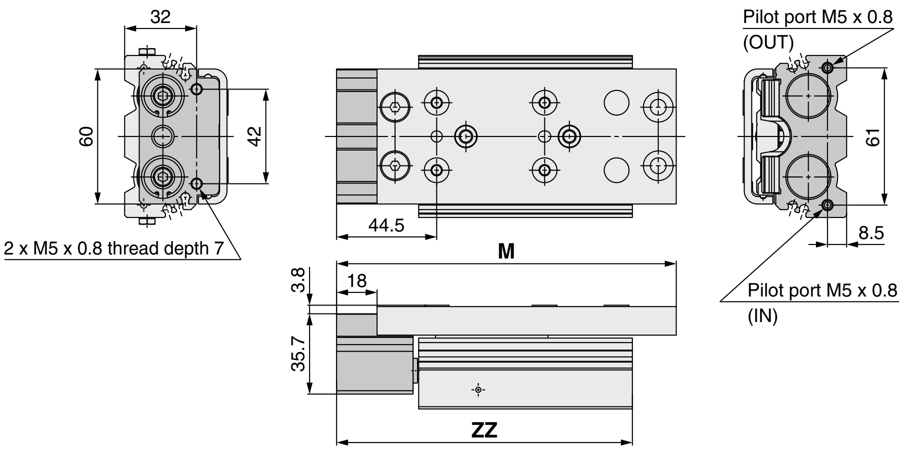
* Dimensions other than those listed above are the same as those for the standard type.

Dimensions

[mm]

Model	J	Q	Standard type M	ZZ
MXQ20-10Z□4	91.5	38	131	121.5
MXQ20-20Z□4			141	
MXQ20-30Z□4	101.5		151	131.5
MXQ20-40Z□4	111.5		161	141.5
MXQ20-50Z□4	127.5		177	157.5
MXQ20-75Z□4	161.5		211	191.5
MXQ20-100Z□4	234.5	61	284	241.5
MXQ20-125Z□4	259.5		309	266.5
MXQ20-150Z□4	284.5		334	291.5

MXQ 20-□□5 With buffer, axial piping (ø20)



Dimensions

[mm]

Model	Standard type M	Shorter total length type M	ZZ
MXQ20-10Z□5	131	113.5	121.5
MXQ20-20Z□5	141	123.5	
MXQ20-30Z□5	151	133.5	131.5
MXQ20-40Z□5	161	143.5	141.5
MXQ20-50Z□5	177	159.5	157.5
MXQ20-75Z□5	211	193.5	191.5
MXQ20-100Z□5	284	266.5	241.5
MXQ20-125Z□5	309	291.5	266.5
MXQ20-150Z□5	334	316.5	291.5

* Dimensions other than those listed above are the same as those for the standard type.

Dimensions: MXQ 20 [Functional Option]

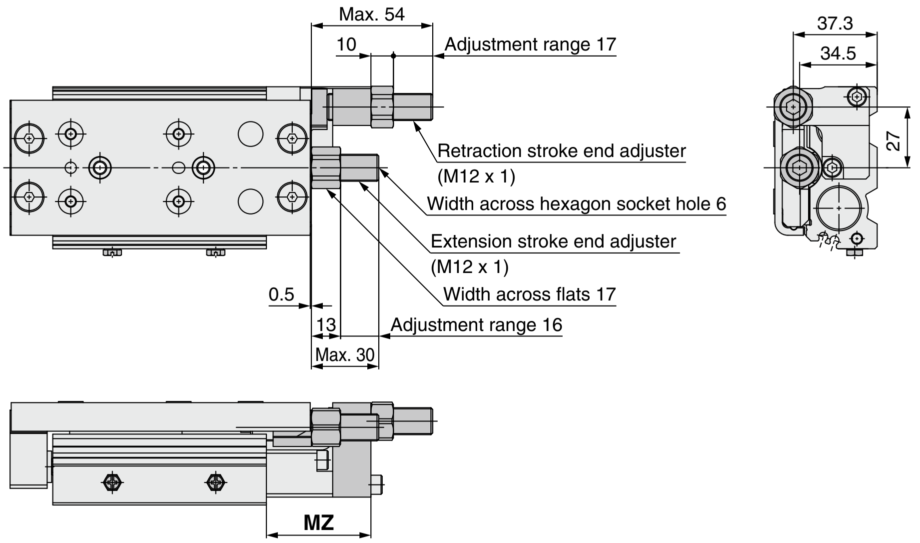
MXQ 20-□□6 Centralized adjuster (ø20)

For adjuster part numbers, refer to page 124-1.

∗1 The shock absorber uses a different size thread than the other adjusters.

Metal stopper with bumper ZA: Both ends, ZC: Retraction stroke end

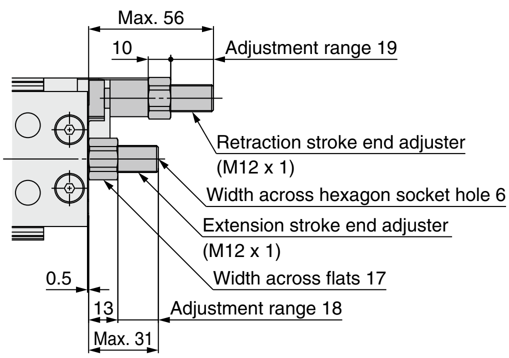
Metal stopper ZK: Both ends, ZM: Retraction stroke end



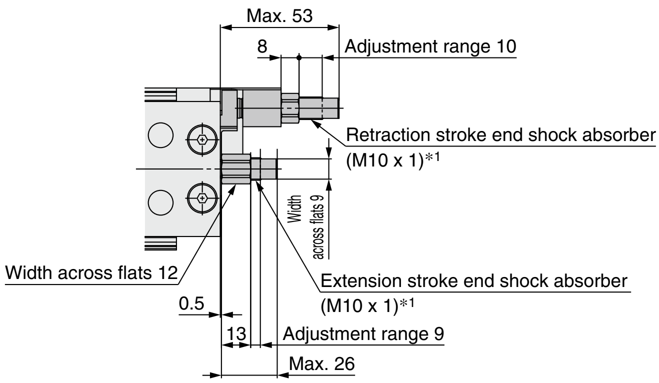
Dimensions [mm]

Model	MZ
MXQ20-10Z□6	36.5
MXQ20-20Z□6	46.5
MXQ20-30Z□6	
MXQ20-40Z□6	
MXQ20-50Z□6	
MXQ20-75Z□6	
MXQ20-100Z□6	69.5
MXQ20-125Z□6	
MXQ20-150Z□6	

Rubber stopper ZD: Both ends, ZF: Retraction stroke end



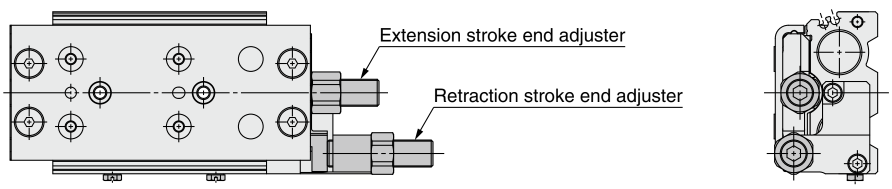
Shock absorber/RJ ZG: Both ends, ZJ: Retraction stroke end



∗ Dimensions other than those listed above are the same as those for the standard type.
∗ In the case of a short stroke, there are some places where an auto switch cannot be mounted. For details, refer to page 126.

MXQ 20-□□7 Centralized adjuster / Symmetric type (ø20)

The mounting position of the retraction stroke end adjuster is on the reverse side of functional option 6.
For adjuster part numbers, refer to page 124-1.

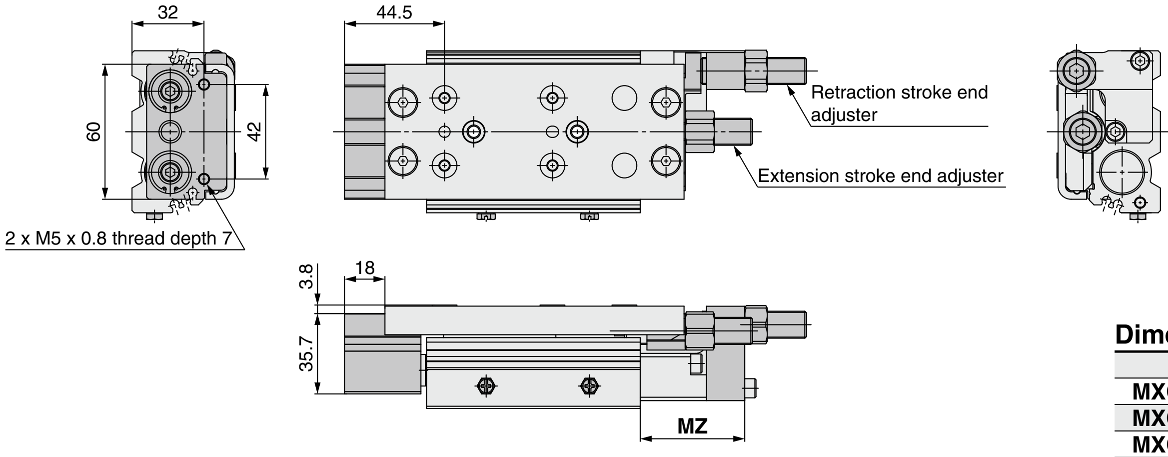


∗ In the case of a short stroke, there are some places where an auto switch cannot be mounted. For details, refer to page 126.

Dimensions: MXQ 20 [Functional Option]

MXQ 20-□□8 Buffer, Centralized adjuster (ø20)

The extension stroke end adjuster can only be mounted on a rubber stopper type or a metal stopper type.
For adjuster part numbers, refer to page 124-1.



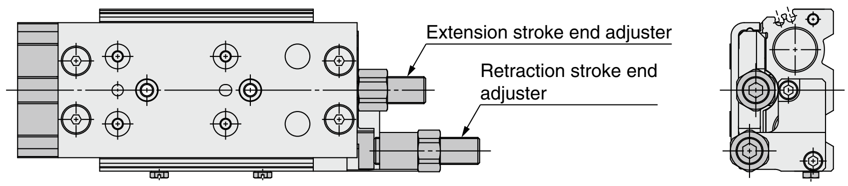
Dimensions [mm]

Model	MZ
MXQ20-10Z□8	36.5
MXQ20-20Z□8	46.5
MXQ20-30Z□8	
MXQ20-40Z□8	
MXQ20-50Z□8	
MXQ20-75Z□8	
MXQ20-100Z□8	69.5
MXQ20-125Z□8	
MXQ20-150Z□8	

∗ Dimensions other than those listed above are the same as those for the standard type.
∗ In the case of a short stroke, there are some places where an auto switch cannot be mounted. For details, refer to page 126.

MXQ 20-□□9 Buffer, Centralized adjuster / Symmetric type (ø20)

The extension stroke end adjuster can only be mounted on a rubber stopper type or a metal stopper type.
The mounting position of the retraction stroke end adjuster is on the reverse side of functional option 8.
For adjuster part numbers, refer to page 124-1.



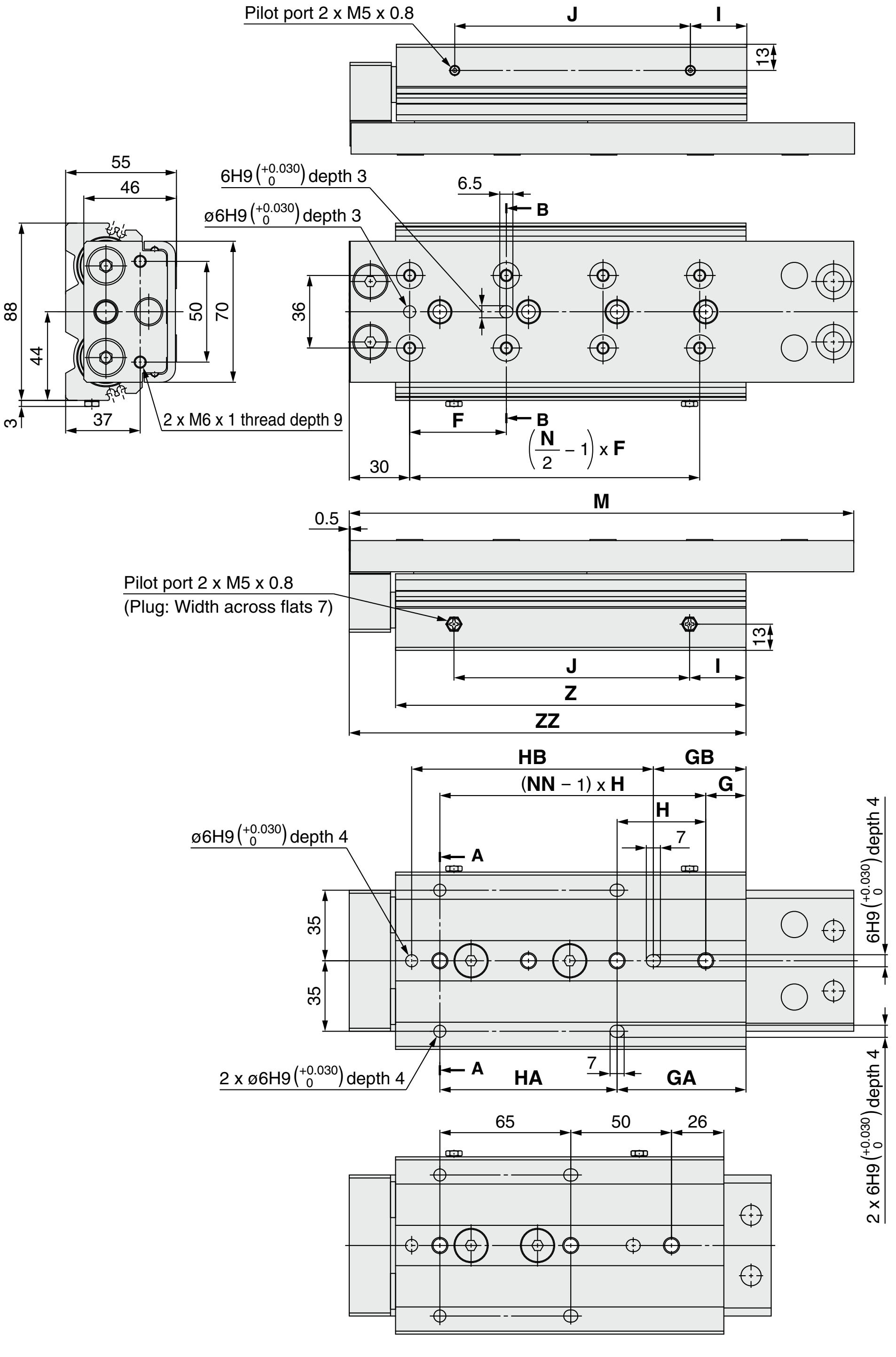
∗ In the case of a short stroke, there are some places where an auto switch cannot be mounted. For details, refer to page 126.

Dimensions: MXQ 25 [Standard]

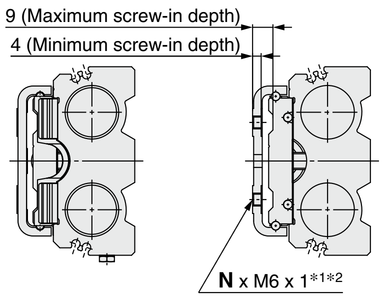
MXQ 25-□Z Standard type

∗1 If long bolts are used, they may touch the guide block and cause a malfunction, etc. Use a screw which has an intermediate length between the maximum screw-in depth and minimum screw-in depth. Refer to page 196 for details.

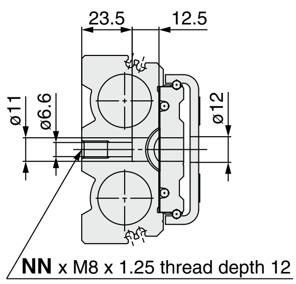
∗2 Since the table is made of a magnetic substance, it could become magnetized if touched by a magnet, etc. This could cause an auto switch malfunction.



Bottom view of MXQ25-75Z



Cross-sectional view B-B



Cross-sectional view A-A

Dimensions

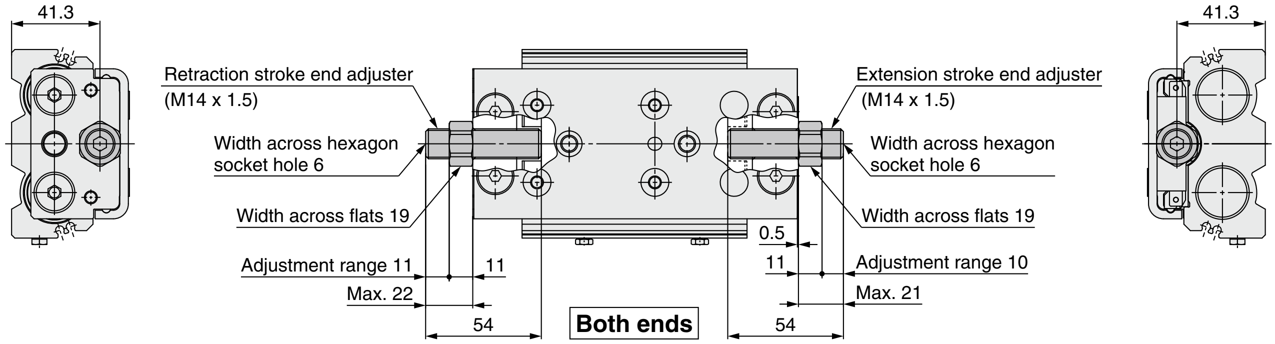
[mm]

Model	F	G	GA	GB	H	HA	HB	I	J	M	N	NN	Z	ZZ
MXQ25-10Z	55	18	18	7	55	55	80	30	36	131.5	4	2	95	118
MXQ25-20Z	46	18	18	7	55	55	80	30	36	141.5	4	2	95	118
MXQ25-30Z	55	28	28	17	55	55	80	22	54	151.5	4	2	105	128
MXQ25-40Z	65	28	28	17	65	65	90	22	64	161.5	4	2	115	138
MXQ25-50Z	75	36	36	20	80	80	110	43	66	184.5	4	2	138	161
MXQ25-75Z	60	—	76	45	—	65	110	42	92	209.5	6	3	163	186
MXQ25-100Z	48	20	64	46	44	88	120	28	117	250.5	8	4	174	197
MXQ25-125Z	60	18	84	60	66	132	170	67	142	314.5	8	4	238	261
MXQ25-150Z	65	43	109	85	66	132	170	66	168	339.5	8	4	263	286

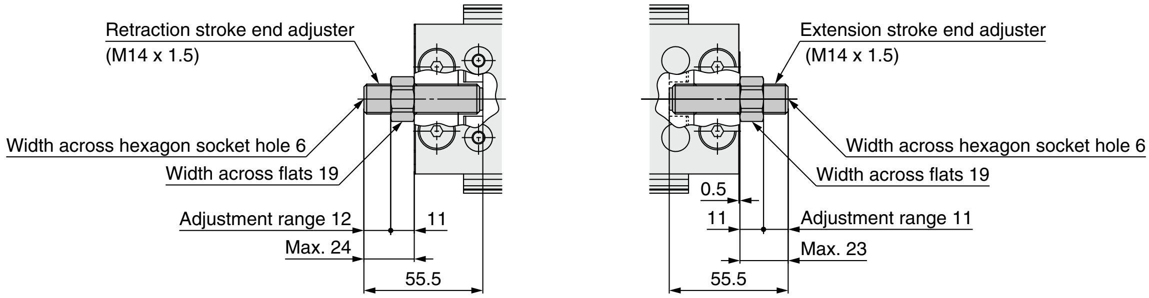
Dimensions: MXQ 25 [Adjuster Option]

MXQ 25-□ [ ] With adjuster option (ø25)

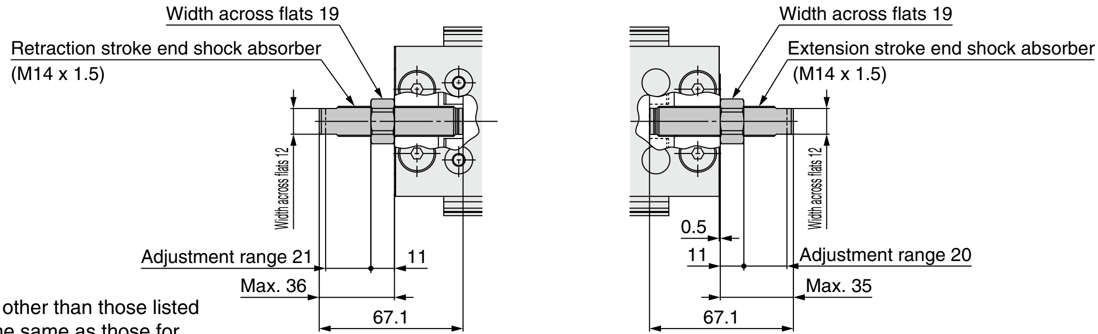
Metal stopper with bumper ZA: Both ends, ZB: Extension stroke end, ZC: Retraction stroke end, ZS: Retraction stroke end (Shorter total length type)
Metal stopper ZK: Both ends, ZL: Extension stroke end, ZM: Retraction stroke end, ZT: Retraction stroke end (Shorter total length type)



Rubber stopper ZD: Both ends, ZE: Extension stroke end, ZF: Retraction stroke end, ZP: Retraction stroke end (Shorter total length type)

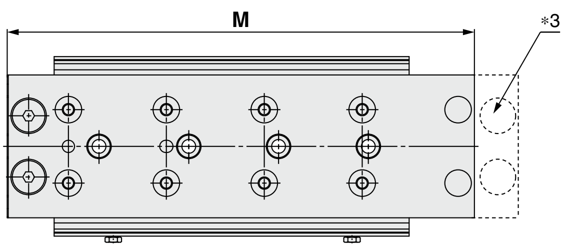


Shock absorber/RJ ZG: Both ends, ZH: Extension stroke end, ZJ: Retraction stroke end, ZQ: Retraction stroke end (Shorter total length type)



∗ Dimensions other than those listed above are the same as those for the standard type.

MXQ 25-□ZN Shorter total length type



∗3 As the total length has been reduced by removing the extension stroke end adjuster mounting holes, an extension stroke end adjuster cannot be mounted afterward. (Retraction stroke end adjusters can be mounted afterward.)

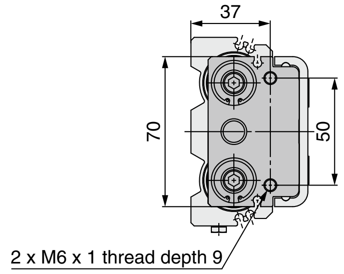
Dimensions [mm]

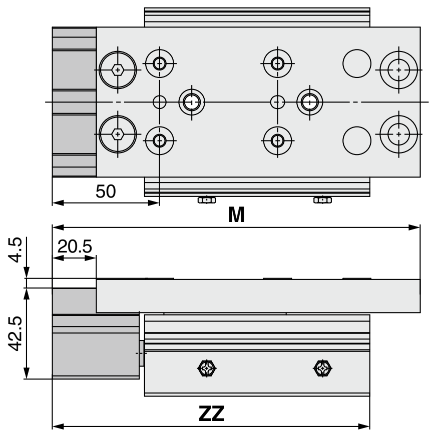
Model	M
MXQ25-10ZN	110
MXQ25-20ZN	120
MXQ25-30ZN	130
MXQ25-40ZN	140
MXQ25-50ZN	163
MXQ25-75ZN	188
MXQ25-100ZN	229
MXQ25-125ZN	293
MXQ25-150ZN	318

∗ Dimensions other than those listed above are the same as those for the standard type.

Dimensions: MXQ 25 [Functional Option]

MXQ 25-□□1 With buffer (ø25)



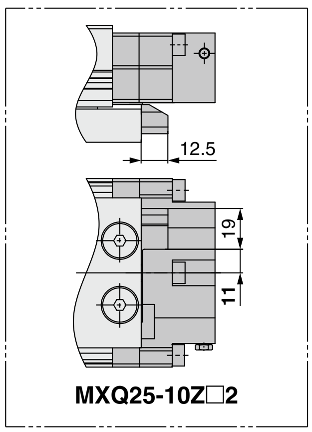


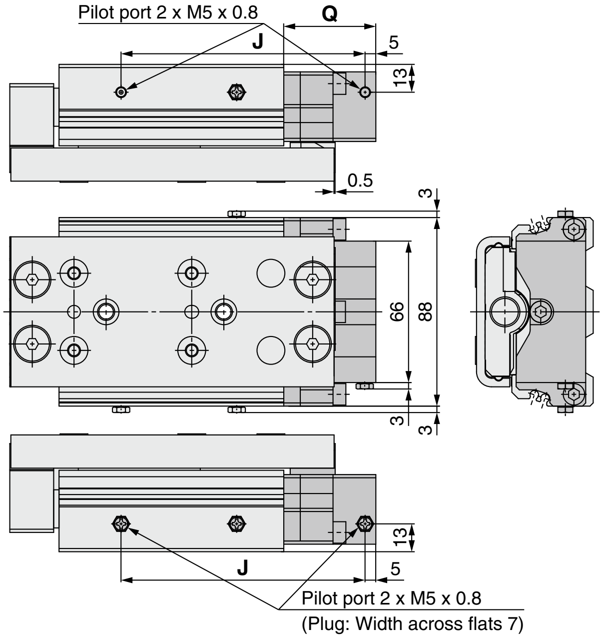
* Dimensions other than those listed above are the same as those for the standard type.

Dimensions [mm]

Model	Standard type M	Shorter total length type M	ZZ
MXQ25-10Z□1	151.5	130	138
MXQ25-20Z□1	161.5	140	
MXQ25-30Z□1	171.5	150	148
MXQ25-40Z□1	181.5	160	158
MXQ25-50Z□1	204.5	183	181
MXQ25-75Z□1	229.5	208	206
MXQ25-100Z□1	270.5	249	217
MXQ25-125Z□1	334.5	313	281
MXQ25-150Z□1	359.5	338	306

MXQ 25-□□2 With end lock (ø25)





* Dimensions other than those listed above are the same as those for the standard type.

Dimensions [mm]

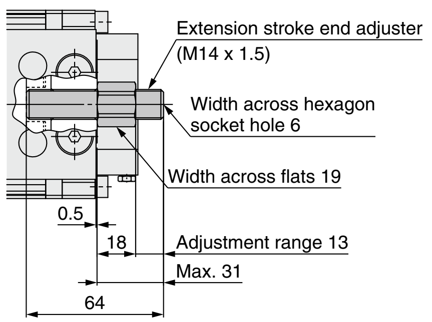
Model	J	Q
MXQ25-10Z□2	109	48
MXQ25-20Z□2	104	43
MXQ25-30Z□2	114	
MXQ25-40Z□2	124	
MXQ25-50Z□2	147	
MXQ25-75Z□2	172	
MXQ25-100Z□2	213	73
MXQ25-125Z□2	277	
MXQ25-150Z□2	302	

MXQ 25-□□2 With end lock, extension stroke end adjuster (ø25)

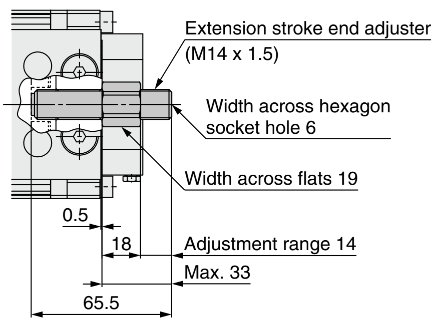
A retraction stroke end adjuster cannot be mounted to the end lock.
For adjuster part numbers, refer to page 124-1.

Metal stopper with bumper: ZB

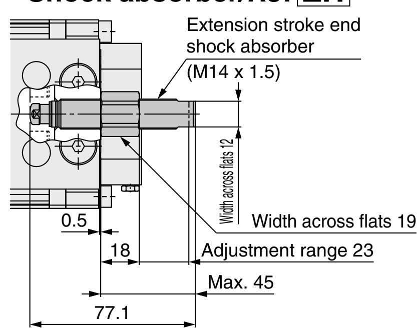
Metal stopper: ZL



Rubber stopper: ZE



Shock absorber/RJ: ZH

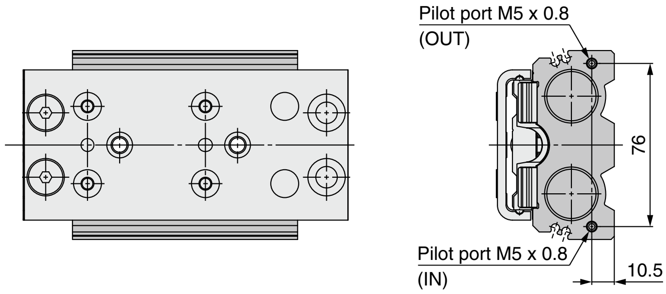


* Dimensions other than those listed above are the same as those for the standard type.

Dimensions: MXQ 25 [Functional Option]

MXQ 25-□□3

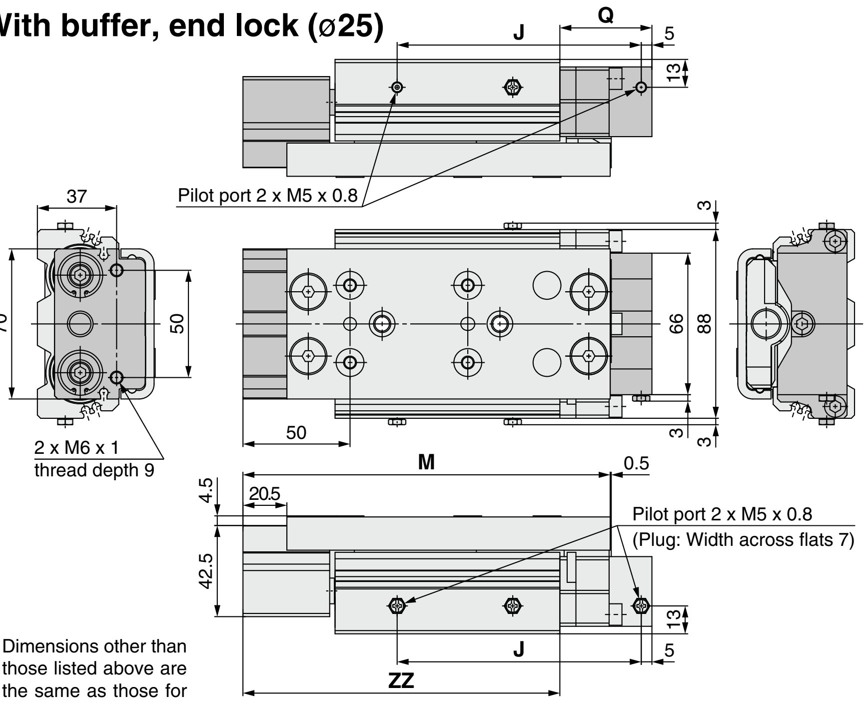
Axial piping (ø25)

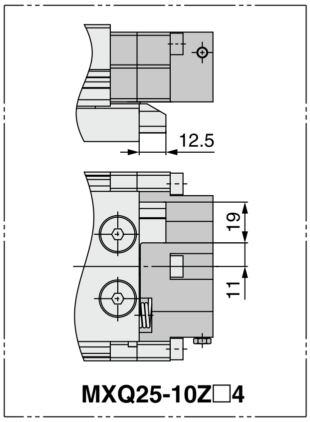


* Dimensions other than those listed above are the same as those for the standard type.

MXQ 25-□□4

With buffer, end lock (ø25)





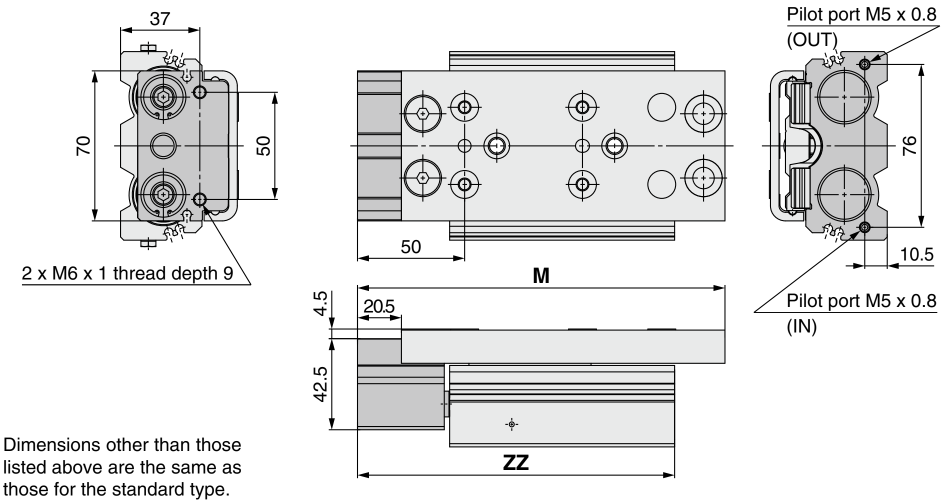
* Dimensions other than those listed above are the same as those for the standard type.

Dimensions [mm]

Model	J	Q	Standard type M	ZZ
MXQ25-10Z□4	109	48	151.5	138
MXQ25-20Z□4	104	43	161.5	
MXQ25-30Z□4	114		171.5	148
MXQ25-40Z□4	124		181.5	158
MXQ25-50Z□4	147		204.5	181
MXQ25-75Z□4	172		229.5	206
MXQ25-100Z□4	213	73	270.5	217
MXQ25-125Z□4	277		334.5	281
MXQ25-150Z□4	302		359.5	306

MXQ 25-□□5

With buffer, axial piping (ø25)



* Dimensions other than those listed above are the same as those for the standard type.

Dimensions [mm]

Model	Standard type M	Shorter total length type M	ZZ
MXQ25-10Z□5	151.5	130	138
MXQ25-20Z□5	161.5	140	
MXQ25-30Z□5	171.5	150	148
MXQ25-40Z□5	181.5	160	158
MXQ25-50Z□5	204.5	183	181
MXQ25-75Z□5	229.5	208	206
MXQ25-100Z□5	270.5	249	217
MXQ25-125Z□5	334.5	313	281
MXQ25-150Z□5	359.5	338	306

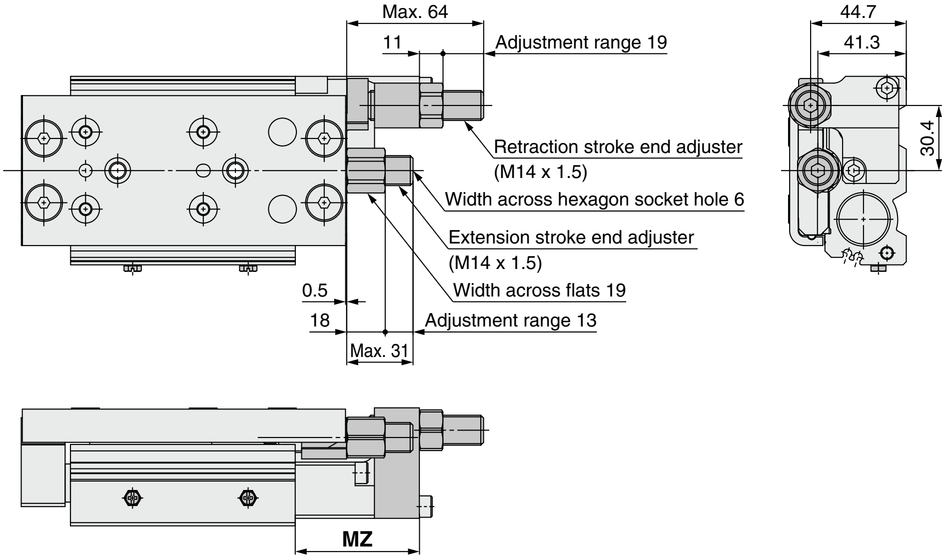
Dimensions: MXQ 25 [Functional Option]

MXQ 25-□□6 Centralized adjuster (ø25)

For adjuster part numbers, refer to page 124-1.

Metal stopper with bumper ZA: Both ends, ZC: Retraction stroke end

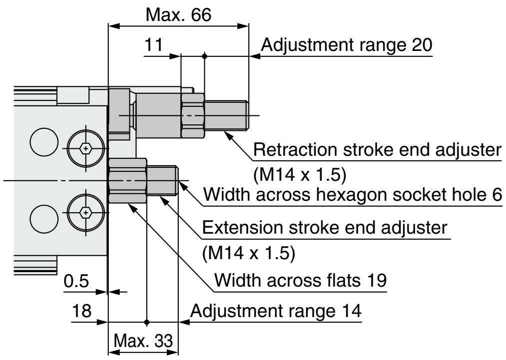
Metal stopper ZK: Both ends, ZM: Retraction stroke end



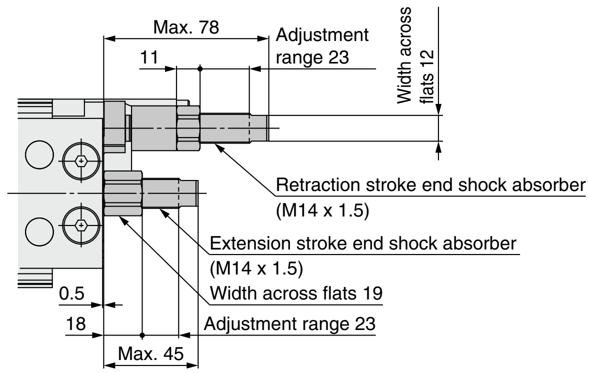
Dimensions [mm]

Model	MZ
MXQ25-10Z□6	48
MXQ25-20Z□6	58
MXQ25-30Z□6	
MXQ25-40Z□6	
MXQ25-50Z□6	
MXQ25-75Z□6	
MXQ25-100Z□6	88
MXQ25-125Z□6	
MXQ25-150Z□6	

Rubber stopper ZD: Both ends,
ZF: Retraction stroke end



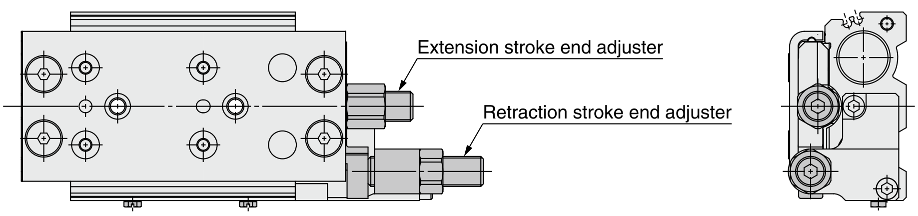
Shock absorber/RJ ZG: Both ends,
ZJ: Retraction stroke end



∗ Dimensions other than those listed above are the same as those for the standard type.

MXQ 25-□□7 Centralized adjuster / Symmetric type (ø25)

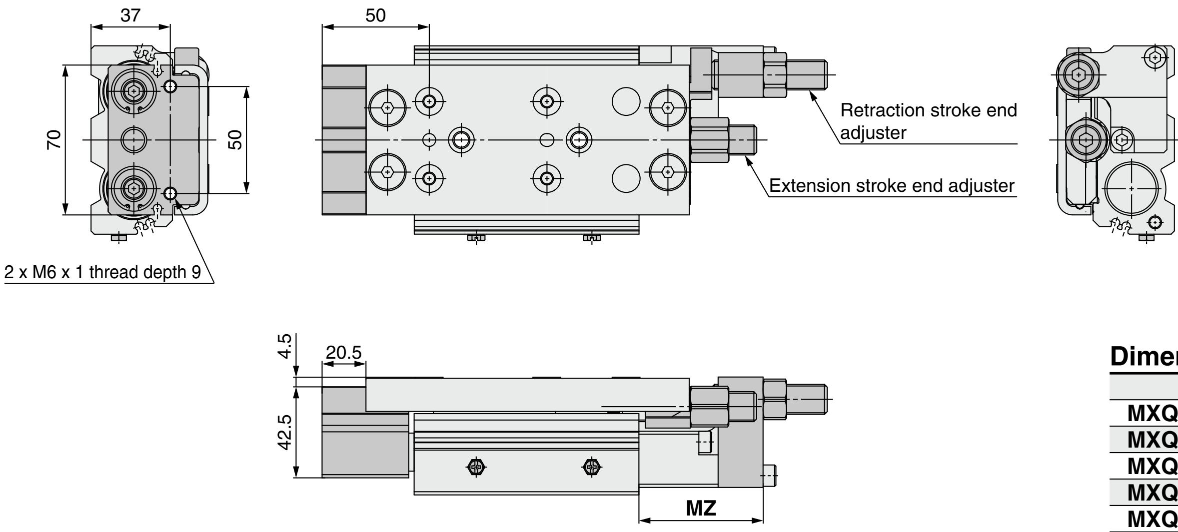
The mounting position of the retraction stroke end adjuster is on the reverse side of functional option 6.
For adjuster part numbers, refer to page 124-1.



Dimensions: MXQ 25 [Functional Option]

MXQ 25-□□8 Buffer, Centralized adjuster (ø25)

The extension stroke end adjuster can only be mounted on a rubber stopper type or a metal stopper type.
For adjuster part numbers, refer to page 124-1.



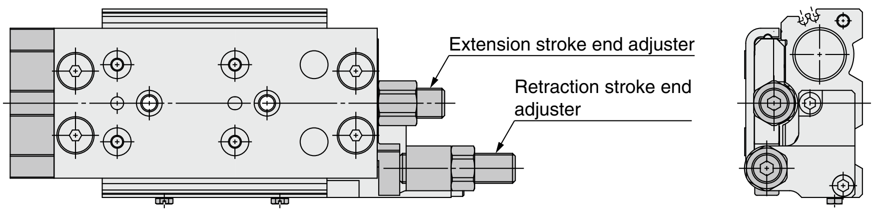
Dimensions [mm]

Model	MZ
MXQ25-10Z□8	48
MXQ25-20Z□8	58
MXQ25-30Z□8	
MXQ25-40Z□8	
MXQ25-50Z□8	
MXQ25-75Z□8	
MXQ25-100Z□8	88
MXQ25-125Z□8	
MXQ25-150Z□8	

∗ Dimensions other than those listed above are the same as those for the standard type.

MXQ 25-□□9 Buffer, Centralized adjuster / Symmetric type (ø25)

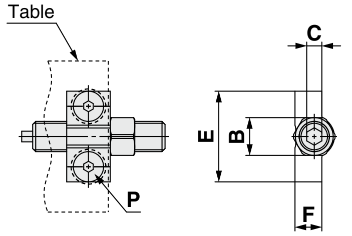
The extension stroke end adjuster can only be mounted on a rubber stopper type or a metal stopper type.
The mounting position of the retraction stroke end adjuster is on the reverse side of functional option 8.
For adjuster part numbers, refer to page 124-1.



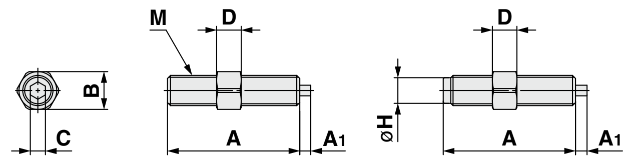
MXQ Series
Common Adjuster Options

Metal Stopper with Bumper

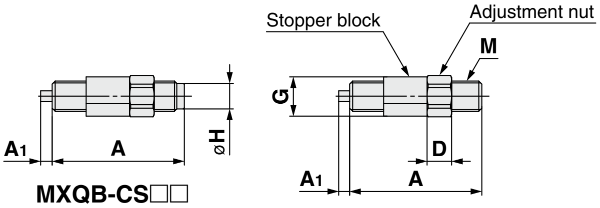
Extension stroke end



Retraction stroke end

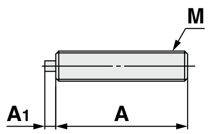


MXQB-CT□□



MXQB-CS□□

Single metal stopper with bumper



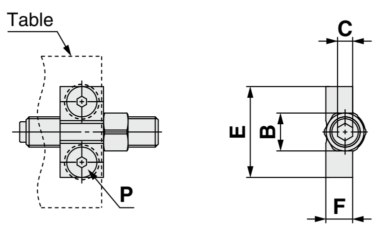
MXQA-A□□87

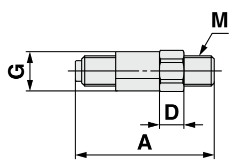
Model		Adjuster part no. Extension stroke end	Retraction stroke end	Single metal stopper with bumper*1	A	A1	B	C	D	E	F	G	M (Fine pitch)	P*2	øH
MXQ8(A, C)	—	MXQA-CS8	MXQA-CT8	MXQA-A887	30	2	8	3	5	18	5.8	8.3	M6 x 0.75	M3 x 6	—
MXQ12(A, C)	—	MXQA-CS12	MXQA-CT12	MXQA-A1287	35	2.8	10	4	6.5	24	7.1	10.4	M8 x 1	M4 x 8	—
MXQ16(A)	—	MXQA-CS16	MXQA-CT16	MXQA-A1687	40	3.6	12	5	8	29.4	9.2	12.6	M10 x 1	M5 x 10	—
MXQ20(A)	—	MXQA-CS20	MXQA-CT20	MXQA-A2087	47	4.4	17	6	10	36	11.2	16.2	M12 x 1	M6 x 12	—
MXQ25(A)	—	MXQA-CS25	MXQA-CT25	MXQA-A2587	54	5.5	19	6	11	44	13.5	19.3	M14 x 1.5	M8 x 16	—
—	MXQ8B	MXQB-CS8	MXQB-CT8	MXQB-A887	35	2	10	4	6.5	24	7.1	10.4	M8 x 1	M4 x 8	6.8
—	MXQ12B	MXQB-CS12	MXQB-CT12	MXQB-A1287	40	2.8	12	5	8	29.4	9.2	12.6	M10 x 1	M5 x 10	8.8
—	MXQ16B	MXQB-CS16	MXQB-CT16	MXQB-A1687	47	3.6	17	6	10	36	11.2	16.2	M12 x 1	M6 x 12	10.8
—	MXQ20B	MXQB-CS20	MXQB-CT20	MXQB-A2087	54	4.4	19	6	11	44	13.5	19.3	M14 x 1.5	M8 x 16	12.3

*1 Single metal stopper with bumper: A single unit of the stopper without a stopper block, adjustment nut, or hexagon socket flat countersunk head cap screw
*2 Size of the hexagon socket flat countersunk head cap screw

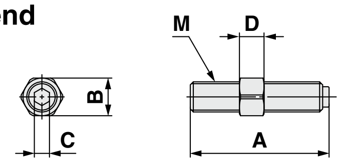
Rubber Stopper

Extension stroke end

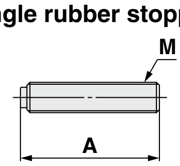




Retraction stroke end



Single rubber stopper



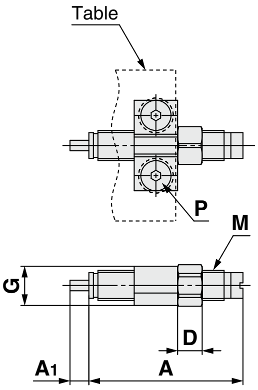
MXQA-A□□27

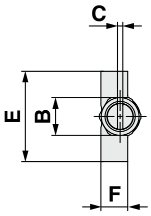
Model	Adjuster part no. Extension stroke end	Retraction stroke end	Single rubber stopper*1	A	B	C	D	E	F	G	M (Fine pitch)	P*2
MXQ6(A) MXQ6B MXQ8(A, C)	MXQA-AS8	MXQA-AT8	MXQA-A827	31.5	8	3	5	18	5.8	8.3	M6 x 0.75	M3 x 6
MXQ12(A, C) MXQ8B	MXQA-AS12	MXQA-AT12	MXQA-A1227	36.5	10	4	6.5	24	7.1	10.4	M8 x 1	M4 x 8
MXQ16(A) MXQ12B	MXQA-AS16	MXQA-AT16	MXQA-A1627	41.5	12	5	8	29.4	9.2	12.6	M10 x 1	M5 x 10
MXQ20(A) MXQ16B	MXQA-AS20	MXQA-AT20	MXQA-A2027	48.5	17	6	10	36	11.2	16.2	M12 x 1	M6 x 12
MXQ25(A) MXQ20B	MXQA-AS25	MXQA-AT25	MXQA-A2527	55.5	19	6	11	44	13.5	19.3	M14 x 1.5	M8 x 16

*1 Single rubber stopper: A single unit of the stopper without a stopper block, adjustment nut, or hexagon socket flat countersunk head cap screw
*2 Size of the hexagon socket flat countersunk head cap screw

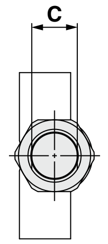
Shock Absorber/RJ

Extension stroke end



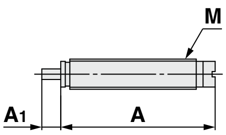


MXQA-JS8



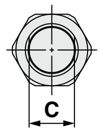
MXQA-JS12 to JS25

Shock absorber only

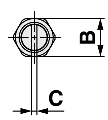


RJ□□□□(H)N

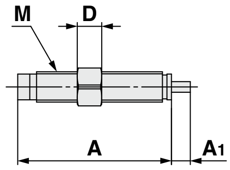
Retraction stroke end

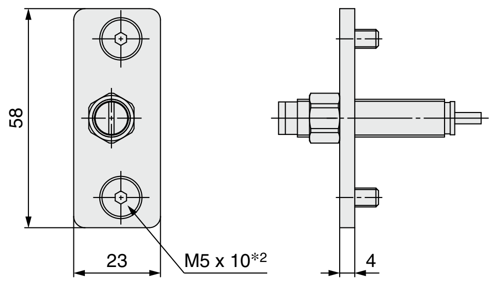


MXQA-JT12 to JT25



MXQA-JT8





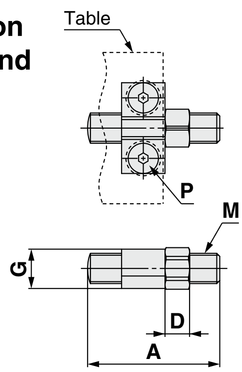
MXQA-JT20P*3

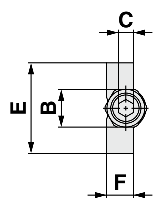
Model	Adjuster part no.			A	A1	B	C	D	E	F	G	M (Fine pitch)	P*2
	Extension stroke end	Retraction stroke end	Shock absorber only*1										
MXQ6(A) **MXQ6B** **MXQ8(A, C)**	**MXQA-JS8**	**MXQA-JT8**	**RJ0603N**	29.9	3.4	8	1	5	18	5.8	8.3	M6 x 0.75	M3 x 6
MXQ12(A, C) **MXQ8B**	**MXQA-JS12**	**MXQA-JT12**	**RJ0805N**	40.8	5	10	7	6.5	24	7.1	10.4	M8 x 1	M4 x 8
MXQ16(A) **MXQ12B**	**MXQA-JS16**	**MXQA-JT16**	**RJ1006N**	45.3	6	12	9	8	29.4	9.2	12.6	M10 x 1	M5 x 10
MXQ20(A) **MXQ16B**	**MXQA-JS20**	**MXQA-JT20P**	**RJ1007HN**	45.3	7	12	9	8	36	11.2	16.2	M10 x 1	M6 x 12
MXQ25(A) **MXQ20B**	**MXQA-JS25**	**MXQA-JT25**	**RJ1410N**	67.1	10	19	12	11	44	13.5	19.3	M14 x 1.5	M8 x 16

*1 Shock absorber only: A single unit of the shock absorber without a stopper block, adjustment nut, or hexagon socket flat countersunk head cap screw
*2 Size of the hexagon socket flat countersunk head cap screw
*3 Since the retraction stroke end shock absorber of the MXQ20(A) and MXQ16B has a different thread size from that of the product, use the mounting plate to mount the shock absorber. For this reason, the part number will differ from other sizes. (The part number has a "P" suffix.)

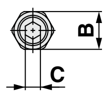
Metal Stopper

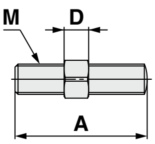
Extension stroke end



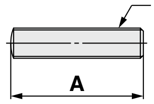


Retraction stroke end





Metal stopper only



MXQA-A□□38

Model	Adjuster part no.			A	B	C	D	E	F	G	M (Fine pitch)	P*2
	Extension stroke end	Retraction stroke end	Metal stopper only*1									
MXQ6(A) **MXQ6B** **MXQ8(A, C)**	**MXQA-DS8**	**MXQA-DT8**	**MXQA-A838**	30	8	3	5	18	5.8	8.3	M6 x 0.75	M3 x 6
MXQ12(A, C) **MXQ8B**	**MXQA-DS12**	**MXQA-DT12**	**MXQA-A1238**	35	10	4	6.5	24	7.1	10.4	M8 x 1	M4 x 8
MXQ16(A) **MXQ12B**	**MXQA-DS16**	**MXQA-DT16**	**MXQA-A1638**	40	12	5	8	29.4	9.2	12.6	M10 x 1	M5 x 10
MXQ20(A) **MXQ16B**	**MXQA-DS20**	**MXQA-DT20**	**MXQA-A2038**	47	17	6	10	36	11.2	16.2	M12 x 1	M6 x 12
MXQ25(A) **MXQ20B**	**MXQA-DS25**	**MXQA-DT25**	**MXQA-A2538**	54	19	6	11	44	13.5	19.3	M14 x 1.5	M8 x 16

*1 Metal stopper only: A single unit of the stopper without a stopper block, adjustment nut, or hexagon socket flat countersunk head cap screw
*2 Size of the hexagon socket flat countersunk head cap screw

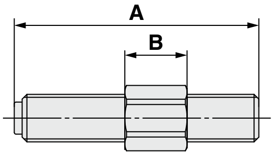
With Functional Option/Adjuster

Applicable model	Type	End lock (2)	Buffer, end lock (4)	Centralized adjuster (6) Centralized adjuster/Symmetric (7)		Buffer, Centralized adjuster (8) Buffer, Centralized adjuster/Symmetric (9)	
		Extension stroke end	Extension stroke end	Extension stroke end	Retraction stroke end	Extension stroke end	Retraction stroke end
MXQ6A MXQ6(L)	Rubber stopper	MXQA-AT8-X28	MXQA-AT8-X28	MXQA-AT8-X28	MXQA-AT8	MXQA-AT8-X28	MXQA-AT8
	Shock absorber	MXQA-JT8-X28	—	MXQA-JT8-X28	MXQA-JT8	—	MXQA-JT8
	Metal stopper	MXQA-DT8-X28	MXQA-DT8-X28	MXQA-DT8-X28	MXQA-DT8	MXQA-DT8-X28	MXQA-DT8
MXQ8A MXQ8(L) MXQ8C(L)	Metal stopper with bumper	MXQA-CT8-X28	—	MXQA-CT8-X28	MXQA-CT8	—	MXQA-CT8
	Rubber stopper	MXQA-AT8-X28	MXQA-AT8-X28	MXQA-AT8-X28	MXQA-AT8	MXQA-AT8-X28	MXQA-AT8
	Shock absorber	MXQA-JT8-X28	—	MXQA-JT8-X28	MXQA-JT8	—	MXQA-JT8
	Metal stopper	MXQA-DT8-X28	MXQA-DT8-X28	MXQA-DT8-X28	MXQA-DT8	MXQA-DT8-X28	MXQA-DT8
MXQ12A MXQ12(L) MXQ12C(L)	Metal stopper with bumper	MXQA-CT12-X28	—	MXQA-CT12-X28	MXQA-CT12	—	MXQA-CT12
	Rubber stopper	MXQA-AT12-X28	MXQA-AT12-X28	MXQA-AT12-X28	MXQA-AT12	MXQA-AT12-X28	MXQA-AT12
	Shock absorber	MXQA-JT12-X28	—	MXQA-JT12-X28	MXQA-JT12	—	MXQA-JT12
	Metal stopper	MXQA-DT12-X28	MXQA-DT12-X28	MXQA-DT12-X28	MXQA-DT12	MXQA-DT12-X28	MXQA-DT12
MXQ16(A)	Metal stopper with bumper	MXQA-CT16-X28	—	MXQA-CT16-X28	MXQA-CT16	—	MXQA-CT16
	Rubber stopper	MXQA-AT16-X28	MXQA-AT16-X28	MXQA-AT16-X28	MXQA-AT16	MXQA-AT16-X28	MXQA-AT16
	Shock absorber	MXQA-JT16-X28	—	MXQA-JT16-X28	MXQA-JT16	—	MXQA-JT16
	Metal stopper	MXQA-DT16-X28	MXQA-DT16-X28	MXQA-DT16-X28	MXQA-DT16	MXQA-DT16-X28	MXQA-DT16
MXQ20(A)	Metal stopper with bumper	MXQA-CT20-X28	—	MXQA-CT20-X28	MXQA-CT20	—	MXQA-CT20
	Rubber stopper	MXQA-AT20-X28	MXQA-AT20-X28	MXQA-AT20-X28	MXQA-AT20	MXQA-AT20-X28	MXQA-AT20
	Shock absorber	MXQA-JT20-X28	—	MXQA-JT20-X28	MXQA-JT20	—	MXQA-JT20
	Metal stopper	MXQA-DT20-X28	MXQA-DT20-X28	MXQA-DT20-X28	MXQA-DT20	MXQA-DT20-X28	MXQA-DT20
MXQ25(A)	Metal stopper with bumper	MXQA-CT25-X28	—	MXQA-CT25-X28	MXQA-CT25	—	MXQA-CT25
	Rubber stopper	MXQA-AT25-X28	MXQA-AT25-X28	MXQA-AT25-X28	MXQA-AT25	MXQA-AT25-X28	MXQA-AT25
	Shock absorber	MXQA-JT25-X28	—	MXQA-JT25-X28	MXQA-JT25	—	MXQA-JT25
	Metal stopper	MXQA-DT25-X28	MXQA-DT25-X28	MXQA-DT25-X28	MXQA-DT25	MXQA-DT25-X28	MXQA-DT25

∗ For details on adjusters applicable to each functional option, refer to pages 11, 67, and 83.
∗ Adjusters for functional options (1) With buffer, (3) Axial piping, and (5) With buffer, axial piping are standard adjusters. Refer to pages 123 and 124 for details.
∗ For dimensions, refer to the dimensions for the type with an adjuster indicated for each functional option.
∗ The metal stopper with bumper option is not available for ø6.
∗ The ø20 shock absorber uses a different size thread than the other adjusters.

[mm]

Metal stopper with bumper			Rubber stopper			Shock absorber/RJ			Metal stopper		
Model	A	B	Model	A	B	Model	A	B	Model	A	B
MXQA-CT8-X28	40	10	MXQA-AT8-X28	41.5	10	MXQA-JT8-X28	29.9	10	MXQA-DT8-X28	40	10
MXQA-CT12-X28	45	11	MXQA-AT12-X28	46.5	11	MXQA-JT12-X28	47.3	11	MXQA-DT12-X28	45	11
MXQA-CT16-X28	50	13	MXQA-AT16-X28	51.5	13	MXQA-JT16-X28	52.8	13	MXQA-DT16-X28	50	13
MXQA-CT20-X28	57	13	MXQA-AT20-X28	58.5	13	MXQA-JT20-X28	52.8	13	MXQA-DT20-X28	57	13
MXQA-CT25-X28	64	18	MXQA-AT25-X28	65.5	18	MXQA-JT25-X28	77.1	18	MXQA-DT25-X28	64	18



With Functional Option/Single Adjustment Bolt

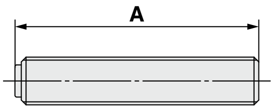
This part number is for a single adjustment bolt without a nut. It can be used as a replacement part when the bolt wears out.

Applicable model	Type	End lock (2)	Buffer, end lock (4)	Centralized adjuster (6) Centralized adjuster/Symmetric (7)		Buffer, Centralized adjuster (8) Buffer, Centralized adjuster/Symmetric (9)	
		Extension stroke end	Extension stroke end	Extension stroke end	Retraction stroke end	Extension stroke end	Retraction stroke end
MXQ6A MXQ6(L)	Single rubber stopper	MXQA-A827-X11	MXQA-A827-X11	MXQA-A827-X11	MXQA-A827	MXQA-A827-X11	MXQA-A827
	Single shock absorber	RJ0603N	—	RJ0603N	RJ0603N	—	RJ0603N
	Metal stopper only	MXQA-A838-X11	MXQA-A838-X11	MXQA-A838-X11	MXQA-A838	MXQA-A838-X11	MXQA-A838
MXQ8A MXQ8(L) MXQ8C(L)	Single metal stopper with bumper	MXQA-A887-X11	—	MXQA-A887-X11	MXQA-A887	—	MXQA-A887
	Single rubber stopper	MXQA-A827-X11	MXQA-A827-X11	MXQA-A827-X11	MXQA-A827	MXQA-A827-X11	MXQA-A827
	Shock absorber only	RJ0603N	—	RJ0603N	RJ0603N	—	RJ0603N
	Metal stopper only	MXQA-A838-X11	MXQA-A838-X11	MXQA-A838-X11	MXQA-A838	MXQA-A838-X11	MXQA-A838
MXQ12A MXQ12(L) MXQ12C(L)	Single metal stopper with bumper	MXQA-A1287-X11	—	MXQA-A1287-X11	MXQA-A1287	—	MXQA-A1287
	Single rubber stopper	MXQA-A1227-X11	MXQA-A1227-X11	MXQA-A1227-X11	MXQA-A1227	MXQA-A1227-X11	MXQA-A1227
	Shock absorber only	RJ0805U-X2300	—	RJ0805U-X2300	RJ0805N	—	RJ0805N
	Metal stopper only	MXQA-A1238-X11	MXQA-A1238-X11	MXQA-A1238-X11	MXQA-A1238	MXQA-A1238-X11	MXQA-A1238
MXQ16(A)	Single metal stopper with bumper	MXQA-A1687-X11	—	MXQA-A1687-X11	MXQA-A1687	—	MXQA-A1687
	Single rubber stopper	MXQA-A1627-X11	MXQA-A1627-X11	MXQA-A1627-X11	MXQA-A1627	MXQA-A1627-X11	MXQA-A1627
	Shock absorber only	RJ1006U-X2300	—	RJ1006U-X2300	RJ1006N	—	RJ1006N
	Metal stopper only	MXQA-A1638-X11	MXQA-A1638-X11	MXQA-A1638-X11	MXQA-A1638	MXQA-A1638-X11	MXQA-A1638
MXQ20(A)	Single metal stopper with bumper	MXQA-A2087-X11	—	MXQA-A2087-X11	MXQA-A2087	—	MXQA-A2087
	Single rubber stopper	MXQA-A2027-X11	MXQA-A2027-X11	MXQA-A2027-X11	MXQA-A2027	MXQA-A2027-X11	MXQA-A2027
	Shock absorber only	RJ1007HU-X2300	—	RJ1007HU-X2300	RJ1007HN	—	RJ1007HN
	Metal stopper only	MXQA-A2038-X11	MXQA-A2038-X11	MXQA-A2038-X11	MXQA-A2038	MXQA-A2038-X11	MXQA-A2038
MXQ25(A)	Single metal stopper with bumper	MXQA-A2587-X11	—	MXQA-A2587-X11	MXQA-A2587	—	MXQA-A2587
	Single rubber stopper	MXQA-A2527-X11	MXQA-A2527-X11	MXQA-A2527-X11	MXQA-A2527	MXQA-A2527-X11	MXQA-A2527
	Shock absorber only	RJ1410U-X2300	—	RJ1410U-X2300	RJ1410N	—	RJ1410N
	Metal stopper only	MXQA-A2538-X11	MXQA-A2538-X11	MXQA-A2538-X11	MXQA-A2538	MXQA-A2538-X11	MXQA-A2538

∗ For details on adjusters applicable to each functional option, refer to pages 11, 67, and 83.
∗ Adjusters for functional options (1) With buffer, (3) Axial piping, and (5) With buffer, axial piping are standard adjusters. Refer to pages 123 and 124 for details.
∗ For dimensions, refer to the dimensions for the type with an adjuster indicated for each functional option.
∗ The metal stopper with bumper option is not available for ø6.
∗ The ø20 shock absorber uses a different size thread than the other adjusters.

[mm]

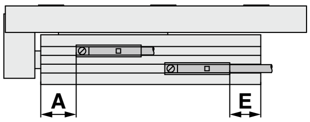
Single metal stopper with bumper		Single rubber stopper		Single shock absorber		Metal stopper only	
Model	A	Model	A	Model	A	Model	A
MXQA-A887-X11	40	MXQA-A827-X11	41.5	RJ0603N	29.9	MXQA-A838-X11	40
MXQA-A1287-X11	45	MXQA-A1227-X11	46.5	RJ0805U-X2300	47.3	MXQA-A1238-X11	45
MXQA-A1687-X11	50	MXQA-A1627-X11	51.5	RJ1006U-X2300	52.8	MXQA-A1638-X11	50
MXQA-A2087-X11	57	MXQA-A2027-X11	58.5	RJ1007HU-X2300	52.8	MXQA-A2038-X11	57
MXQA-A2087-X11	64	MXQA-A2027-X11	65.5	RJ1410U-X2300	77.1	MXQA-A2538-X11	64



Auto Switch Mounting

Auto Switch Proper Mounting Position (Detection at stroke end)

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



Solid State Auto Switch: D-M9□/M9□W

[mm]

Model	A stroke									E stroke								
	10	20	30	40	50	75	100	125	150	10	20	30	40	50	75	100	125	150
MXQ6(A)	18	7.4	7.4	7.4	7.4	—	—	—	—	0	0.6	3.6	5.6	5.6	—	—	—	—
MXQ8(A, C)	13.9	13.9	13.9	13.9	13.9	13.9	—	—	—	5.1	5.1	5.1	11.1	28.1	5.1	—	—	—
MXQ12(A, C)	26.5	16.5	16.5	16.5	16.5	16.5	16.5	—	—	4.1	6.1	6.1	14.1	14.1	33.1	33.1	—	—
MXQ16(A)	20.6	20.6	20.6	20.6	20.6	20.6	20.6	20.6	—	20	14	14	21	21	27	46	46	—
MXQ20(A)	32.2	21.2	21.2	21.2	21.2	21.2	21.2	21.2	21.2	20.9	21.9	21.9	21.9	27.9	36.9	61.9	61.9	61.9
MXQ25(A)	34.4	25.4	25.4	25.4	25.4	25.4	25.4	25.4	25.4	28.7	27.7	27.7	27.7	40.7	40.7	42.7	65.4	65.7
MXQ6B	18	7.4	7.4	7.4	7.4	7.4	—	—	—	1	11.6	11.6	17.6	34.6	11.6	—	—	—
MXQ8B	29	13.9	13.9	13.9	13.9	13.9	13.9	—	—	2	9.1	9.1	17.1	17.1	36.1	36.1	—	—
MXQ12B	26.5	16.5	16.5	16.5	16.5	16.5	16.5	16.5	—	14	18	18	25	25	31	50	50	—
MXQ16B	20.6	20.6	20.6	20.6	20.6	20.6	20.6	20.6	20.6	32.9	22.9	22.9	22.9	28.9	37.9	62.9	62.9	62.9
MXQ20B	32.2	21.2	21.2	21.2	21.2	21.2	21.2	21.2	21.2	30.8	31.8	31.8	31.8	44.8	44.8	30.8	69.8	69.8

Solid State Auto Switch: D-M9□V/M9□WV

[mm]

Model	A stroke									E stroke								
	10	20	30	40	50	75	100	125	150	10	20	30	40	50	75	100	125	150
MXQ6(A)	18	7.4	7.4	7.4	7.4	—	—	—	—	2	2.6	5.6	7.6	7.6	—	—	—	—
MXQ8(A, C)	13.9	13.9	13.9	13.9	13.9	13.9	—	—	—	7.1	7.1	7.1	13.1	30.1	7.1	—	—	—
MXQ12(A, C)	26.5	16.5	16.5	16.5	16.5	16.5	16.5	—	—	6.1	8.1	8.1	16.1	16.1	35.1	35.1	—	—
MXQ16(A)	20.6	20.6	20.6	20.6	20.6	20.6	20.6	20.6	—	22	16	16	23	23	29	48	48	—
MXQ20(A)	32.2	21.2	21.2	21.2	21.2	21.2	21.2	21.2	21.2	22.9	23.9	23.9	23.9	29.9	38.9	63.9	63.9	63.9
MXQ25(A)	34.4	25.4	25.4	25.4	25.4	25.4	25.4	25.4	25.4	30.7	29.7	29.7	29.7	42.7	42.7	28.7	67.7	67.7
MXQ6B	18	7.4	7.4	7.4	7.4	7.4	—	—	—	3	13.6	13.6	19.6	36.6	13.6	—	—	—
MXQ8B	29	13.9	13.9	13.9	13.9	13.9	13.9	—	—	4	11.1	11.1	19.1	19.1	38.1	38.1	—	—
MXQ12B	26.5	16.5	16.5	16.5	16.5	16.5	16.5	16.5	—	16	20	20	27	27	33	52	52	—
MXQ16B	20.6	20.6	20.6	20.6	20.6	20.6	20.6	20.6	20.6	34.9	24.9	24.9	24.9	30.9	30.9	64.9	64.9	64.9
MXQ20B	32.2	21.2	21.2	21.2	21.2	21.2	21.2	21.2	21.2	32.9	33.8	33.8	33.8	46.8	46.8	32.8	71.8	71.8

Reed Auto Switch: D-A9□/A9□V

[mm]

Model	A stroke									E stroke								
	10	20	30	40	50	75	100	125	150	10	20	30	40	50	75	100	125	150
MXQ6(A)	14	3.4	3.4	3.4	3.4	—	—	—	—	1.5 (4)	2.1 (4.6)	5.1 (7.6)	7.1 (9.6)	7.1 (9.6)	—	—	—	—
MXQ8(A, C)	9.9	9.9	9.9	9.9	9.9	9.9	—	—	—	6.6 (9.1)	6.6 (9.1)	6.6 (9.1)	12.6 (15.1)	29.6 (32.1)	6.6 (9.1)	—	—	—
MXQ12(A, C)	22.5	12.5	12.5	12.5	12.5	12.5	12.5	—	—	5.6 (8.1)	7.6 (10.1)	7.6 (10.1)	15.6 (18.1)	15.6 (18.1)	34.6 (37.1)	34.6 (37.1)	—	—
MXQ16(A)	16.6	16.6	16.6	16.6	16.6	16.6	16.6	16.6	—	21.5 (24)	15.5 (18)	15.5 (18)	22.5 (25)	22.5 (25)	28.5 (31)	47.5 (50)	47.5 (50)	—
MXQ20(A)	28.2	17.2	17.2	17.2	17.2	17.2	17.2	17.2	17.2	22.4 (24.9)	23.4 (25.9)	23.4 (25.9)	23.4 (25.9)	29.4 (31.9)	38.4 (40.9)	63.4 (65.9)	63.4 (65.9)	63.4 (65.9)
MXQ25(A)	30.4	21.4	21.4	21.4	21.4	21.4	21.4	21.4	21.4	30.2 (32.7)	30.2 (31.7)	30.2 (31.7)	30.2 (31.7)	42.2 (44.7)	42.2 (44.7)	44.2 (46.7)	66.9 (69.4)	67.2 (69.7)
MXQ6B	14	3.4	3.4	3.4	3.4	3.4	—	—	—	2.5 (5)	13.1 (15.6)	13.1 (15.6)	19.1 (21.6)	36.1 (38.6)	13.1 (15.6)	—	—	—
MXQ8B	25	9.9	9.9	9.9	9.9	9.9	9.9	—	—	3.5 (6)	10.6 (13.1)	10.6 (13.1)	18.6 (21.1)	18.6 (21.1)	37.6 (40.1)	37.6 (40.1)	—	—
MXQ12B	22.5	12.5	12.5	12.5	12.5	12.5	12.5	12.5	—	15.5 (18)	19.5 (22)	19.5 (22)	26.5 (29)	26.5 (29)	32.5 (35)	51.5 (54)	51.5 (54)	—
MXQ16B	16.6	16.6	16.6	16.6	16.6	16.6	16.6	16.6	16.6	34.4 (36.9)	24.4 (26.9)	24.4 (26.9)	24.4 (26.9)	30.4 (32.9)	39.4 (41.9)	64.4 (66.9)	64.4 (66.9)	64.4 (66.9)
MXQ20B	28.2	17.2	17.2	17.2	17.2	17.2	17.2	17.2	17.2	32.3 (34.8)	33.3 (35.8)	33.3 (35.8)	33.3 (35.8)	46.3 (48.8)	46.3 (48.8)	32.3 (34.8)	71.3 (73.8)	71.3 (73.8)

( ): Denotes the values of D-A9□V.

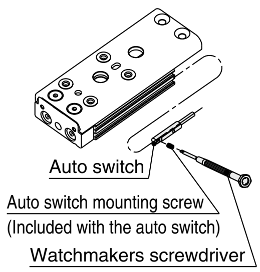
Auto Switch Mounting

⚠Caution

■ **Tightening torque**

Tightening Torque of Auto Switch Mounting Screw [N·m]

Auto switch model	Tightening torque
D-M9□(V)/M9□W(V) D-A9□(V)	0.05 to 0.15
D-M9□A(V)	0.05 to 0.10



■ **Auto switch mounting tool**

When tightening the auto switch mounting screw (included with the auto switch), use a watchmakers screwdriver with a handle diameter of about 5 to 6 mm.

Operating Range

[mm]

Auto switch model	Applicable bore size					
	6	8	12	16	20	25
D-M9□(V)/M9□W(V)/M9□	2.5	2.5	3	4	4.5	5
D-A9□(V)	4.5	5	6	7	8	9

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

Other than the applicable auto switches listed in "How to Order," the following auto switches are also mountable.

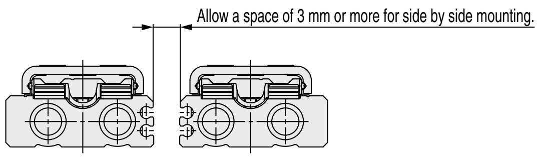
Normally closed (NC = b contact) solid state auto switches (D-M9□E(V)) and solid state auto switch (D-F8) are also available. For details, refer to the **Web Catalog** or Best Pneumatics Catalog.

Caution on Mounting Auto Switches

⚠Caution

1. Allow a space of 3 mm or more if a standard type and symmetric type are used side by side.

Otherwise, the auto switches may malfunction.



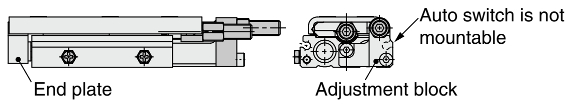
2. Note that an auto switch with a functional option centralized adjuster may not be able to be installed in some places because of the adjustment block. Use the method listed below. In the case of a stroke that is not indicated by [×] in the table below, it is possible to use the auto switch after inserting it from the end plate side.

1) Install the auto switch in another auto switch groove.
2) First, remove the adjustment block unit, and then insert the switch.
(For details on the removal method of the adjustment block unit, refer to “How to Remove the Adjustment Block Unit.”)
3) Replace the auto switch with a D-F8□ auto switch.

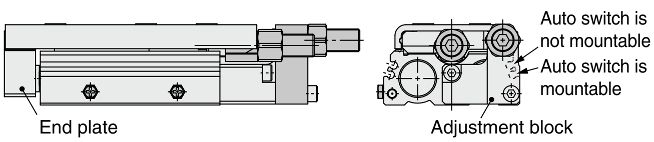
Double-ported type									
Model	Stroke								
	10	20	30	40	50	75	100	125	150
MXQ6A-□Z□(6, 7, 8, 9)	×	×	○	○	○	/	/	/	/
MXQ8A-□Z□(6, 7, 8, 9)	×	×	○	○	○	○	/	/	/
MXQ12A-□Z□(6, 7, 8, 9)	×	×	○	○	○	○	○	/	/
MXQ16A-□Z□(6, 7, 8, 9)	×	○	○	○	○	○	○	○	/
MXQ20A-□Z□(6, 7, 8, 9)	×	○	○	○	○	○	○	○	○
MXQ25A-□Z□(6, 7, 8, 9)	○	○	○	○	○	○	○	○	○

Height interchangeable type									
Model	Stroke								
	10	20	30	40	50	75	100	125	150
MXQ6(L)-□Z□(6, 7, 8, 9)	○	○	○	○	○	/	/	/	/
MXQ8(L)-□Z□(6, 7, 8, 9)	○	○	○	○	○	○	/	/	/
MXQ12(L)-□Z□(6, 7, 8, 9)	○	○	○	○	○	○	○	/	/
MXQ16-□Z□(6, 7, 8, 9)	×	○	○	○	○	○	○	○	/
MXQ20-□Z□(6, 7, 8, 9)	×	○	○	○	○	○	○	○	○
MXQ25-□Z□(6, 7, 8, 9)	○	○	○	○	○	○	○	○	○

MXQ6A, 8A, 12A
10, 20 mm stroke

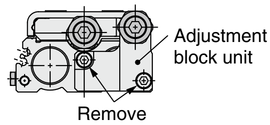


MXQ16(A), 20(A)
10 mm stroke



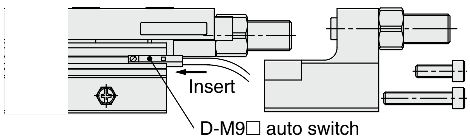
How to Remove the Adjustment Block Unit

1. Remove the hexagon socket head cap screws shown in the drawing.



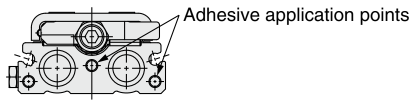
Model	Hexagon socket head cap screw		
	Screw size [mm]	Width across hexagon socket hole [mm]	Tightening torque [N·m]
MXQ6□-□Z□(6, 7, 8, 9)	M2.5	2	0.36
MXQ8□-□Z□(6, 7, 8, 9)	M3	2.5	0.63
MXQ12□-□Z□(6, 7, 8, 9)	M4	3	1.5
MXQ16□-□Z□(6, 7, 8, 9)	M5	4	3
MXQ20□-□Z□(6, 7, 8, 9)	M5	4	3

2. Insert the D-M9□ auto switch.



3. Apply locking adhesive to the female thread of the body, and then install the adjustment block unit once again.

∗ For the tightening torque and other values, refer to the table in item 1.



Made to Order

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

Made to Order

■ Made to Order

Symbol	Specifications	Double-ported type MXQ□A	Low thrust with high rigidity type MXQ□B	Single side-ported type MXQ□C	Height inter-changeable type MXQ□	Page
-X7	PTFE grease	●	●	●	●	128
-X9	Grease for food processing equipment	●	●	●	●	128
-X11	Long adjustment bolt (10 mm longer adjustment range)	●	●	●	●	128
-X12	Long adjustment bolt (20 mm longer adjustment range)	●	●	●	●	129
-X28	Long adjustment nut and bolt	●	●	●	●	130
-X33	Without built-in auto switch magnet	●	●	●	●	131
-X39	Fluororubber seal	●	●	●	●	131
-X42	Anti-corrosive guide unit	●	●	●	●	131
-X580	Low-speed specification (15 to 50 mm/s)	●	●	●	●	131
-X2100	End plate compatible with the current MXQ series				●	132
-X2128	Heat-resistant specification (–10°C to 100°C)	●	●	●	●	132
-X2192	Dual stroke specification	●*1				133
-X2200	Side adjuster specification				●	141
-X2201	Combined use of shock absorber + metal stopper				●	147
-X2202	Extension stroke end adjuster fixed from the axial direction	●	●	●	●	153

*1 Excludes ø6

SMC

Symbol

1 PTFE Grease -X7

PTFE grease is used for all parts to which grease is applied.
* For the type with a shock absorber, standard grease is used on the shock absorber part.

MXQ **Standard model no.** **– X7**

PTFE grease

Specifications

Bore size [mm]	6, 8, 12, 16, 20, 25

* Dimensions and specifications other than the above are the same as the standard type.

⚠ Warning

Precautions

Be aware that smoking cigarettes, etc., after your hands have come into contact with the grease used in this cylinder can create a gas that is hazardous to humans.

Symbol

2 Grease for Food Processing Equipment -X9

Grease for food is used for all parts to which grease is applied.

MXQ **Standard model no.** **– X9**

Grease for food processing equipment

Specifications

Bore size [mm]	6, 8, 12, 16, 20, 25

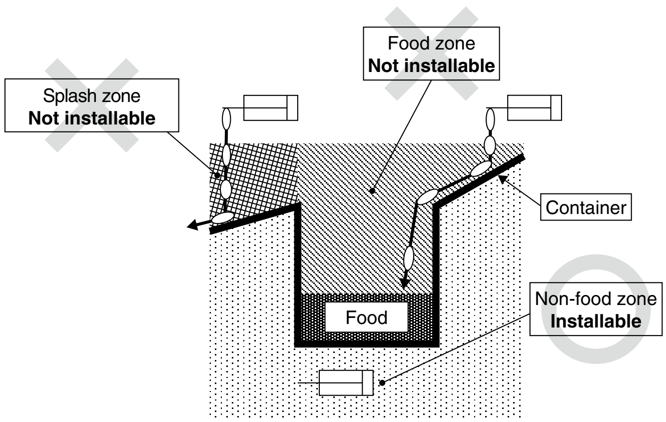
* Dimensions and specifications other than the above are the same as the standard type.

⚠ Caution

1. Do not use in a food contact environment.
2. Do not use in a liquid splash environment, e.g. water, detergent, liquid chemicals.

<Not installable>
Food zone·········An environment where food which will be sold as merchandise directly touches the cylinder's components
Splash zone······An environment where food which will not be sold as merchandise directly touches the cylinder's components
<Installable>
Non-food zone··An environment where there is no contact with food

* For the type with a shock absorber, standard grease is used on the shock absorber part.



Double-ported type MXQ□A
Low thrust with high rigidity type MXQ□B
Single side-ported type MXQ□C
Height interchangeable type MXQ□
Common Adjuster Options
Auto Switch Mounting
Made to Order
Model Selection

Symbol

3 Long Adjustment Bolt (10 mm longer adjustment range) -X11

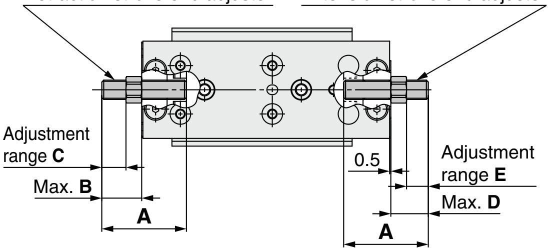
Metal stopper with bumper, Rubber stopper: The stroke adjustment range has been increased by 10 mm compared with the standard product by making the adjustment bolt longer.
Shock absorber/RJ: The adjustment range has been increased though the use of a cap bracket mounted at the rod end of the shock absorber.

∗1 Refer to the table below for the shock absorber unit applicable to "-X11."
∗ "-X11" is not available for products with end locks or centralized adjusters. Please consult with SMC when a product with a 10 mm longer adjustment range is required.
∗ As there are models with no buffer stroke, the –X11 type cannot be used with a buffer.

MXQ	Standard model no.	– X11
	Standard adjuster model no.	
	Standard adjustment bolt model no.∗1	

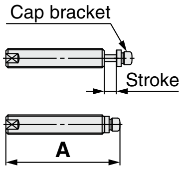
Long adjustment bolt (10 mm longer adjustment range)

Dimensions



RJ□-X2300

A cap bracket is mounted to lengthen the A dimension.



Metal Stopper with Bumper

[mm]

Model		A	B	C	D	E
MXQ8(A, C)	—	40	25	20	23	18
MXQ12(A, C)	—	45	27	20	26	19
MXQ16(A)	—	50	28	20	27	18
MXQ20(A)	—	57	31	20	30	19
MXQ25(A)	—	64	32	21	31	20
—	MXQ8B	45	27	18	26	17
—	MXQ12B	50	28	18	27	16
—	MXQ16B	57	31	18	30	17
—	MXQ20B	64	32	18	31	17

"-X11" is not available for the MXQ6(A, B).

Rubber Stopper

[mm]

Model		A	B	C	D	E
MXQ6(A)	—	41.5	27	22	25	20
MXQ8(A, C)	MXQ6B	41.5	27	21	25	19
MXQ12(A, C)	MXQ8B	46.5	28	21	27	20
MXQ16(A)	MXQ12B	51.5	30	21	28	20
MXQ20(A)	MXQ16B	58.5	32	22	31	21
MXQ25(A)	MXQ20B	65.5	34	22	33	21

Shock Absorber/RJ

[mm]

Model		A	B	C	D	E	Applicable shock absorber unit model
MXQ12(A, C)	MXQ8B	47.3	29	19	28	18	RJ0805U-X2300
MXQ16(A)	MXQ12B	52.8	31	19	30	18	RJ1006U-X2300
MXQ20(A)	MXQ16B	52.8	23	11	26	14	RJ1007HU-X2300
MXQ25(A)	MXQ20B	77.1	46	31	45	30	RJ1410U-X2300

"-X11" is not available for the MXQ6(A, B) and MXQ8(A, C).
Shape of the adjustment part varies (hexagonal hole, width across flats, slot) depending on the model of the adjuster or shock absorber. Refer to the full view of the standard product for details.

Metal Stopper

[mm]

Model		A	B	C	D	E
MXQ6(A)	—	40	26	20	24	18
MXQ8(A, C)	MXQ6B	40	25	20	23	18
MXQ12(A, C)	MXQ8B	45	27	20	26	19
MXQ16(A)	MXQ12B	50	28	20	27	18
MXQ20(A)	MXQ16B	57	31	20	30	19
MXQ25(A)	MXQ20B	64	32	21	31	20

Symbol
-X12

4 Long Adjustment Bolt (20 mm longer adjustment range)

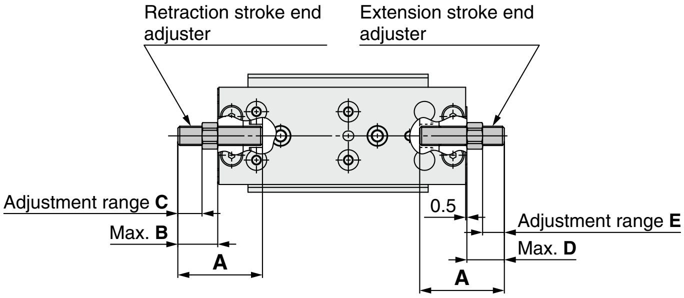
The stroke adjustment range has been increased by 20 mm compared with the standard product by making the adjustment bolt longer. For the adjustment range, refer to the table below.

∗ "-X12" is not available for the shock absorber (RJ).
∗ "-X12" is not available for products with end locks or centralized adjusters. Please consult with SMC when a product with a 20 mm longer adjustment range is required.
∗ As there is no buffer stroke for the -X12 type, it cannot be used with a buffer.

MXQ	**Standard model no.**	
	Standard adjuster model no.	**– X12**
	Standard adjustment bolt model no.	

X12 — **Long adjustment bolt (20 mm longer adjustment range)**

Dimensions



Metal Stopper with Bumper [mm]

Model		A	B	C	D	E
MXQ8(A,C)	—	50	35	30	33	28
MXQ12(A,C)	—	55	37	30	36	29
MXQ16(A)	—	60	38	30	37	28
MXQ20(A)	—	67	41	30	40	29
MXQ25(A)	—	74	42	31	41	30
—	**MXQ8B**	55	37	28	36	27
—	**MXQ12B**	60	38	28	37	26
—	**MXQ16B**	67	41	28	40	27
—	**MXQ20B**	74	42	28	41	27

"-X12" is not available for the MXQ6(A, B).

Rubber Stopper [mm]

Model		A	B	C	D	E
MXQ6(A)	—	51.5	37	32	35	30
MXQ8(A, C)	**MXQ6B**	51.5	37	31	35	29
MXQ12(A, C)	**MXQ8B**	56.5	38	31	37	30
MXQ16(A)	**MXQ12B**	61.5	40	31	38	30
MXQ20(A)	**MXQ16B**	68.5	42	32	41	31
MXQ25(A)	**MXQ20B**	75.5	44	32	43	31

Metal Stopper [mm]

Model		A	B	C	D	E
MXQ6(A)	—	50	36	30	34	28
MXQ8(A, C)	**MXQ6B**	50	35	30	33	28
MXQ12(A, C)	**MXQ8B**	55	37	30	36	29
MXQ16(A)	**MXQ12B**	60	38	30	37	28
MXQ20(A)	**MXQ16B**	67	41	30	40	29
MXQ25(A)	**MXQ20B**	74	42	31	41	30

Symbol
-X28

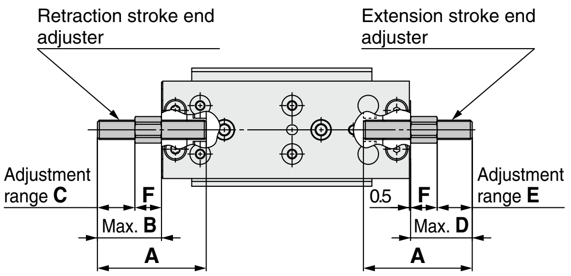
5 Long Adjustment Nut and Bolt

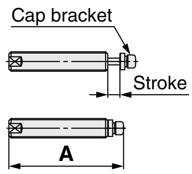
Easier stroke adjustment with the longer overall lengths of the adjustment nut, adjustment bolt, and shock absorber
This is used for the extension stroke end adjuster of the end lock mechanism and the extension stroke end adjuster of the centralized adjuster specification.

* The extension stroke end adjuster for the types with an end lock and a centralized adjuster uses a standard adjuster with a long adjustment nut and bolt specification (-X28).
The "-X28" product number suffix is not required.

MXQ	Standard model no.*1 / Standard adjuster model no.	– X28
		Long adjustment nut and bolt

Dimensions





RJ□-X2300
A cap bracket is mounted to lengthen the A dimension.

Metal Stopper with Bumper

[mm]

Model		A	B	C	D	E	F
MXQ8(A, C)	—	40	25	15	23	13	10
MXQ12(A, C)	—	45	27	15	26	14	11
MXQ16(A)	—	50	28	15	27	13	13
MXQ20(A)	—	57	31	17	30	16	13
MXQ25(A)	—	64	32	14	31	13	18
—	MXQ8B	45	27	13	26	12	11
—	MXQ12B	50	28	13	27	11	13
—	MXQ16B	57	31	15	30	14	13
—	MXQ20B	64	32	11	31	10	18

The MXQ6(A, B) is not available.

Rubber Stopper

[mm]

Model		A	B	C	D	E	F
MXQ6(A)	—	41.5	27	17	25	15	10
MXQ8(A, C)	MXQ6B	41.5	27	16	25	14	10
MXQ12(A, C)	MXQ8B	46.5	28	17	27	16	11
MXQ16(A)	MXQ12B	51.5	30	16	28	15	13
MXQ20(A)	MXQ16B	58.5	32	19	31	18	13
MXQ25(A)	MXQ20B	65.5	34	15	33	14	18

Shock Absorber/RJ

[mm]

Model		A	B	C	D	E	F	Applicable part no. (Shock absorber only)
MXQ6(A)	—	29.9	16	3	14	3	10	RJ0603N
MXQ8(A, C)	MXQ6B	29.9	15	3	13	2.2	10	
MXQ12(A, C)	MXQ8B	47.3	29	14	28	13	11	RJ0805U-X2300
MXQ16(A)	MXQ12B	52.8	31	14	30	13	13	RJ1006U-X2300
MXQ20(A)	MXQ16B	52.8	23	6	26	9	13	RJ1007HU-X2300
MXQ25(A)	MXQ20B	77.1	46	24	45	23	18	RJ1410U-X2300

For the MXQ6(A, B) and MXQ8(A, C), only the adjustment nut is long.

Metal Stopper

[mm]

Model		A	B	C	D	E	F
MXQ6(A)	—	40	26	15	24	13	10
MXQ8(A, C)	MXQ6B	40	25	15	23	13	10
MXQ12(A, C)	MXQ8B	45	27	15	26	14	11
MXQ16(A)	MXQ12B	50	28	15	27	13	13
MXQ20(A)	MXQ16B	57	31	17	30	16	13
MXQ25(A)	MXQ20B	64	32	14	31	13	18

Shape of the adjustment part varies (hexagonal hole, width across flats, slot) depending on the model of the adjuster or shock absorber. Refer to the full view of the standard product for details.

Symbol

6 Without Built-in Auto Switch Magnet

-X33

This product does not have a magnet for an auto switch.
It is suitable for applications where magnetic force is not acceptable.

MXQ **Standard model no.** **– X33**

Without built-in auto switch magnet

Specifications

Bore size [mm]	6, 8, 12, 16, 20, 25
Auto switch	Not mountable

* Dimensions and specifications other than the above are the same as the standard type.

Symbol

7 Fluororubber Seal

-X39

This specification changes the materials for the piston seal, rod seal, and O-rings to fluororubber.

* For the type with a shock absorber, a standard shock absorber is used.

MXQ **Standard model no.** **– X39**

Fluororubber seal

Specifications

Bore size [mm]	6, 8, 12, 16, 20, 25
Seal material	Fluororubber

* Dimensions and specifications other than the above are the same as the standard type.

Symbol

8 Anti-corrosive Guide Unit

-X42

Table and guide block are given anti-corrosive treatment.

MXQ **Standard model no.** **– X42**

Anti-corrosive guide unit

Specifications

Bore size [mm]	6, 8, 12, 16, 20, 25
Surface treatment	Special anti-corrosive treatment*1

*1 Special anti-corrosive treatment makes the table and the guide block black.
* Dimensions and specifications other than the above are the same as the standard type.

Symbol

10 Low-speed Specification (15 to 50 mm/s)

-X580

Stick-slip phenomenon can be prevented, and smooth operation can be achieved even at lower driving speeds between 15 to 50 mm/s.

MXQ **Standard model no.** **– X580**

Low speed

* Operate without lubrication from a pneumatic system lubricator.
* Does not have an end lock

Specifications

Bore size [mm]	6, 8, 12, 16, 20, 25
Operating speed range (Average operating speed)	15 to 50 mm/s
Applicable adjuster type	Rubber stopper, Metal stopper

* Dimensions and specifications other than the above are the same as the standard type.

11 End Plate Compatible with the Current MXQ Series

Symbol
-X2100

Dimensions for mounting a workpiece on the end plate are the same as those of the current MXQ series.

How to Order

MXQ 12 L − 10 ZB ☐ M9BWL − X2100

Bore size

Same as the standard product

Body options

Nil	Height interchangeable type
L	Height interchangeable type (Symmetric)

Compatible end plate mounting

Auto switch

Nil	Without auto switch (Built-in magnet)

∗ Applicable auto switches are the same as the standard product.

Functional options

Nil	Standard
2	With end lock
3	Axial piping
6	Centralized adjuster
7	Centralized adjuster (Symmetric)

Adjuster options

Symbol	Adjuster type		Adjuster mounting position*3	
	Extension stroke end	Retraction stroke end	Extension stroke end	Retraction stroke end
Z	Without adjuster			
ZA*1	Metal stopper with bumper*2		○	○
ZB			○	
ZC*1				○
ZD*1	Rubber stopper		○	○
ZE			○	
ZF*1				○
ZG*1	Shock absorber/RJ		○	○
ZH			○	
ZJ*1				○
ZK*1	Metal stopper		○	○
ZL			○	
ZM*1				○
ZN	Shorter total length type (without adjuster)			
ZBF*1	Metal stopper with bumper*2	Rubber stopper	○	○
ZBJ*1		Shock absorber/RJ	○	○
ZBM*1		Metal stopper	○	○
ZEC*1	Rubber stopper	Metal stopper with bumper*2	○	○
ZEJ*1		Shock absorber/RJ	○	○
ZEM*1		Metal stopper	○	○
ZHC*1	Shock absorber/RJ	Metal stopper with bumper*2	○	○
ZHF*1		Rubber stopper	○	○
ZHM*1		Metal stopper	○	○
ZLC*1	Metal stopper	Metal stopper with bumper*2	○	○
ZLF*1		Rubber stopper	○	○
ZLJ*1		Shock absorber/RJ	○	○

∗1 Only for use with a centralized adjuster
∗2 Not available for ø6
∗3 Without any symbol for the adjuster mounting position: The adjuster can be mounted afterward.

Adjuster Options/Functional Option Combinations

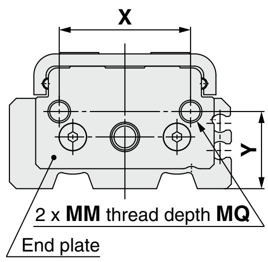
Adjuster option \ Functional option	Nil	2	3	6	7
ZA, ZD, ZG, ZK, ZC, ZF, ZJ, ZM ZBF, ZBJ, ZBM, ZEC, ZEJ, ZEM ZHC, ZHF, ZHM, ZLC, ZLF, ZLJ	×	×	×	○	○
ZB, ZH	○	○	○	×	×
ZE, ZL	○	○	○	×	×
ZN	○	×	○	×	×

Specifications

Series	Height interchangeable type	
Bore size [mm]	6, 8, 12, 16, 20, 25	
Adjuster mounting position	Standard	Extension stroke end adjuster
	Centralized adjuster	Adjuster on both ends, Retraction stroke end adjuster
Functional option type	Without functional option (Standard), With end lock, Axial piping, Centralized adjuster, Centralized adjuster (Symmetric)	

∗ Specifications other than the above are the same as the standard type.

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



Dimensions [mm]

Series	X	Y	MM	MQ
MXQ6	20	11	M3 x 0.5	5
MXQ8	24	13	M4 x 0.7	6
MXQ12	29	17	M5 x 0.8	6
MXQ16	29	23	M6 x 1	10
MXQ20	35	28	M6 x 1	13
MXQ25	44	33.5	M8 x 1.25	15

∗ There are no mounting holes in the center of the end plate.

12 Heat-resistant Specification (–10 to 100°C)

Symbol
-X2128

Seal material and grease have been changed so that the product can be used at temperatures between –10 up to 100°C.

MXQ Standard model no. − X2128

Heat-resistant specification

∗ Magnet is built-in, but when using an auto switch, the acceptable temperature range becomes –10 to 60°C.
∗ It is not possible to order a model with an auto switch.
∗ Does not have an end lock

Specifications

Ambient temperature	–10°C to 100°C (No freezing)
Seal material	Fluororubber
Grease	Heat-resistant grease
Applicable adjuster type	Metal stopper

∗ Specifications other than the above are the same as the standard type.

⚠ Warning

Precautions

Be aware that smoking cigarettes, etc. after your hands have come into contact with the grease used in this cylinder can create a gas that is hazardous to humans.

13 Dual Stroke Specification

Two cylinders can be integrated by connecting them in line, and the cylinder stroke can be controlled in two stages in both directions.

How to Order

MXQ 12 A – 15 – 25 ZA – M9BWL – X2192

- **Bore size**

8
12
16
20
25

- **Body option**

A	Double-ported type

- **A stroke / B-A stroke**

A stroke	B-A stroke
5	15
	25
	35
	45
10	10
	20
	30
	40
15	15
	25
	35
20	20
	30
25	25

- **Dual stroke** (X2192)

- **Auto switch**

Nil	Without auto switch (Built-in magnet)

∗ Applicable auto switches are the same as the standard product.

- **Adjuster options**

Symbol	Adjuster type∗2∗3: Extension stroke end	Adjuster type∗2∗3: Retraction stroke end	Adjuster mounting position∗1: Extension stroke end	Adjuster mounting position∗1: Retraction stroke end
Z	Without adjuster			
ZA	Metal stopper with bumper		●	●
ZB	Metal stopper with bumper		●	
ZC	Metal stopper with bumper			●
ZD	Rubber stopper		●	●
ZE	Rubber stopper		●	
ZF	Rubber stopper			●
ZG	Shock absorber/RJ		●	●
ZH	Shock absorber/RJ		●	
ZJ	Shock absorber/RJ			●
ZK	Metal stopper		●	●
ZL	Metal stopper		●	
ZM	Metal stopper			●
ZBF	Metal stopper with bumper	Rubber stopper	●	●
ZBJ	Metal stopper with bumper	Shock absorber/RJ	●	●
ZBM	Metal stopper with bumper	Metal stopper	●	●
ZEC	Rubber stopper	Metal stopper with bumper	●	●
ZEJ	Rubber stopper	Shock absorber/RJ	●	●
ZEM	Rubber stopper	Metal stopper	●	●
ZHC	Shock absorber/RJ	Metal stopper with bumper	●	●
ZHF	Shock absorber/RJ	Rubber stopper	●	●
ZHM	Shock absorber/RJ	Metal stopper	●	●
ZLC	Metal stopper	Metal stopper with bumper	●	●
ZLF	Metal stopper	Rubber stopper	●	●
ZLJ	Metal stopper	Shock absorber/RJ	●	●

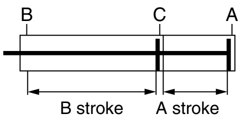
∗1 ●: Shipped together with the product, but not assembled
Without any symbol for the adjuster mounting position: The adjuster can be mounted afterward.
∗2 The shock absorbers on both ends and the extension stroke end adjuster are not available for ø8. Only the retraction stroke end adjuster is available.
∗3 When the extension stroke end adjuster is to be mounted afterward, order the –X2202 (Extension stroke end adjuster fixed from the axial direction).

Specifications

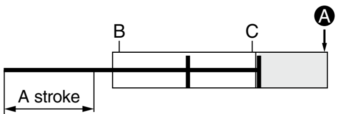
Series	Double-ported type
Bore size [mm]	8, 12, 16, 20, 25
Max. stroke [mm]	50

∗ Specifications other than the above are the same as the standard type.

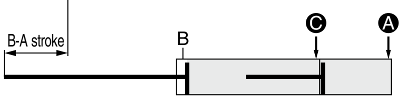
Functional description of dual stroke cylinder



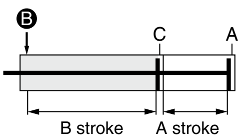
1) Initial state
(0 stroke position)



2) 1st stage: A stroke operation
When the air pressure is supplied from the A port, the rod operates the A stroke.



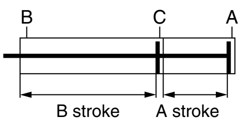
3) 2nd stage: B-A stroke operation
Following the 1st stage, when the air pressure is supplied from the C port, the rod operates the B-A stroke.



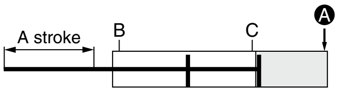
4) Cylinder retraction
When the air pressure is supplied from the B port, the rod retracts completely.

A stroke or B stroke operation can be made individually.

A stroke operation

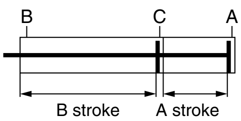


1) Initial state
(0 stroke position)

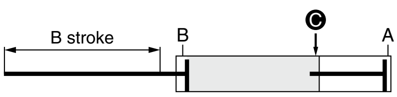


2) Operation
When the air pressure is supplied from the A port, the rod operates the A stroke.

B stroke operation

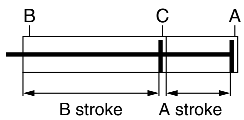


1) Initial state
(0 stroke position)

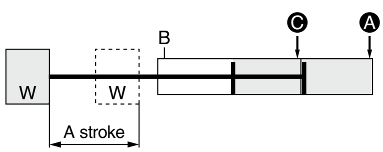


2) Operation
When the air pressure is supplied from the C port, the rod operates the B stroke.

Double output is possible.



1) Initial state
(0 stroke position)



2) Double output
When the air pressure is supplied to the A and C ports at the same time, double output can be obtained in the A stroke range.

Precautions

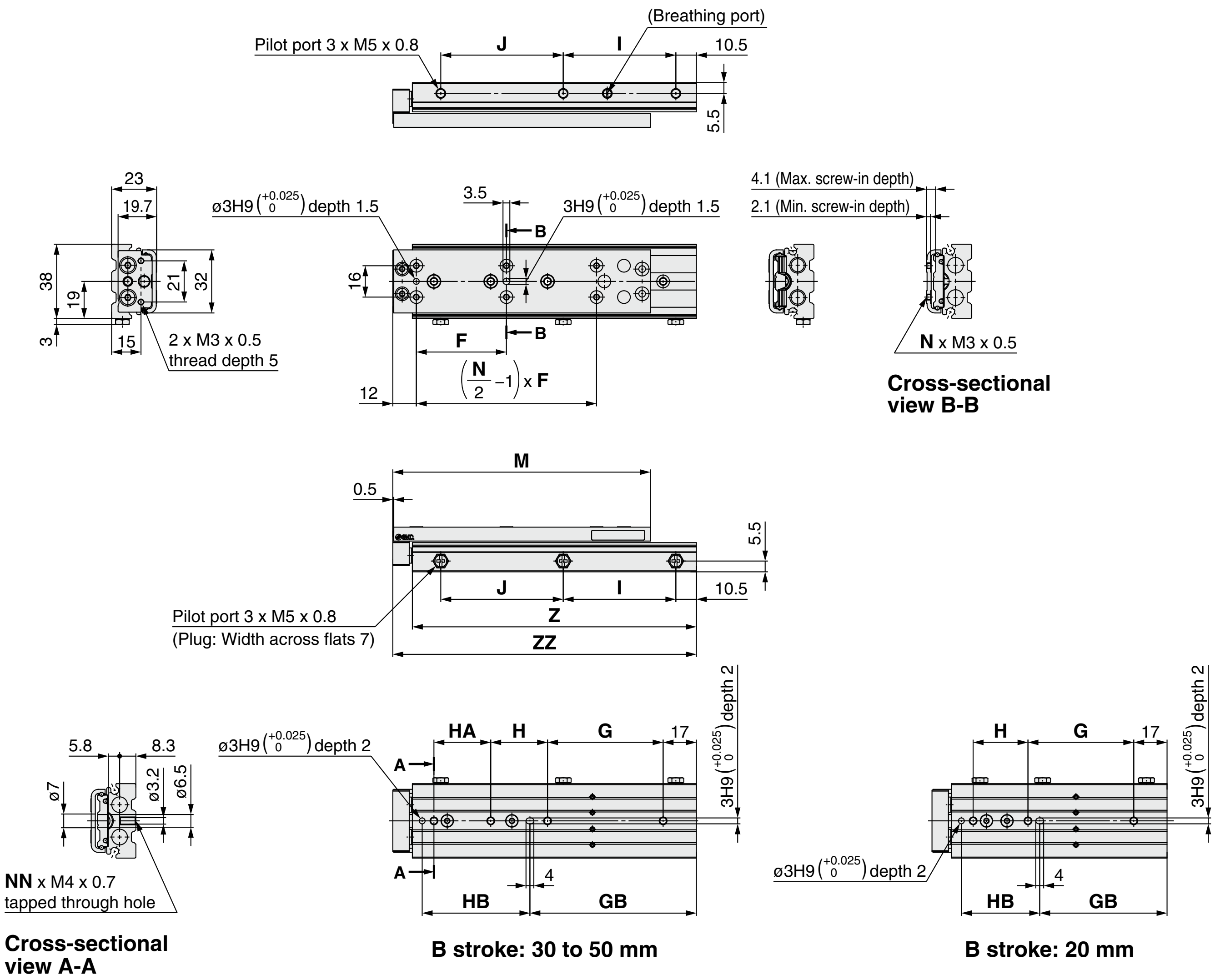
⚠Caution

1. Adjustment can be performed by the adjusters at the positions of the extension stroke end and the retraction stroke end, but not at the center position.

Symbol
-X2192

Dimensions

MXQ8A-□-□Z-X2192



Dimensions/Weights

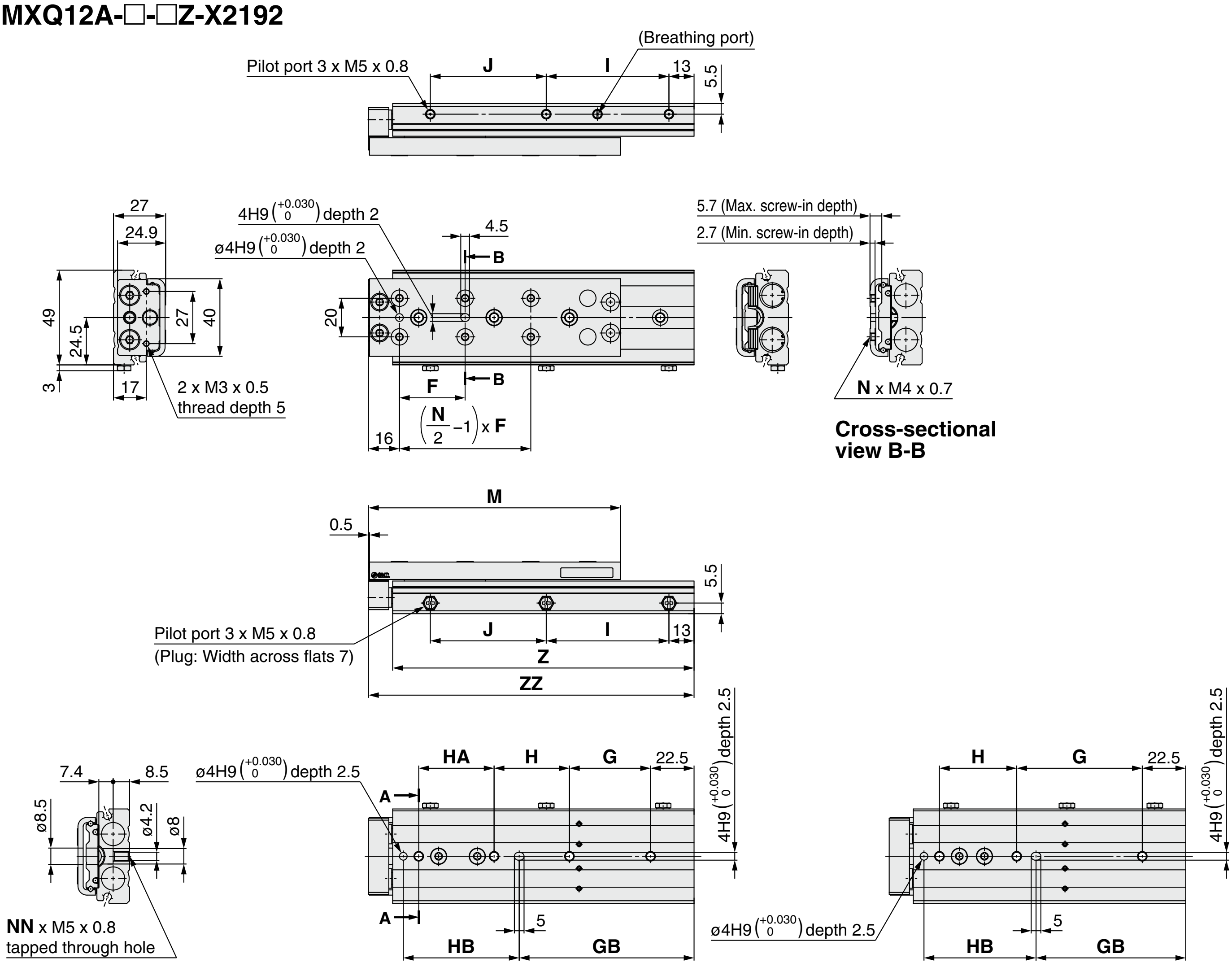
Stroke A	Stroke B	Model	Dimension [mm]													Weight [g] Standard type	Additional weight of adjuster option: Extension stroke end	Additional weight of adjuster option: Retraction stroke end
			F	N	G	H	HA	NN	GB	HB	I	J	M	Z	ZZ			
5	20	**MXQ8A-5-15Z□-X2192**	25	4	54	28	—	3	65	40	52.5	32.5	78.5	110	120	230	15	8
10		**MXQ8A-10-10Z□-X2192**																
5	30	**MXQ8A-5-25Z□-X2192**	26	6	52	23	27	4	85	40	63	42	88.5	130	140	270		
10		**MXQ8A-10-20Z□-X2192**																
15		**MXQ8A-15-15Z□-X2192**																
5	40	**MXQ8A-5-35Z□-X2192**	32	6	40	31	31	4	70	55	52.5	52.5	104.5	130	140	280		
10		**MXQ8A-10-30Z□-X2192**																
15		**MXQ8A-15-25Z□-X2192**																
20		**MXQ8A-20-20Z□-X2192**																
5	50	**MXQ8A-5-45Z□-X2192**	46	6	59	29	29	4	85	55	57.5	62.5	131.5	145	155	330		
10		**MXQ8A-10-40Z□-X2192**																
15		**MXQ8A-15-35Z□-X2192**																
20		**MXQ8A-20-30Z□-X2192**																
25		**MXQ8A-25-25Z□-X2192**																

* The first stage stroke adjustment cannot be performed.
* For dimensions of the model with an adjuster option, refer to pages 139 and 140.

13 Dual Stroke Specification

Dimensions

MXQ12A-□-□Z-X2192



Cross-sectional view B-B

Cross-sectional view A-A

B stroke: 40, 50 mm

B stroke: 20, 30 mm

Dimensions/Weights

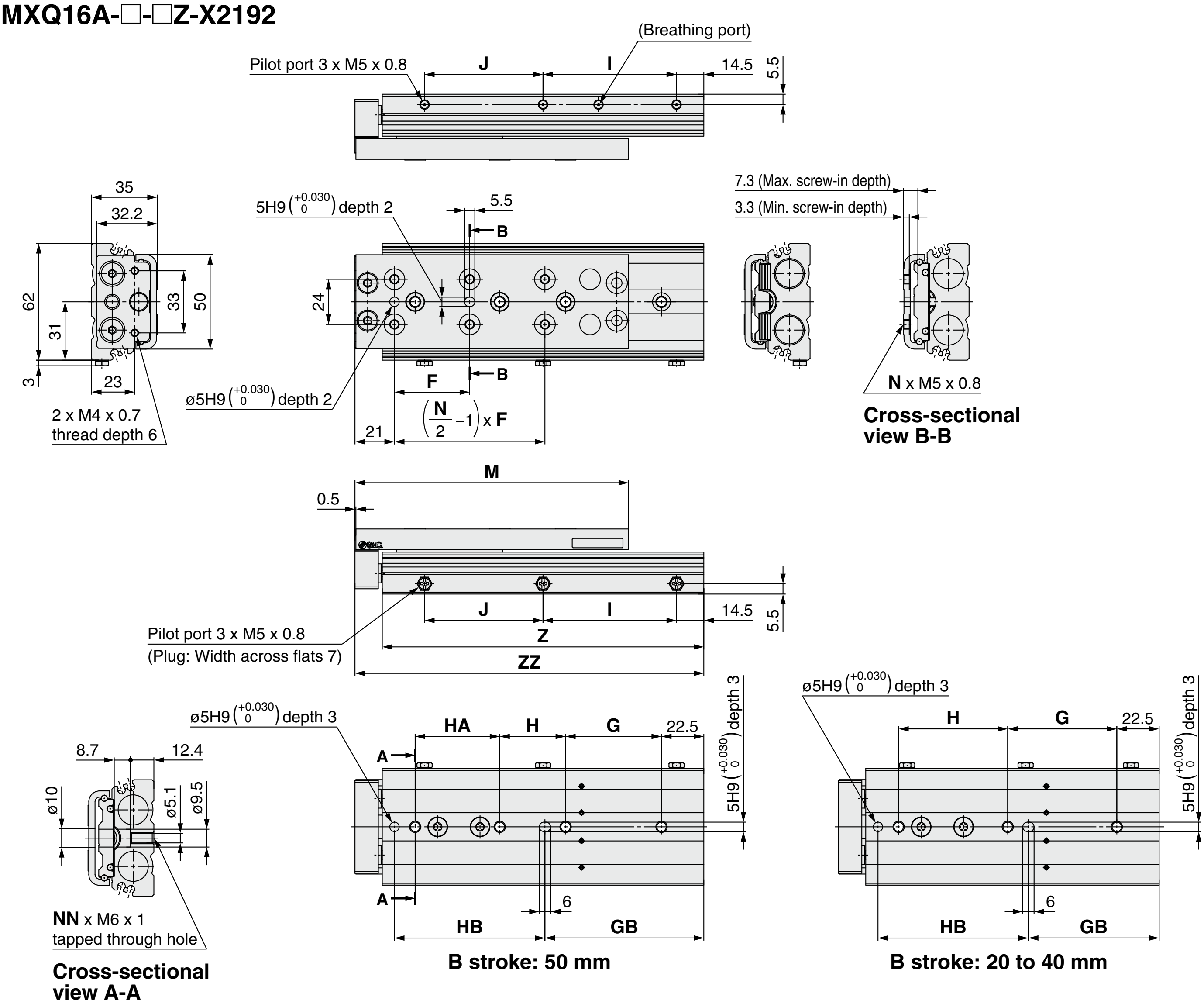
Stroke A	Stroke B	Model	Dimension [mm]													Weight [g]		
			F	N	G	H	HA	NN	GB	HB	I	J	M	Z	ZZ	Standard type	Additional weight of adjuster option: Extension stroke end	Additional weight of adjuster option: Retraction stroke end
5	20	MXQ12A-5-15Z□-X2192	28	4	53	32	—	3	67.5	48	56.5	32	92.5	121	133.5	420	30 (25)*1	16
10		MXQ12A-10-10Z□-X2192																
5	30	MXQ12A-5-25Z□-X2192	38	4	65	40	—	3	77.5	58	68.5	40	102.5	141	153.5	480		
10		MXQ12A-10-20Z□-X2192														460		
15		MXQ12A-15-15Z□-X2192																
5	40	MXQ12A-5-35Z□-X2192	34	6	37	29	39	4	75.5	60	58.5	50	120.5	141	153.5	490		
10		MXQ12A-10-30Z□-X2192																
15		MXQ12A-15-25Z□-X2192																
20		MXQ12A-20-20Z□-X2192																
5	50	MXQ12A-5-45Z□-X2192	34	6	42	39	39	4	90.5	60	63.5	60	130.5	156	168.5	530		
10		MXQ12A-10-40Z□-X2192																
15		MXQ12A-15-35Z□-X2192																
20		MXQ12A-20-30Z□-X2192																
25		MXQ12A-25-25Z□-X2192																

*1 Value in ( ) is the additional weight of the shock absorber.
* The first stage stroke adjustment cannot be performed.
* For dimensions of the model with an adjuster option, refer to pages 139 and 140.

Symbol
-X2192

Dimensions

MXQ16A-□-□Z-X2192



Dimensions/Weights

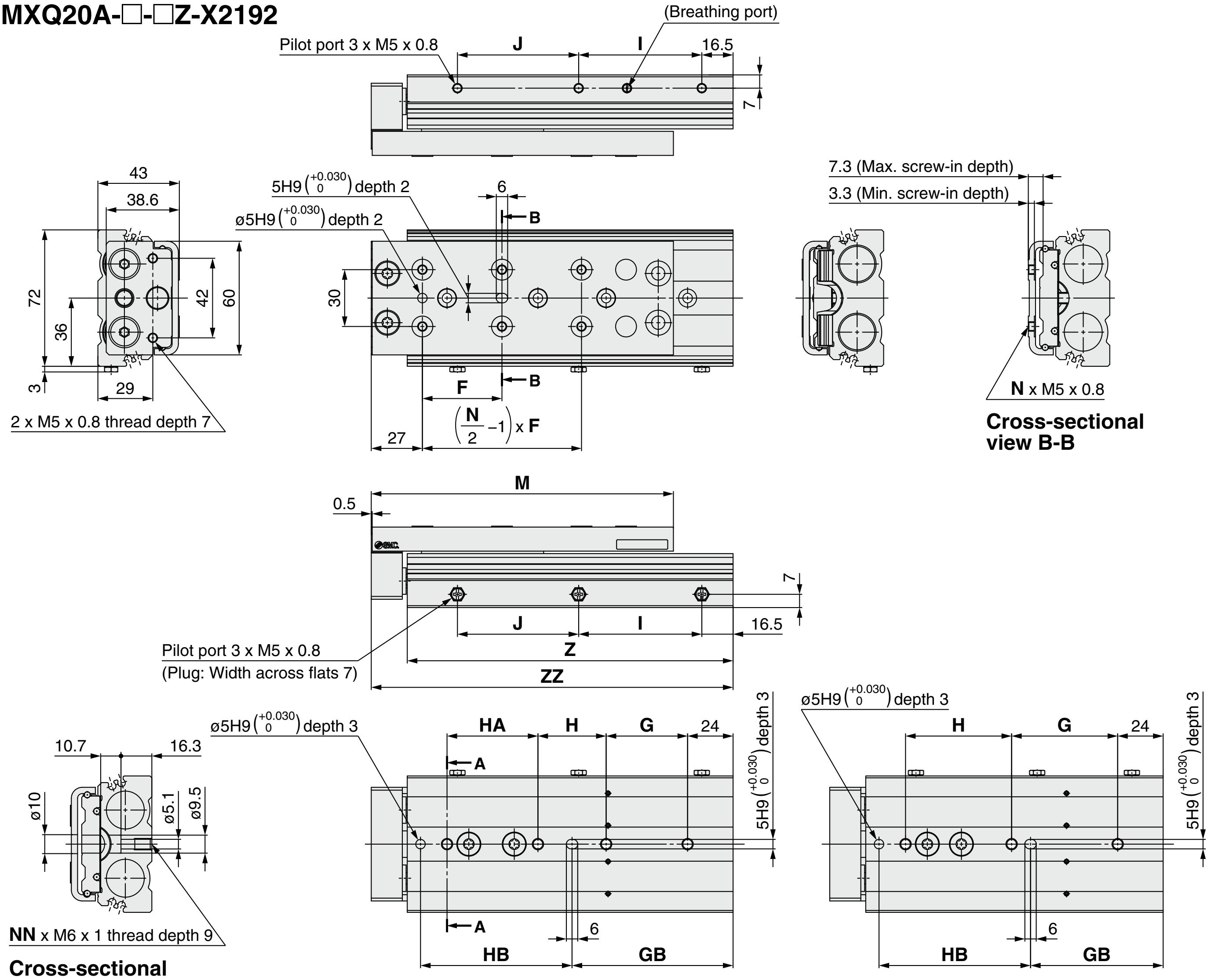
Stroke A	Stroke B	Model	Dimension [mm]													Weight [g]		
			F	N	G	H	HA	NN	GB	HB	I	J	M	Z	ZZ	Standard type	Additional weight of adjuster option: Extension stroke end	Additional weight of adjuster option: Retraction stroke end
5	20	**MXQ16A-5-15Z□-X2192**	38	4	57	39	—	3	71.5	58	60	39	108.5	136	150.5	760	50 (40)*1	30
10		**MXQ16A-10-10Z□-X2192**																
5	30	**MXQ16A-5-25Z□-X2192**	48	4	68	48	—	3	99.5	50	71	48	118.5	156	170.5	830		
10		**MXQ16A-10-20Z□-X2192**																
15		**MXQ16A-15-15Z□-X2192**														820		
5	40	**MXQ16A-5-35Z□-X2192**	58	4	58	58	—	3	69.5	80	61	58	135.5	156	170.5	860		
10		**MXQ16A-10-30Z□-X2192**																
15		**MXQ16A-15-25Z□-X2192**																
20		**MXQ16A-20-20Z□-X2192**														850		
5	50	**MXQ16A-5-45Z□-X2192**	40	6	51	35	45	4	84.5	80	71	63	145.5	171	185.5	920		
10		**MXQ16A-10-40Z□-X2192**																
15		**MXQ16A-15-35Z□-X2192**														910		
20		**MXQ16A-20-30Z□-X2192**																
25		**MXQ16A-25-25Z□-X2192**																

∗1 Value in ( ) is the additional weight of the shock absorber.
∗ The first stage stroke adjustment cannot be performed.
∗ For dimensions of the model with an adjuster option, refer to pages 139 and 140.

13 Dual Stroke Specification

Dimensions

MXQ20A-□-□Z-X2192



Cross-sectional view A-A

B stroke: 50 mm

B stroke: 20 to 40 mm

Dimensions/Weights

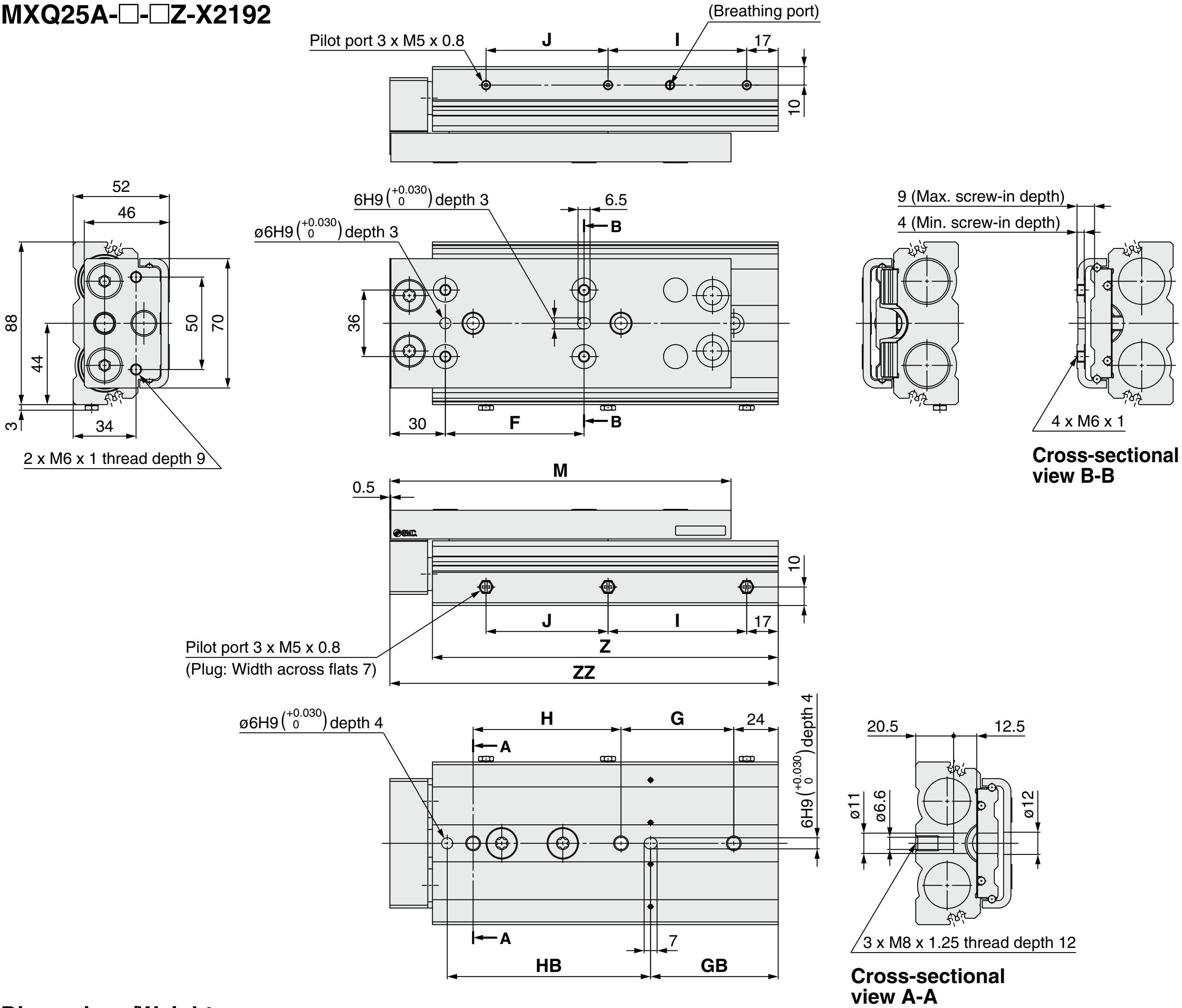
Stroke A	Stroke B	Model	Dimension [mm]													Weight [g]		
			F	N	G	H	HA	NN	GB	HB	I	J	M	Z	ZZ	Standard type	Additional weight of adjuster option: Extension stroke end	Additional weight of adjuster option: Retraction stroke end
5	20	MXQ20A-5-15Z□-X2192	40	4	46	46	—	3	60	70	60	34	123.5	137	156	1200	85 (55)*1	50 (80)*1
10		MXQ20A-10-10Z□-X2192																
5	30	MXQ20A-5-25Z□-X2192	48	4	66	46	—	3	80	70	68	46	133.5	157	176	1300		
10		MXQ20A-10-20Z□-X2192																
15		MXQ20A-15-15Z□-X2192																
5	40	MXQ20A-5-35Z□-X2192	58	4	56	56	—	3	70	80	58	56	143.5	157	176	1300		
10		MXQ20A-10-30Z□-X2192																
15		MXQ20A-15-25Z□-X2192																
20		MXQ20A-20-20Z□-X2192																
5	50	MXQ20A-5-45Z□-X2192	42	6	43	36	48	4	85	80	65	64	159.5	172	191	1500		
10		MXQ20A-10-40Z□-X2192																
15		MXQ20A-15-35Z□-X2192																
20		MXQ20A-20-30Z□-X2192																
25		MXQ20A-25-25Z□-X2192																

*1 Value in ( ) is additional weight of the shock absorber.
* The first stage stroke adjustment cannot be performed.
* For dimensions of the model with an adjuster option, refer to pages 139 and 140.

Symbol
-X2192

Dimensions

MXQ25A-□-□Z-X2192



Dimensions/Weights

Stroke A	Stroke B	Model	Dimension [mm]										Weight [g]		
			F	G	H	GB	HB	I	J	M	Z	ZZ	Standard type	Additional weight of adjuster option: Extension stroke end	Additional weight of adjuster option: Retraction stroke end
5	20	MXQ25A-5-15Z□-X2192	46	51	55	64	80	70	36	141.5	152	175	2000	135 (120)*1	80
10		MXQ25A-10-10Z□-X2192													
5	30	MXQ25A-5-25Z□-X2192	55	71	55	84	80	72	54	151.5	172	195	2200		
10		MXQ25A-10-20Z□-X2192													
15		MXQ25A-15-15Z□-X2192													
5	40	MXQ25A-5-35Z□-X2192	65	61	65	74	90	62	64	161.5	172	195	2100		
10		MXQ25A-10-30Z□-X2192													
15		MXQ25A-15-25Z□-X2192													
20		MXQ25A-20-20Z□-X2192													
5	50	MXQ25A-5-45Z□-X2192	75	61	80	69	110	75	66	184.5	187	210	2500		
10		MXQ25A-10-40Z□-X2192													
15		MXQ25A-15-35Z□-X2192													
20		MXQ25A-20-30Z□-X2192													
25		MXQ25A-25-25Z□-X2192													

*1 Value in ( ) is the additional weight of the shock absorber.
* The first stage stroke adjustment cannot be performed.
* For dimensions of the model with an adjuster option, refer to pages 139 and 140.

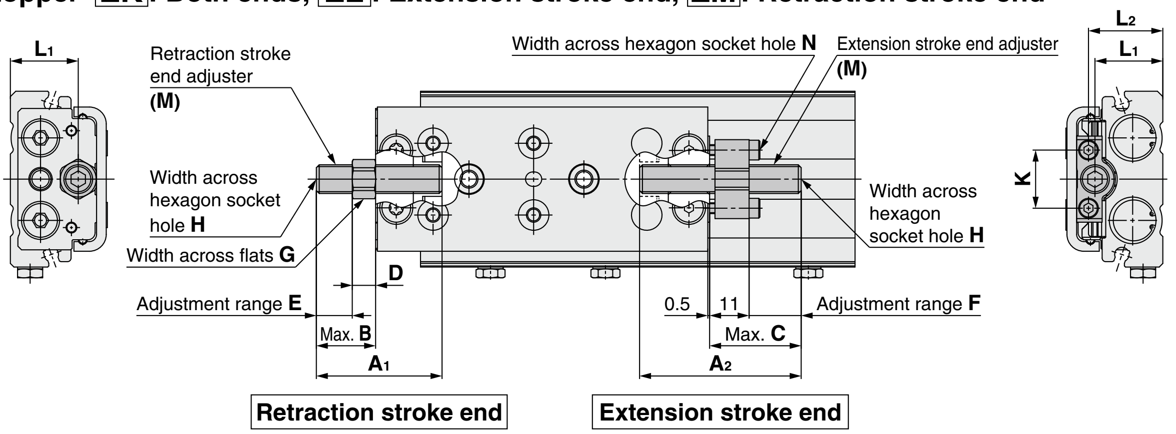
13 Dual Stroke Specification

Dimensions

MXQ□□A-□□Z□-X2192 With adjuster option

Metal stopper with bumper ZA: Both ends, ZB: Extension stroke end, ZC: Retraction stroke end

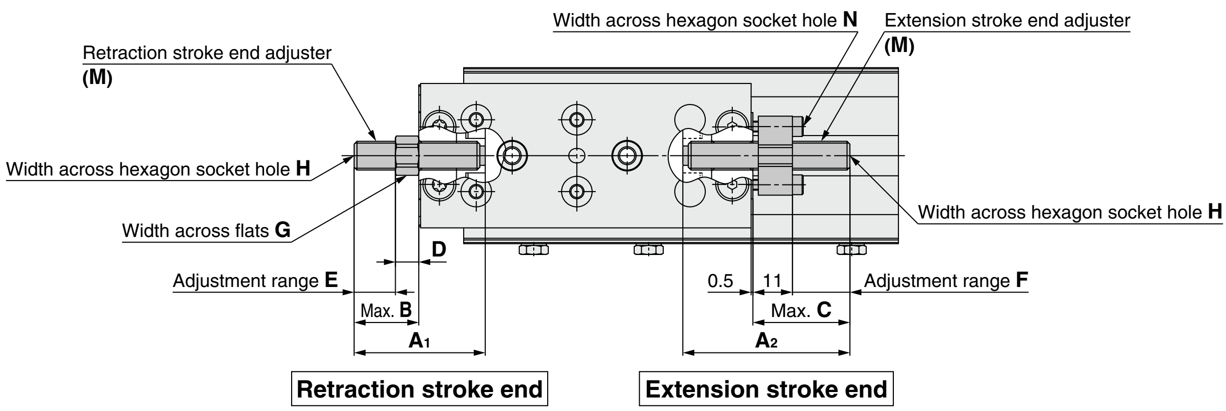
Metal stopper ZK: Both ends, ZL: Extension stroke end, ZM: Retraction stroke end



Metal Stopper with Bumper/Metal Stopper

Model	A_1	A_2	B	C	D	E	F	G	H	K	L_1	L_2	M	N	Metal stopper with bumper Adjuster part no.		Metal stopper Adjuster part no.	
															Extension stroke end adjuster	Retraction stroke end adjuster	Extension stroke end adjuster	Retraction stroke end adjuster
MXQ8A-□-X2192	30	40	15	23	5	10	12	8	3	13	16.6	18.2	M6 x 0.75	2.5	MXQA-CS8-X2202	MXQA-CT8	MXQA-DS8-X2202	MXQA-DT8
MXQ12A-□-X2192	35	45	17	26	6.5	10	14	10	4	16.2	18.9	20.7	M8 x 1	2.5	MXQA-CS12-X2202	MXQA-CT12	MXQA-DS12-X2202	MXQA-DT12
MXQ16A-□-X2192	40	50	18	27	8	10	15	12	5	20	25.2	26.9	M10 x 1	3	MXQA-CS16-X2202	MXQA-CT16	MXQA-DS16-X2202	MXQA-DT16
MXQ20A-□-X2192	47	57	21	30	10	10	18	17	6	27	31.5	34.1	M12 x 1	4	MXQA-CS20-X2202	MXQA-CT20	MXQA-DS20-X2202	MXQA-DT20
MXQ25A-□-X2192	54	64	22	31	11	11	20	19	6	27	38.3	40.8	M14 x 1.5	5	MXQA-CS25-X2202	MXQA-CT25	MXQA-DS25-X2202	MXQA-DT25

Rubber stopper ZD: Both ends, ZE: Extension stroke end, ZF: Retraction stroke end



Rubber Stopper

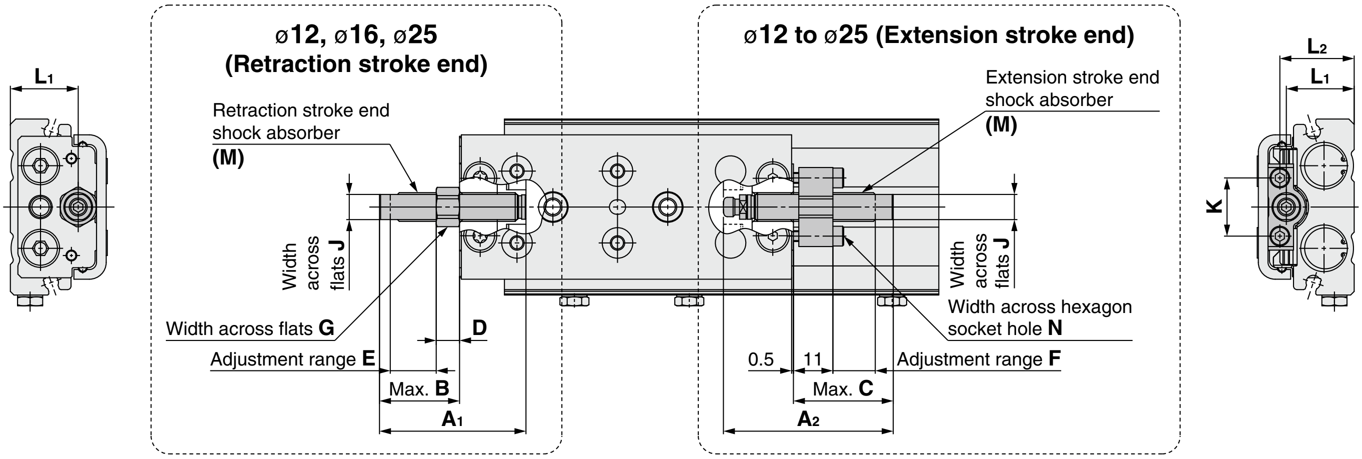
Model	A_1	A_2	B	C	D	E	F	G	H	K	L_1	L_2	M	N	Adjuster part no.	
															Extension stroke end adjuster	Retraction stroke end adjuster
MXQ8A-□-X2192	31.5	41.5	17	25	5	11	13	8	3	13	16.6	18.2	M6 x 0.75	2.5	MXQA-AS8-X2202	MXQA-AT8
MXQ12A-□-X2192	36.5	46.5	18	27	6.5	11	16	10	4	16.2	18.9	20.7	M8 x 1	2.5	MXQA-AS12-X2202	MXQA-AT12
MXQ16A-□-X2192	41.5	51.5	20	28	8	11	17	12	5	20	25.2	26.9	M10 x 1	3	MXQA-AS16-X2202	MXQA-AT16
MXQ20A-□-X2192	48.5	58.5	22	31	10	12	20	17	6	27	31.5	34.1	M12 x 1	4	MXQA-AS20-X2202	MXQA-AT20
MXQ25A-□-X2192	55.5	65.5	24	33	11	12	21	19	6	27	38.3	40.8	M14 x 1.5	5	MXQA-AS25-X2202	MXQA-AT25

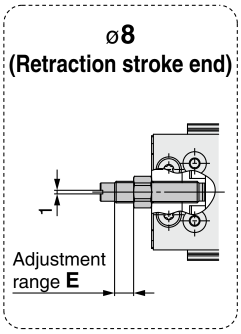
Symbol
-X2192

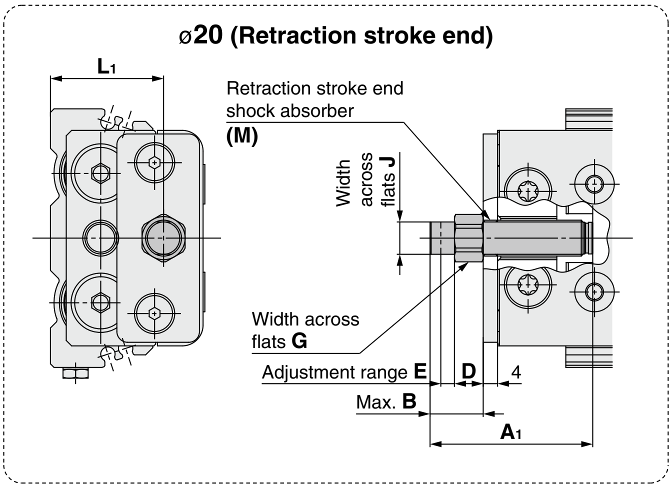
Dimensions

MXQ□□A-□□Z□-X2192 With adjuster option

Shock absorber/RJ ZG: Both ends, ZH: Extension stroke end, ZJ: Retraction stroke end







Shock Absorber/RJ

Model	A_1	A_2	B	C	D	E	F	G	J	K	L_1	L_2	M	N	Adjuster part no. Extension stroke end adjuster	Adjuster part no. Retraction stroke end adjuster
MXQ8A-□-X2192	29.3	—	15	—	5	5	—	8	—	—	—	—	M6 x 0.75	—	—*1	**MXQA-JT8**
MXQ12A-□-X2192	40.8	47.3	23	29	6.5	12	11	10	7	16.2	18.9	20.7	M8 x 1	2.5	**MXQA-JS12-X2202**	**MXQA-JT12**
MXQ16A-□-X2192	45.3	52.8	24	30	8	12	11	12	9	20	25.2	26.9	M10 x 1	3	**MXQA-JS16-X2202**	**MXQA-JT16**
MXQ20A-□-X2192	45.3	52.8	15	26	8	3	6	12	9	27	31.5	34.1	M10 x 1	4	**MXQA-JS20-X2202**	**MXQA-JT20P**
MXQ25A-□-X2192	67.1	77.1	36	45	11	21	25	19	12	27	38.3	40.8	M14 x 1.5	5	**MXQA-JS25-X2202**	**MXQA-JT25**

*1 Both ends and extension stroke end options are not available for ø8.

14 Side Adjuster Specification

Specifications in which the extension stroke end adjuster is installed on the side of the body

How to Order

MXQ 20 □ - 10 ZG - M9BW - X2200 L

Height interchangeable type

Body options

Nil	Height interchangeable type
L	Height interchangeable type/Symmetric type

Bore size/Stroke

Same as the standard product

Adjuster options

Symbol	Adjuster type*1		Adjuster mounting position	
	Extension stroke end	Retraction stroke end	Extension stroke end	Retraction stroke end
ZA	Metal stopper with bumper		●	●
ZB	Metal stopper with bumper		●	
ZD	Rubber stopper		●	●
ZE	Rubber stopper		●	
ZG	Shock absorber/RJ		●	●
ZH	Shock absorber/RJ		●	
ZBF	Metal stopper with bumper	Rubber stopper	●	●
ZBJ	Metal stopper with bumper	Shock absorber/RJ	●	●
ZEC	Rubber stopper	Metal stopper with bumper	●	●
ZEJ	Rubber stopper	Shock absorber/RJ	●	●
ZHC	Shock absorber/RJ	Metal stopper with bumper	●	●
ZHF	Shock absorber/RJ	Rubber stopper	●	●

*1 The metal stopper with bumper option is not available for ø6.

Auto switch

Nil	Without auto switch (Built-in magnet)

* Applicable auto switches are the same as the standard product.

Side adjuster

Side adjuster position

Symbol	Side adjuster position
Nil	Standard type
L	Symmetric type

(ø16 to ø25 only)

Specifications

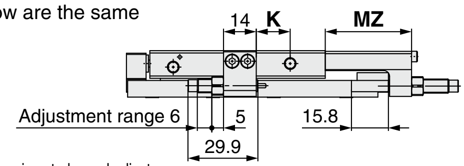
Series	Height interchangeable type

* Specifications other than the above are the same as the standard type.

Dimensions

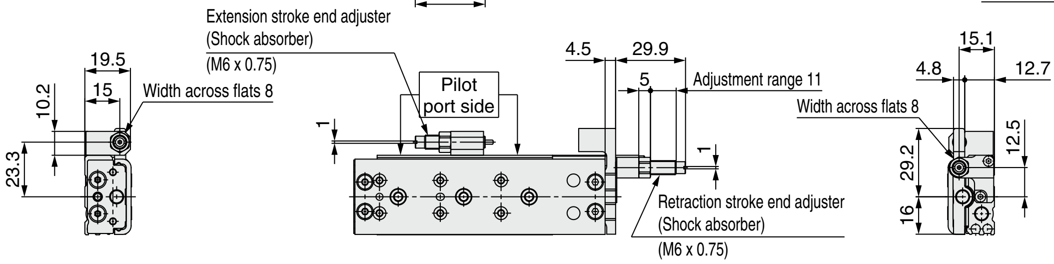
Standard type/MXQ6-□ZG-X2200: Shock absorber/RJ

* Dimensions other than those shown below are the same as the standard product.

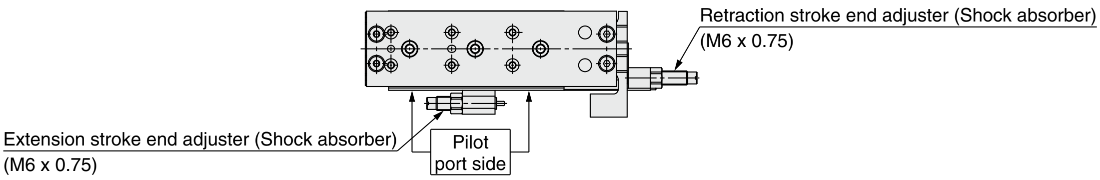


Dimensions

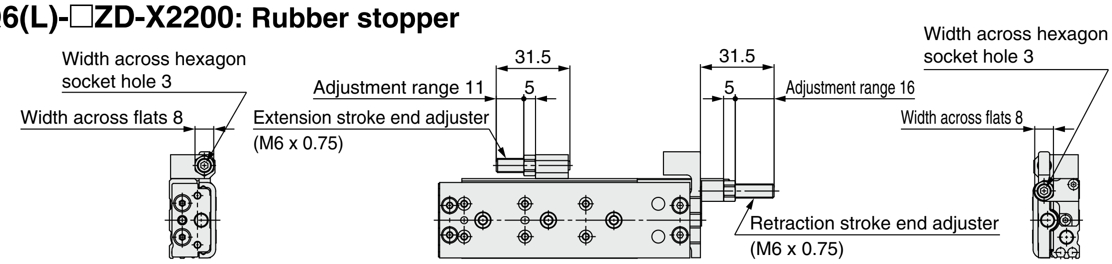
Stroke	K	MZ
10	7.5	18.9
20	7.5	28.9
30	6.5	36.9
40	14.5	36.9
50	24.5	36.9



Symmetric type/MXQ6L-□ZG-X2200: Shock absorber/RJ



MXQ6(L)-□ZD-X2200: Rubber stopper

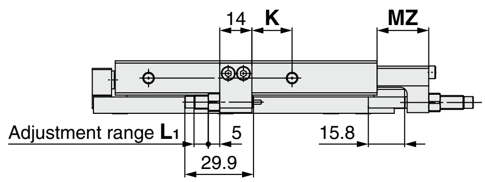


Symbol
-X2200

Dimensions

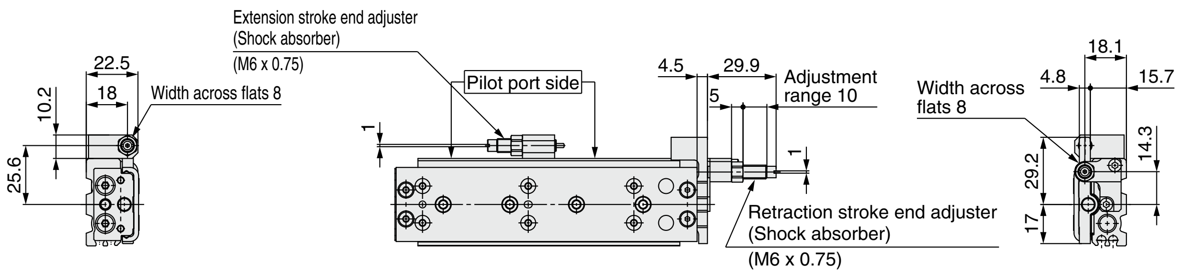
Standard type/MXQ8-□ZG-X2200: Shock absorber/RJ

∗ Dimensions other than those shown below are the same as the standard product.

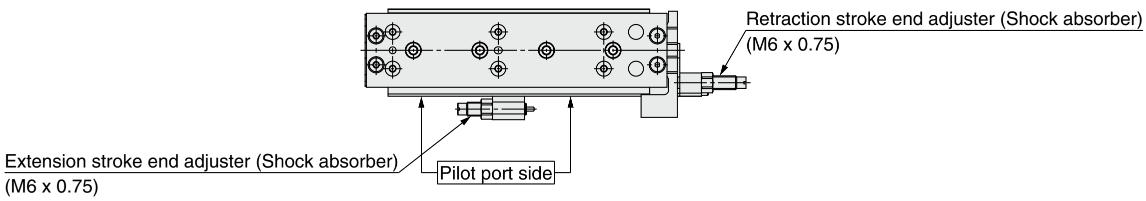


Dimensions

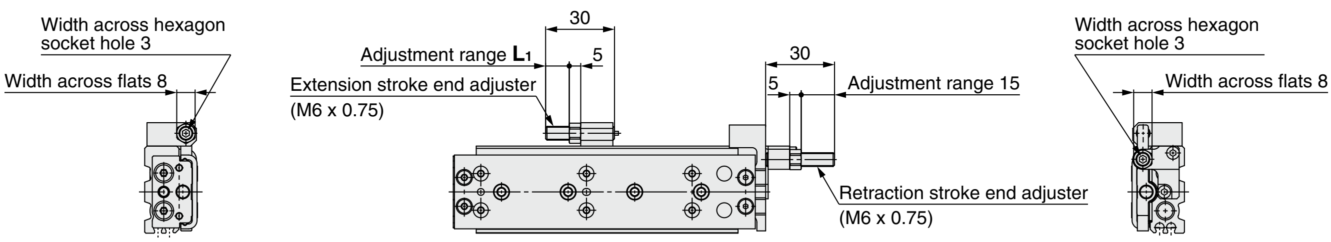
Stroke	K	MZ	Extension stroke end adjuster adjustment range		
			Metal stopper with bumper	Rubber stopper	Shock absorber
			L1	L1	L1
10	5.5	22.5	9	10	5
20	10.5	22.5	10	11	6
30	20	22.5	10	11	6
40	24.5	22.5	10	11	6
50	17.5	22.5	10	11	6
75	46.5	46.5	10	11	6



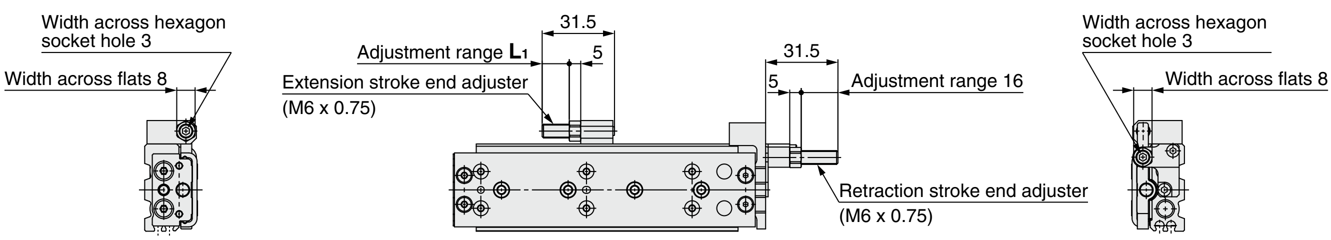
Symmetric type/MXQ8L-□ZG-X2200: Shock absorber/RJ



MXQ8(L)-□ZA-X2200: Metal stopper with bumper



MXQ8(L)-□ZD-X2200: Rubber stopper

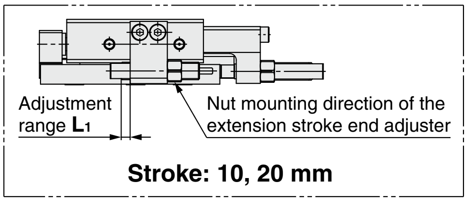


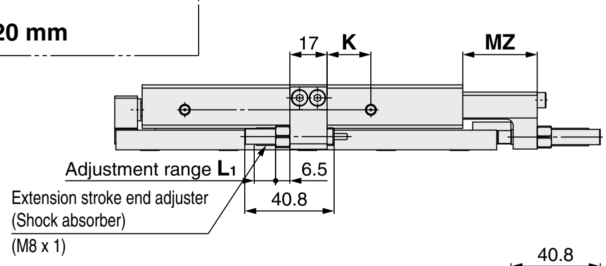
14 Side Adjuster Specification

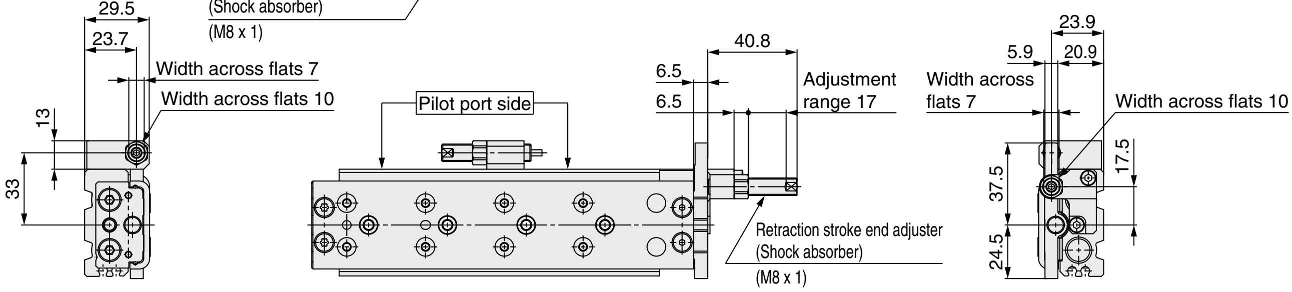
Dimensions

Standard type/MXQ12-□ZG-X2200: Shock absorber/RJ

＊ Dimensions other than those shown below are the same as the standard product.



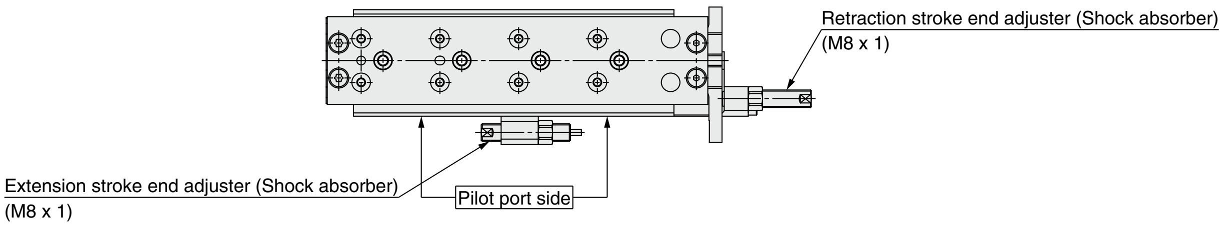




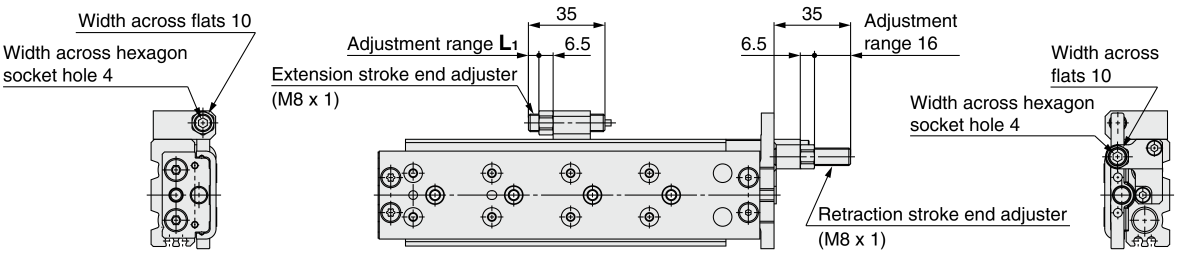
Dimensions

Stroke	K	MZ	Extension stroke end adjuster adjustment range		
			Metal stopper with bumper	Rubber stopper	Shock absorber
			L1	L1	L1
10	5.5	26	3	4	4
20	5.5	34	3	4	4
30	5.5	34	4	6	5
40	5.5	34	6	8	7
50	14	34	8	9	9
75	20	34	8	9	9
100	45	34	8	9	9

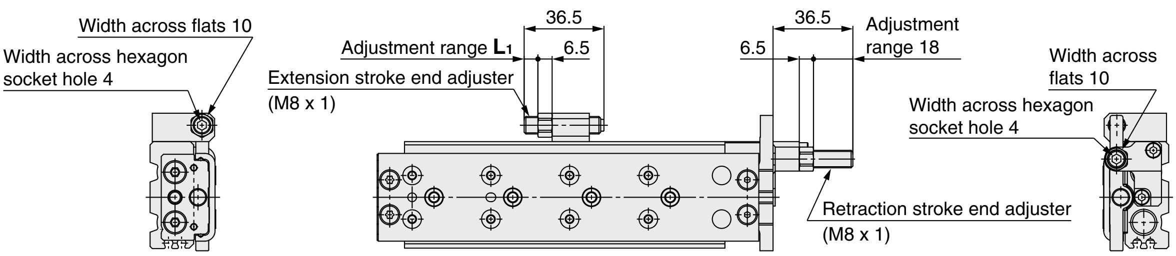
Symmetric type/MXQ12L-□ZG-X2200: Shock absorber/RJ



MXQ12(L)-□ZA-X2200: Metal stopper with bumper



MXQ12(L)-□ZD-X2200: Rubber stopper

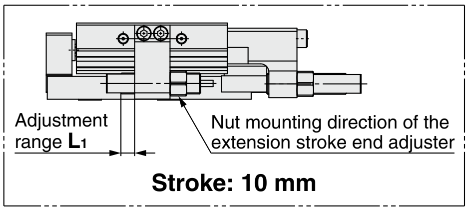


Symbol
-X2200

Dimensions

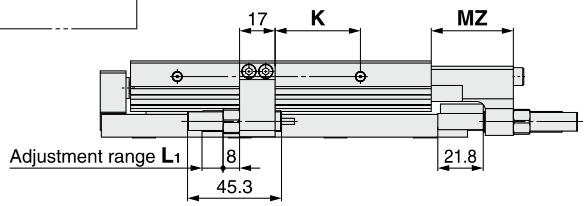
Standard type/MXQ16-□ZG-X2200: Shock absorber/RJ

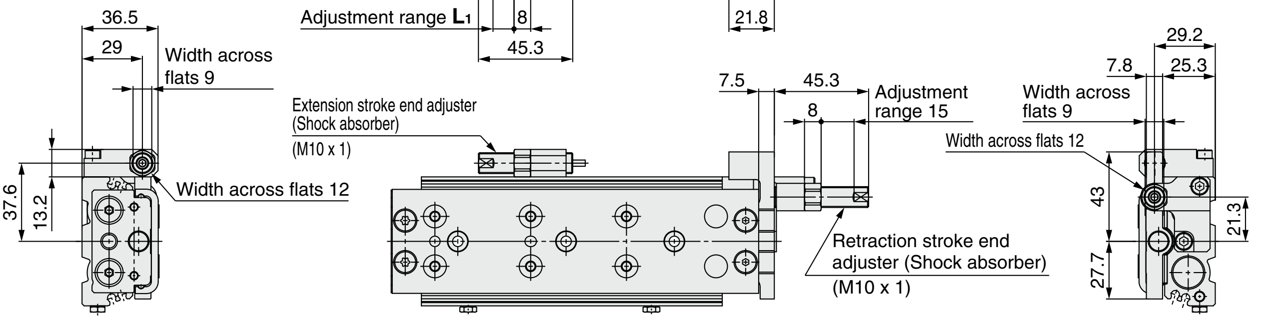
∗ Dimensions other than those shown below are the same as the standard product.



Dimensions

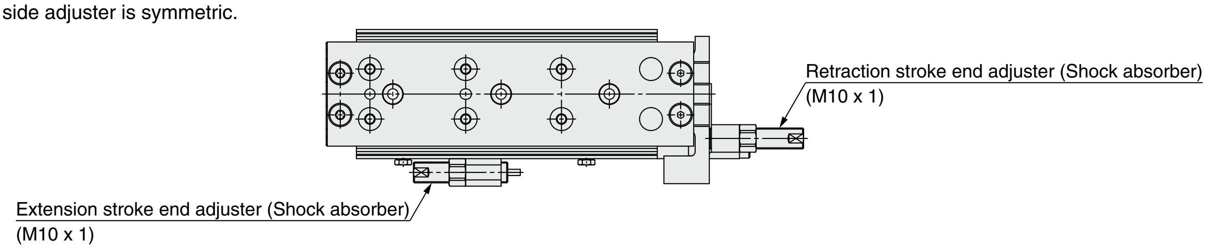
Stroke	K	MZ	Extension stroke end adjuster adjustment range		
			Metal stopper with bumper	Rubber stopper	Shock absorber
			L_1	L_1	L_1
10	5.5	33.5	8	9	6
20	5.5	39.5	11	12	9
30	14	39.5	11	13	10
40	17	39.5	11	13	10
50	22	39.5	11	13	10
75	41	39.5	11	13	10
100	47	39.5	11	13	10
125	72	39.5	11	13	10



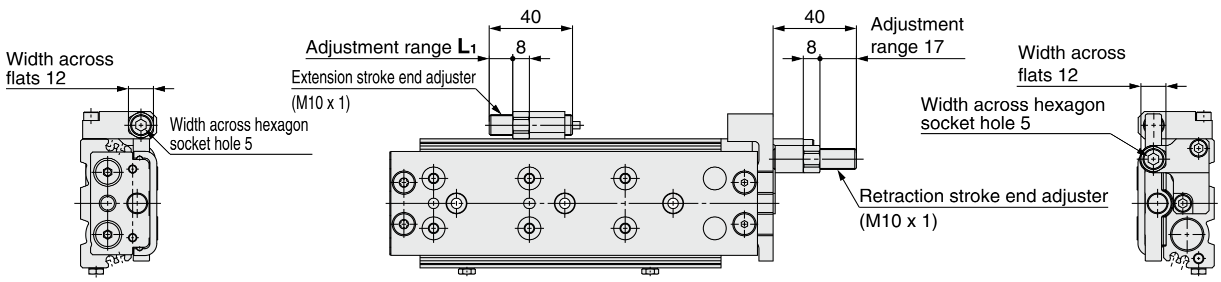


Symmetric type/MXQ16-□ZG-X2200L: Shock absorber/RJ

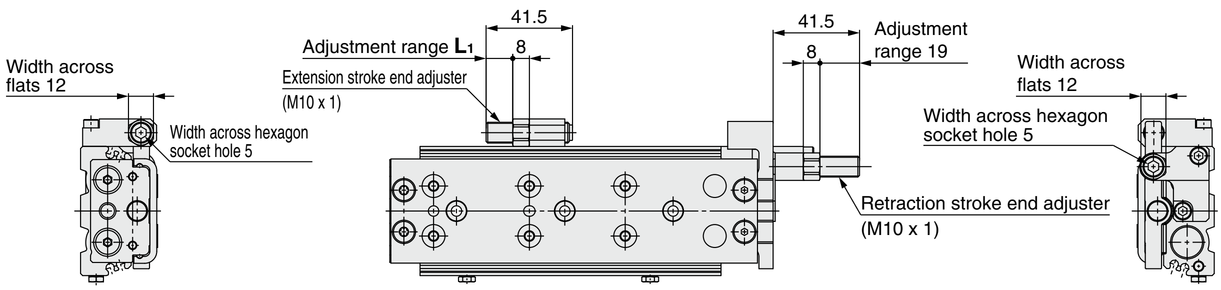
∗ Only the side adjuster is symmetric.



MXQ16-□ZA-X2200(L): Metal stopper with bumper



MXQ16-□ZD-X2200(L): Rubber stopper

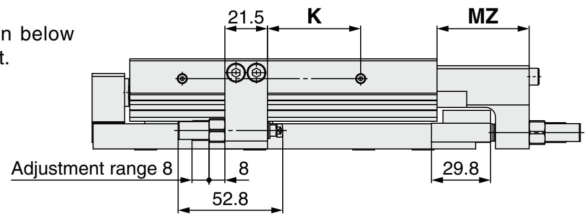


14 Side Adjuster Specification

Dimensions

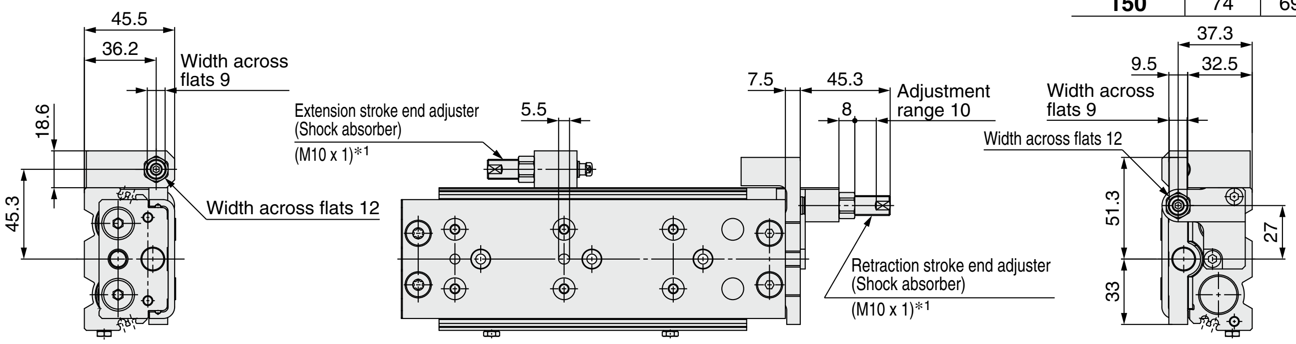
Standard type/MXQ20-□ZG-X2200: Shock absorber/RJ

∗1 The shock absorber uses a different size thread than the other adjusters.
∗ Dimensions other than those shown below are the same as the standard product.



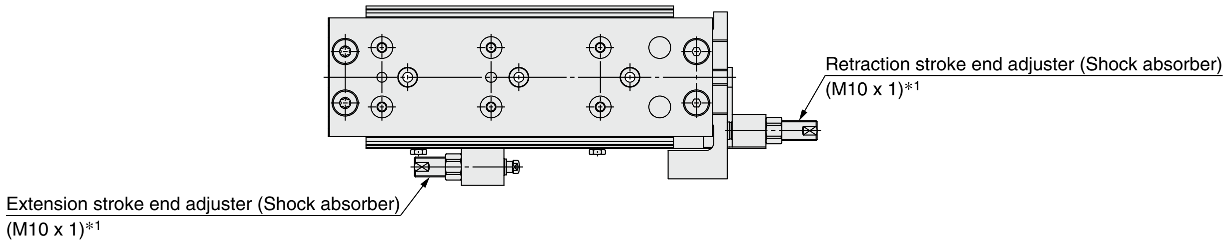
Dimensions

Stroke	K	MZ
10	6	36.5
20	6	46.5
30	18	46.5
40	28	46.5
50	30	46.5
75	47	46.5
100	24	69.5
125	49	69.5
150	74	69.5

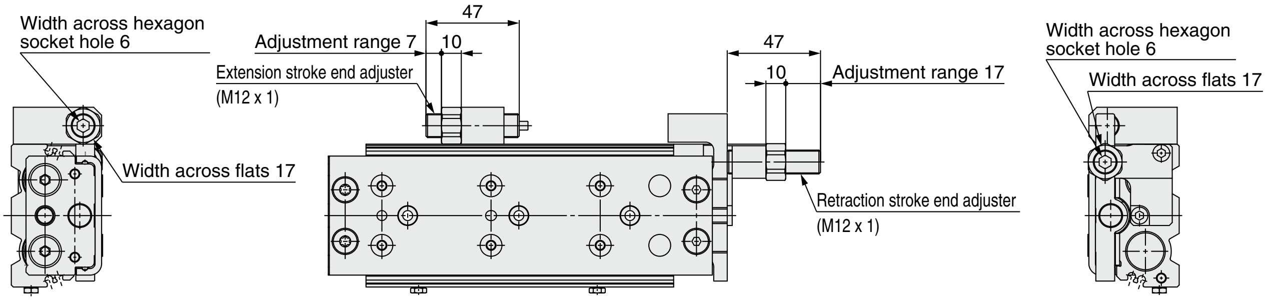


Symmetric type/MXQ20-□ZG-X2200L: Shock absorber/RJ

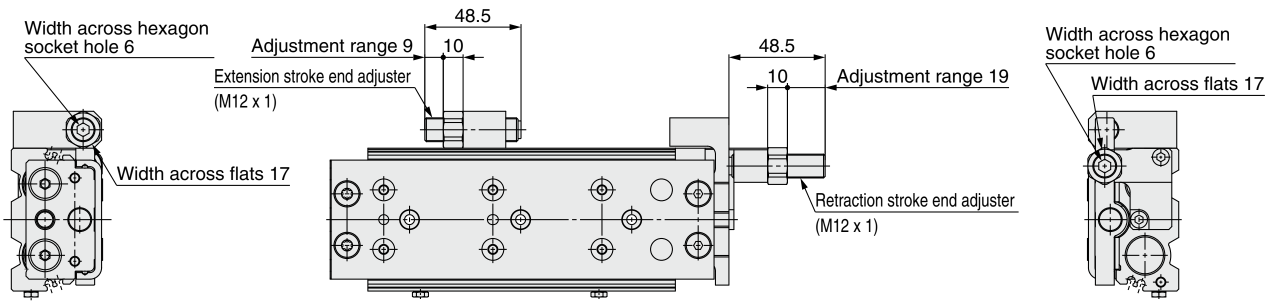
∗ Only the side adjuster is symmetric.



MXQ20-□ZA-X2200(L): Metal stopper with bumper



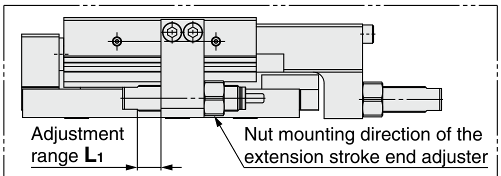
MXQ20-□ZD-X2200(L): Rubber stopper



Symbol
-X2200

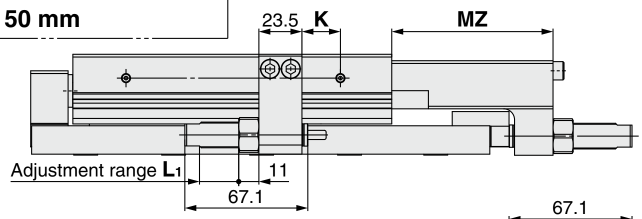
Dimensions

Standard type/MXQ25-□ZG-X2200: Shock absorber/RJ



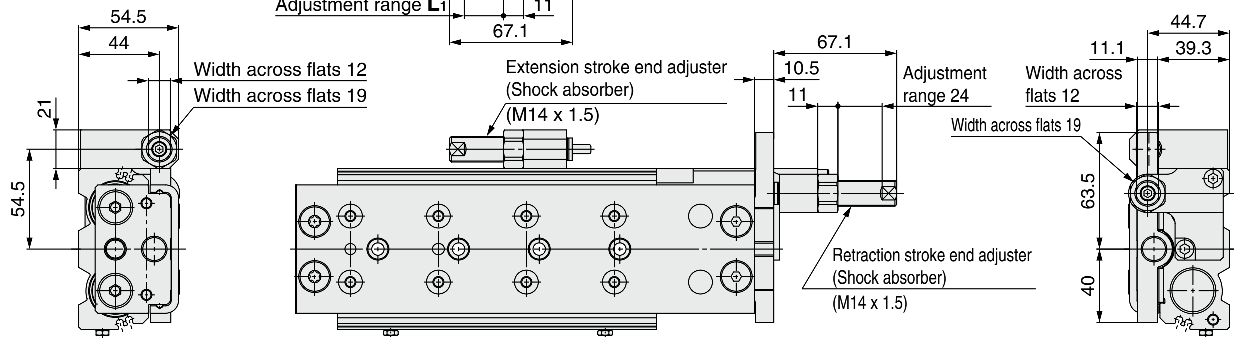
Stroke: 30, 50 mm

* Dimensions other than those shown below are the same as the standard product.



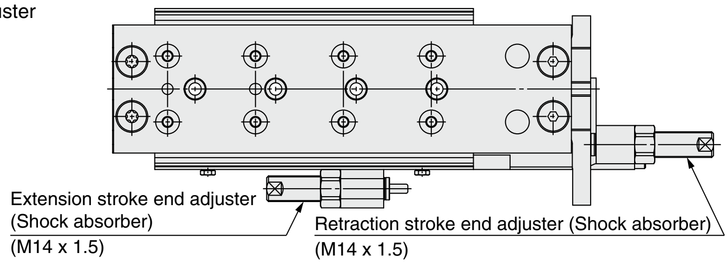
Dimensions

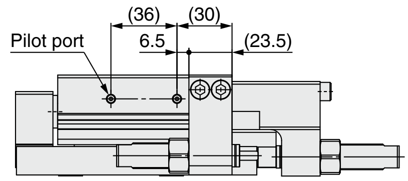
Stroke	K	MZ	Extension stroke end adjuster adjustment range: Metal stopper with bumper L1	Rubber stopper L1	Shock absorber L1
10	—*1	48	15	16	20
20	—*1	58	15	16	20
30	6.5	58	7	9	12
40	6.5	58	6	8	11
50	6.5	58	6	8	11
75	12	58	16	17	21
100	21	88	16	17	21
125	7	88	16	17	21
150	33	88	16	17	21



Symmetric type/MXQ25-□ZG-X2200L: Shock absorber/RJ

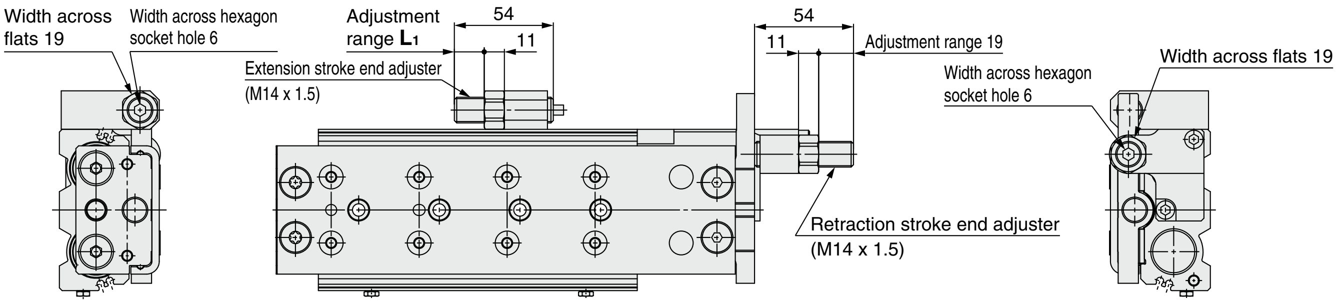
* Only the side adjuster is symmetric.



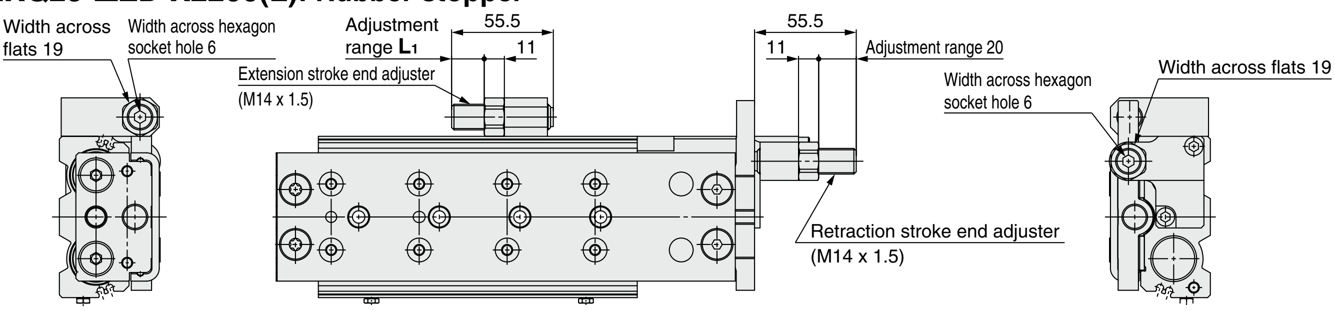


Stroke: 10, 20 mm

MXQ25-□ZA-X2200(L): Metal stopper with bumper



MXQ25-□ZD-X2200(L): Rubber stopper



15 Combined Use of Shock Absorber + Metal Stopper

These are specifications in which shock absorbers and metal stoppers are used in combination with the extension stroke end adjuster and the retraction stroke end adjuster. The shock absorbers absorb energy, and the metal stoppers are used for positioning.

How to Order

MXQ 20 □ - 10 ZG - M9BW - X2201 L

Height interchangeable type (MXQ)

Body options

Nil	Height interchangeable type
L	Height interchangeable type/Symmetric type

Bore size/Stroke

Same as the standard product

Adjuster options

Symbol	Adjuster type	Adjuster mounting position	
		Extension stroke end	Retraction stroke end
ZG	Shock absorber/RJ + Metal stopper	●	●
ZH		●	
ZJ			●

Auto switch

Nil	Without auto switch (Built-in magnet)

∗ Applicable auto switches are the same as the standard product.

Combined use of shock absorber + metal stopper (X2201)

Side adjuster position

Symbol	Side adjuster position
Nil	Standard type
L	Symmetric type

(ø16 to ø25 only)

Specifications

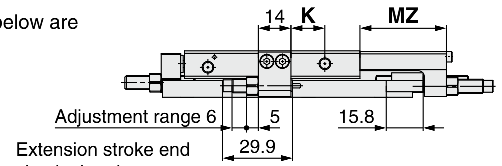
Series	Height interchangeable type

∗ Specifications other than the above are the same as the standard type.

Dimensions

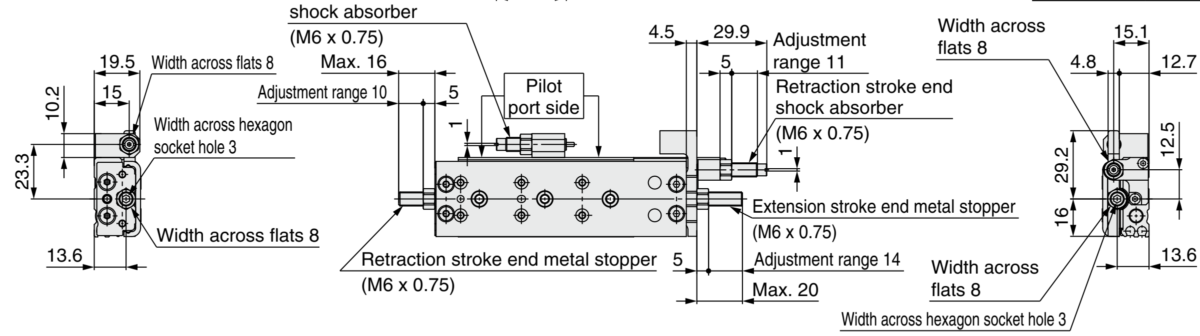
Standard type/MXQ6-□ZG-X2201

∗ Dimensions other than those shown below are the same as the standard product.

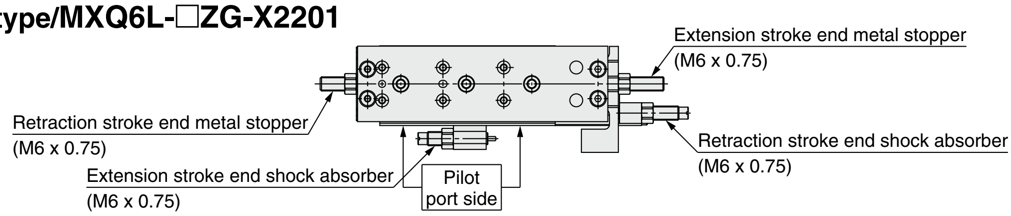


Dimensions

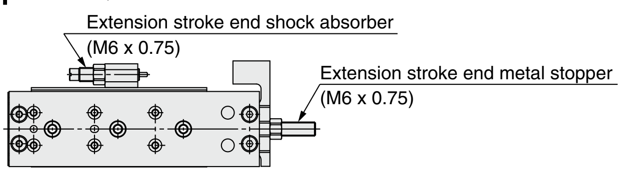
Stroke	K	MZ
10	7.5	18.9
20	7.5	28.9
30	6.5	36.9
40	14.5	36.9
50	24.5	36.9



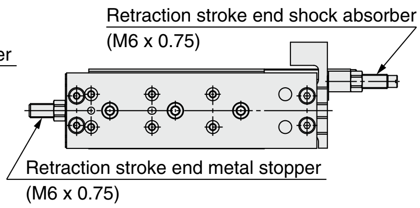
Symmetric type/MXQ6L-□ZG-X2201



Standard type/MXQ6-□ZH-X2201



Standard type/MXQ6-□ZJ-X2201

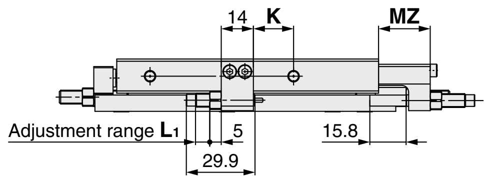


Symbol
-X2201

Dimensions

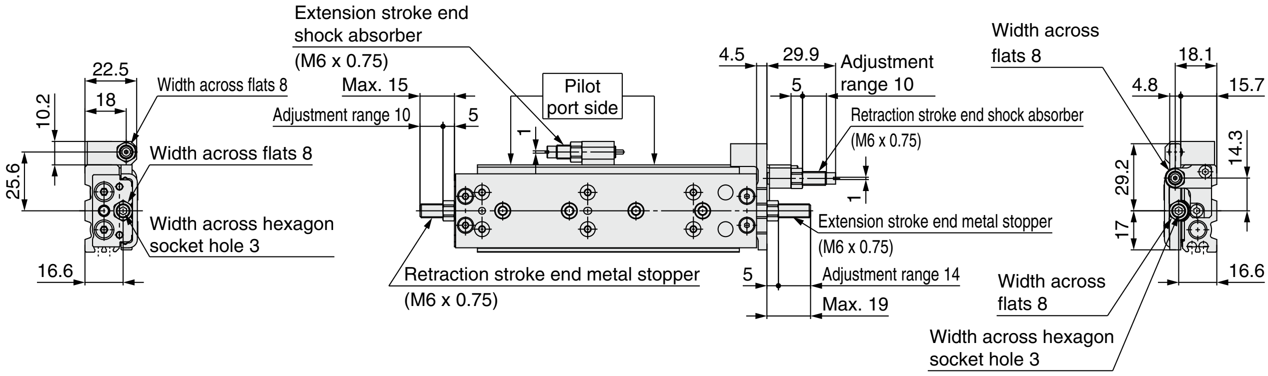
Standard type/MXQ8-□ZG-X2201

∗ Dimensions other than those shown below are the same as the standard product.

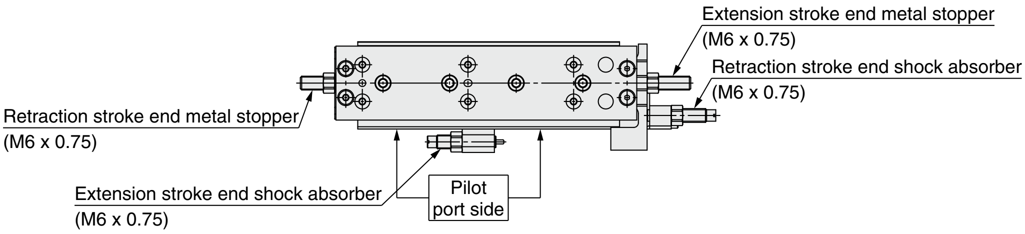


Dimensions

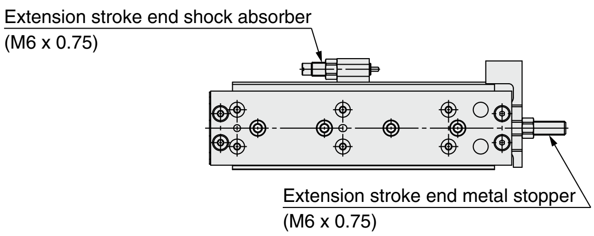
Stroke	K	MZ
10	5.5	22.5
20	10.5	22.5
30	20	22.5
40	24.5	22.5
50	17.5	22.5
75	46.5	46.5



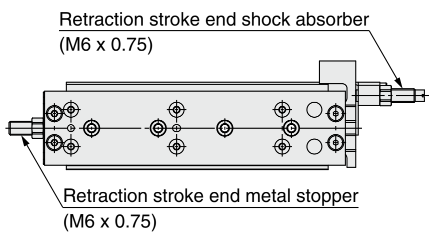
Symmetric type/MXQ8L-□ZG-X2201



Standard type/MXQ8-□ZH-X2201



Standard type/MXQ8-□ZJ-X2201



15 Combined Use of Shock Absorber + Metal Stopper

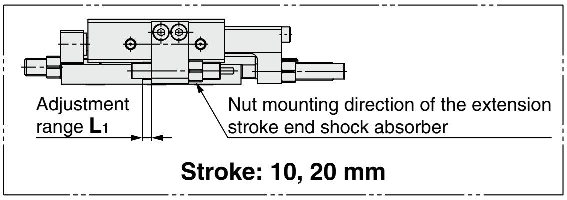
Dimensions

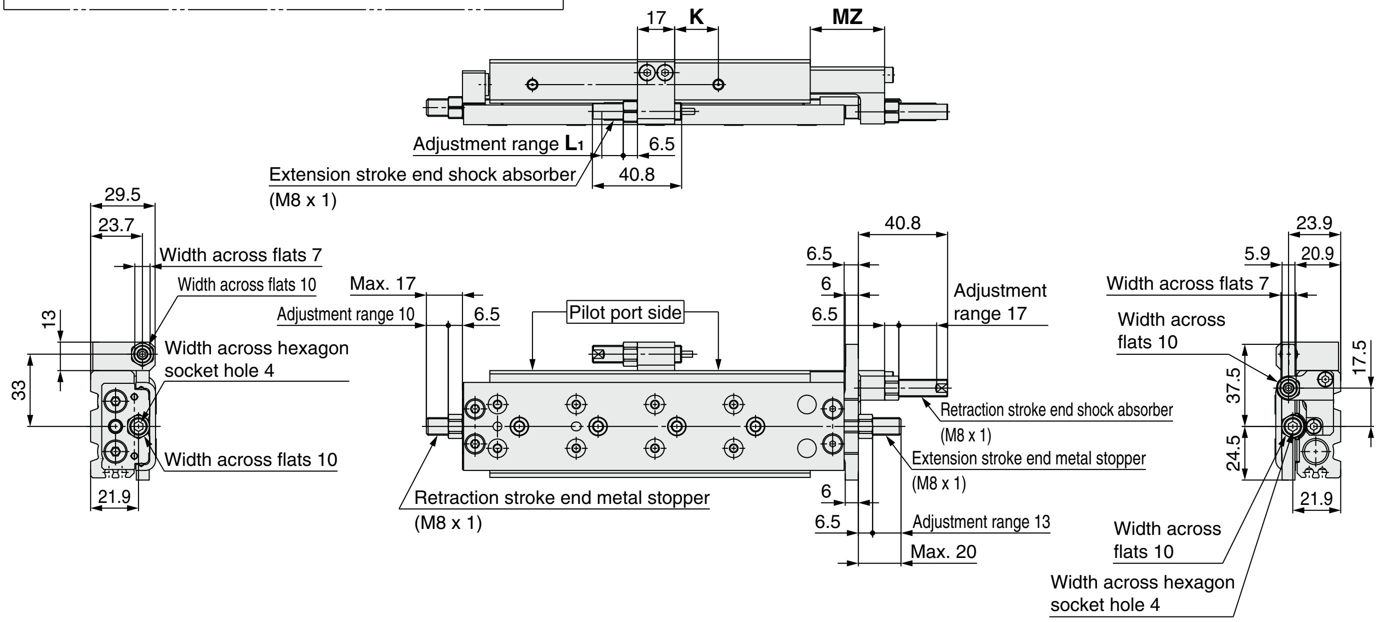
Standard type/MXQ12-□ZG-X2201

∗ Dimensions other than those shown below are the same as the standard product.

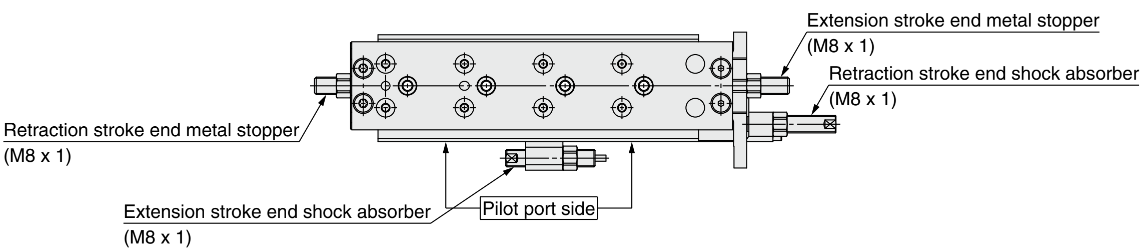
Dimensions

Stroke	K	MZ	L1
10	5.5	26	4
20	5.5	34	4
30	5.5	34	5
40	5.5	34	7
50	14	34	9
75	20	34	9
100	45	34	9

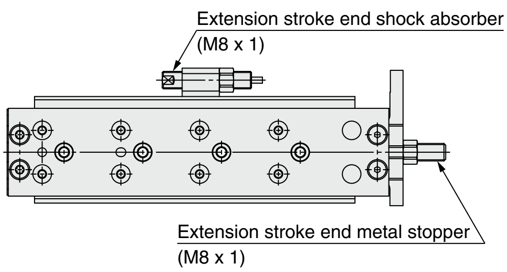




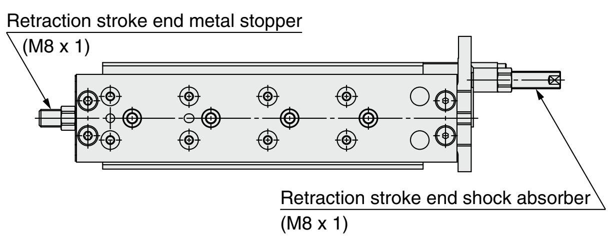
Symmetric type/MXQ12L-□ZG-X2201



Standard type/MXQ12-□ZH-X2201



Standard type/MXQ12-□ZJ-X2201



Symbol

-X2201

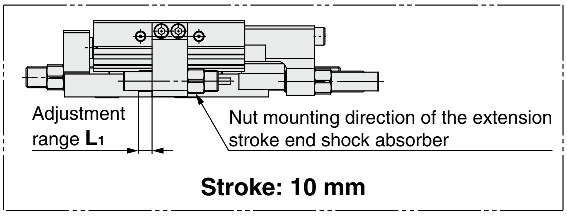
Dimensions

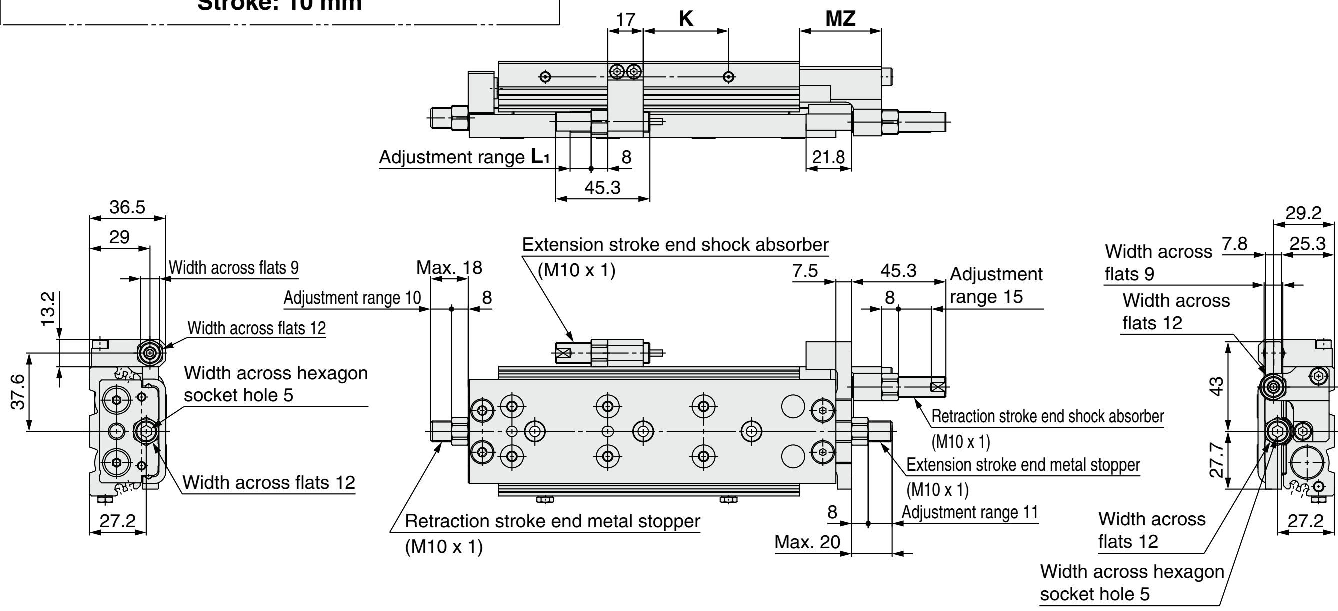
Standard type/MXQ16-□ZG-X2201

∗ Dimensions other than those shown below are the same as the standard product.

Dimensions

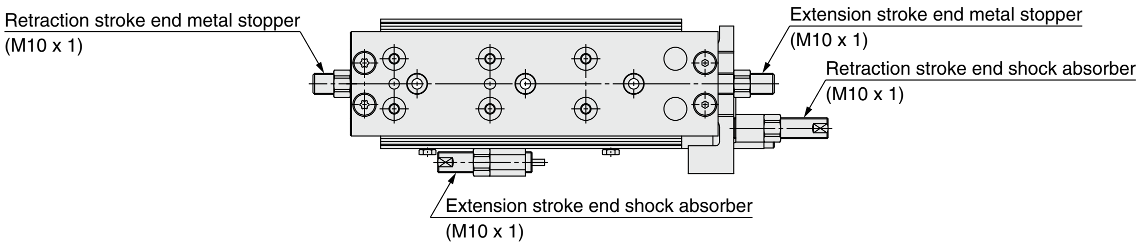
Stroke	K	MZ	L_1
10	5.5	33.5	6
20	5.5	39.5	9
30	14	39.5	10
40	17	39.5	10
50	22	39.5	10
75	41	39.5	10
100	47	39.5	10
125	72	39.5	10



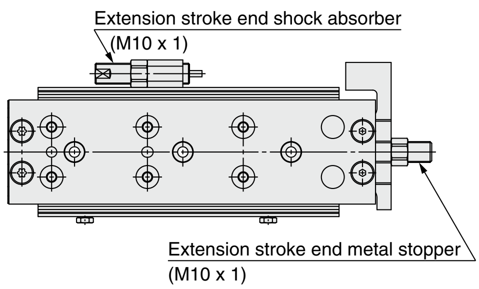


Symmetric type/MXQ16-□ZG-X2201L

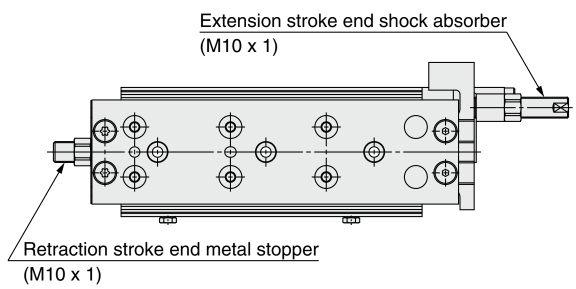
∗ Only the adjuster part is symmetric.



Standard type/MXQ16-□ZH-X2201



Standard type/MXQ16-□ZJ-X2201



15 Combined Use of Shock Absorber + Metal Stopper

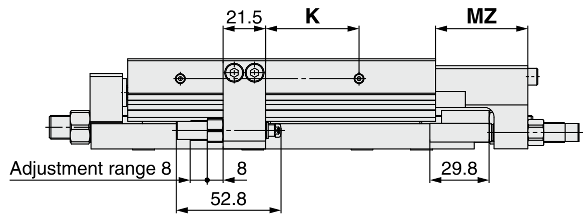
Dimensions

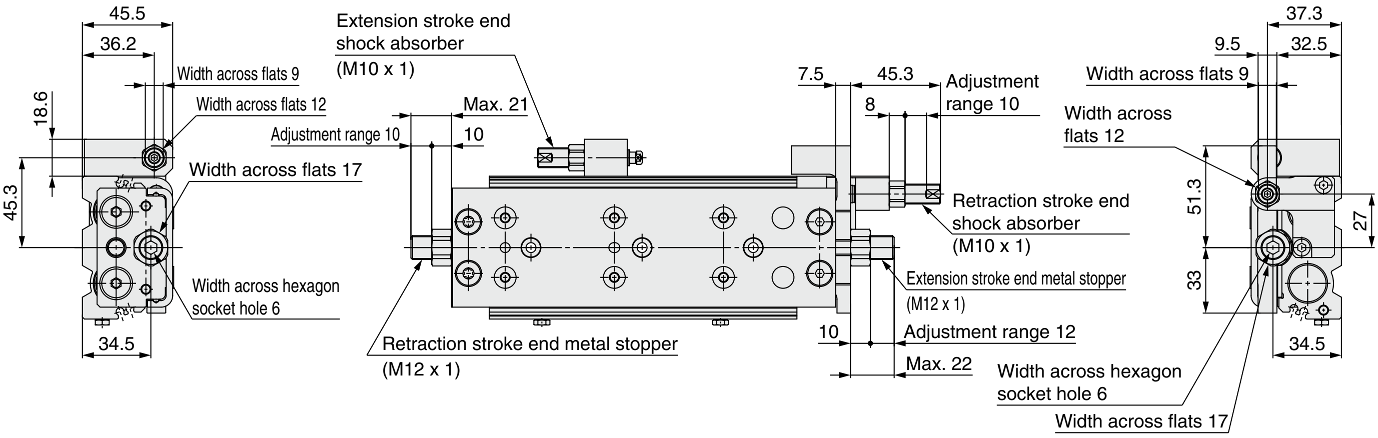
Standard type/MXQ20-□ZG-X2201

∗ Dimensions other than those shown below are the same as the standard product.

Dimensions

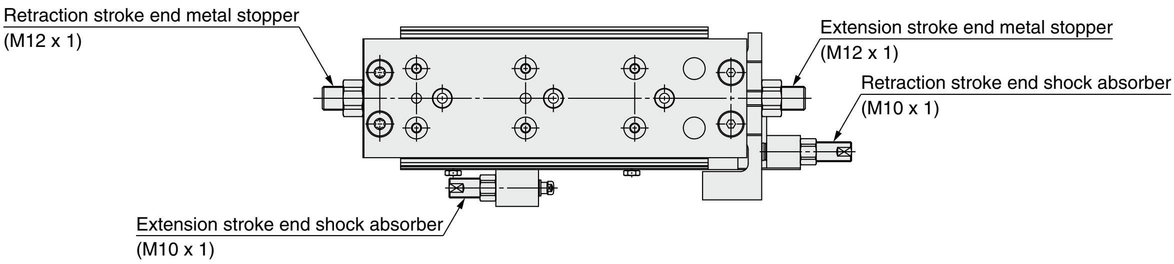
Stroke	K	MZ
10	6	36.5
20	6	46.5
30	18	46.5
40	28	46.5
50	30	46.5
75	47	46.5
100	24	69.5
125	49	69.5
150	74	69.5



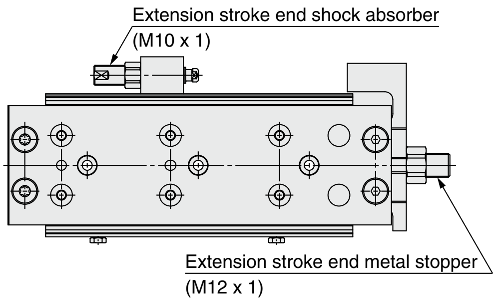


Symmetric type/MXQ20-□ZG-X2201L

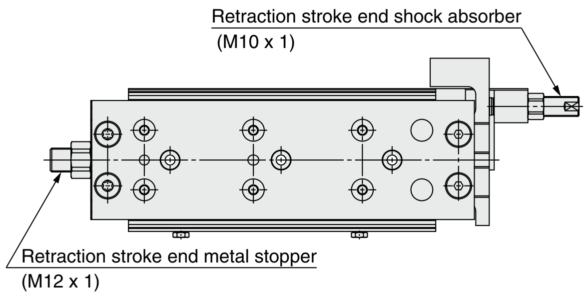
∗ Only the adjuster part is symmetric.



Standard type/MXQ20-□ZH-X2201



Standard type/MXQ20-□ZJ-X2201

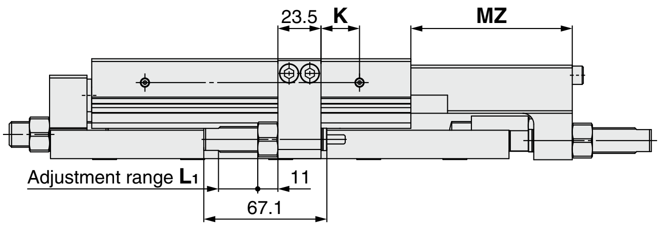


Symbol
-X2201

Dimensions

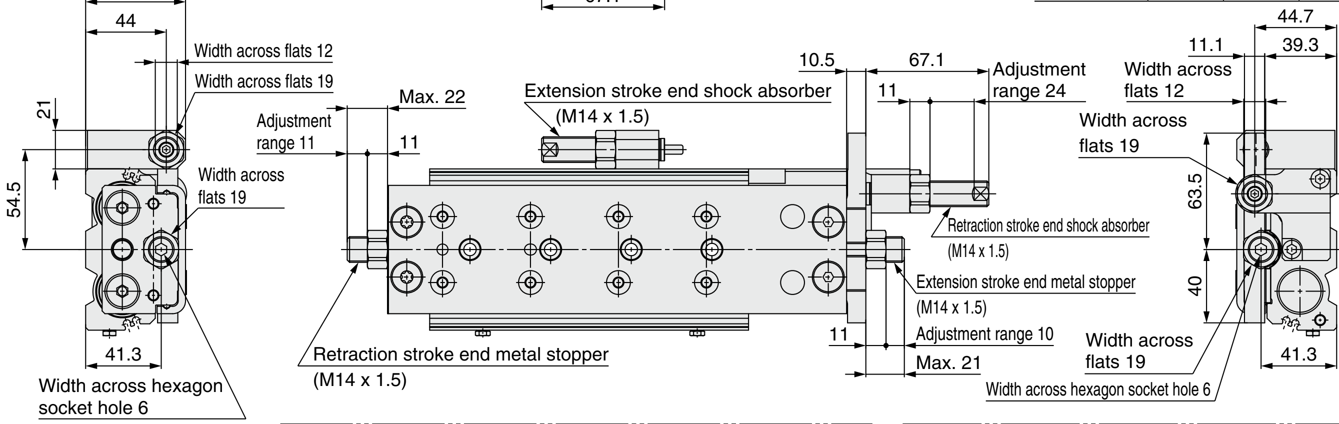
Standard type/MXQ25-□ZG-X2201

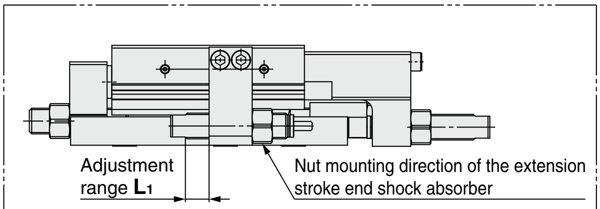
∗ Dimensions other than those shown below are the same as the standard product.



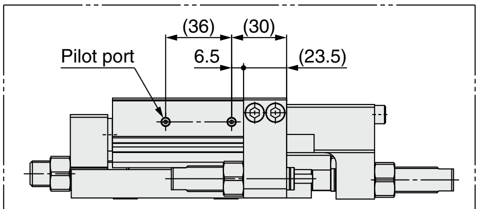
Dimensions

Stroke	K	MZ	L_1
10	—	48	20
20	—	58	20
30	6.5	58	12
40	6.5	58	11
50	6.5	58	11
75	12	58	21
100	21	88	21
125	7	88	21
150	33	88	21





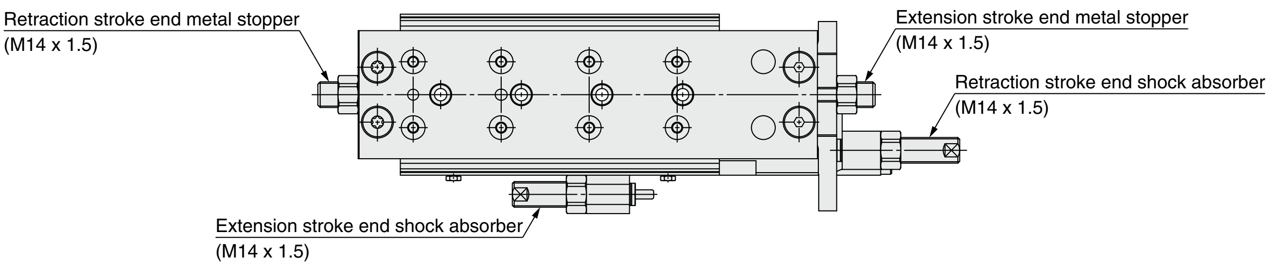
Stroke: 30, 50 mm



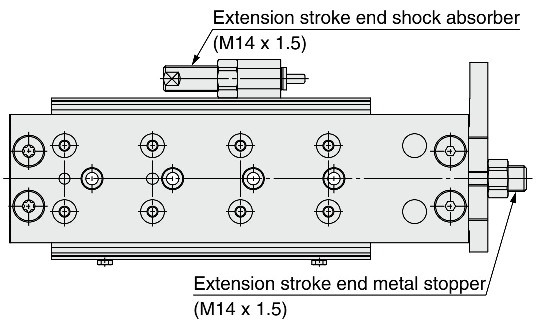
Stroke: 10, 20 mm

Symmetric type/MXQ25-□ZG-X2201L

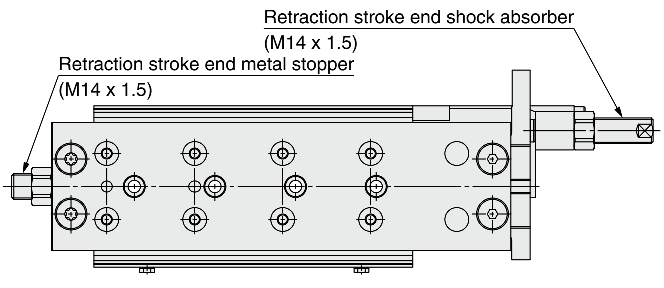
∗ Only the adjuster part is symmetric.



Standard type/MXQ25-□ZH-X2201



Standard type/MXQ25-□ZJ-X2201



16 Extension Stroke End Adjuster Fixed from the Axial Direction

This product has been designed to enable the method of locking the extension stroke end adjuster to be fixed from the axial direction using a hexagon wrench.

How to Order

MXQ 12 ☐ - 10 ZA - M9BW - X2202

Extension stroke end adjuster fixed from the axial direction

Body options

Same as the standard product

Auto switch

Nil	Without auto switch (Built-in magnet)

∗ Applicable auto switches are the same as the standard product.

Bore size/Stroke

Same as the standard product

Adjuster options

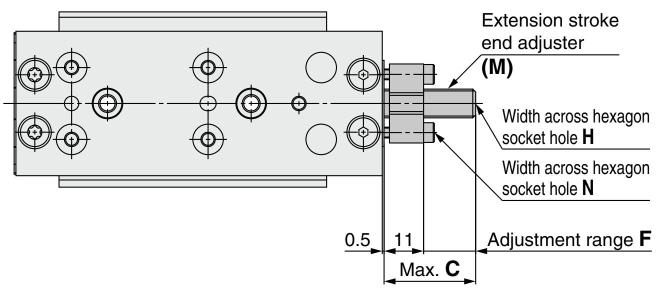
Symbol	Adjuster type∗2∗3∗4	Adjuster mounting position∗1	
		Extension stroke end	Retraction stroke end
ZA	Metal stopper with bumper	●	●
ZB		●	
ZD	Rubber stopper	●	●
ZE		●	
ZG	Shock absorber/RJ	●	●
ZH		●	
ZK	Metal stopper	●	●
ZL		●	

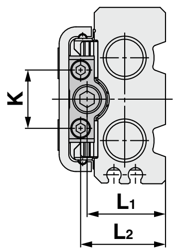
∗1 ●: Shipped together with the product, but not assembled
Without any symbol for the adjuster mounting position: The adjuster can be mounted afterward.
∗2 The metal stopper with bumper option is not available for the MXQ6(A, B).
∗3 The shock absorber option is not available for the MXQ6(A, B) and MXQ8(A, C).
∗4 When the product comes with adjusters on both ends, the retraction stroke end is standard.

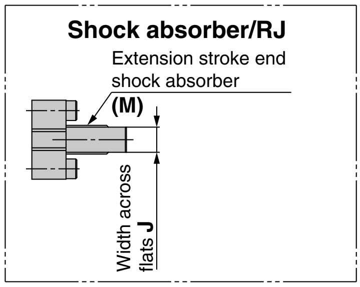
Symbol	Adjuster type∗2∗3∗4		Adjuster mounting position	
	Extension stroke end	Retraction stroke end	Extension stroke end	Retraction stroke end
ZBF	Metal stopper with bumper	Rubber stopper	●	●
ZBJ		Shock absorber/RJ	●	●
ZBM		Metal stopper	●	●
ZEC	Rubber stopper	Metal stopper with bumper	●	●
ZEJ		Shock absorber/RJ	●	●
ZEM		Metal stopper	●	●
ZHC	Shock absorber/RJ	Metal stopper with bumper	●	●
ZHF		Rubber stopper	●	●
ZHM		Metal stopper	●	●
ZLC	Metal stopper	Metal stopper with bumper	●	●
ZLF		Rubber stopper	●	●
ZLJ		Shock absorber/RJ	●	●

Symbol
-X2202

Dimensions







Metal Stopper with Bumper

[mm]

Model	C	F	H	K	L_1	L_2	M	N
MXQ8, MXQ8A	23	12	3	13	16.6	18.2	M6 x 0.75	2.5
MXQ8C					14.6	16.2		
MXQ12	26	14	4	16.2	21.9	23.7	M8 x 1	2.5
MXQ12A, MXQ12C					18.9	20.7		
MXQ16	27	15	5	20	27.2	28.9	M10 x 1	3
MXQ16A					25.2	26.9		
MXQ20	30	18	6	27	34.5	37.1	M12 x 1	4
MXQ20A					31.5	34.1		
MXQ25	31	20	6	27	41.3	43.8	M14 x 1.5	5
MXQ25A					38.3	40.8		
MXQ8B	26	12	4	16.2	14.9	16.7	M8 x 1	2.5
MXQ12B	27	13	5	20	20.2	21.9	M10 x 1	3
MXQ16B	30	16	6	27	25.5	28.1	M12 x 1	4
MXQ20B	31	17	6	27	32.3	34.8	M14 x 1.5	5

Shock Absorber/RJ

[mm]

Model	C	F	J	K	L_1	L_2	M	N
MXQ12	29	11	7	16.2	21.9	23.7	M8 x 1	2.5
MXQ12A, MXQ12C					18.9	20.7		
MXQ16	30	11	9	20	27.2	28.9	M10 x 1	3
MXQ16A					25.2	26.9		
MXQ20	26	6	9	27	34.5	37.1	M10 x 1	4
MXQ20A					31.5	34.1		
MXQ25	45	25	12	27	41.3	43.8	M14 x 1.5	5
MXQ25A					38.3	40.8		
MXQ8B	28	11	7	16.2	14.9	16.7	M8 x 1	2.5
MXQ12B	30	11	9	20	20.2	21.9	M10 x 1	3
MXQ16B	26	7	9	27	25.5	28.1	M10 x 1	4
MXQ20B	45	25	12	27	32.3	34.8	M14 x 1.5	5

Rubber Stopper

[mm]

Model	C	F	H	K	L_1	L_2	M	N
MXQ6	25	14	3	13	13.6	15.2	M6 x 0.75	2.5
MXQ6A					16.6	18.2		
MXQ8, MXQ8A	25	13	3	13	16.6	18.2	M6 x 0.75	2.5
MXQ8C					14.6	16.2		
MXQ12	27	16	4	16.2	21.9	23.7	M8 x 1	2.5
MXQ12A, MXQ12C					18.9	20.7		
MXQ16	28	17	5	20	27.2	28.9	M10 x 1	3
MXQ16A					25.2	26.9		
MXQ20	31	20	6	27	34.5	37.1	M12 x 1	4
MXQ20A					31.5	34.1		
MXQ25	33	21	6	27	41.3	43.8	M14 x 1.5	5
MXQ25A					38.3	40.8		
MXQ6B	25	13	3	13	13.6	15.2	M6 x 0.75	2.5
MXQ8B	27	16	4	16.2	14.9	16.7	M8 x 1	2.5
MXQ12B	28	17	5	20	20.2	21.9	M10 x 1	3
MXQ16B	31	20	6	27	25.5	28.1	M12 x 1	4
MXQ20B	33	21	6	27	32.3	34.8	M14 x 1.5	5

Metal Stopper

[mm]

Model	C	F	H	K	L_1	L_2	M	N
MXQ6	24	12	3	13	13.6	15.2	M6 x 0.75	2.5
MXQ6A					16.6	18.2		
MXQ8, MXQ8A	23	12	3	13	16.6	18.2	M6 x 0.75	2.5
MXQ8C					14.6	16.2		
MXQ12	26	14	4	16.2	21.9	23.7	M8 x 1	2.5
MXQ12A, MXQ12C					18.9	20.7		
MXQ16	27	15	5	20	27.2	28.9	M10 x 1	3
MXQ16A					25.2	26.9		
MXQ20	30	18	6	27	34.5	37.1	M12 x 1	4
MXQ20A					31.5	34.1		
MXQ25	31	20	6	27	41.3	43.8	M14 x 1.5	5
MXQ25A					38.3	40.8		
MXQ6B	23	12	3	13	13.6	15.2	M6 x 0.75	2.5
MXQ8B	26	14	4	16.2	14.9	16.7	M8 x 1	2.5
MXQ12B	27	15	5	20	20.2	21.9	M10 x 1	3
MXQ16B	30	18	6	27	25.5	28.1	M12 x 1	4
MXQ20B	31	20	6	27	32.3	34.8	M14 x 1.5	5

16 Extension Stroke End Adjuster Fixed from the Axial Direction (Order an extension stroke end adjuster as a single unit.)

This product has been designed to enable the method of locking the extension stroke end adjuster to be fixed from the axial direction using a hexagon wrench.

Stroke Adjusters (Accessories)

How to Order

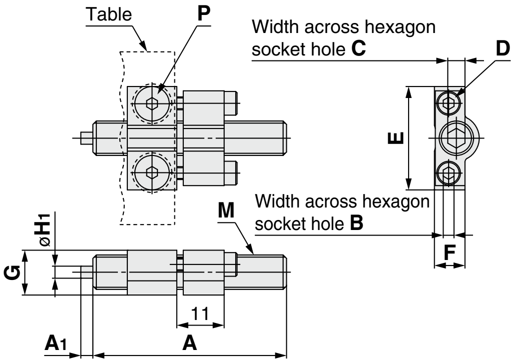
MXQA – CS 12 – X2202

- **CS**: Metal stopper with bumper
- **12**: Size
- **X2202**: Extension stroke end adjuster fixed from the axial direction

Size
8
12
16
20
25

Dimensions

Metal stopper with bumper



Metal Stopper with Bumper [mm]

Model	Adjuster part no.	A	A_1	B	C	D*1	E	F	G	$øH_1$	M (Fine pitch)	P*2
MXQ8(L, A, C, CL)	MXQA-CS8-X2202	40	2	2.5	3	M3 x 12	18	5.8	8.3	2	M6 x 0.75	M3 x 6
MXQ12(L, A, C, CL)	MXQA-CS12-X2202	45	2.8	2.5	4	M3 x 12	24	7.1	10.4	2.8	M8 x 1	M4 x 8
MXQ16(A)	MXQA-CS16-X2202	50	3.6	3	5	M4 x 12	29.4	9.2	12.6	3.6	M10 x 1	M5 x 10
MXQ20(A)	MXQA-CS20-X2202	57	4.4	4	6	M5 x 12	36	11.2	16.2	4.4	M12 x 1	M6 x 12
MXQ25(A)	MXQA-CS25-X2202	64	5.5	5	6	M6 x 12	44	13.5	19.3	5.5	M14 x 1.5	M8 x 16

*1 Size of the hexagon socket head cap screw *2 Size of the hexagon socket flat countersunk head cap screw

How to Order

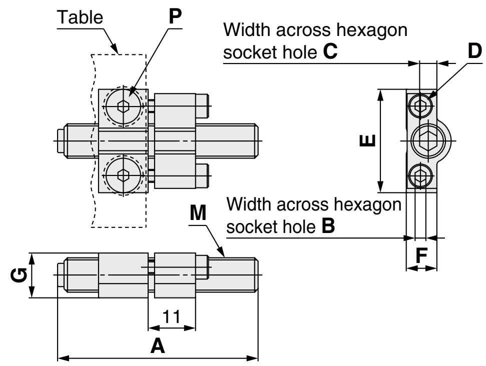
MXQA – AS 12 – X2202

- **AS**: Rubber stopper
- **12**: Size
- **X2202**: Extension stroke end adjuster fixed from the axial direction

Size
8
12
16
20
25

Dimensions

Rubber stopper



Rubber Stopper [mm]

Model		Adjuster part no.	A	B	C	D*1	E	F	G	M (Fine pitch)	P*2
MXQ6(L, A) MXQ8(L, A, C, CL)	MXQ6B(L)	MXQA-AS8-X2202	41.5	2.5	3	M3 x 12	18	5.8	8.3	M6 x 0.75	M3 x 6
MXQ12(L, A, C, CL)	MXQ8B(L)	MXQA-AS12-X2202	46.5	2.5	4	M3 x 12	24	7.1	10.4	M8 x 1	M4 x 8
MXQ16(A)	MXQ12B(L)	MXQA-AS16-X2202	51.5	3	5	M4 x 12	29.4	9.2	12.6	M10 x 1	M5 x 10
MXQ20(A)	MXQ16B	MXQA-AS20-X2202	58.5	4	6	M5 x 12	36	11.2	16.2	M12 x 1	M6 x 12
MXQ25(A)	MXQ20B	MXQA-AS25-X2202	65.5	5	6	M6 x 12	44	13.5	19.3	M14 x 1.5	M8 x 16

*1 Size of the hexagon socket head cap screw *2 Size of the hexagon socket flat countersunk head cap screw

Symbol
-X2202

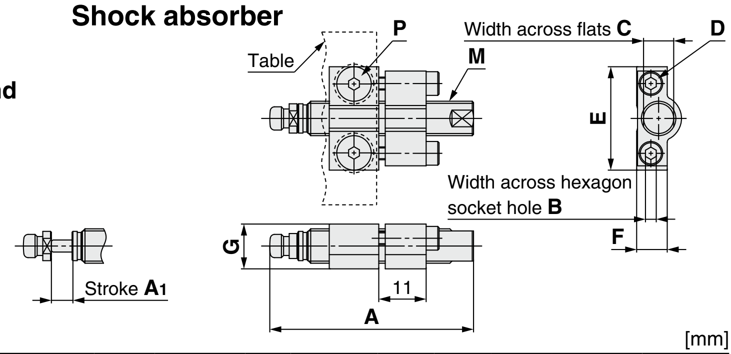
How to Order

MXQA – JS [12] – X2202

- Shock absorber/RJ (JS)
- Size: 12 / 16 / 20 / 25
- Extension stroke end adjuster fixed from the axial direction (X2202)

Dimensions

Shock absorber



Shock Absorber/RJ [mm]

Model		Adjuster part no.	Single shock absorber part no.	A	A_1	B	C	D*1	E	F	G	M (Fine pitch)	P*2
MXQ12(L, A, C, CL)	MXQ8B(L)	MXQA-JS12-X2202	RJ0805U-X2300	47.3	5	2.5	7	M3 x 12	24	7.1	10.4	M8 x 1	M4 x 8
MXQ16(A)	MXQ12B(L)	MXQA-JS16-X2202	RJ1006U-X2300	52.8	6	3	9	M4 x 12	29.4	9.2	12.6	M10 x 1	M5 x 10
MXQ20(A)	MXQ16B	MXQA-JS20-X2202	RJ1007HU-X2300	52.8	7	4	9	M5 x 12	36	11.2	16.2	M12 x 1	M6 x 12
MXQ25(A)	MXQ20B	MXQA-JS25-X2202	RJ1410U-X2300	77.1	10	5	12	M6 x 12	44	13.5	19.3	M14 x 1.5	M8 x 16

*1 Size of the hexagon socket head cap screw *2 Size of the hexagon socket flat countersunk head cap screw

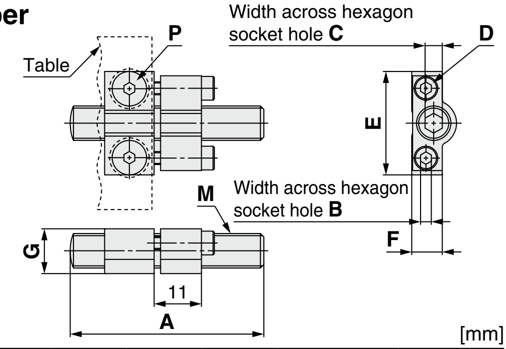
How to Order

MXQA – DS [12] – X2202

- Metal stopper (DS)
- Size: 8 / 12 / 16 / 20 / 25
- Extension stroke end adjuster fixed from the axial direction (X2202)

Dimensions

Metal stopper



Metal Stopper [mm]

Model		Adjuster part no.	A	B	C	D*1	E	F	G	M (Fine pitch)	P*2
MXQ6(L, A)		MXQA-DS8-X2202	40	2.5	3	M3 x 12	18	5.8	8.3	M6 x 0.75	M3 x 6
MXQ8(L, A, C, CL)	MXQ6B(L)										
MXQ12(L, A, C, CL)	MXQ8B(L)	MXQA-DS12-X2202	45	2.5	4	M3 x 12	24	7.1	10.4	M8 x 1	M4 x 8
MXQ16(A)	MXQ12B(L)	MXQA-DS16-X2202	50	3	5	M4 x 12	29.4	9.2	12.6	M10 x 1	M5 x 10
MXQ20(A)	MXQ16B	MXQA-DS20-X2202	57	4	6	M5 x 12	36	11.2	16.2	M12 x 1	M6 x 12
MXQ25(A)	MXQ20B	MXQA-DS25-X2202	64	5	6	M6 x 12	44	13.5	19.3	M14 x 1.5	M8 x 16

*1 Size of the hexagon socket head cap screw *2 Size of the hexagon socket flat countersunk head cap screw

Low thrust with high rigidity type

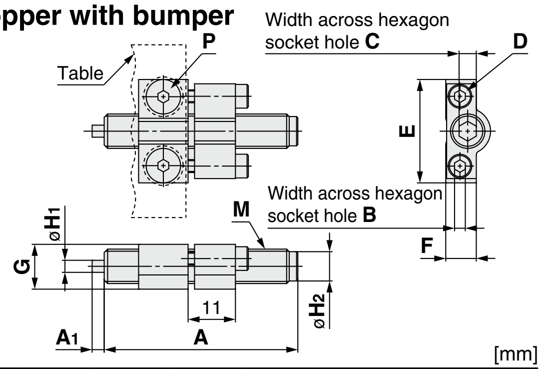
How to Order

MXQB – CS [12] – X2202

- Metal stopper with bumper (CS)
- Size: 8 / 12 / 16 / 20
- Extension stroke end adjuster fixed from the axial direction (X2202)

Dimensions

Metal stopper with bumper



Metal Stopper with Bumper [mm]

Model	Adjuster part no.	A	A_1	B	C	D*1	E	F	G	øH_1	øH_2	M (Fine pitch)	P*2
MXQ8B(L)	MXQB-CS8-X2202	45	2.8	2.5	4	M3 x 12	24	7.1	10.4	2.8	6.8	M8 x 1	M4 x 8
MXQ12B(L)	MXQB-CS12-X2202	50	3.6	3	5	M4 x 12	29.4	9.2	12.6	3.6	8.8	M10 x 1	M5 x 10
MXQ16B	MXQB-CS16-X2202	57	4.4	4	6	M5 x 12	36	11.2	16.2	4.4	10.8	M12 x 1	M6 x 12
MXQ20B	MXQB-CS20-X2202	64	5.5	5	6	M6 x 12	44	13.5	19.3	5.5	12.3	M14 x 1.5	M8 x 16

*1 Size of the hexagon socket head cap screw *2 Size of the hexagon socket flat countersunk head cap screw

MXQ Series
Model Selection

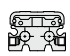
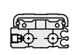
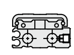
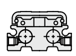
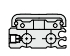
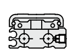
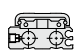
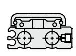
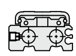
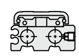
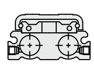
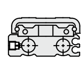
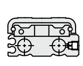
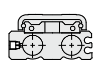
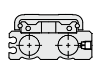
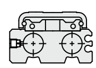
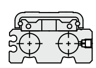
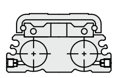
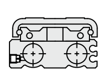
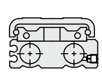
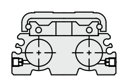
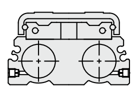
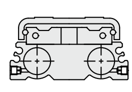
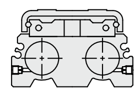
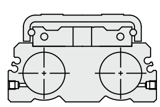
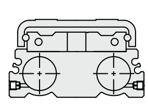
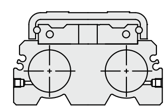
Model Selection Software is available.
For details, refer to Model Selection Software on the **SMC website**.

Guidelines for Model Selection 1

Model selection criteria	Body type	Bore size	Dimensions [mm]			Weight [g] (Compared at 50 stroke)	Thrust [N] (0.5 MPa, OUT direction)	Allowable moment [N·m] (Compared at 50 stroke)		
			Height	Width	Table width			Pitch	Yaw	Roll
When an air slide table without preset piping directions is required (The piping direction can be set when mounting to application.) ∗ **ø16, ø20, ø25: Standard type, Low thrust with high rigidity type (excluding ø25): Double piping direction type**	Double-ported type (MXQ□A)	ø6	23	34	32	210	29	6	6	14
		ø8	23	38	32	270	51	10	10	19
		ø12	27	49	40	400	113	9	9	24
		ø16	35	62	50	670	201	16	16	46
		ø20	43	72	60	1,100	314	21	21	65
		ø25	52	88	70	1,900	491	41	41	119
For applications which require more guide rigidity than thrust	Low thrust with high rigidity type (MXQ□B)	ø6	20	34	32	230	29	10	10	19
		ø8	23	42	40	330	51	9	9	24
		ø12	30	52	50	580	113	16	16	46
		ø16	37	70	60	920	201	21	21	65
		ø20	46	80	70	1,600	314	41	41	119
• When a lower height is required **• When two indicator LEDs need to be observed on one side (including short stroke)**	Single side-ported type (MXQ□C)	ø8	21	38	32	260	51	10	10	19
		ø12	27	49	40	400	113	9	9	24
To replace the current type (Mounting dimensions and height are interchangeable.)	Height interchangeable type (MXQ□)	ø6	20	34	32	190	29	6	6	14
		ø8	23	38	32	310	51	10	10	19
		ø12	30	49	40	430	113	9	9	24
		ø16	37	62	50	690	201	16	16	46
		ø20	46	72	60	1,100	314	21	21	65
		ø25	55	88	70	1,900	491	41	41	119

Guidelines for Model Selection 2

Model Variations

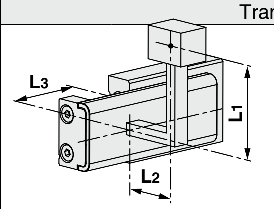
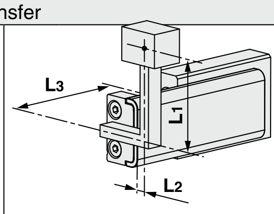
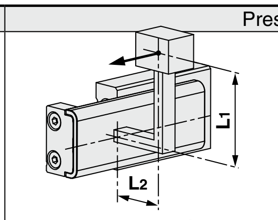
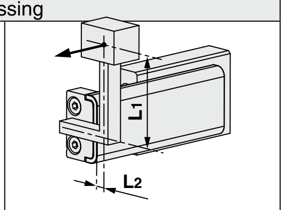
Guide size (Width)	Double-ported type MXQ□A		Low thrust with high rigidity type MXQ□B			Single side-ported type MXQ□C			Height interchangeable type MXQ□		
	Bore size		Bore size	Standard type	Symmetric type (L)	Bore size	Standard type	Symmetric type (L)	Bore size	Standard type	Symmetric type (L)
32(1)[∗1]	ø6		—	—	—	—	—	—	ø6		
32(2)	ø8		ø6			ø8			ø8		
40	ø12		ø8			ø12			ø12		
50	ø16		ø12			—	—	—	ø16		
60	ø20		ø16			—	—	—	ø20		
70	ø25		ø20			—	—	—	ø25		

∗1 There are two rigidity types of actuator tables for width 32.

SMC

Selection Conditions

There are two model selection methods according to the usage. The model selection procedures are shown below.
The following is a simplified selection procedure using the graphs for when an MXQ is mounted onto a static table. When using the product mounted to an electric actuator, etc., it is necessary to perform model selection using another method as the product can be influenced by the acceleration of the electric actuator. For details, refer to Model Selection Software on the SMC website.

Application		Transfer					Pressing	
Workpiece mounting position Overhang		 Table mounting		 End plate mounting			 Table mounting	 End plate mounting
		L1: Distance from the center of the table to the center of gravity of the workpiece L2: Distance from the top surface of the table to the center of gravity of the workpiece L3: Distance from the end of the body to the center of gravity of the workpiece in the Z direction					L1: Distance from the center of the table to the pressing part L2: Distance from the top surface of the table to the pressing part	
Stroke adjuster		Without adjuster	Metal stopper with bumper	Rubber stopper	Shock absorber/RJ	Metal stopper		
Selection graph	Double-ported type Single side-ported type Height interchangeable type	Page 162	Page 168	Page 173	Page 179	Page 185	Page 191	
	Low thrust with high rigidity type	Page 165	Page 171	Page 176	Page 182	Page 188	Page 192	

For Transfer

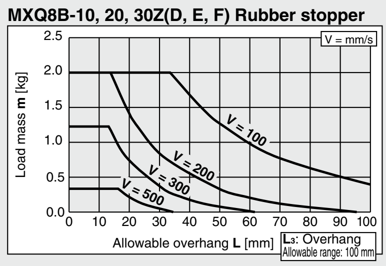
Model Selection Steps

1 Necessary conditions

- Equipment to be used
- Load mass
- Overhang
- Average speed
- Adjuster type

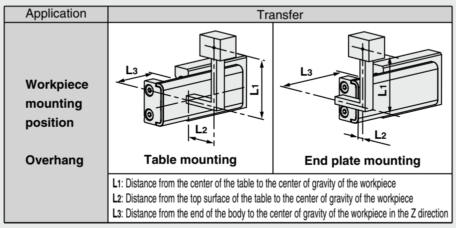
2 Select a graph.

Select the applicable graph (from page 162) by body configuration and stroke adjuster type. When the extension stroke end and retraction stroke end use different adjuster types, check each adjuster graph to see if the adjuster can be used.



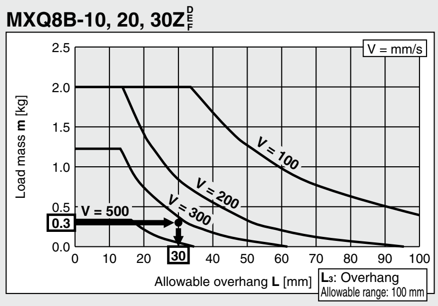
3 Determine the overhang.

Determine the overhang at the workpiece mounting positions L1, L2, and L3.
* Positional relationships among L1, L2, and L3 do not change regardless of the body mounting direction.



4 Check the overhang.

Check the overhang for L1max, L2max, and L3max during transfer.
① L1max: Check the overhang from the cross point of the load mass and driving speed.
② L2max: a: When mounted to the table
Check the allowable overhang from the cross point of the load mass and driving speed.
b: When mounted to the end plate
The allowable overhang is found by multiplying the allowable overhang by 1/2 (coefficient*1).
③ L3max: It is possible to use within the "Allowable overhang range" in the selection graph if it is within the allowable range of the load mass and driving speed
*1 Coefficient varies depending on the model and stroke. Refer to page 159 for details.



5 Overhang in the operating conditions

This product can be used with the overhang required (L1, L2, L3 of No.3) if it is within the allowable overhang range (L1max, L2max, L3max of No.4).
* When the required overhang exceeds the allowable overhang, review the overhang, load mass, driving speed, etc., and reconfirm that they are acceptable.

Precautions for Metal Stopper with Bumper

When a metal stopper with bumper is used in a vertical position, thrust larger than "the operating load mass + full compression force of metal stopper with bumper" is required. This needs to be considered when adjusting the operating pressure and selecting the cylinder size.
* The metal stopper with bumper may not be fully compressed due to lack of thrust.

Double-ported type MXQ□A
Low thrust with high rigidity type MXQ□B
Single side-ported type MXQ□C
Height interchangeable type MXQ□
Common Adjuster Options
Auto Switch Mounting
Made to Order
Model Selection

For Pressing

Model Selection Steps

Precautions for Metal Stopper with Bumper

When a metal stopper with bumper is used in a vertical position, thrust larger than "the operating load mass + full compression force of metal stopper with bumper" is required. This needs to be considered when adjusting the operating pressure and selecting the cylinder size.

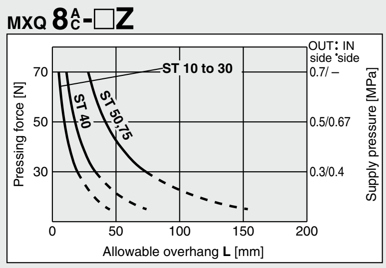
∗ The metal stopper with bumper may not be fully compressed due to lack of thrust.

1 Necessary conditions

- **Equipment to be used**
- **Required pressing force or operating pressure**
- **Overhang**

2 Select a graph.

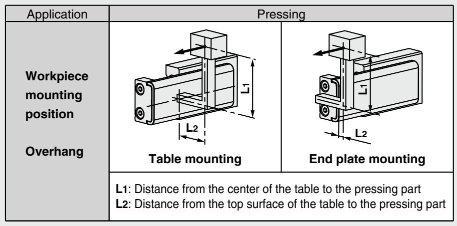
Select the applicable graph by body configuration (from page 191).



3 Determine the overhang.

Determine the overhang at L1 and L2.

∗ **Positional relationships between L1 and L2 do not change regardless of the body mounting direction.**



4 Check the allowable pressing force.

Confirm the allowable pressing force Nmax with the overhang.

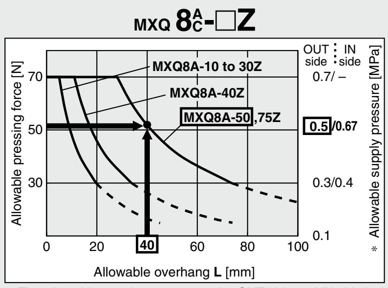
Nmax: ① When mounted to the table

Determine the allowable pressing force with the cross point of the overhang at L1 and L2 and stroke.

② When mounted to the end plate

The allowable valve is found by multiplying the allowable pressing force by 1/2 (coefficient∗1).

∗1 Coefficient varies depending on the model and stroke.
Refer below for details.



∗ The allowable supply pressure on the OUT side and IN side is the theoretical output of the cylinder when pressing force is required.

5 Allowable pressing force in the operating conditions

This product can be used with the pressing force required if it is within the allowable pressing force range.

∗ **When the required pressing force exceeds the allowable pressing force, review the operating pressing force, operating pressure, overhang, etc., and reconfirm that they are acceptable.**

6 Check the allowable supply pressure.

The allowable supply pressure can be confirmed with the selection graph.

∗ Coefficient for the allowable overhang and the allowable pressing force of the models shown below is 1/4.

Model	Stroke
MXQ8(A, C)	50, 75
MXQ12(A, C)	75, 100
MXQ16(A)	100, 125
MXQ20(A)	100, 125, 150
MXQ25(A)	125, 150
MXQ6B	50, 75
MXQ8B	75, 100
MXQ12B	100, 125
MXQ16B	100, 125, 150
MXQ20B	125, 150

Selection Example 1 (Transfer, Table Mounting)

Selection conditions

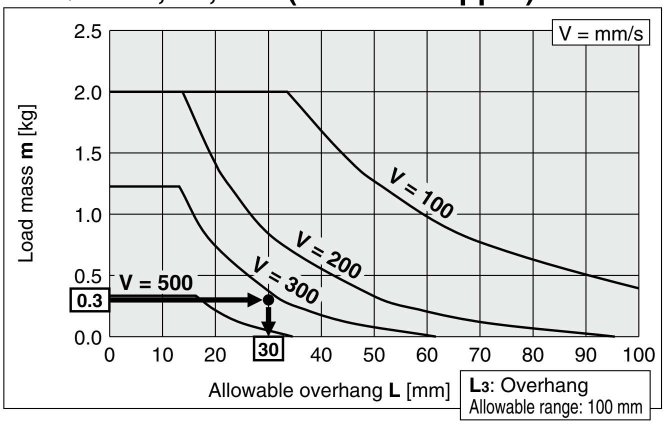
Selected model: **MXQ8B-30ZEJ**
Load mass: 0.3 kg
Average operating speed: Extension stroke end: 300 mm/s
* Average operating speed: Speed calculated by dividing the stroke by the time from starting operation until reaching the end
Overhang: L_1 = 20, L_2 = 20, L_3 = 50
Stroke adjuster: Extension stroke end: Rubber stopper
Retraction stroke end: Shock absorber

Selection method

Determine the extension stroke end (rubber stopper).

① Find the max. overhang of L_1, L_2, and L_3 from the selection graph.
L_1, L_2: Use the graph to find the **L** when the speed is 300 mm/s and load mass is m = 0.3 kg. **L** = 30 mm → L_1, L_2 max. overhang = 30 mm
L_3: Check the allowable overhang range shown at the bottom right of the graph. L_3 max. overhang = 100 mm
② Confirm that L_1, L_2, L_3 are lower than the max. overhang.
L_1 = 20 mm and L_2 = 20 mm OK (L_1, L_2 max. overhang = 30 mm), L_3 = 50 mm OK (L_3 max. overhang = 100 mm)

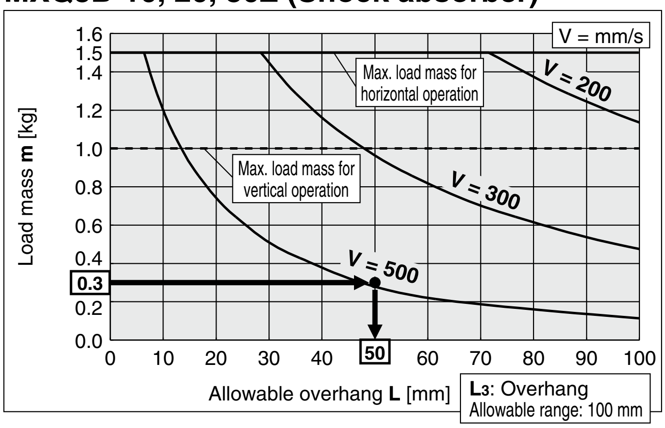
MXQ8B-10, 20, 30Z (Rubber stopper)



Determine the retraction stroke end (shock absorber).

① Find the max. overhang of L_1, L_2, and L_3 from the selection graph.
L_1, L_2: Use the graph to find the **L** when the speed is 500 mm/s and load mass is m = 0.3 kg. **L** = 50 mm → L_1, L_2 max. overhang = 50 mm
L_3: Check the allowable overhang range shown at the bottom right of the graph. L_3 max. overhang = 100 mm
② Confirm that L_1, L_2, and L_3 are lower than the max. overhang.
L_1 = 20 mm and L_2 = 20 mm OK (L_1, L_2 max. overhang = 50 mm), L_3 = 50 mm OK (L_3 max. overhang = 100 mm)

MXQ8B-10, 20, 30Z (Shock absorber)



Therefore, the **MXQ8B-30ZEJ** can be used.

Selection Example 2 (Transfer, End Plate Mounting)

Selection conditions

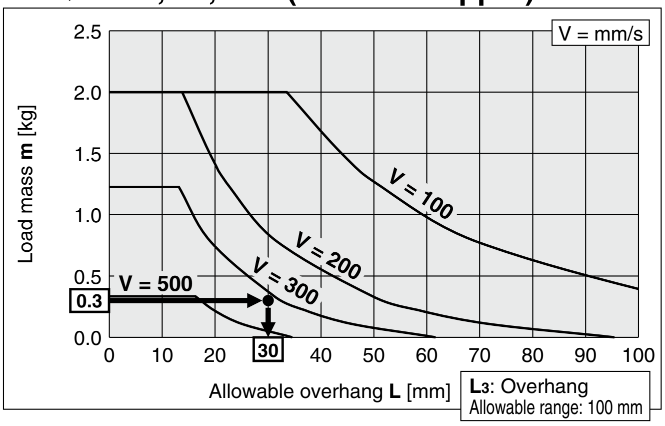
Selected model: **MXQ8B-30ZD**
Load mass: 0.3 kg
Average operating speed: 300 mm/s
* Average operating speed: Speed calculated by dividing the stroke by the time from starting operation until reaching the end
Overhang: L_1 = 20, L_2 = 10, L_3 = 50
Stroke adjuster: Extension stroke end: Rubber stopper
Retraction stroke end: Rubber stopper

Selection method

① Find the max. overhang of L_1, L_2, and L_3 from the selection graph.
L_1: Use the graph to find the **L** when the speed is 300 mm/s and load mass is m = 0.3 kg. **L** = 30 mm → L_1 max. overhang = 30 mm
L_2: Use the graph to find the **L** when the speed is 300 mm/s and load mass is m = 0.3 kg and multiply it by 1/2.
L = 30 mm → L_2 max. overhang = 30 mm/2 = 15 mm
* For end plate mounting, L_2 is 1/2 of the **L** which is found from the graph.
L_3: Confirm that this value is lower than the max. overhang shown at the bottom right of the graph. L_3 max. overhang = 100 mm
② Confirm that L_1, L_2, and L_3 are lower than the max. overhang.
L_1 = 20 mm OK (L_1 max. overhang = 30 mm)
L_2 = 10 mm OK (L_2 max. overhang = 15 mm)
L_3 = 50 mm OK (L_3 max. overhang = 100 mm)

Therefore, the **MXQ8B-30ZD** can be used.

MXQ8B-10, 20, 30Z (Rubber stopper)



Selection Example 3 (Pressing, Table Mounting)

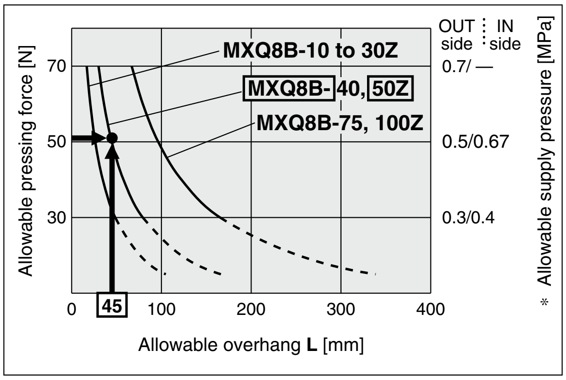
Selection conditions
Selected model: **MXQ8B-50Z**
Operating direction: OUT

Operating pressure: 0.5 MPa (Pressing force: 51 N)
Overhang: **L1** = 20, **L2** = 30

Selection method
① Find the max. overhang of **L1** and **L2** from the selection graph.
Find the **L** at an operating pressure of 0.5 MPa from the graph.
L1, **L2** max. overhang = 45 mm
② Confirm that **L1** and **L2** are lower than the max. overhang.
L1 = 20 mm and **L2** = 30 mm OK (**L1**, **L2** max. overhang = 45 mm)

Therefore, the **MXQ8B-50Z** can be used with a supply pressure of 0.5 MPa.

MXQ 8B-□Z



* The allowable supply pressure on the OUT side and IN side is the theoretical output of the cylinder when pressing force is required.

Selection Example 4 (Pressing, End Plate Mounting)

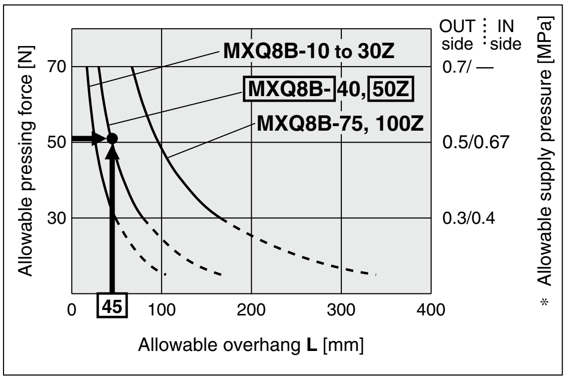
Selection conditions
Selected model: **MXQ8B-50Z**
Operating direction: OUT

Operating pressure: 0.5 MPa (Pressing force: 50 N)
Overhang: **L1** = 20, **L2** = 10

Selection method
① Find the max. overhang of **L1** and **L2** from the selection graph.
L1: Find the **L** at an operating pressure of 0.5 MPa from the graph, and multiply it by 1/2. **L1** max. overhang = 22.5 mm
L2: Find an **L** at an operating pressure of 0.5 MPa from the graph, and multiply it by 1/2. **L2** max. overhang = 22.5 mm
* For end plate mounting, **L1** and **L2** are 1/2 of the **L** which is found from the graph.
② Confirm that **L1** and **L2** are lower than the max. overhang.
L1 = 20 mm OK (**L1** max. overhang = 22.5 mm)
L2 = 10 mm OK (**L2** max. overhang = 22.5 mm)

Therefore, the **MXQ8B-50Z** can be used.

MXQ 8B-□Z



* The allowable supply pressure on the OUT side and IN side is the theoretical output of the cylinder when pressing force is required.

⚠Caution

1. Operate loads within the range of the operating limits.
Select a model according to the model selection steps.
If the product is used outside of the operating limits, adverse effects such as play at the guide, degraded accuracy, and shortened product life may result.

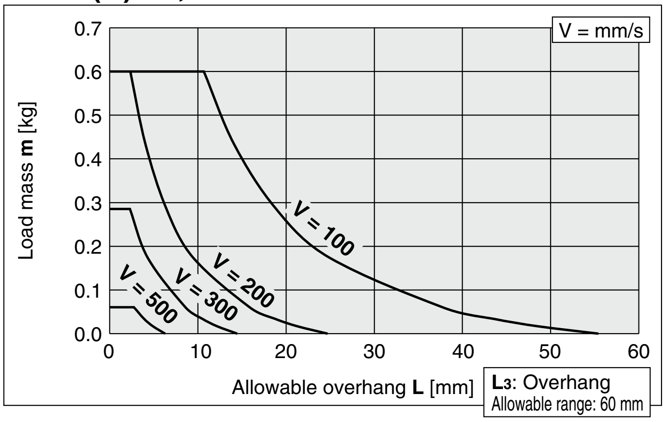
2. If an intermediate stop is performed by an external stopper, be careful of ejection when restarting.
If lurching occurs, damage can result. If a slide table is stopped at an intermediate position by an external stopper and then moved forwards, after the slide table is returned to the back to retract the stopper, supply pressure to the opposite port to operate the slide table.

3. Do not use the product in such a way that excessive external force or impact force is applied to it.
Malfunction or damage to the table may result.
Although the table has adequate strength, if it is damaged, protect your hands with gloves. Otherwise, injury may result.

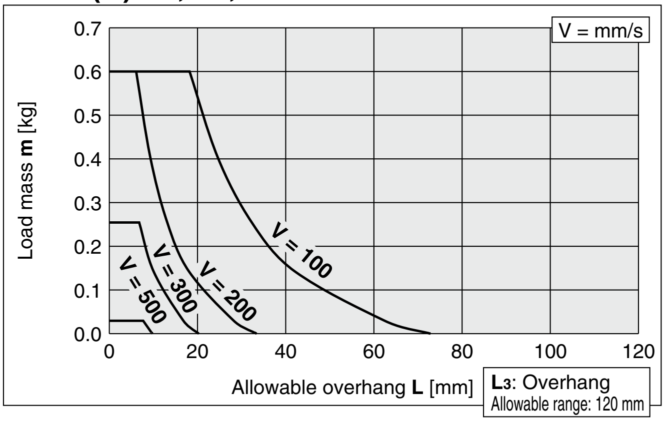
MXQ 6A-□Z□, MXQ 6-□Z□ (Height interchangeable type) MXQ 8(A/C)-□Z□, MXQ 8-□Z□ (Height interchangeable type) / For Transfer/ Without Adjuster

Determine the overhang. (Refer to page 158 for details.)
L_1, L_2: Check from the cross point of the load mass and driving speed.
L_3: Can be used within the "Allowable overhang range" in the selection graph if the load mass and driving speed values are within the allowable range

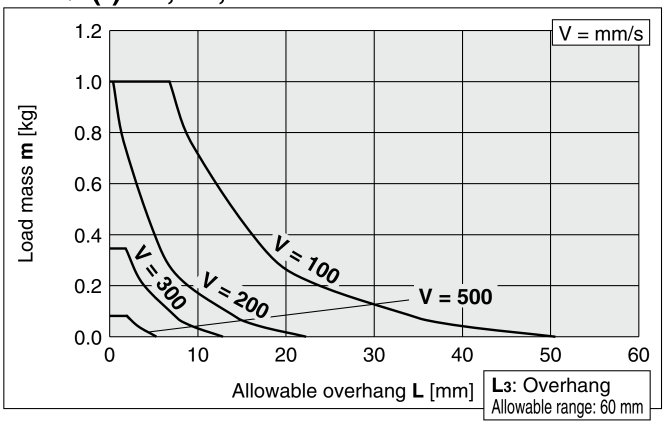
MXQ6(A)-10, 20Z□



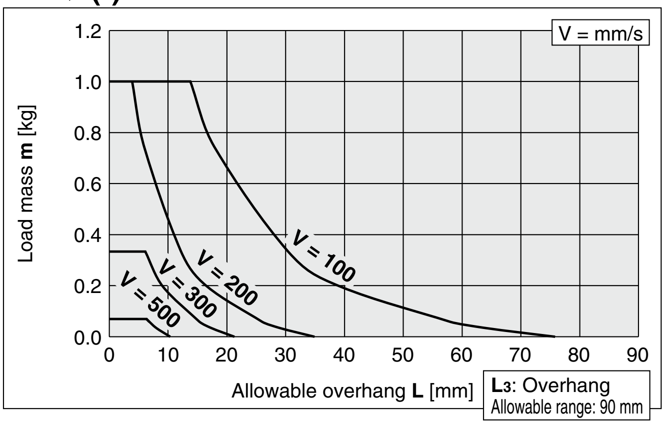
MXQ6(A)-30, 40, 50Z□



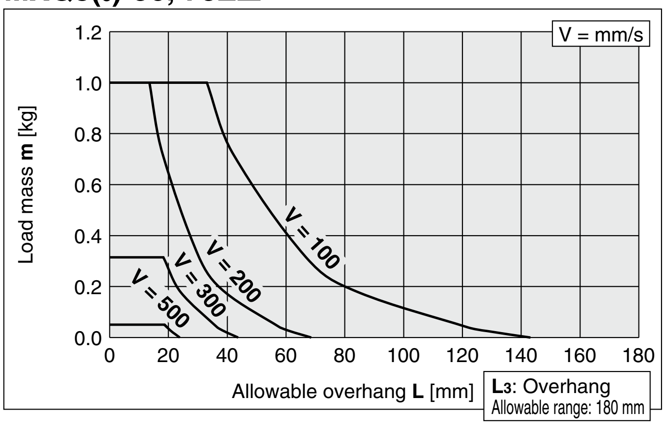
MXQ8(A/C)-10, 20, 30Z□



MXQ8(A/C)-40Z□



MXQ8(A/C)-50, 75Z□

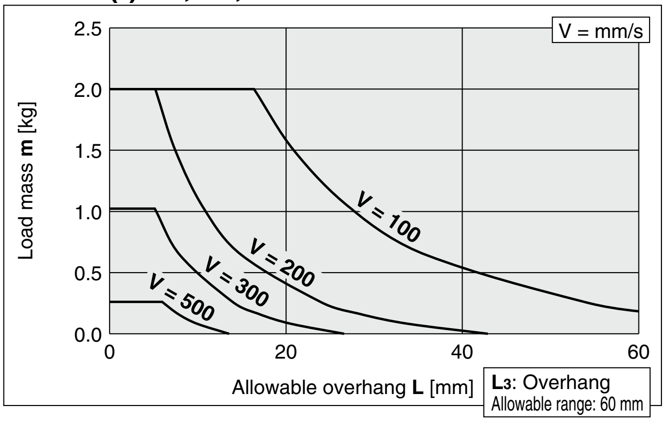


Double-ported type MXQ□A
Low thrust with high rigidity type MXQ□B
Single side-ported type MXQ□C
Height interchangeable type MXQ□
Common Adjuster Options
Auto Switch Mounting
Made to Order
Model Selection

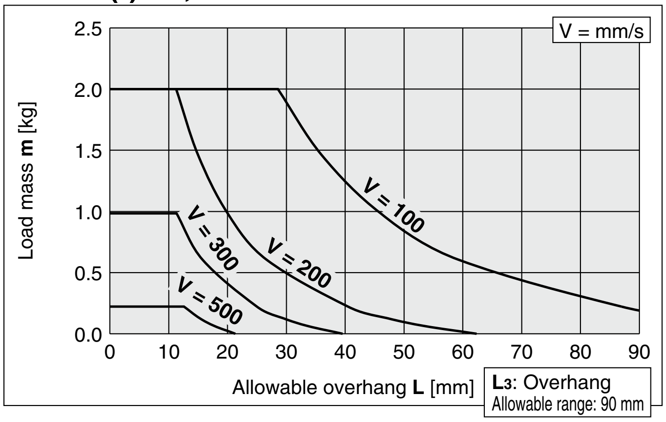
MXQ 12$^{A}_{C}$-□Z□, MXQ 12-□Z□ (Height interchangeable type) MXQ 16A-□Z□, MXQ 16-□Z□ (Height interchangeable type) / For Transfer/ Without Adjuster

Determine the overhang. (Refer to page 158 for details.)
L_1, L_2: Check from the cross point of the load mass and driving speed.
L_3: Can be used within the "Allowable overhang range" in the selection graph if the load mass and driving speed values are within the allowable range

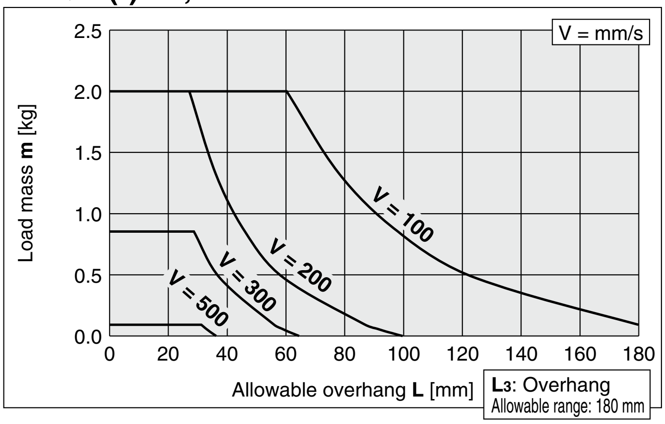
MXQ12($^{A}_{C}$)-10, 20, 30Z□



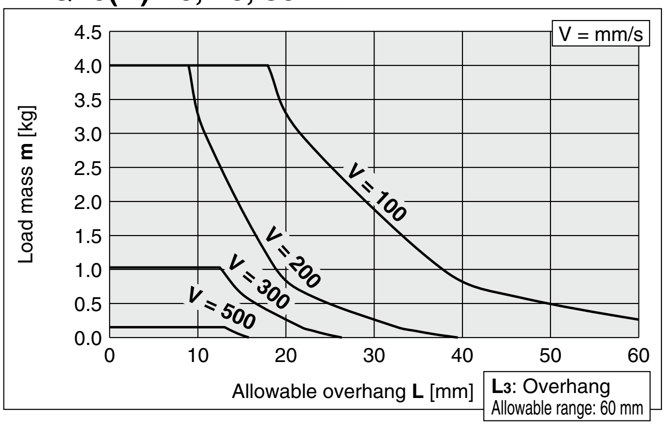
MXQ12($^{A}_{C}$)-40, 50Z□



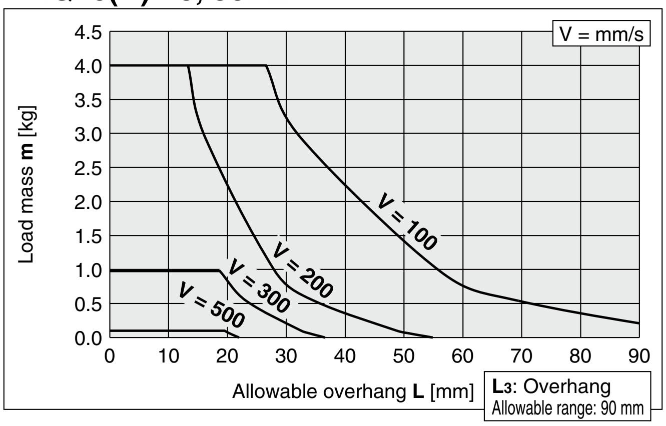
MXQ12($^{A}_{C}$)-75, 100Z□



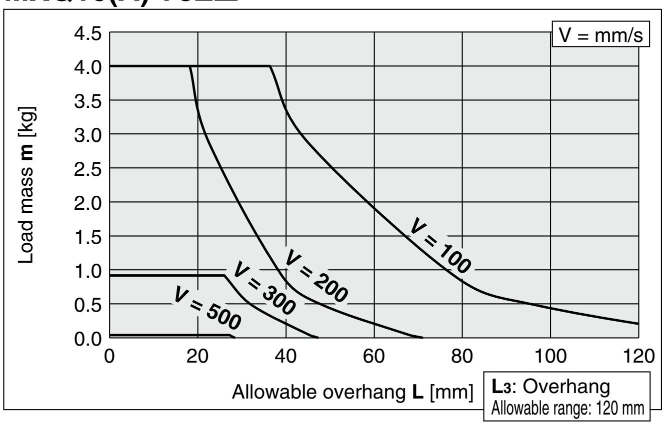
MXQ16(A)-10, 20, 30Z□



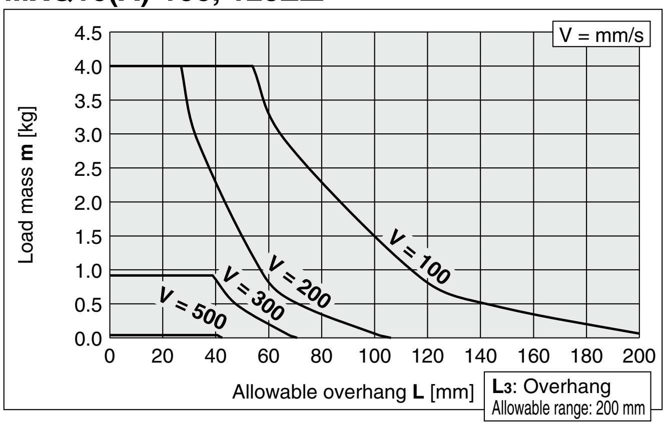
MXQ16(A)-40, 50Z□



MXQ16(A)-75Z□



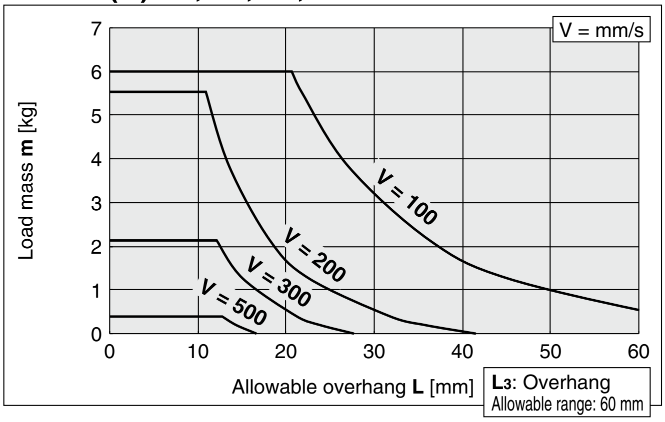
MXQ16(A)-100, 125Z□



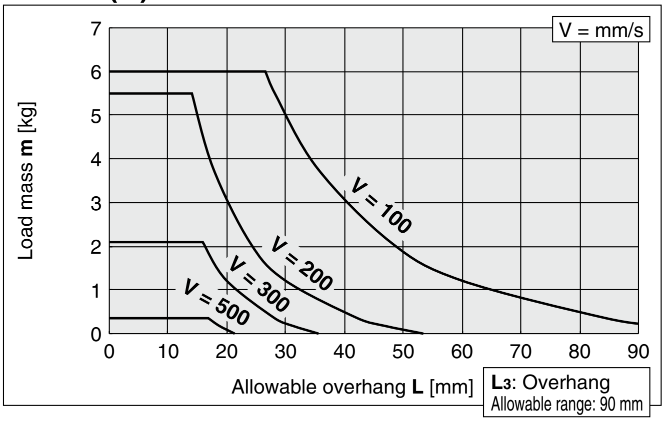
MXQ 20A-□Z□, MXQ 20-□Z□ (Height interchangeable type) / MXQ 25A-□Z□, MXQ 25-□Z□ (Height interchangeable type) / For Transfer/ Without Adjuster

Determine the overhang. (Refer to page 158 for details.)
L_1, L_2: Check from the cross point of the load mass and driving speed.
L_3: Can be used within the "Allowable overhang range" in the selection graph if the load mass and driving speed values are within the allowable range

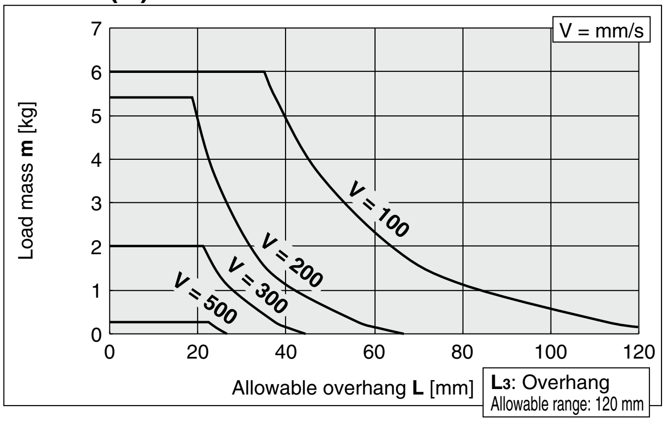
MXQ20(A)-10, 20, 30, 40Z□



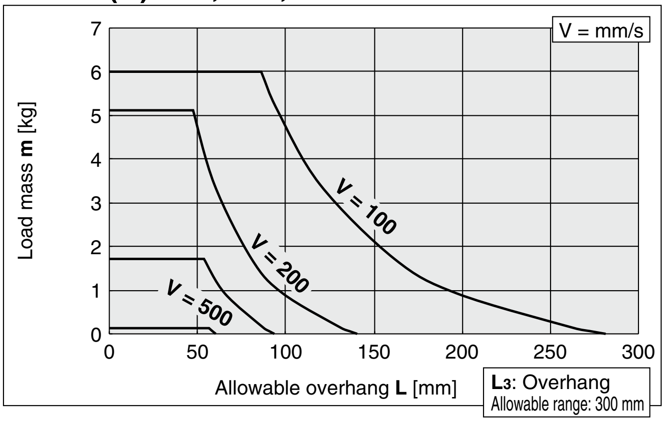
MXQ20(A)-50Z□



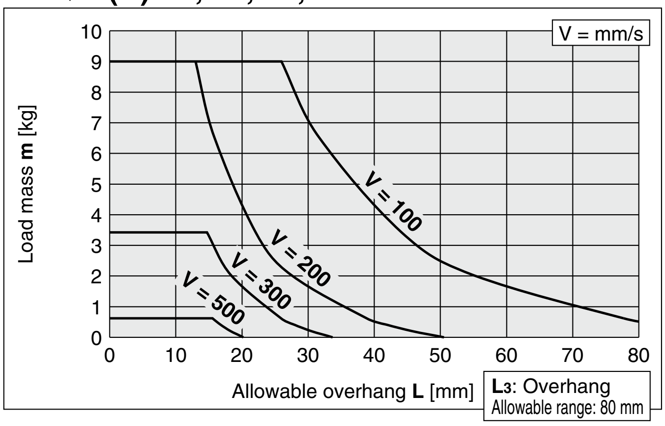
MXQ20(A)-75Z□



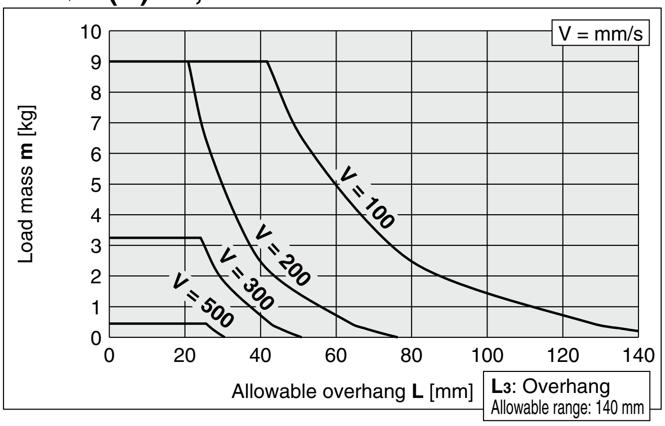
MXQ20(A)-100, 125, 150Z□



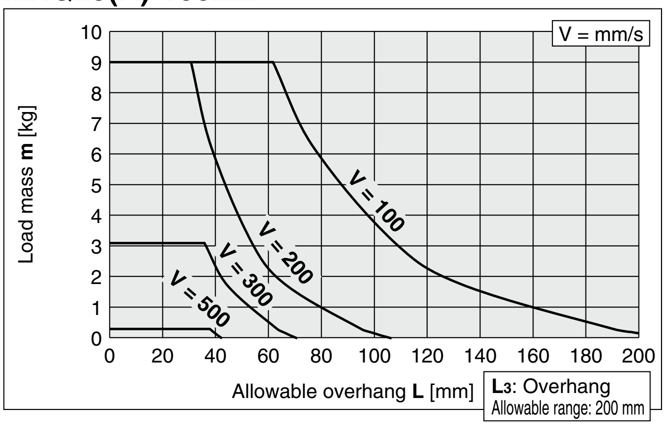
MXQ25(A)-10, 20, 30, 40Z□



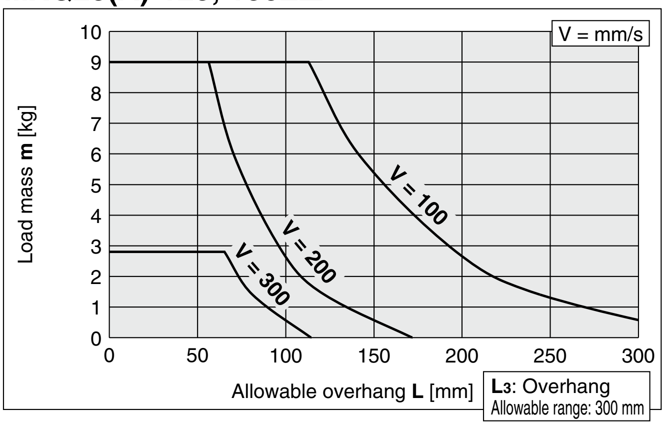
MXQ25(A)-50, 75Z□



MXQ25(A)-100Z□



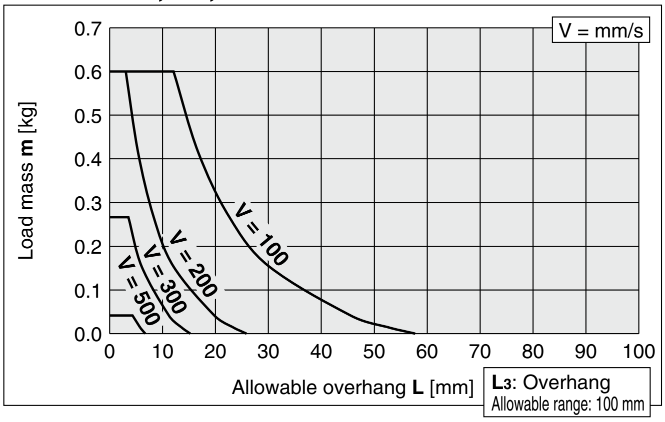
MXQ25(A)-125, 150Z□



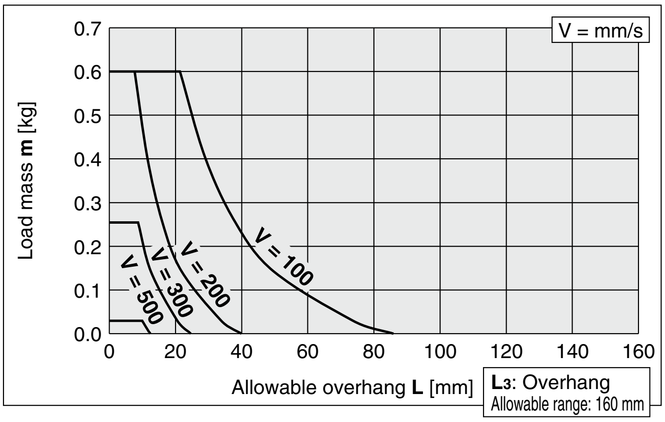
Determine the overhang. (Refer to page 158 for details.)
L_1, L_2: Check from the cross point of the load mass and driving speed.
L_3: Can be used within the "Allowable overhang range" in the selection graph if the load mass and driving speed values are within the allowable range

MXQ 6B-□Z□/For Transfer/Without Adjuster

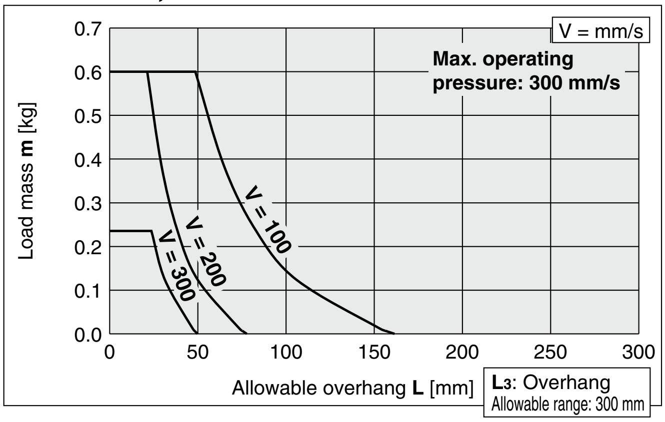
MXQ6B-10, 20, 30Z□



MXQ6B-40Z□



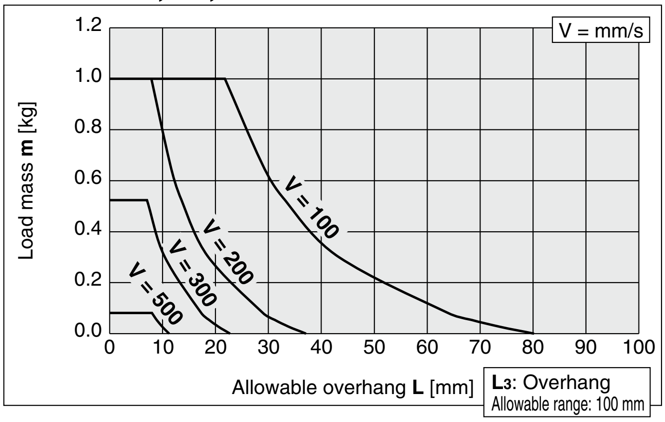
MXQ6B-50, 75Z□



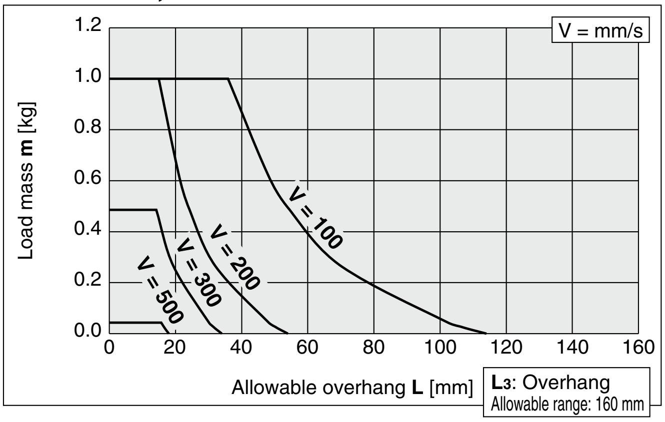
MXQ 8B-□Z□, MXQ 12B-□Z□ / For Transfer/ Without Adjuster

Determine the overhang. (Refer to page 158 for details.)
L_1, L_2: Check from the cross point of the load mass and driving speed.
L_3: Can be used within the "Allowable overhang range" in the selection graph if the load mass and driving speed values are within the allowable range

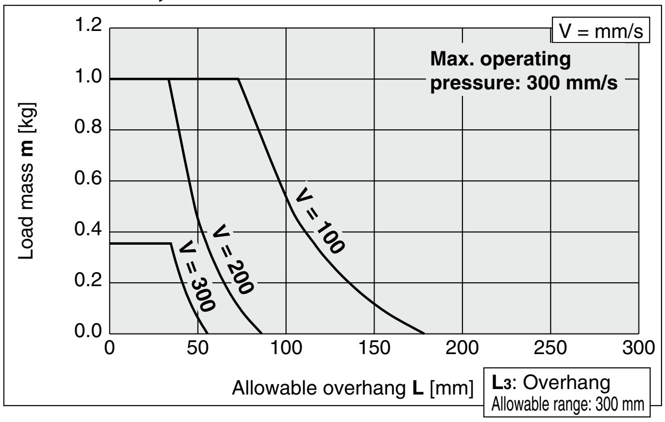
MXQ8B-10, 20, 30Z□



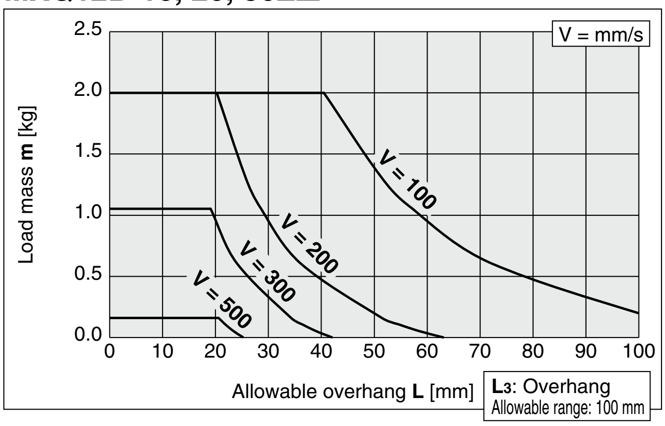
MXQ8B-40, 50Z□



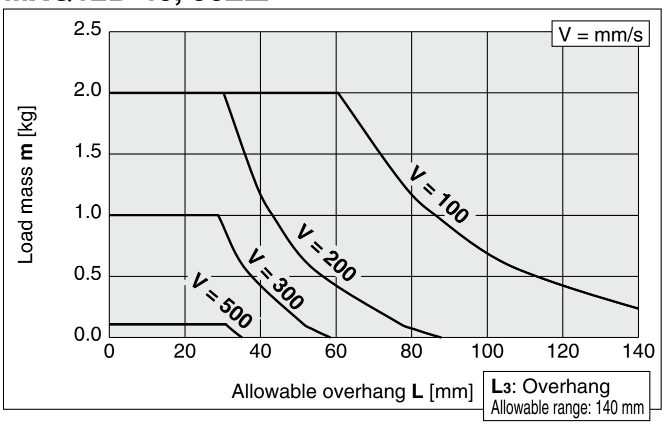
MXQ8B-75, 100Z□



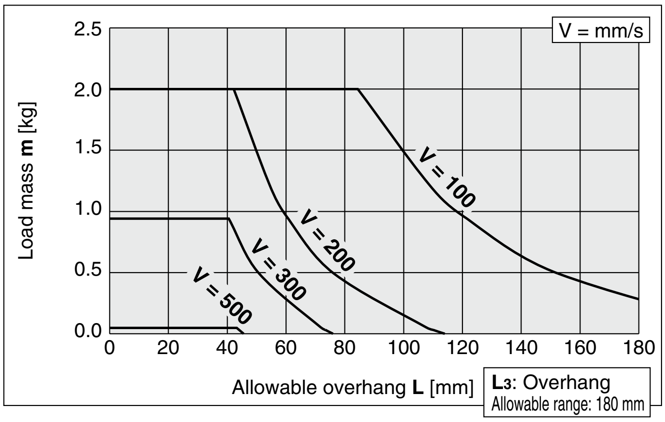
MXQ12B-10, 20, 30Z□



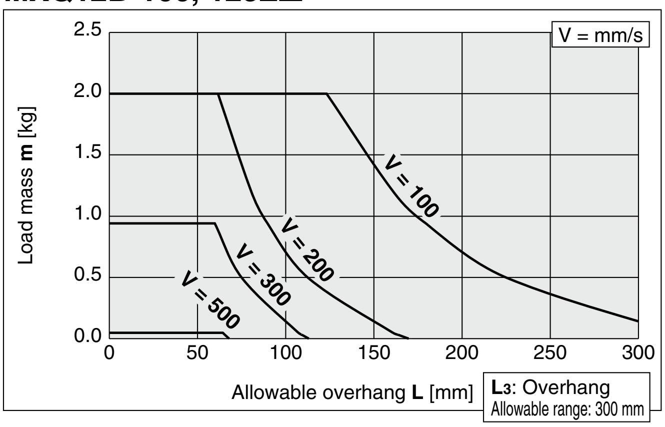
MXQ12B-40, 50Z□



MXQ12B-75Z□



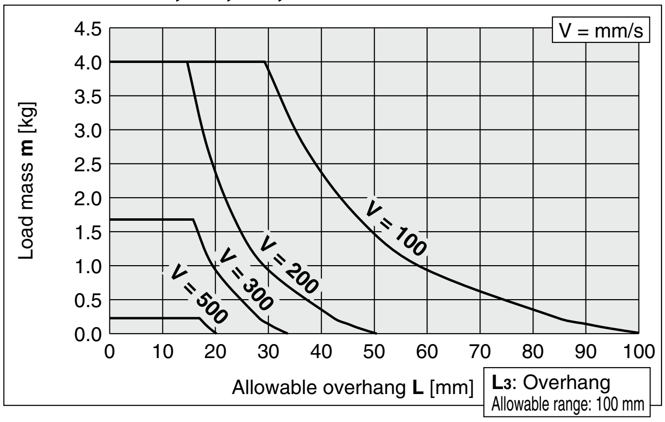
MXQ12B-100, 125Z□



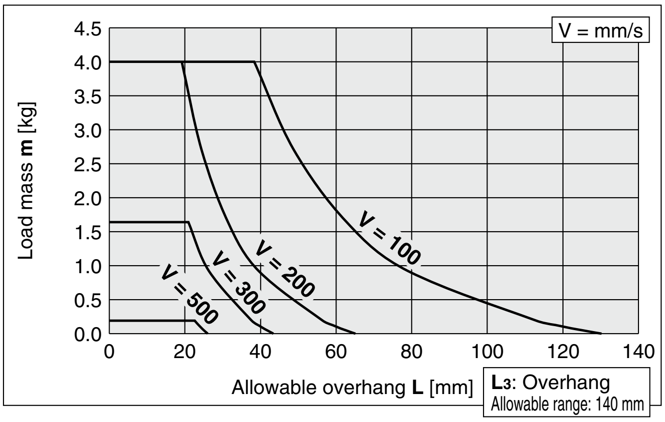
MXQ 16B-□Z□, MXQ 20B-□Z□ / For Transfer/ Without Adjuster

Determine the overhang. (Refer to page 158 for details.)
L_1, L_2: Check from the cross point of the load mass and driving speed.
L_3: Can be used within the "Allowable overhang range" in the selection graph if the load mass and driving speed values are within the allowable range

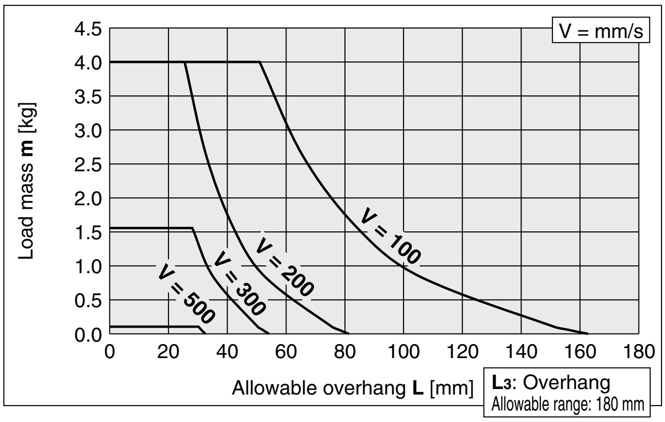
MXQ16B-10, 20, 30, 40Z□



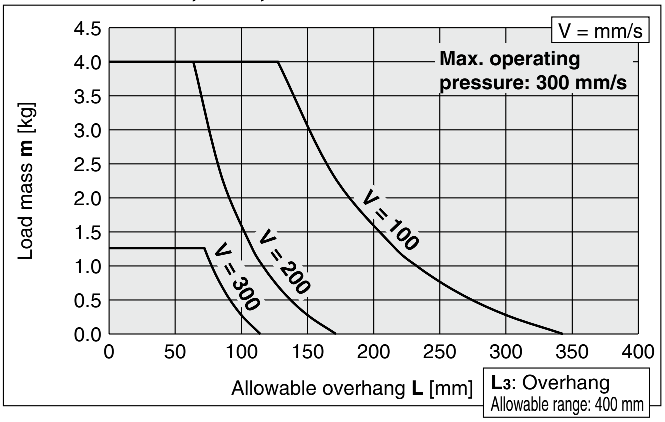
MXQ16B-50Z□



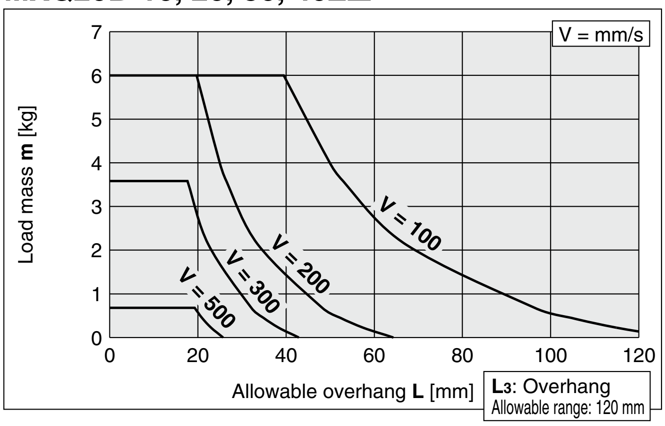
MXQ16B-75Z□



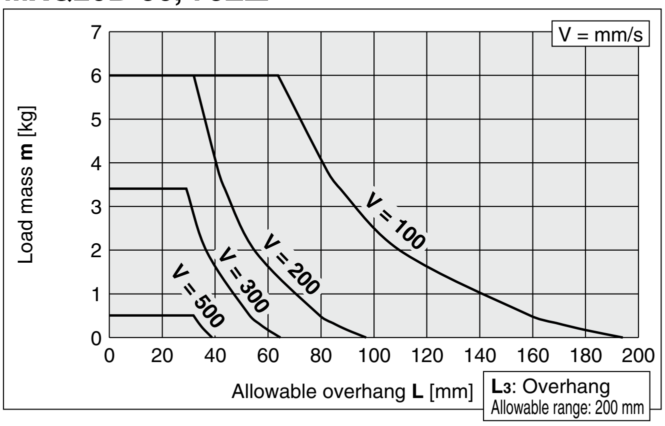
MXQ16B-100, 125, 150Z□



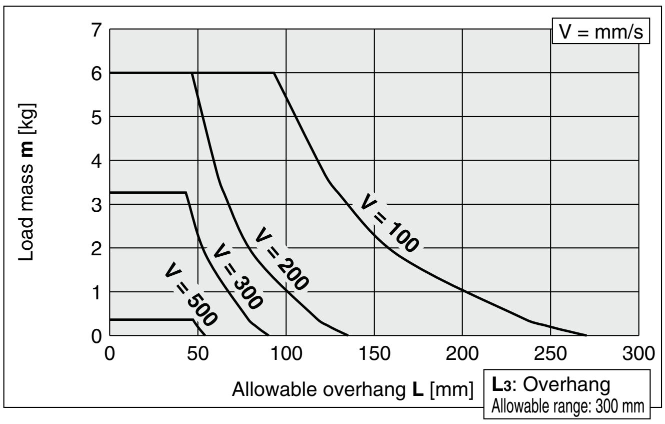
MXQ20B-10, 20, 30, 40Z□



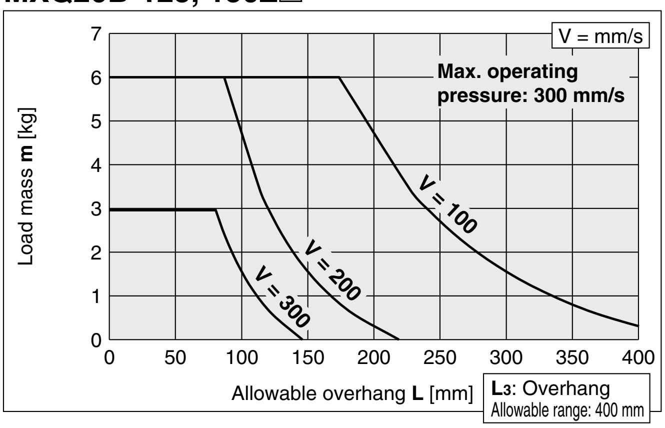
MXQ20B-50, 75Z□



MXQ20B-100Z□



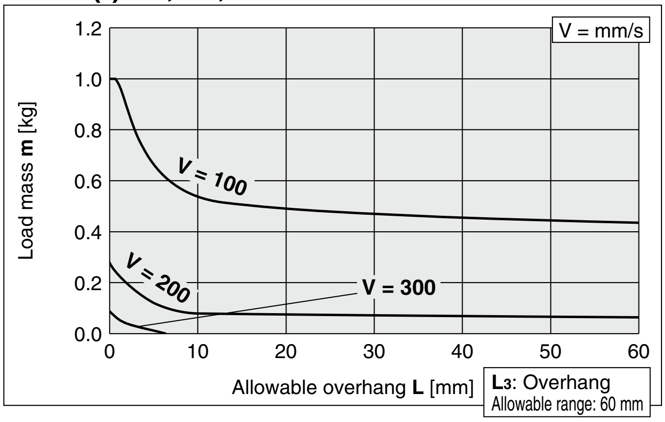
MXQ20B-125, 150Z□



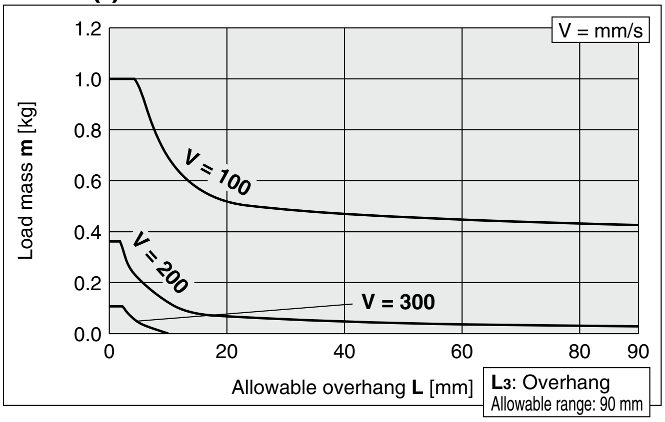
Determine the overhang. (Refer to page 158 for details.)
L_1, L_2: Check from the cross point of the load mass and driving speed.
L_3: Can be used within the "Allowable overhang range" in the selection graph if the load mass and driving speed values are within the allowable range

MXQ 8$\binom{A}{C}$-□Z□, MXQ 8-□Z□ (Height interchangeable type) / For Transfer/ Metal Stopper with Bumper

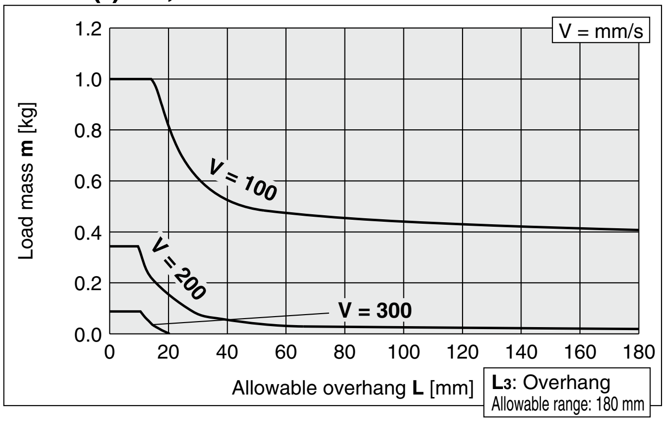
MXQ8($\binom{A}{C}$)-10, 20, 30Z□



MXQ8($\binom{A}{C}$)-40Z□



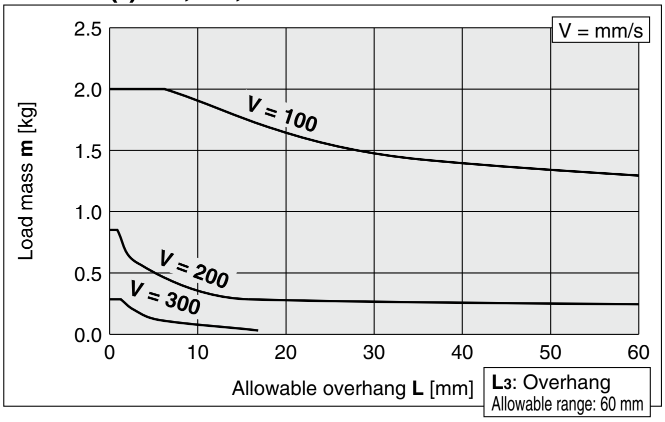
MXQ8($\binom{A}{C}$)-50, 75Z□



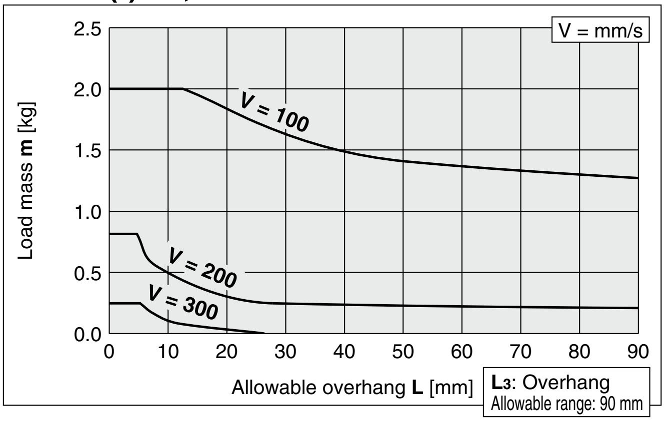
MXQ 12A/C-□Z□, MXQ 12-□Z□ (Height interchangeable type) MXQ 16A-□Z□, MXQ 16-□Z□ (Height interchangeable type) / For Transfer/ Metal Stopper with Bumper

Determine the overhang. (Refer to page 158 for details.)
L_1, L_2: Check from the cross point of the load mass and driving speed.
L_3: Can be used within the "Allowable overhang range" in the selection graph if the load mass and driving speed values are within the allowable range

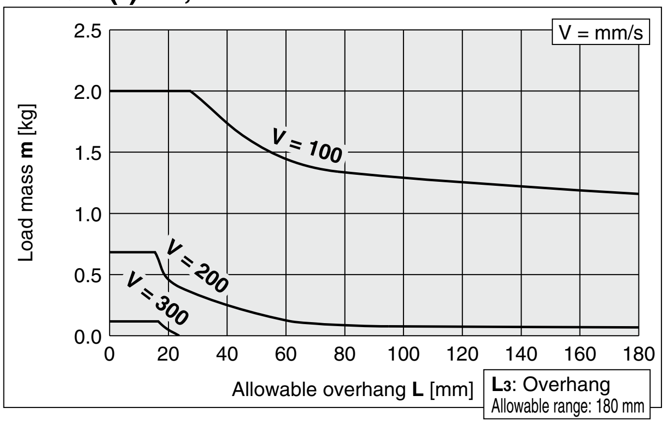
MXQ12(A/C)-10, 20, 30Z□



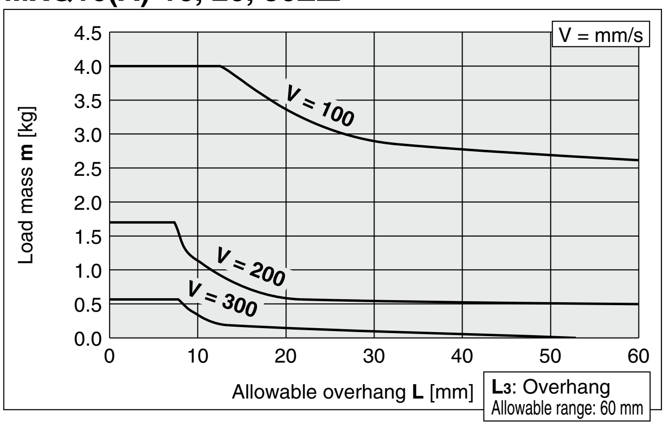
MXQ12(A/C)-40, 50Z□



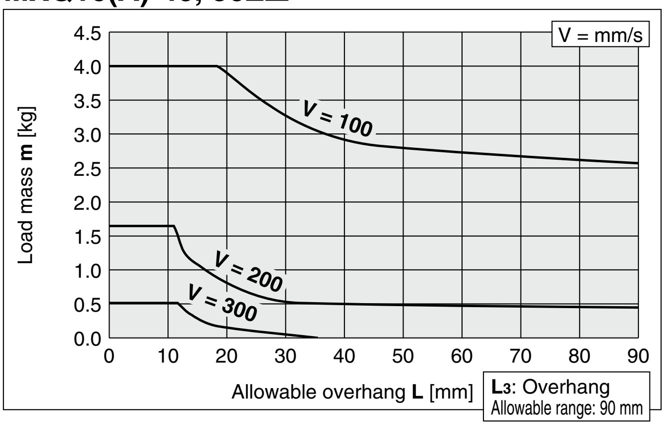
MXQ12(A/C)-75, 100Z□



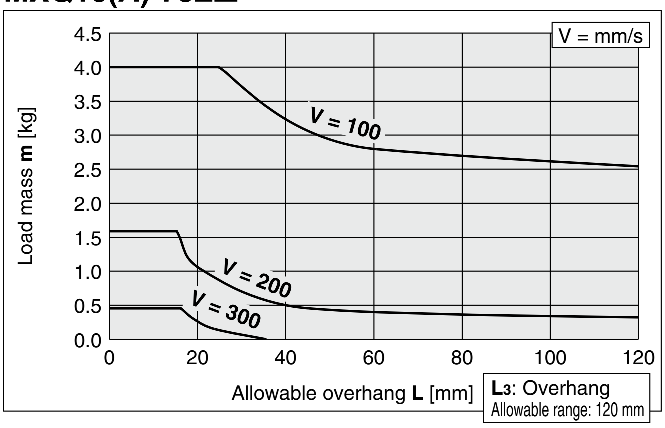
MXQ16(A)-10, 20, 30Z□



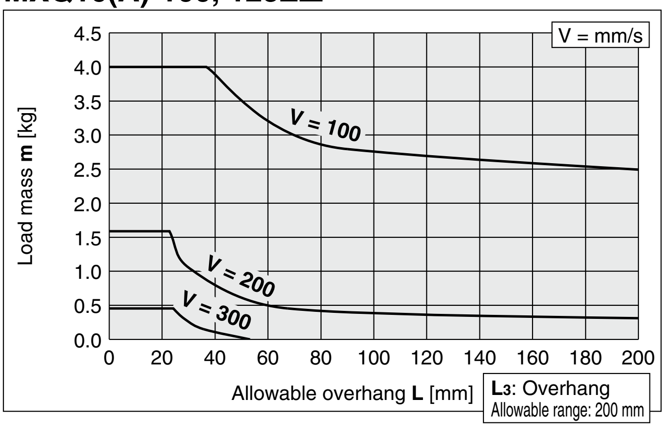
MXQ16(A)-40, 50Z□



MXQ16(A)-75Z□



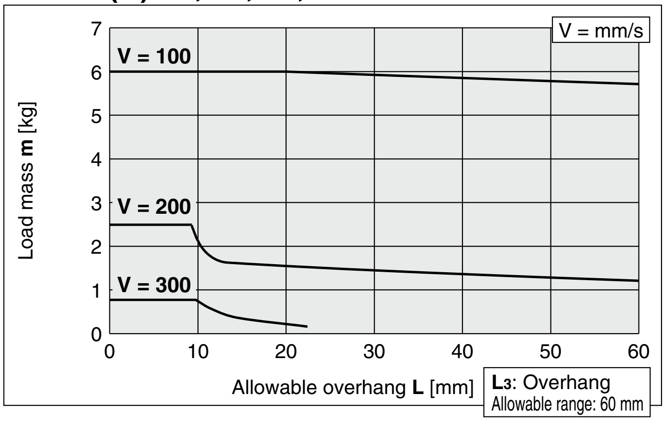
MXQ16(A)-100, 125Z□



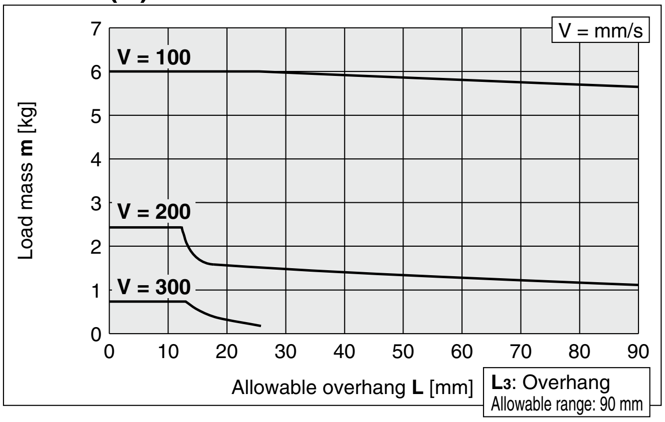
MXQ 20A-□Z□, MXQ 20-□Z□ (Height interchangeable type) MXQ 25A-□Z□, MXQ 25-□Z□ (Height interchangeable type) / For Transfer/ Metal Stopper with Bumper

Determine the overhang. (Refer to page 158 for details.)
L_1, L_2: Check from the cross point of the load mass and driving speed.
L_3: Can be used within the "Allowable overhang range" in the selection graph if the load mass and driving speed values are within the allowable range

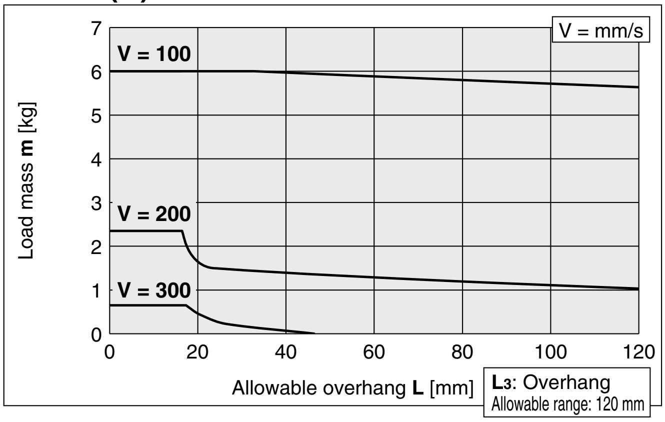
MXQ20(A)-10, 20, 30, 40Z□



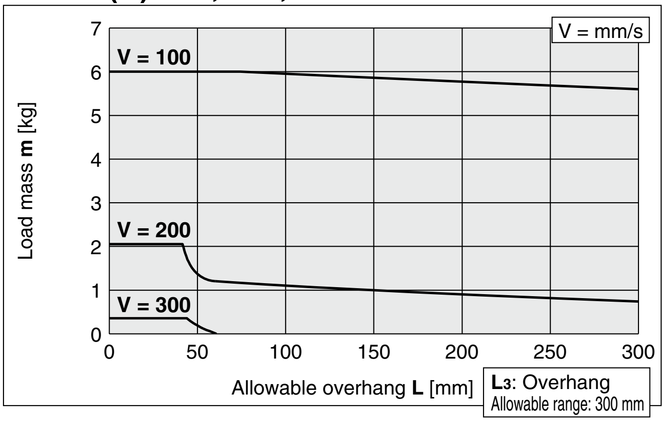
MXQ20(A)-50Z□



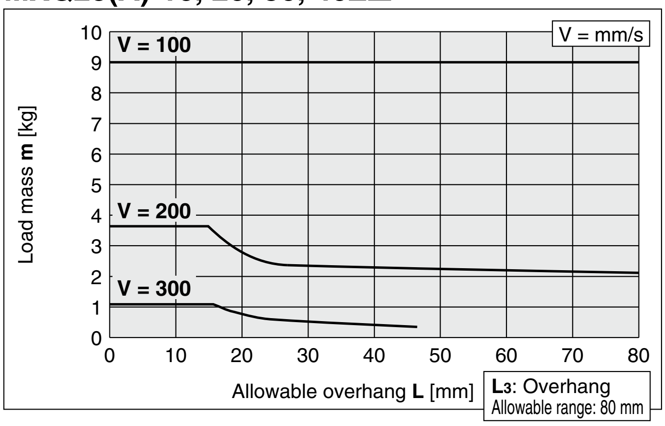
MXQ20(A)-75Z□



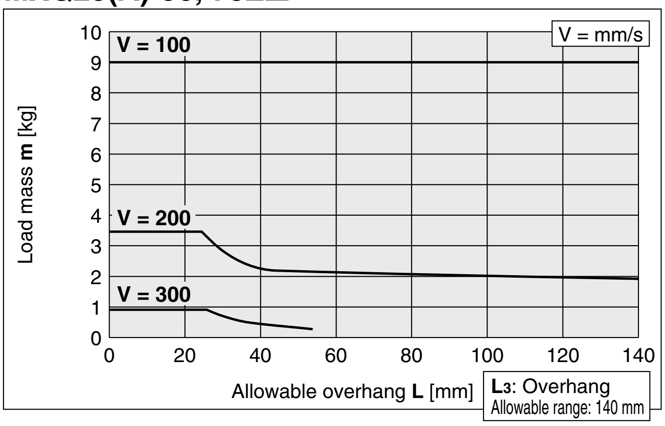
MXQ20(A)-100, 125, 150Z□



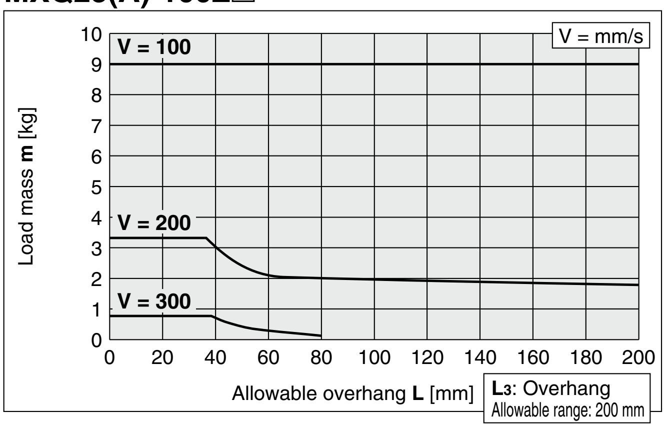
MXQ25(A)-10, 20, 30, 40Z□



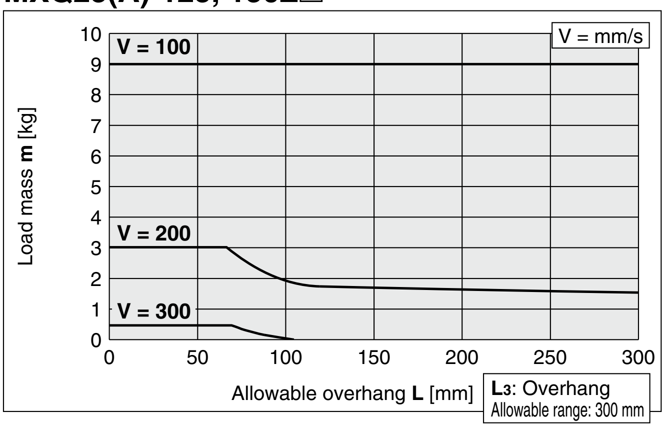
MXQ25(A)-50, 75Z□



MXQ25(A)-100Z□



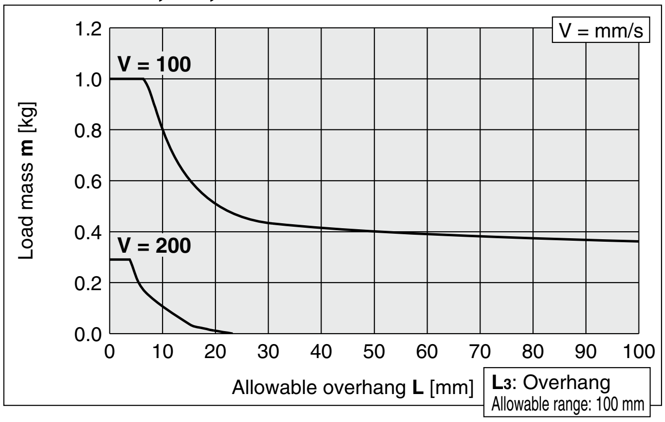
MXQ25(A)-125, 150Z□



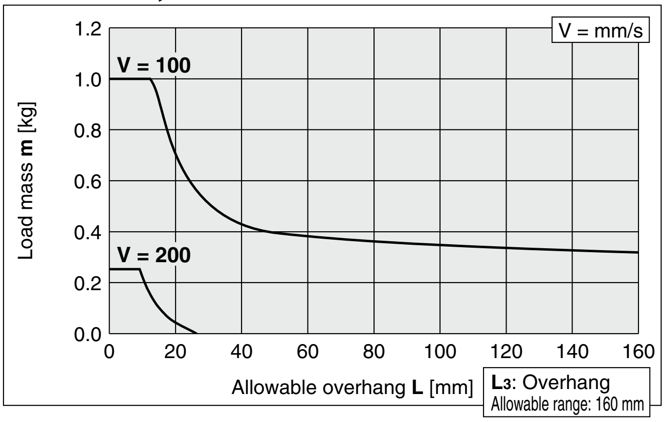
Determine the overhang. (Refer to page 158 for details.)
L_1, L_2: Check from the cross point of the load mass and driving speed.
L_3: Can be used within the "Allowable overhang range" in the selection graph if the load mass and driving speed values are within the allowable range

MXQ 8B-□Z□, MXQ 12B-□Z□ / For Transfer/ Metal Stopper with Bumper

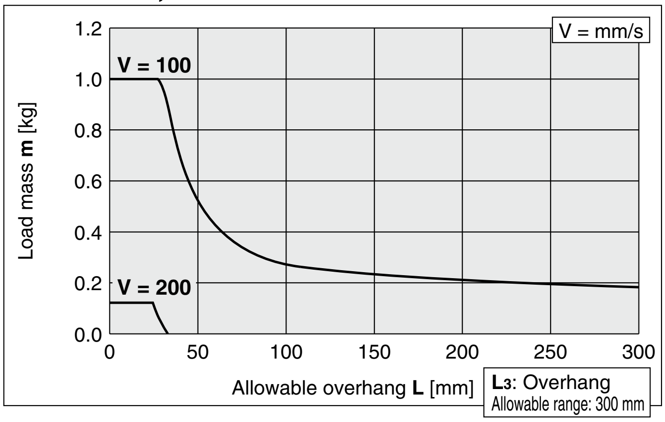
MXQ8B-10, 20, 30Z□



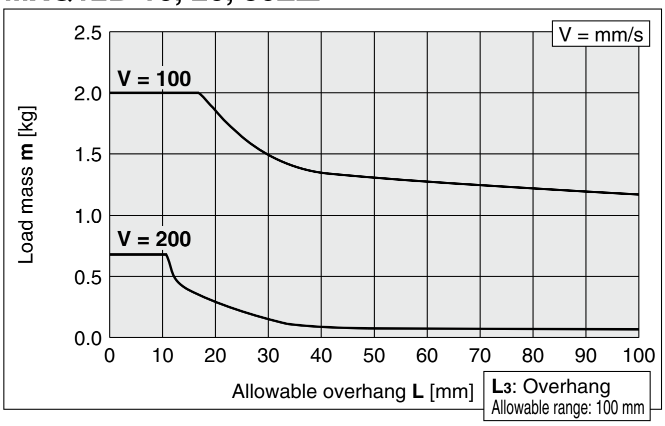
MXQ8B-40, 50Z□



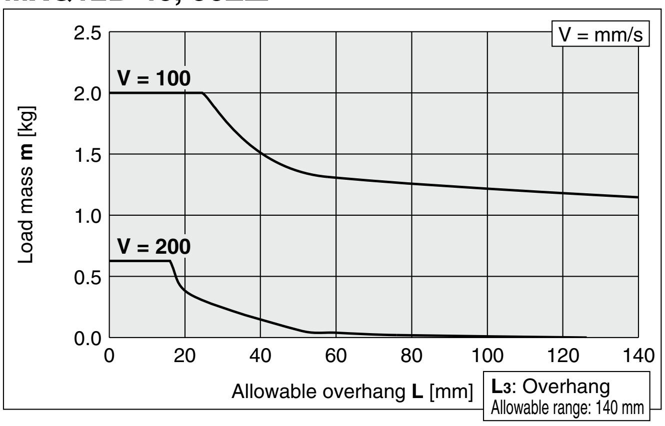
MXQ8B-75, 100Z□



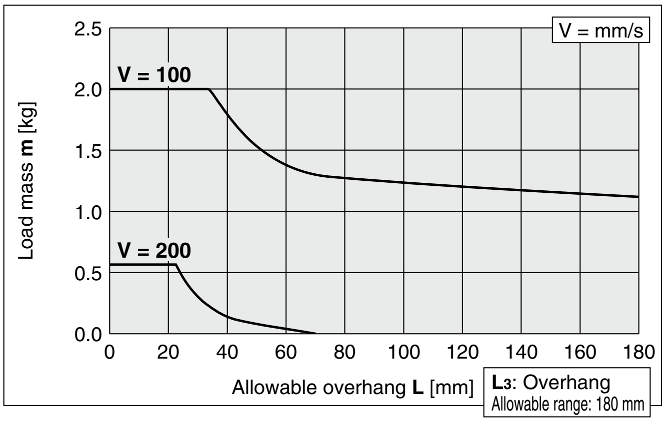
MXQ12B-10, 20, 30Z□



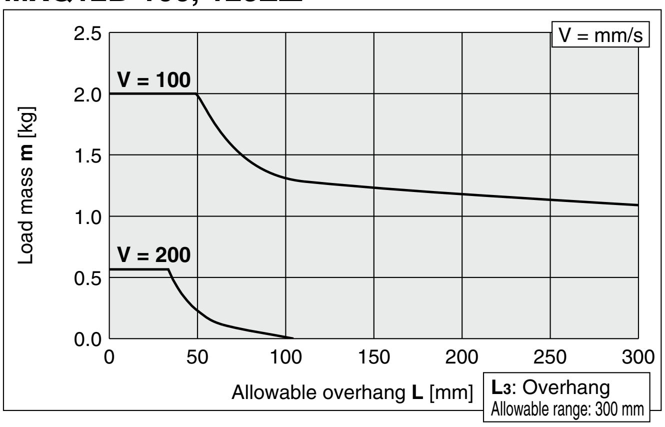
MXQ12B-40, 50Z□



MXQ12B-75Z□



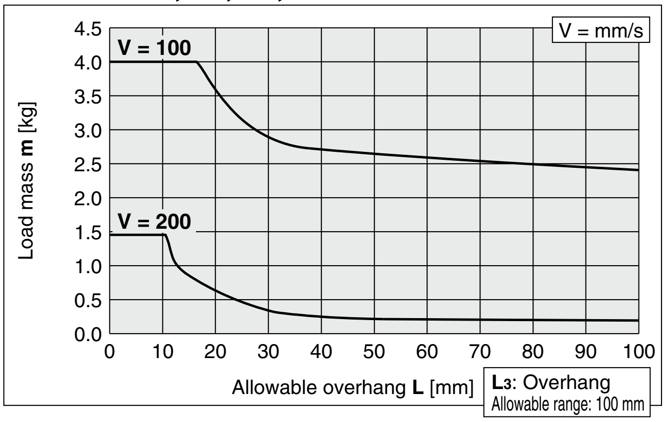
MXQ12B-100, 125Z□



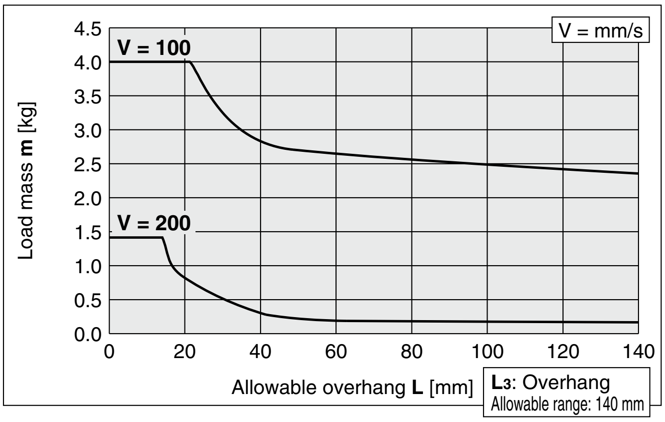
Determine the overhang. (Refer to page 158 for details.)
L_1, L_2: Check from the cross point of the load mass and driving speed.
L_3: Can be used within the "Allowable overhang range" in the selection graph if the load mass and driving speed values are within the allowable range

MXQ 16B-□Z□, MXQ 20B-□Z□ / For Transfer/ Metal Stopper with Bumper

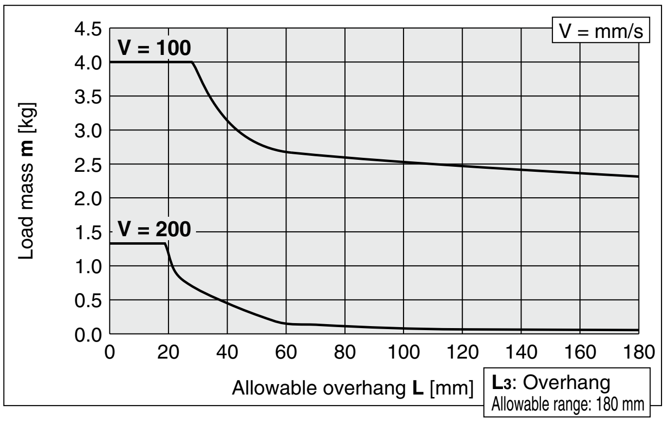
MXQ16B-10, 20, 30, 40Z□



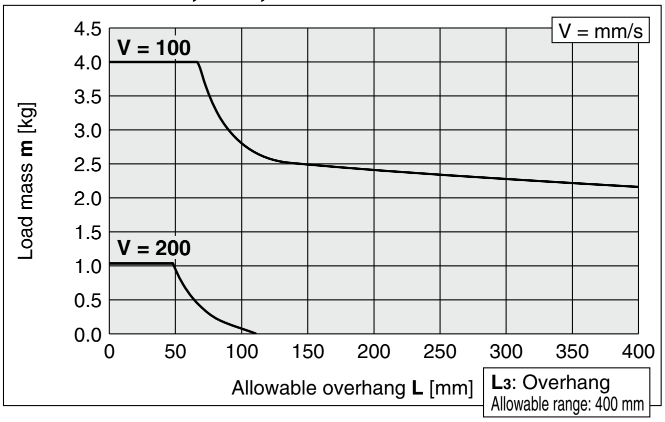
MXQ16B-50Z□



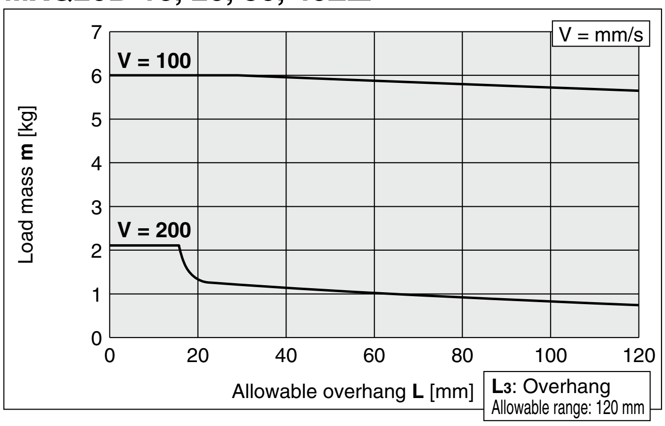
MXQ16B-75Z□



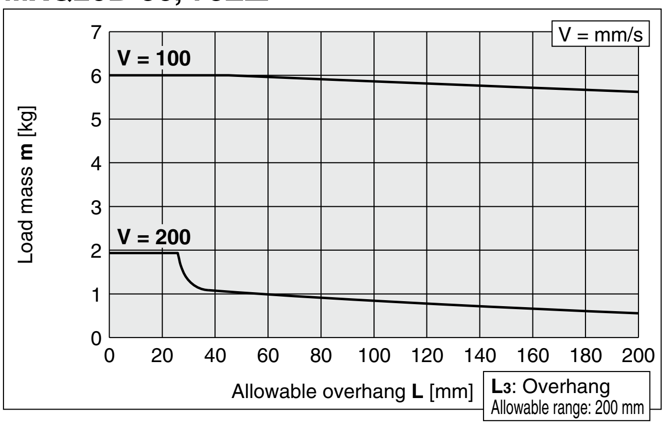
MXQ16B-100, 125, 150Z□



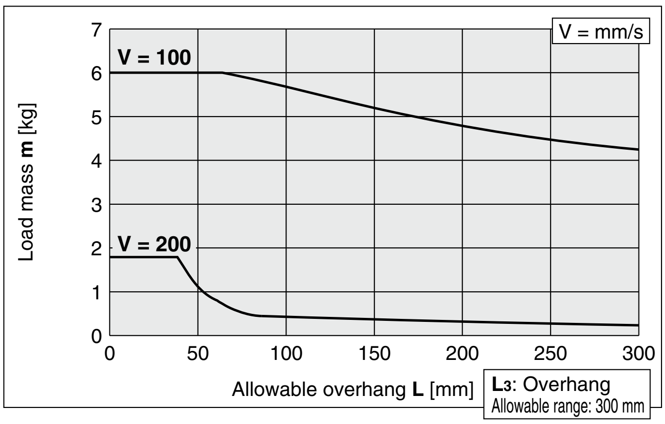
MXQ20B-10, 20, 30, 40Z□



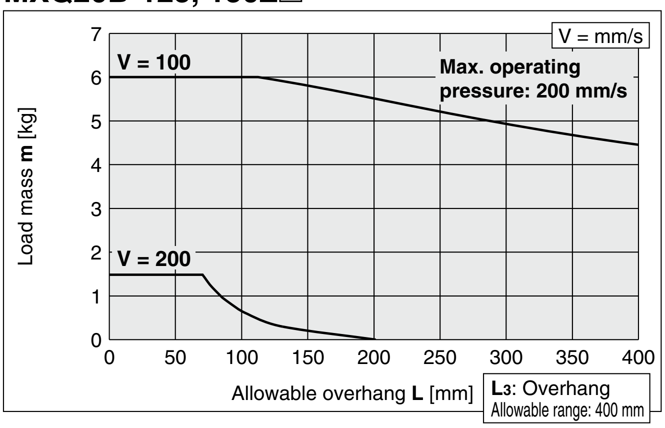
MXQ20B-50, 75Z□



MXQ20B-100Z□



MXQ20B-125, 150Z□

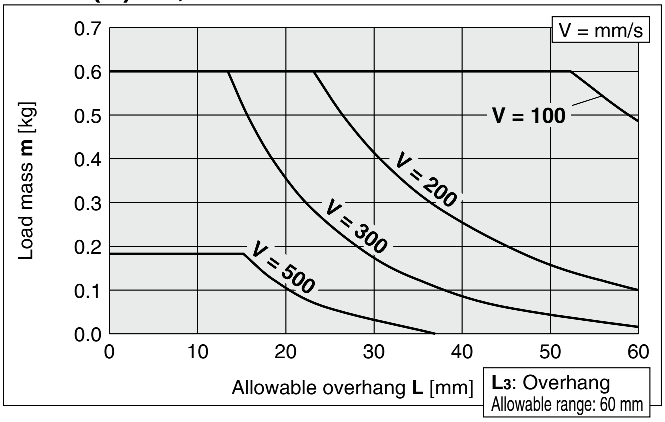


MXQ Series

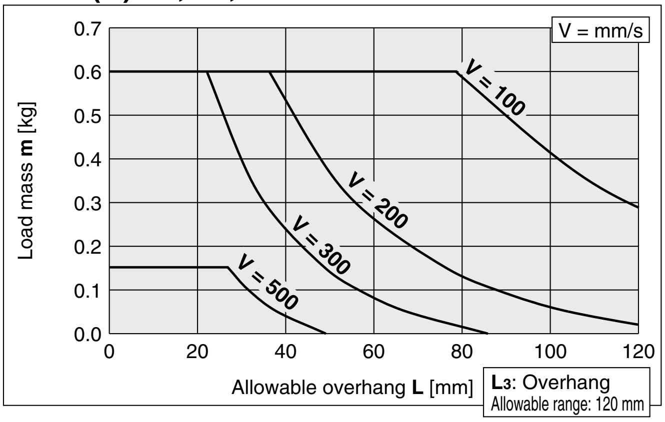
MXQ 6A-□Z□, MXQ 6-□Z□ (Height interchangeable type)
MXQ 8$^{A}_{C}$-□Z□, MXQ 8-□Z□ (Height interchangeable type) / For Transfer/ Rubber Stopper

Determine the overhang. (Refer to page 158 for details.)
L1, L2: Check from the cross point of the load mass and driving speed.
L3: Can be used within the "Allowable overhang range" in the selection graph if the load mass and driving speed values are within the allowable range

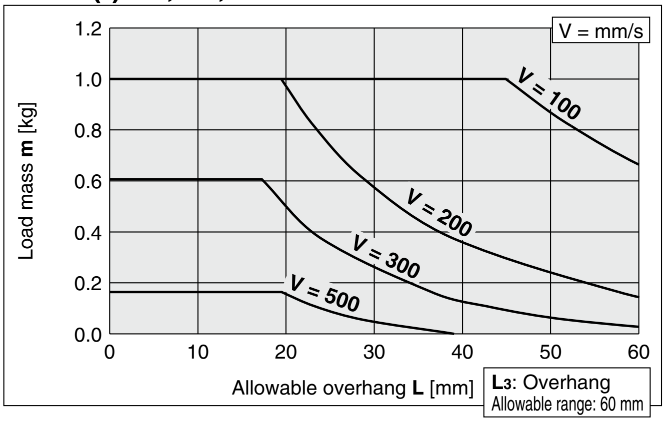
MXQ6(A)-10, 20Z□



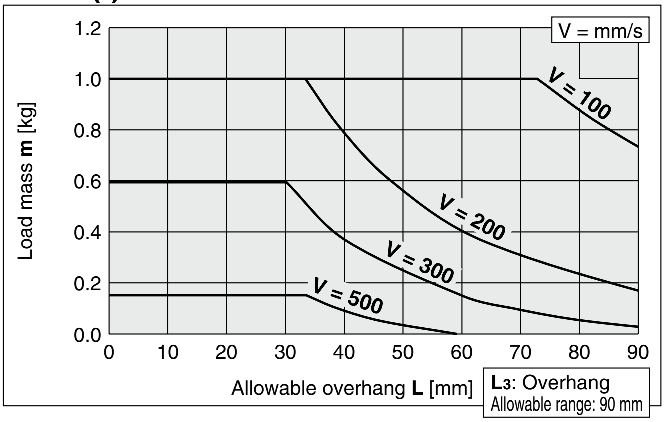
MXQ6(A)-30, 40, 50Z□



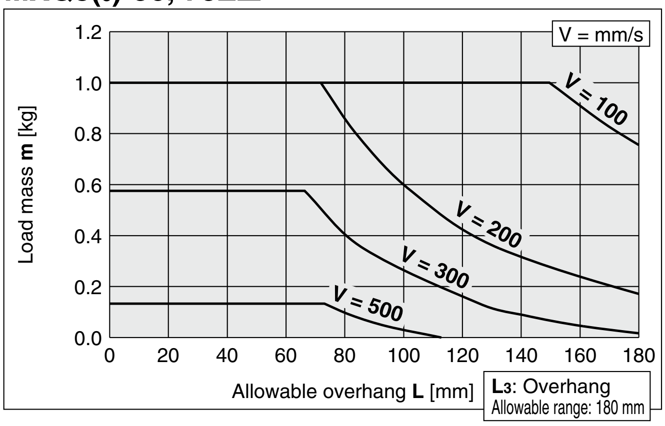
MXQ8($^{A}_{C}$)-10, 20, 30Z□



MXQ8($^{A}_{C}$)-40Z□



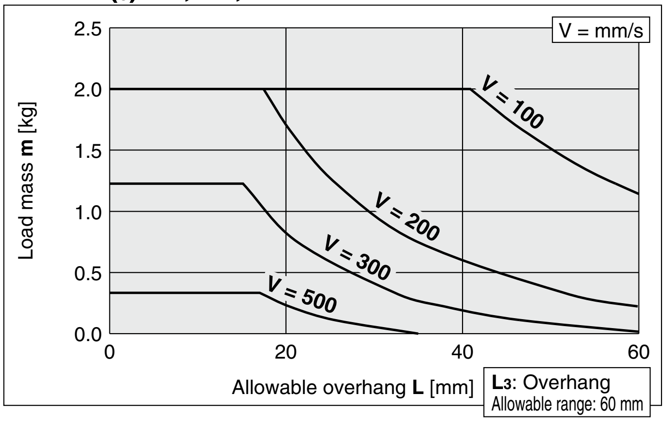
MXQ8($^{A}_{C}$)-50, 75Z□



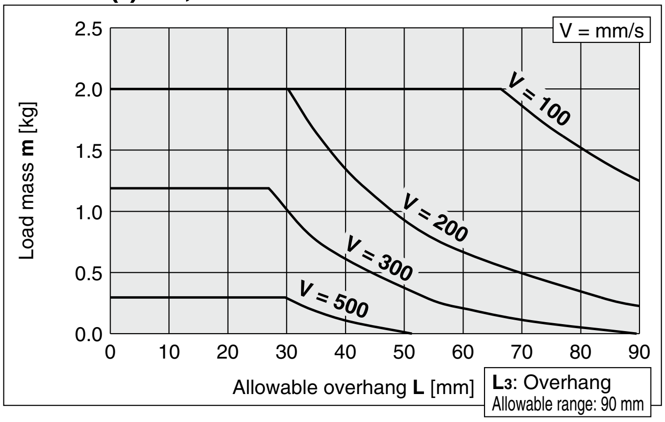
MXQ 12$^{A}_{C}$-□Z□, MXQ 12-□Z□ (Height interchangeable type) MXQ 16A-□Z□, MXQ 16-□Z□ (Height interchangeable type) / For Transfer/ Rubber Stopper

Determine the overhang. (Refer to page 158 for details.)
L_1, L_2: Check from the cross point of the load mass and driving speed.
L_3: Can be used within the "Allowable overhang range" in the selection graph if the load mass and driving speed values are within the allowable range

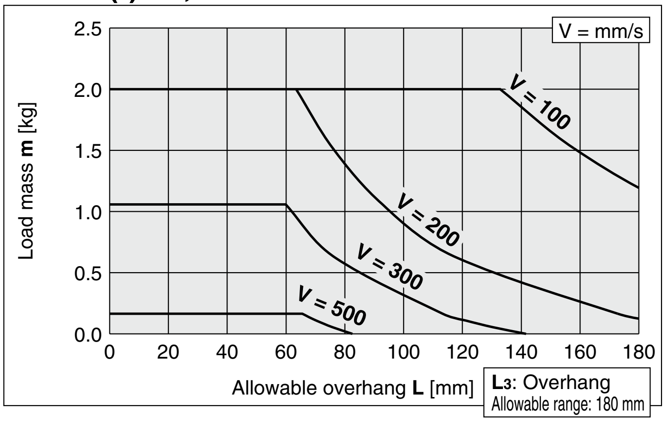
MXQ12($^{A}_{C}$)-10, 20, 30Z□



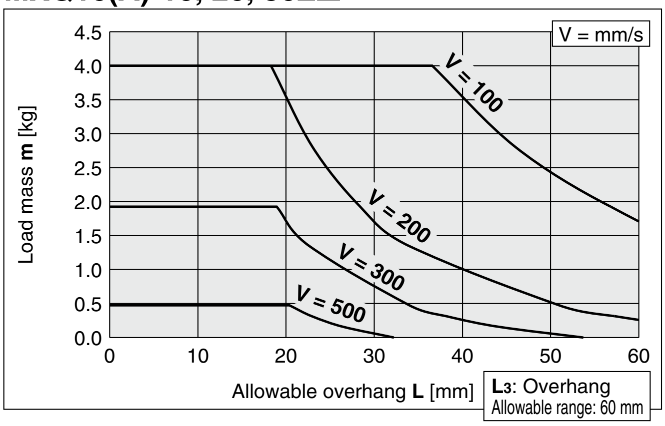
MXQ12($^{A}_{C}$)-40, 50Z□



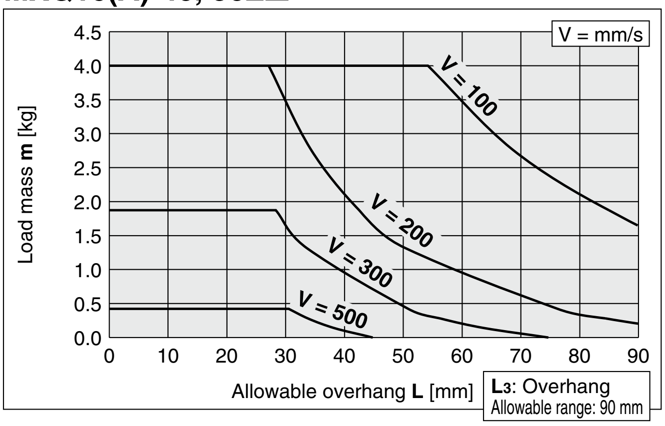
MXQ12($^{A}_{C}$)-75, 100Z□



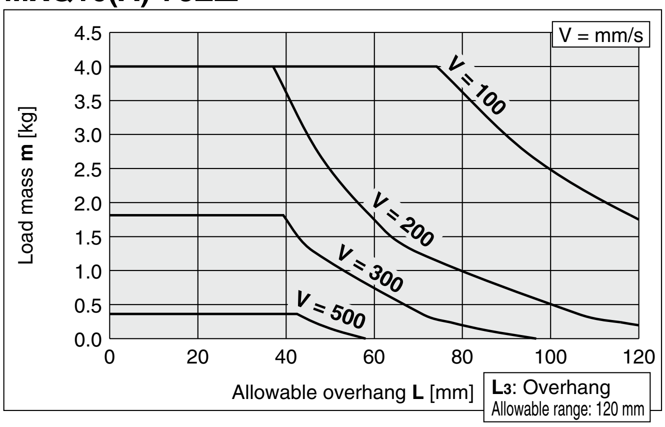
MXQ16(A)-10, 20, 30Z□



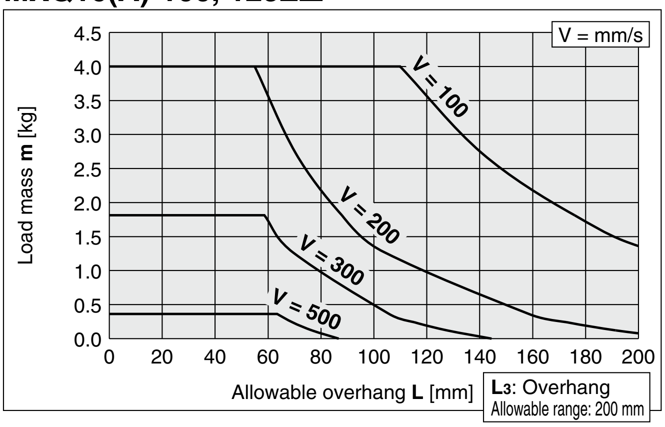
MXQ16(A)-40, 50Z□



MXQ16(A)-75Z□



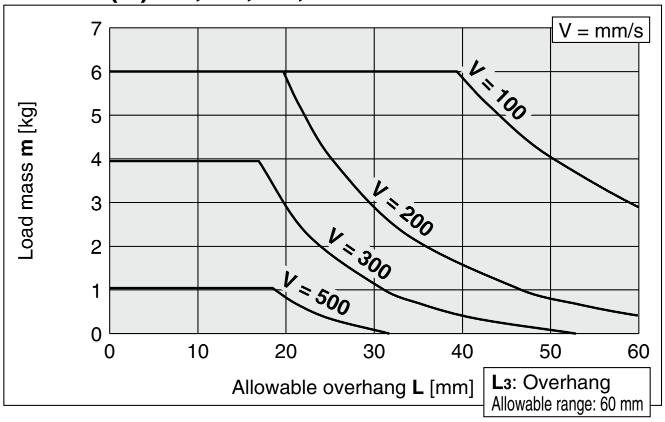
MXQ16(A)-100, 125Z□



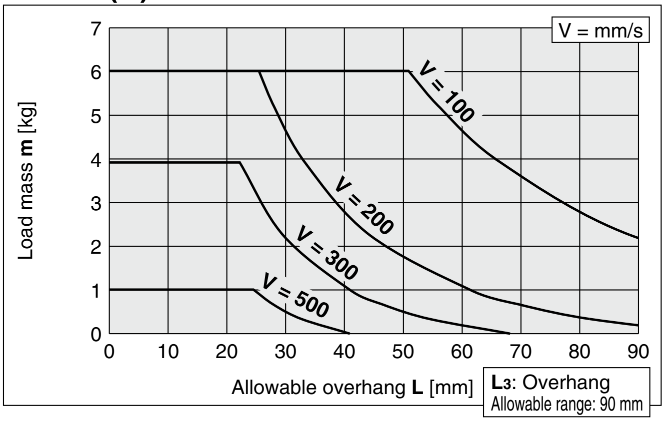
MXQ20A-□Z□, MXQ20-□Z□ (Height interchangeable type), MXQ25A-□Z□, MXQ25-□Z□ (Height interchangeable type) / For Transfer/ Rubber Stopper

Determine the overhang. (Refer to page 158 for details.)
L1, L2: Check from the cross point of the load mass and driving speed.
L3: Can be used within the "Allowable overhang range" in the selection graph if the load mass and driving speed values are within the allowable range

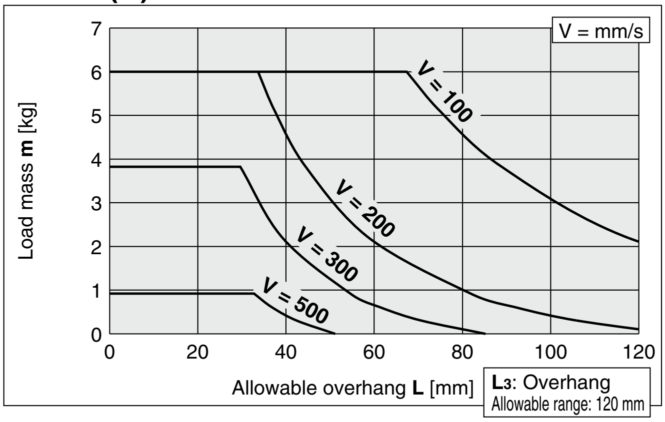
MXQ20(A)-10, 20, 30, 40Z□



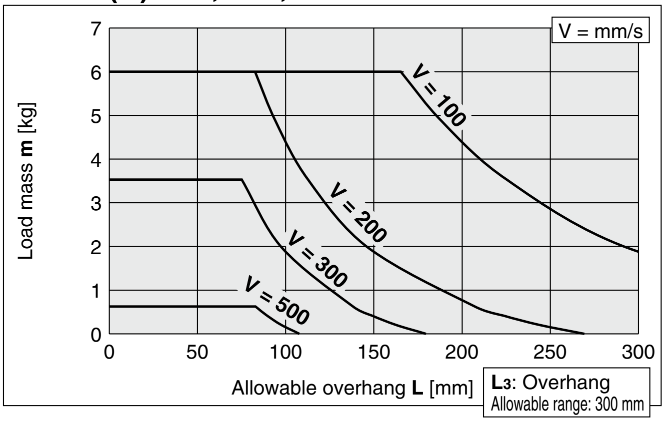
MXQ20(A)-50Z□



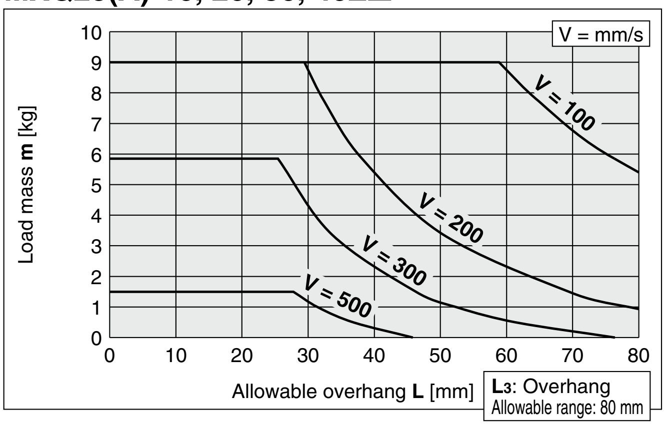
MXQ20(A)-75Z□



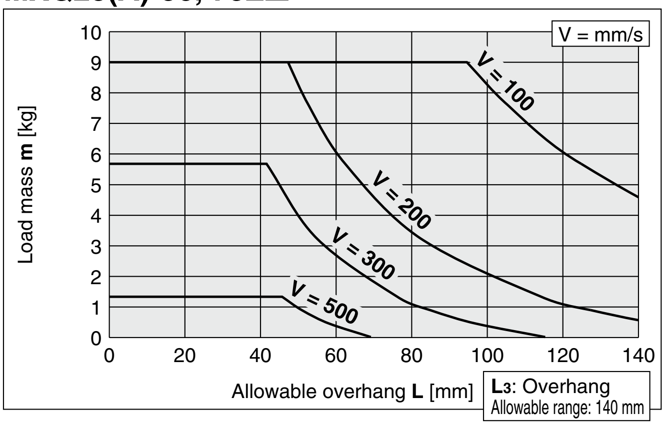
MXQ20(A)-100, 125, 150Z□



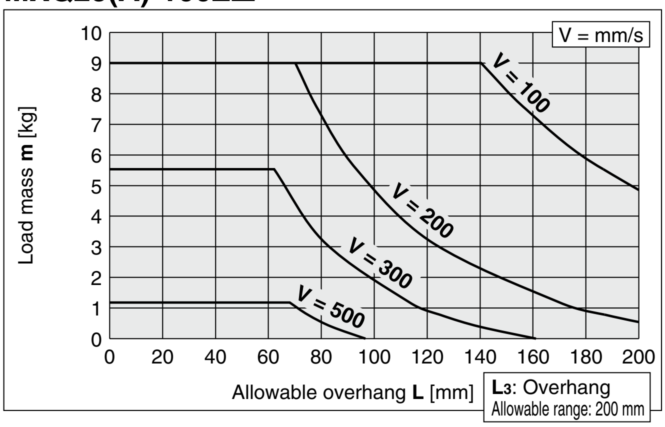
MXQ25(A)-10, 20, 30, 40Z□



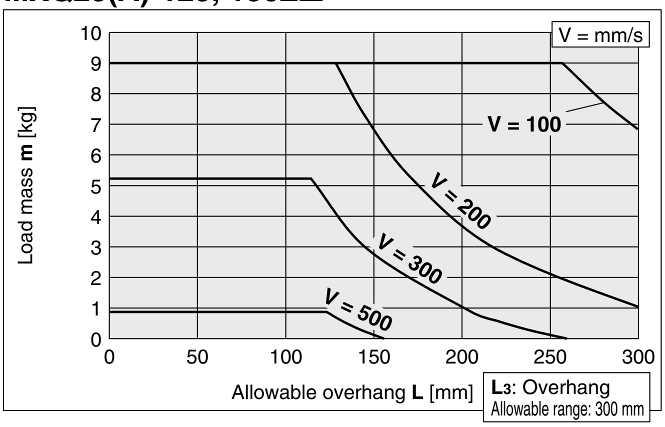
MXQ25(A)-50, 75Z□



MXQ25(A)-100Z□



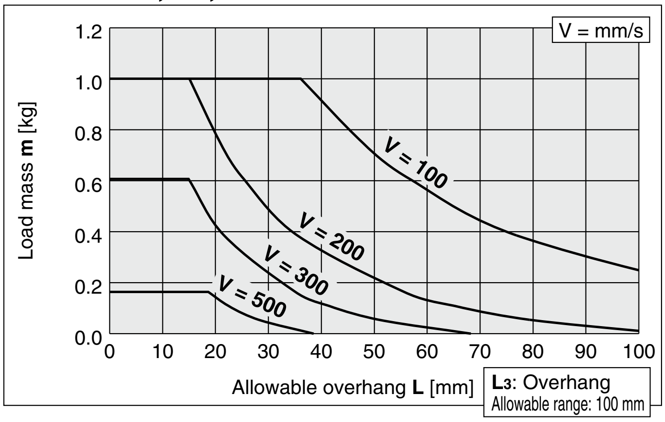
MXQ25(A)-125, 150Z□



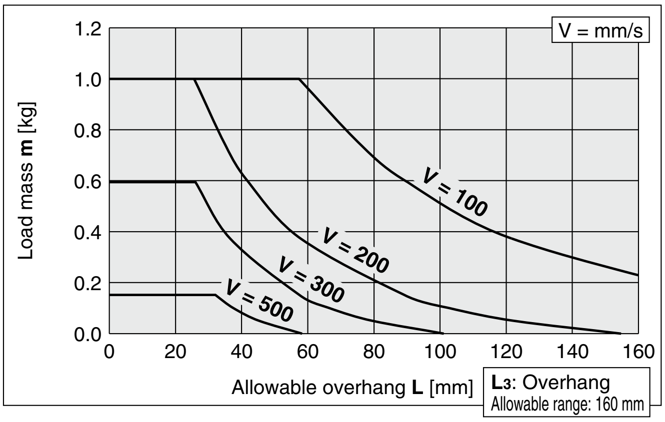
Determine the overhang. (Refer to page 158 for details.)
L_1, L_2: Check from the cross point of the load mass and driving speed.
L_3: Can be used within the "Allowable overhang range" in the selection graph if the load mass and driving speed values are within the allowable range

MXQ 6B-□Z□/For Transfer/Rubber Stopper

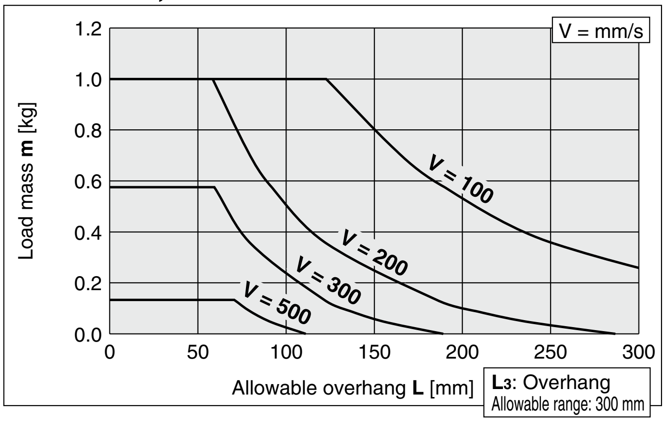
MXQ6B-10, 20, 30Z□



MXQ6B-40Z□



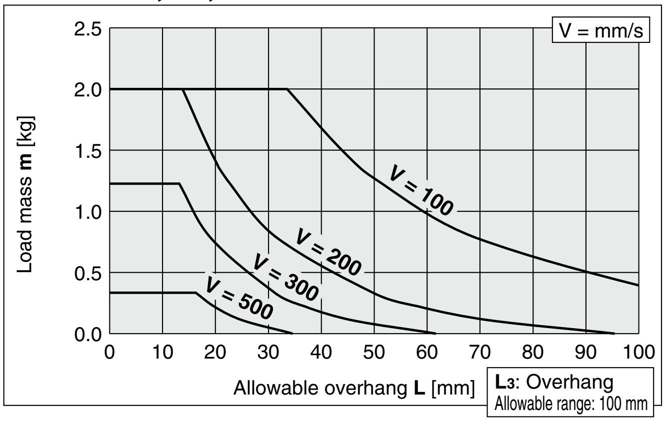
MXQ6B-50, 75Z□



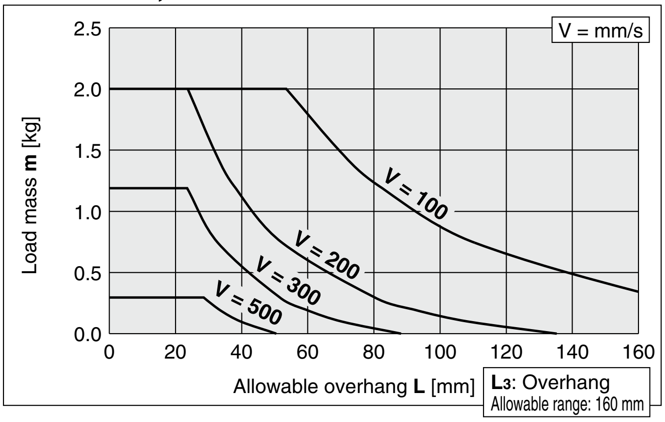
MXQ 8B-□Z□, MXQ 12B-□Z□ / For Transfer/ Rubber Stopper

Determine the overhang. (Refer to page 158 for details.)
L_1, L_2: Check from the cross point of the load mass and driving speed.
L_3: Can be used within the "Allowable overhang range" in the selection graph if the load mass and driving speed values are within the allowable range

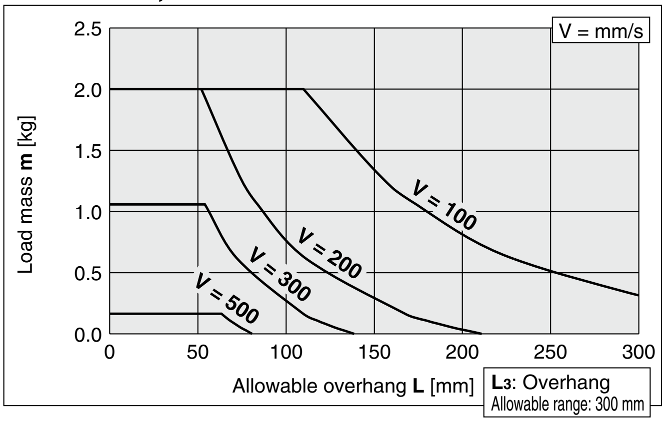
MXQ8B-10, 20, 30Z□



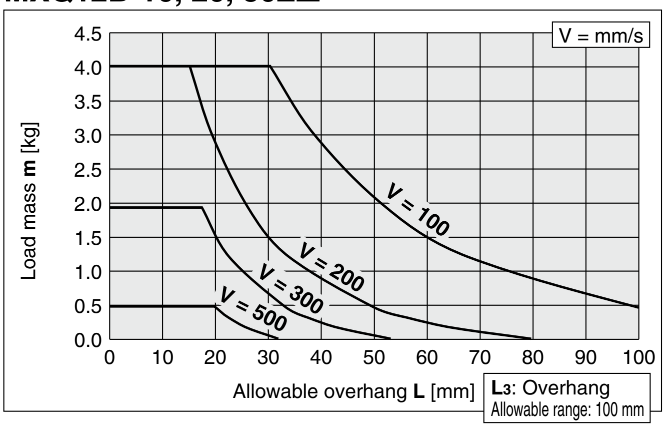
MXQ8B-40, 50Z□



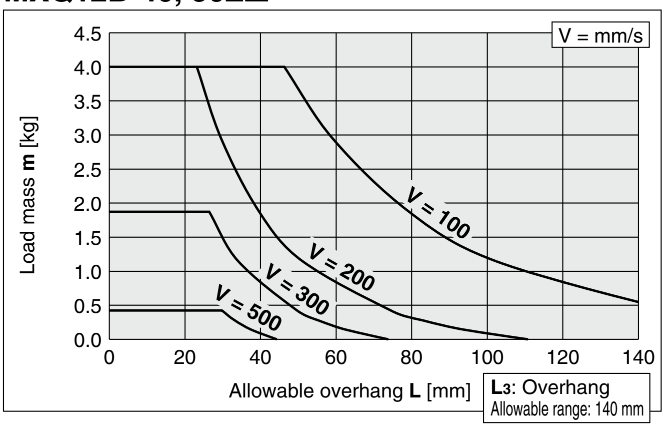
MXQ8B-75, 100Z□



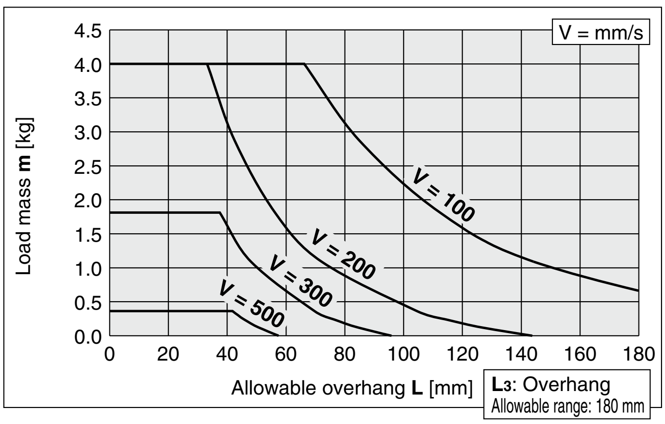
MXQ12B-10, 20, 30Z□



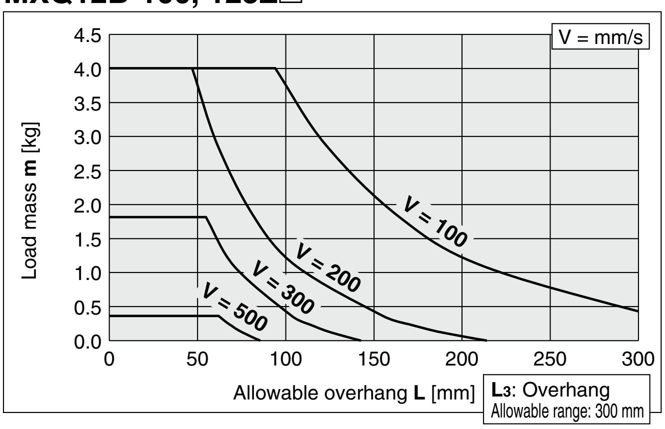
MXQ12B-40, 50Z□



MXQ12B-75Z□



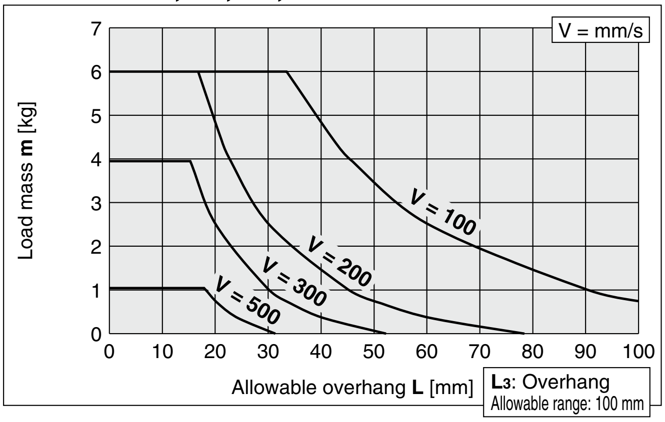
MXQ12B-100, 125Z□



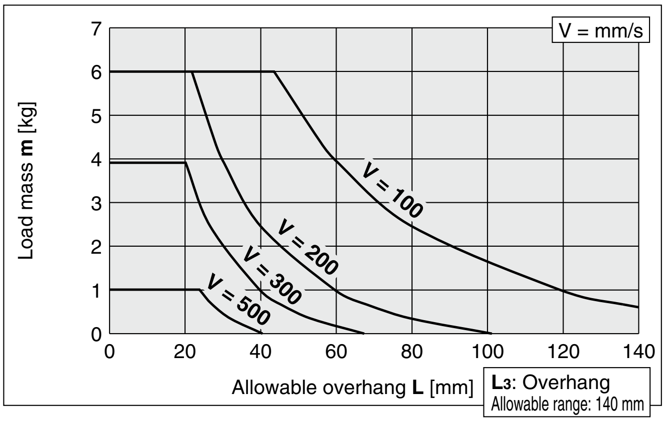
MXQ 16B-□Z□, MXQ 20B-□Z□ / For Transfer/ Rubber Stopper

Determine the overhang. (Refer to page 158 for details.)
L_1, L_2: Check from the cross point of the load mass and driving speed.
L_3: Can be used within the "Allowable overhang range" in the selection graph if the load mass and driving speed values are within the allowable range

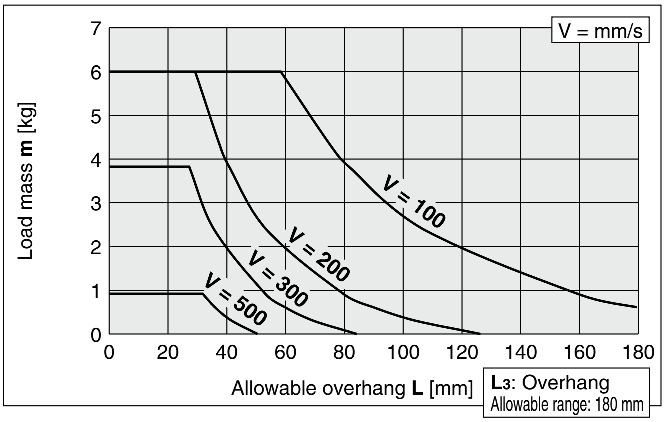
MXQ16B-10, 20, 30, 40Z□



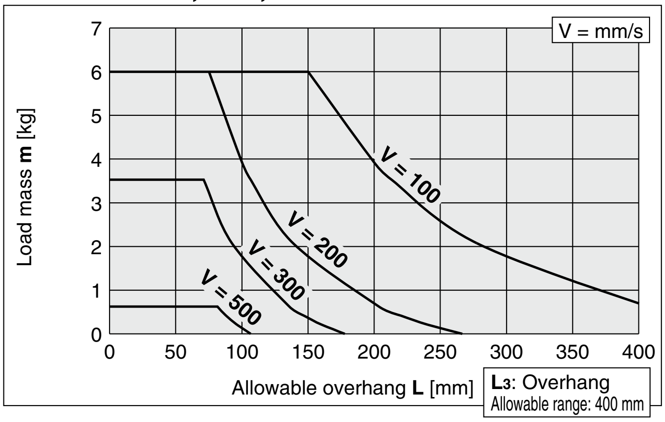
MXQ16B-50Z□



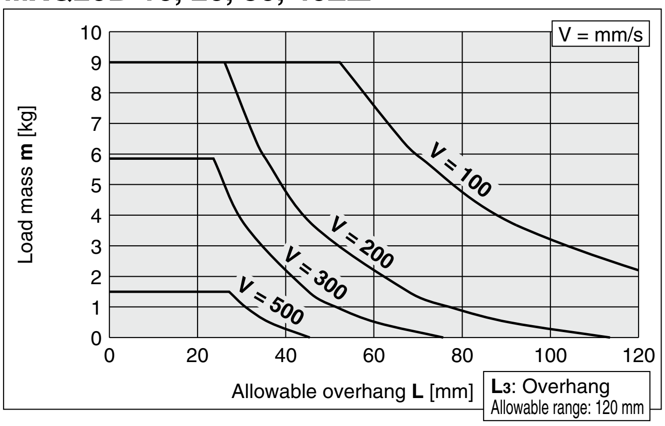
MXQ16B-75Z□



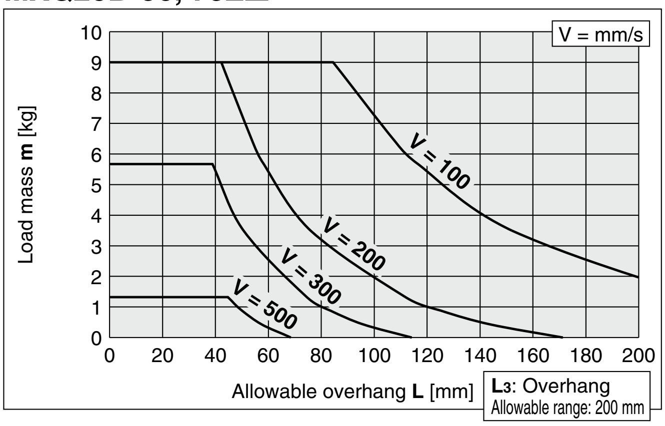
MXQ16B-100, 125, 150Z□



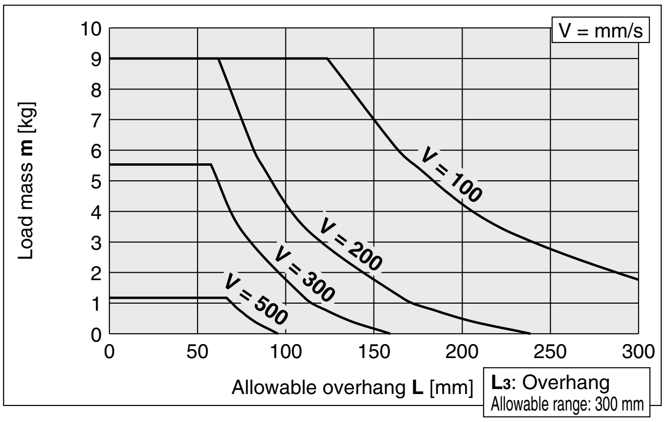
MXQ20B-10, 20, 30, 40Z□



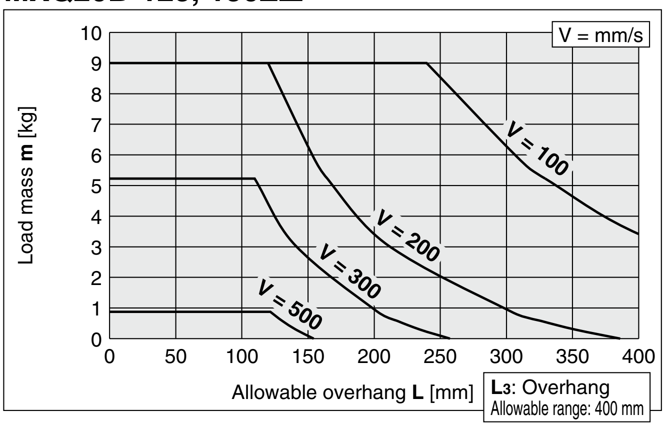
MXQ20B-50, 75Z□



MXQ20B-100Z□



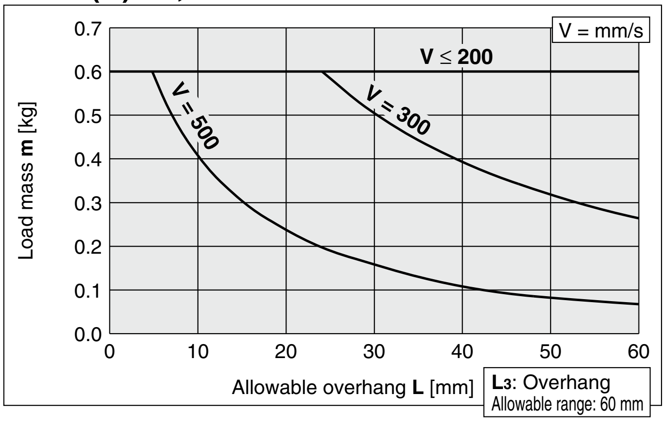
MXQ20B-125, 150Z□



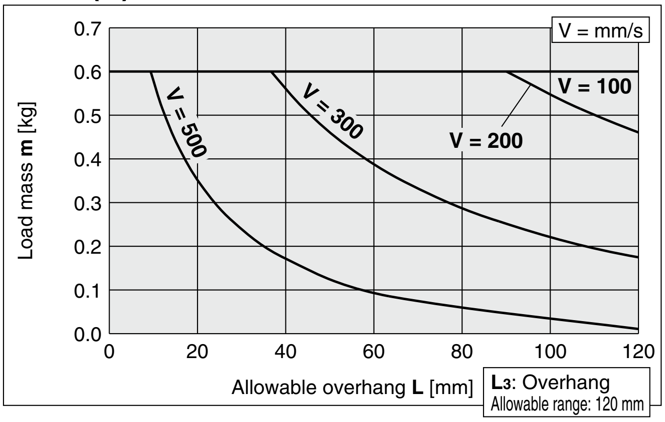
MXQ 6A-□Z□, MXQ 6-□Z□ (Height interchangeable type)
MXQ 8$^{A}_{C}$-□Z□, MXQ 8-□Z□ (Height interchangeable type) / For Transfer/ Shock Absorber/RJ

Determine the overhang. (Refer to page 158 for details.)
L_1, L_2: Check from the cross point of the load mass and driving speed.
L_3: Can be used within the "Allowable overhang range" in the selection graph if the load mass and driving speed values are within the allowable range

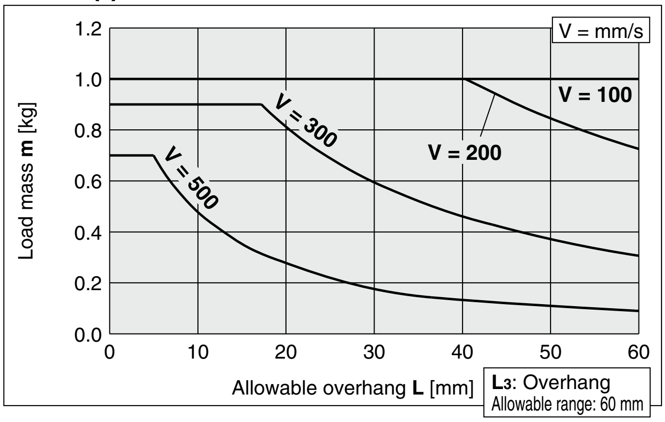
MXQ6(A)-10, 20Z□



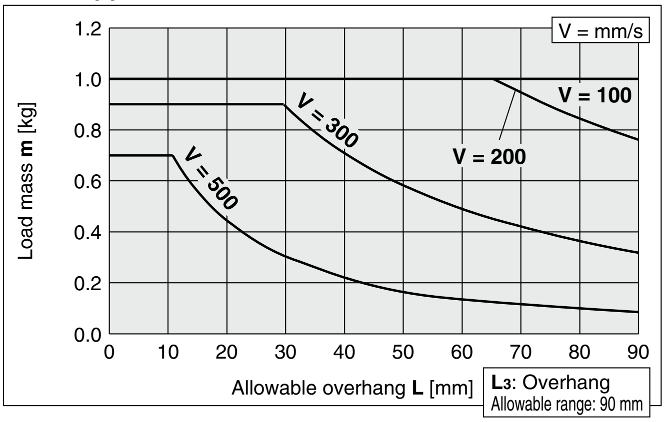
MXQ6(A)-30, 40, 50Z□



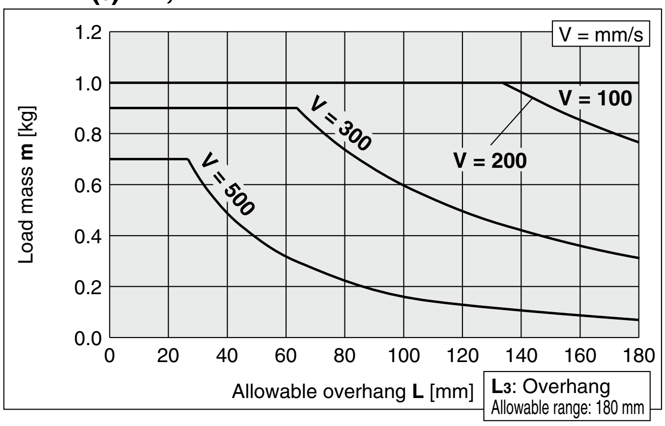
MXQ8($^{A}_{C}$)-10, 20, 30Z□



MXQ8($^{A}_{C}$)-40Z□



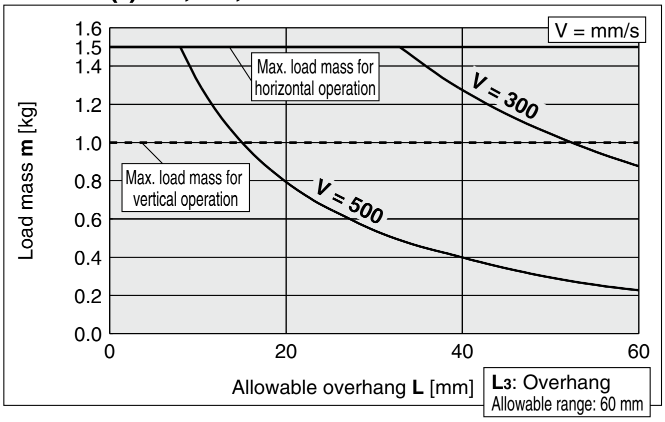
MXQ8($^{A}_{C}$)-50, 75Z□



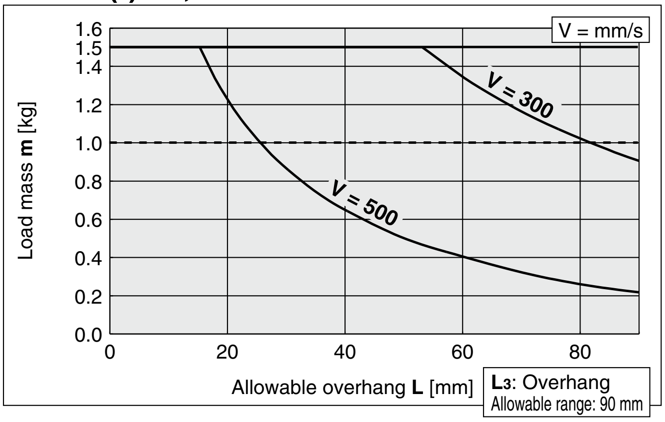
MXQ 12$^{A}_{C}$-□Z□, MXQ 12-□Z□ (Height interchangeable type)
MXQ 16A-□Z□, MXQ 16-□Z□ (Height interchangeable type) / For Transfer/Shock Absorber/RJ

Determine the overhang. (Refer to page 158 for details.)
L_1, L_2: Check from the cross point of the load mass and driving speed.
L_3: Can be used within the "Allowable overhang range" in the selection graph if the load mass and driving speed values are within the allowable range

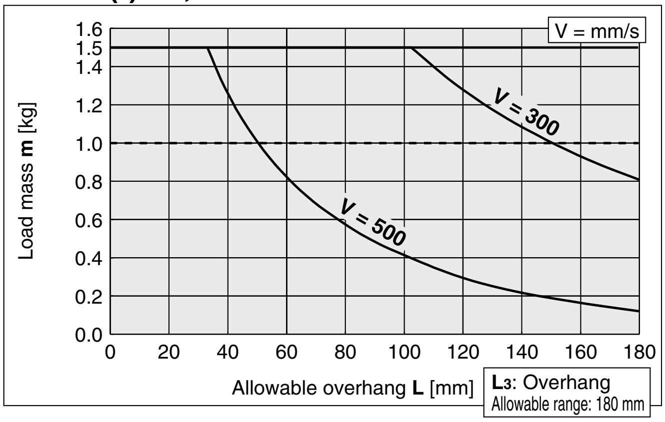
MXQ12($^{A}_{C}$)-10, 20, 30Z□



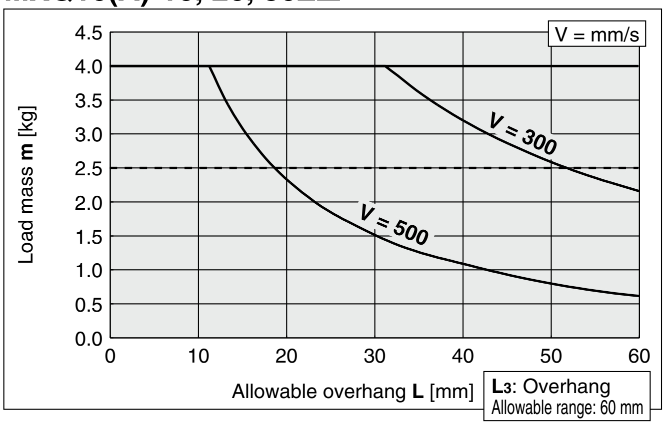
MXQ12($^{A}_{C}$)-40, 50Z□



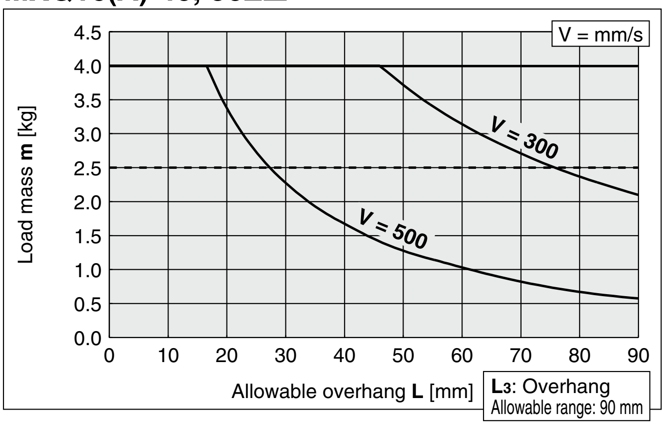
MXQ12($^{A}_{C}$)-75, 100Z□



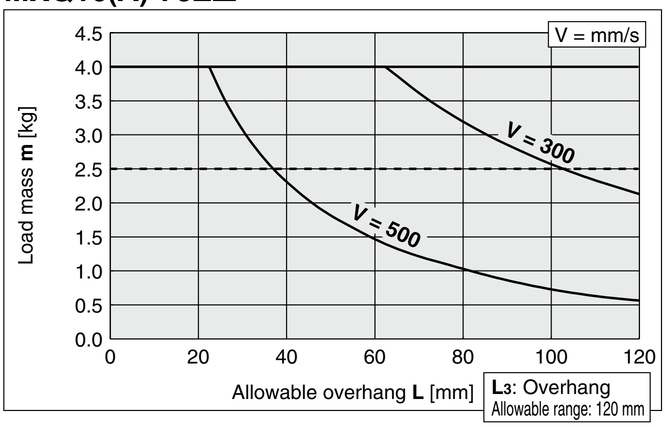
MXQ16(A)-10, 20, 30Z□



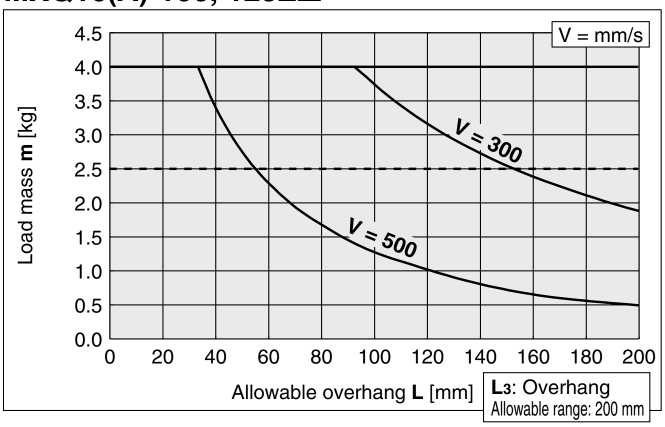
MXQ16(A)-40, 50Z□



MXQ16(A)-75Z□

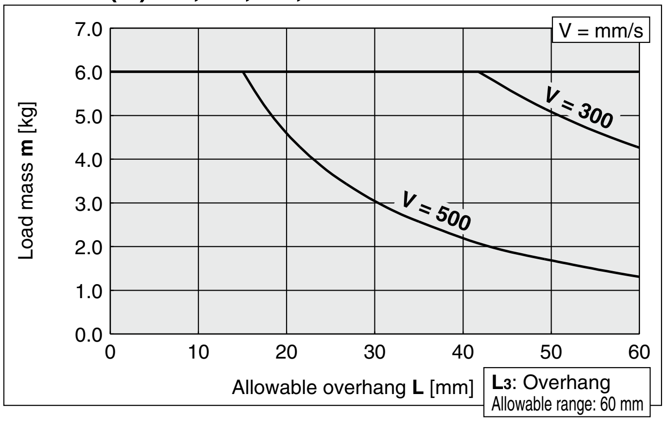


MXQ16(A)-100, 125Z□

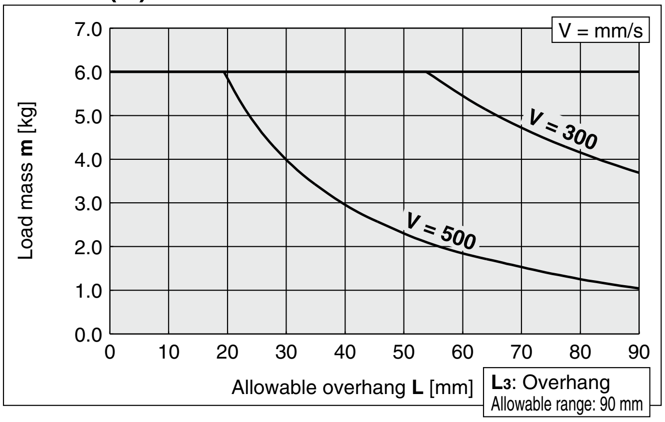


Determine the overhang. (Refer to page 158 for details.)
L_1, L_2: Check from the cross point of the load mass and driving speed.
L_3: Can be used within the "Allowable overhang range" in the selection graph if the load mass and driving speed values are within the allowable range

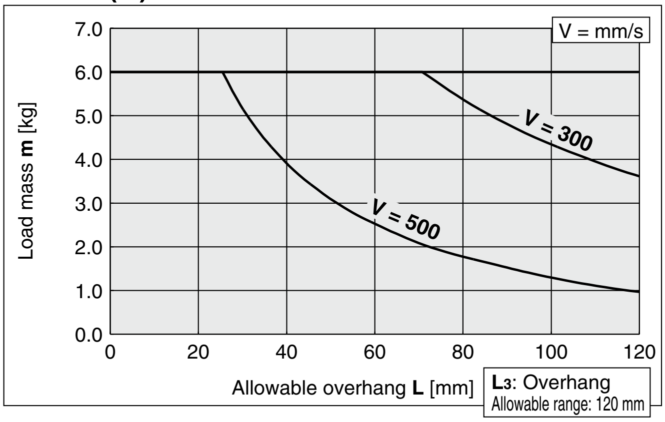
MXQ20(A)-10, 20, 30, 40Z□



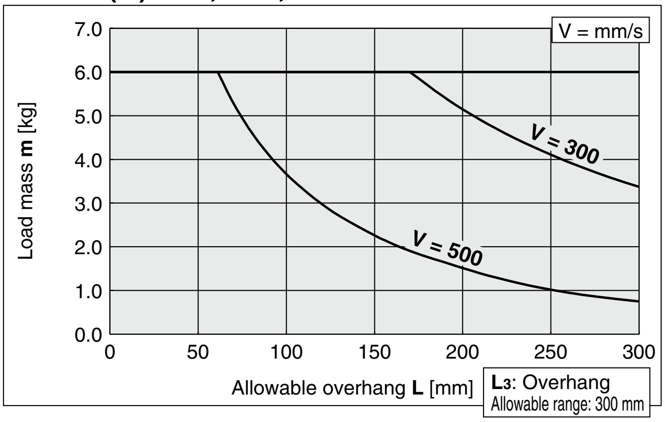
MXQ20(A)-50Z□



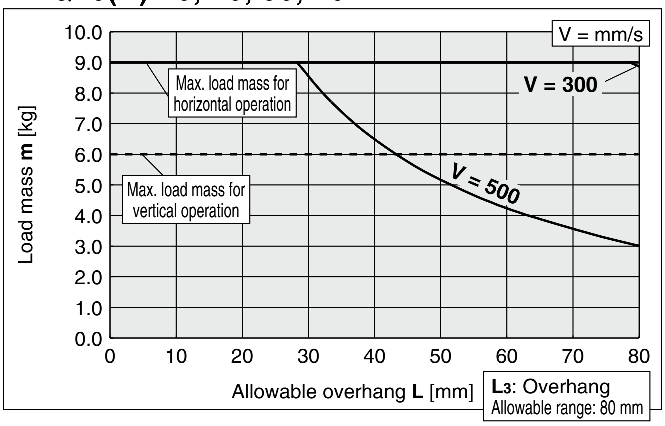
MXQ20(A)-75Z□



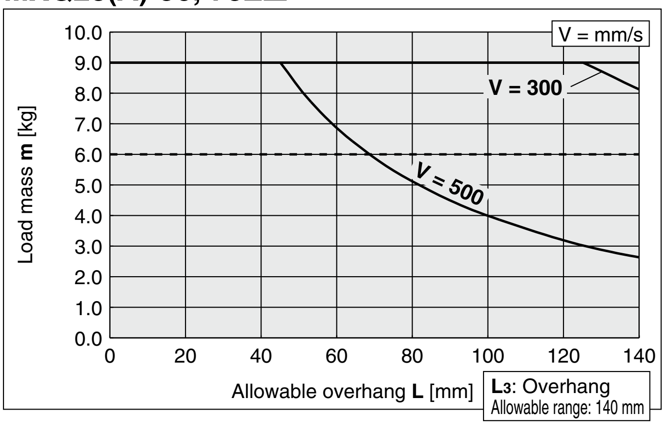
MXQ20(A)-100, 125, 150Z□



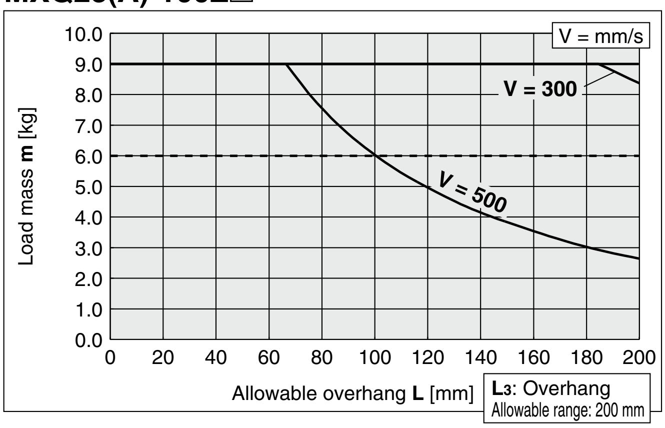
MXQ25(A)-10, 20, 30, 40Z□



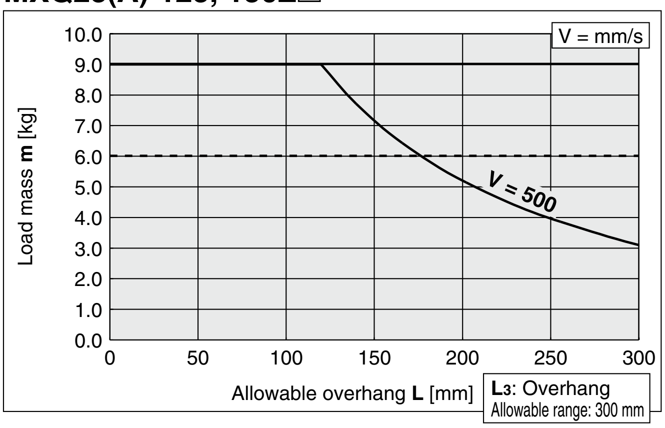
MXQ25(A)-50, 75Z□



MXQ25(A)-100Z□



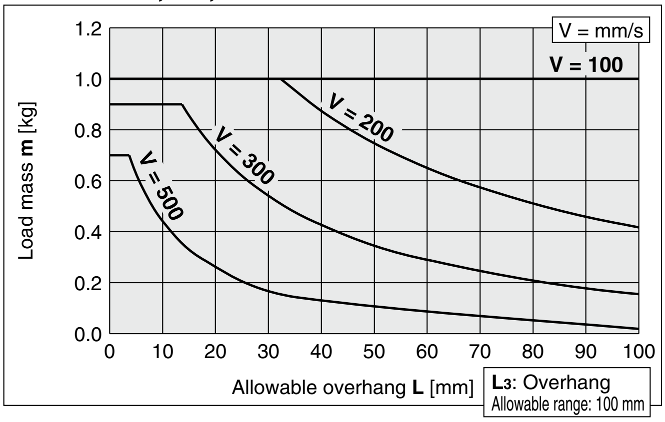
MXQ25(A)-125, 150Z□



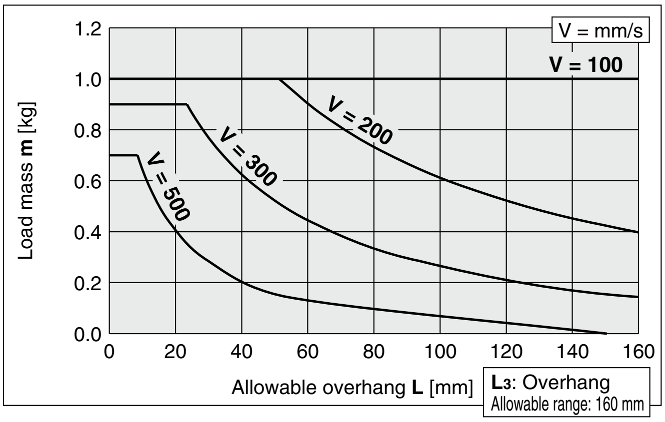
Determine the overhang. (Refer to page 158 for details.)
L_1, L_2: Check from the cross point of the load mass and driving speed.
L_3: Can be used within the "Allowable overhang range" in the selection graph if the load mass and driving speed values are within the allowable range

MXQ 6B-□Z□/For Transfer/Shock Absorber/RJ

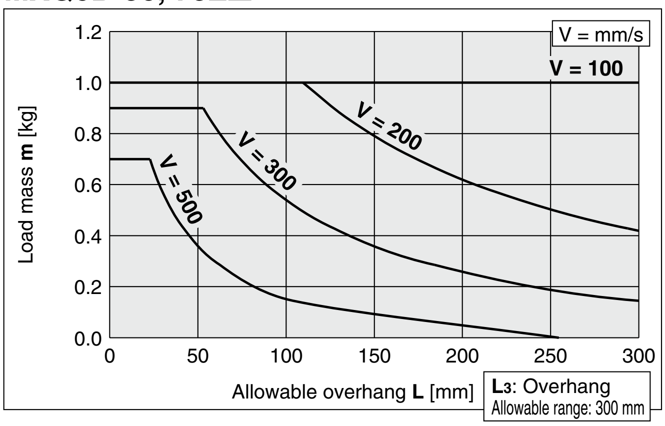
MXQ6B-10, 20, 30Z□



MXQ6B-40Z□



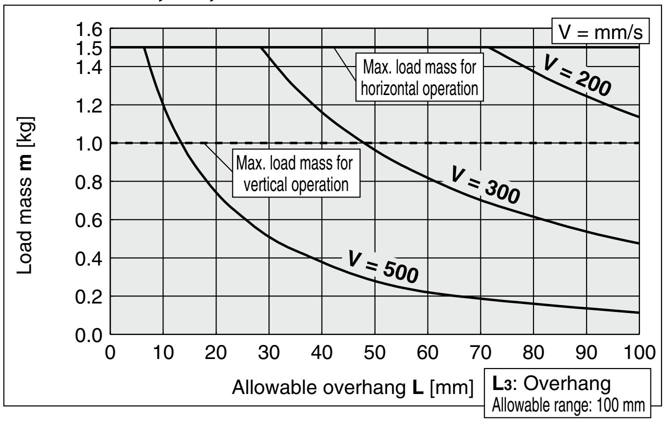
MXQ6B-50, 75Z□



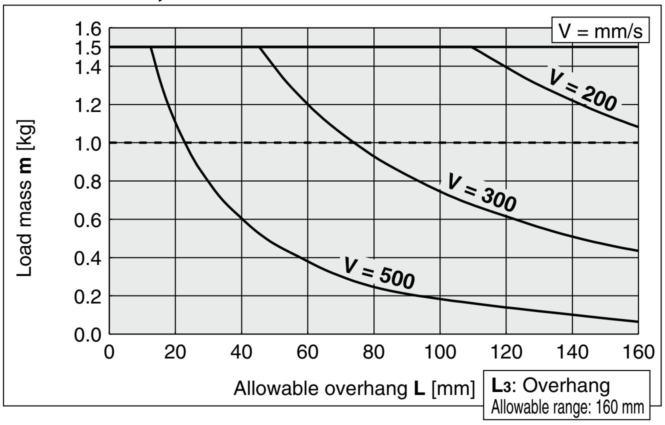
MXQ 8B-□Z□, MXQ 12B-□Z□ / For Transfer/ Shock Absorber/RJ

Determine the overhang. (Refer to page 158 for details.)
L_1, L_2: Check from the cross point of the load mass and driving speed.
L_3: Can be used within the "Allowable overhang range" in the selection graph if the load mass and driving speed values are within the allowable range

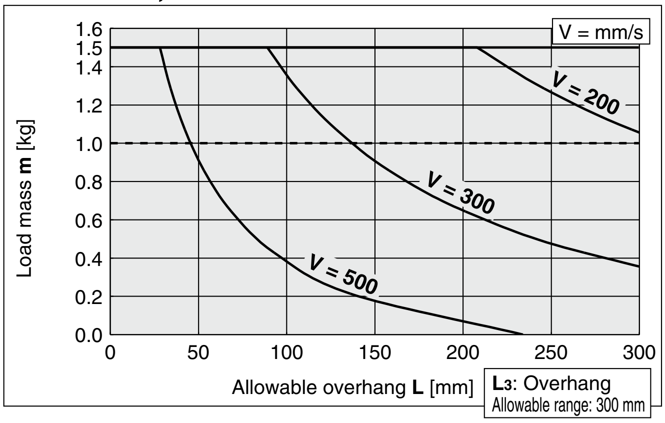
MXQ8B-10, 20, 30Z□



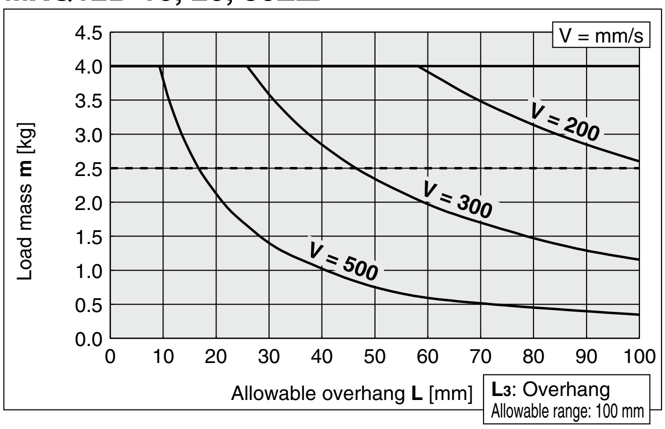
MXQ8B-40, 50Z□



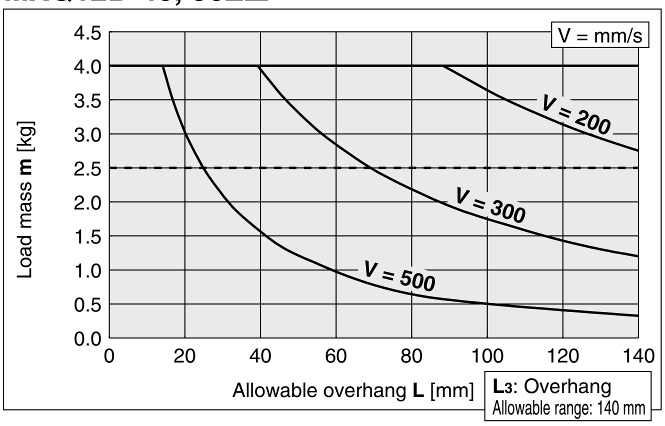
MXQ8B-75, 100Z□



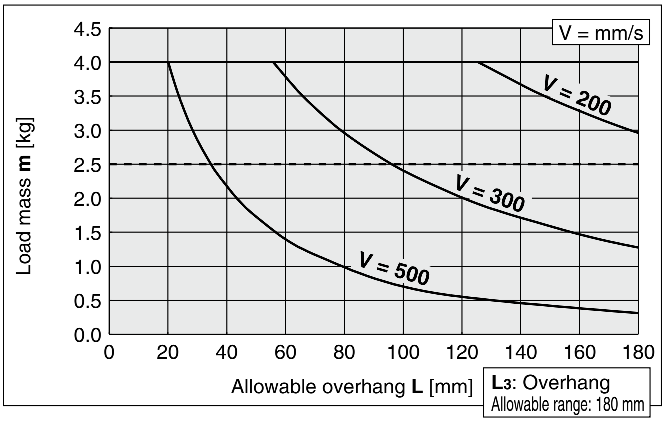
MXQ12B-10, 20, 30Z□



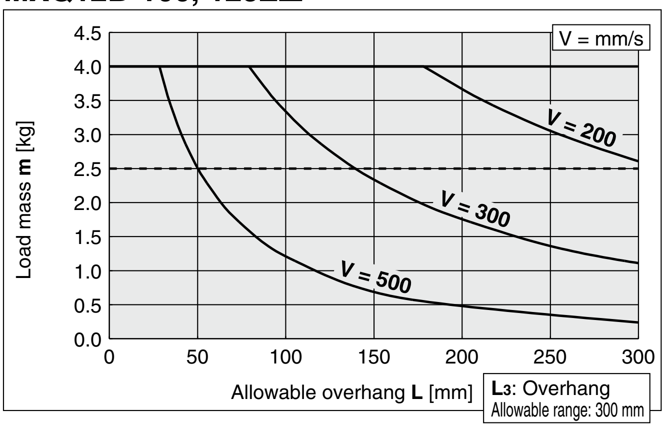
MXQ12B-40, 50Z□



MXQ12B-75Z□



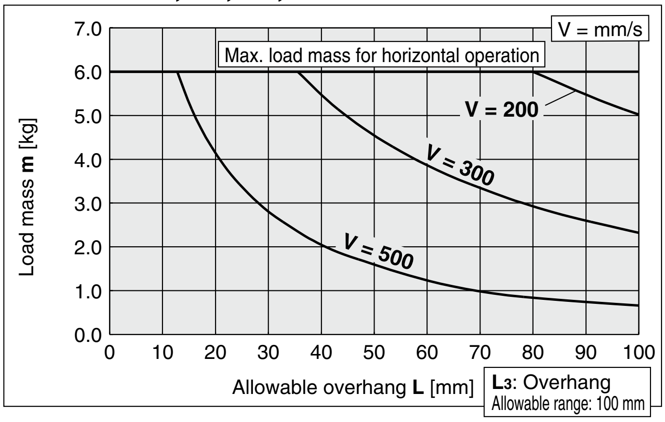
MXQ12B-100, 125Z□



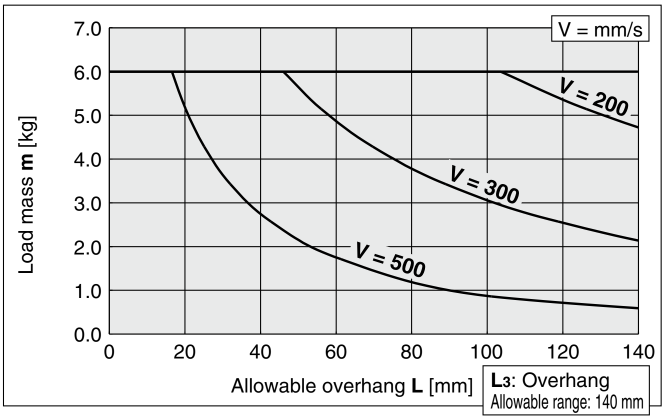
Determine the overhang. (Refer to page 158 for details.)
L_1, L_2: Check from the cross point of the load mass and driving speed.
L_3: Can be used within the "Allowable overhang range" in the selection graph if the load mass and driving speed values are within the allowable range

MXQ 16B-□Z□, MXQ 20B-□Z□ / For Transfer/ Shock Absorber/RJ

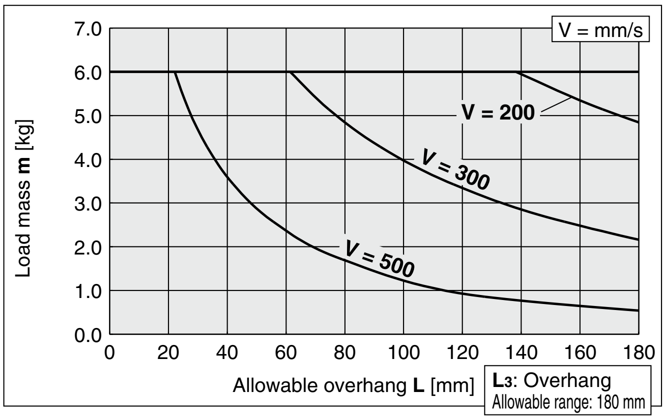
MXQ16B-10, 20, 30, 40Z□



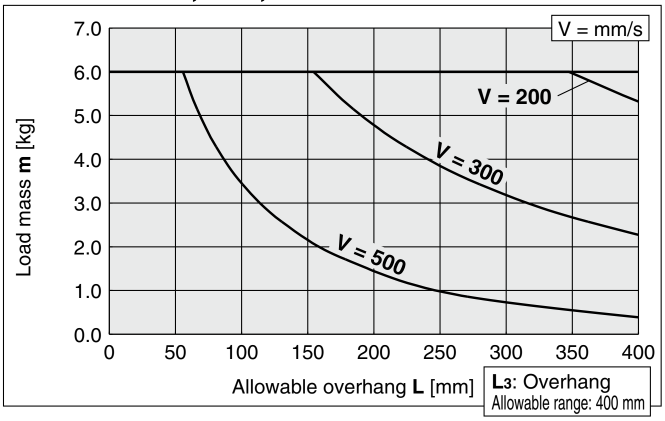
MXQ16B-50Z□



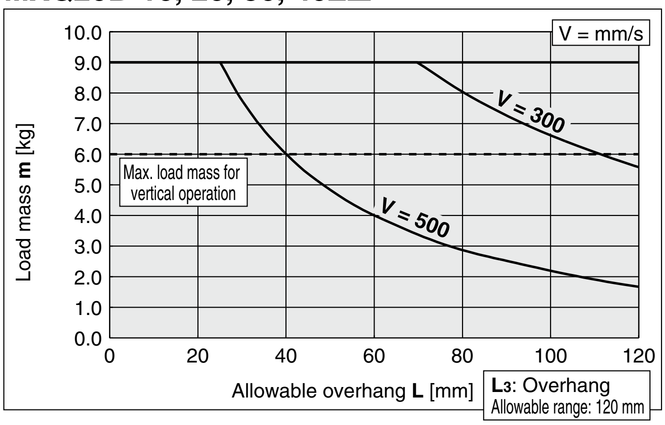
MXQ16B-75Z□



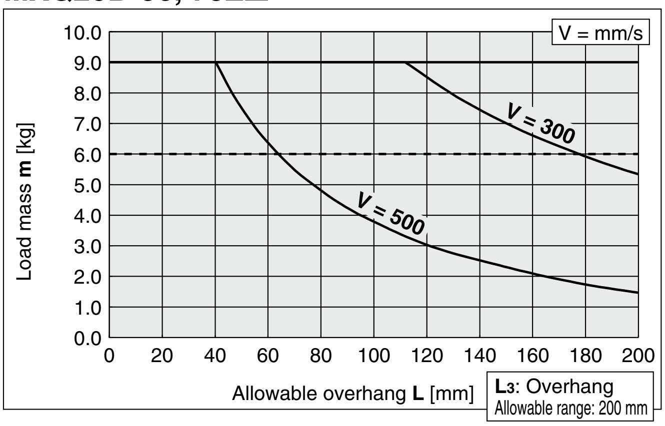
MXQ16B-100, 125, 150Z□



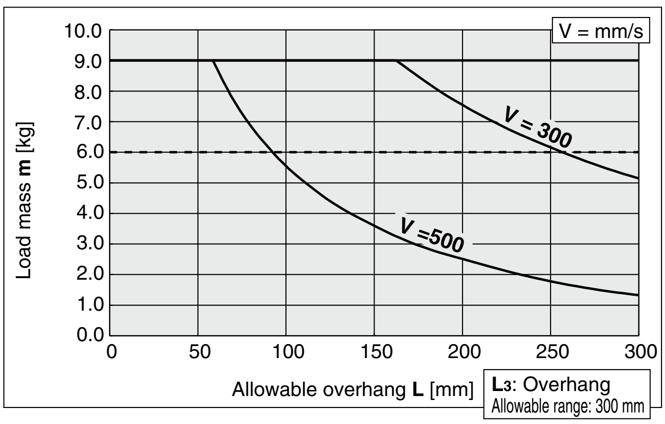
MXQ20B-10, 20, 30, 40Z□



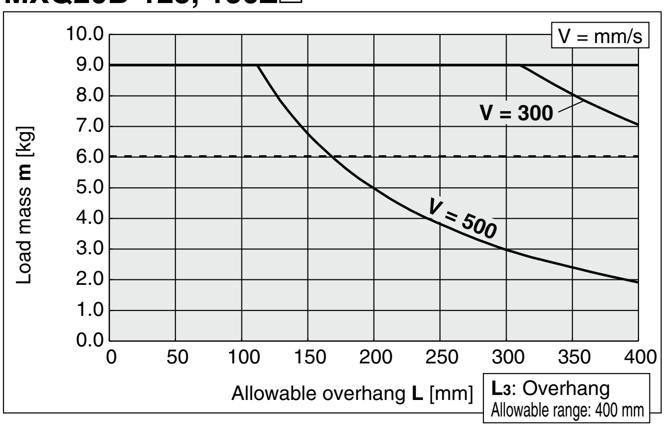
MXQ20B-50, 75Z□



MXQ20B-100Z□



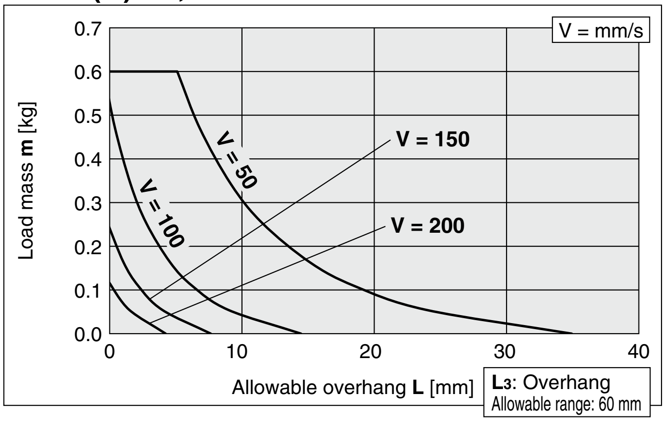
MXQ20B-125, 150Z□



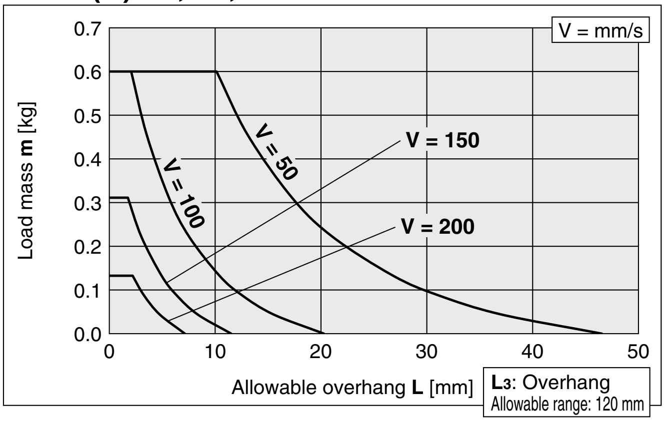
MXQ 6A-□Z□, MXQ 6-□Z□ (Height interchangeable type) MXQ 8$^{A}_{C}$-□Z□, MXQ 8-□Z□ (Height interchangeable type) / For Transfer/ Metal Stopper

Determine the overhang. (Refer to page 158 for details.)
L_1, L_2: Check from the cross point of the load mass and driving speed.
L_3: Can be used within the "Allowable overhang range" in the selection graph if the load mass and driving speed values are within the allowable range

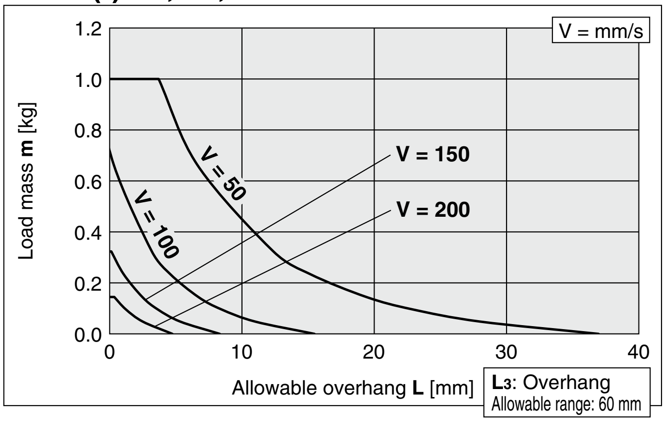
MXQ6(A)-10, 20Z□



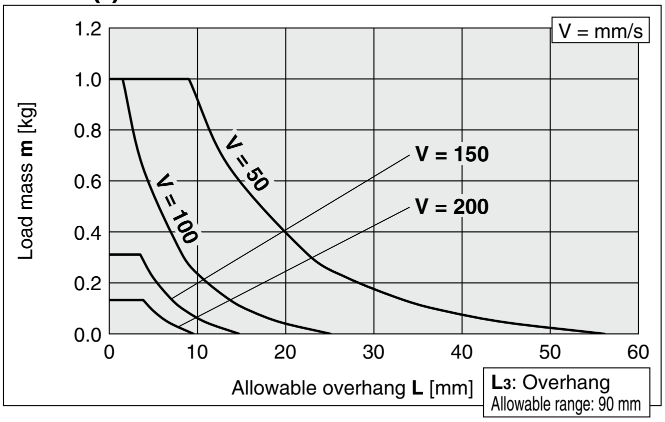
MXQ6(A)-30, 40, 50Z□



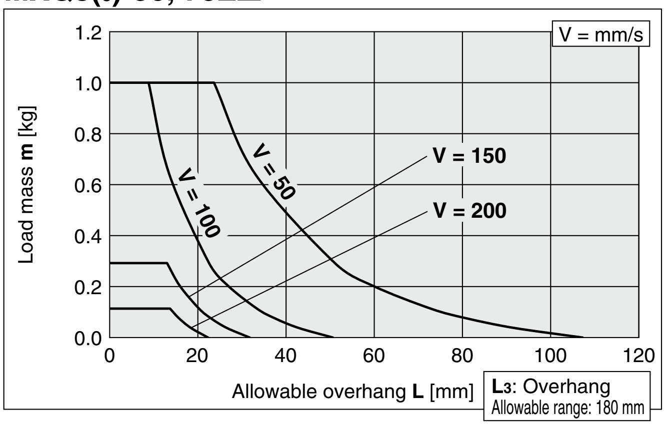
MXQ8($^{A}_{C}$)-10, 20, 30Z□



MXQ8($^{A}_{C}$)-40Z□



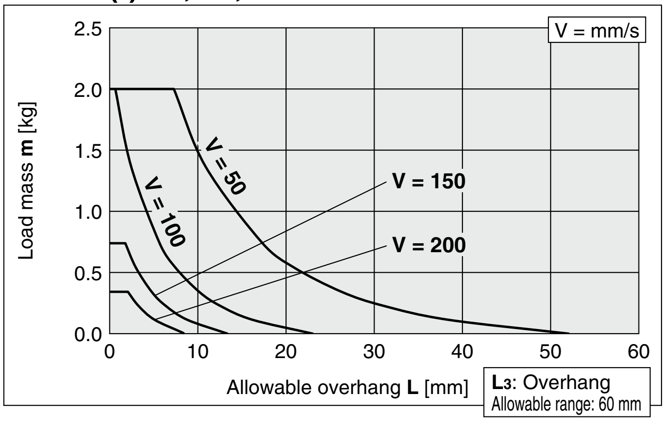
MXQ8($^{A}_{C}$)-50, 75Z□



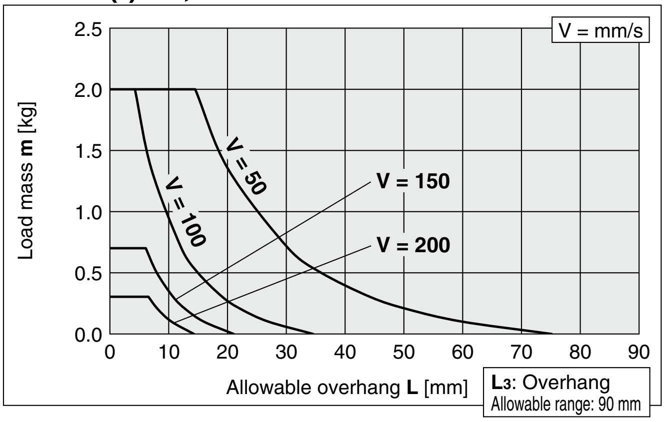
MXQ 12$^{A}_{C}$-□Z□, MXQ 12-□Z□ (Height interchangeable type) / MXQ 16A-□Z□, MXQ 16-□Z□ (Height interchangeable type) / For Transfer/ Metal Stopper

Determine the overhang. (Refer to page 158 for details.)
L1, L2: Check from the cross point of the load mass and driving speed.
L3: Can be used within the "Allowable overhang range" in the selection graph if the load mass and driving speed values are within the allowable range

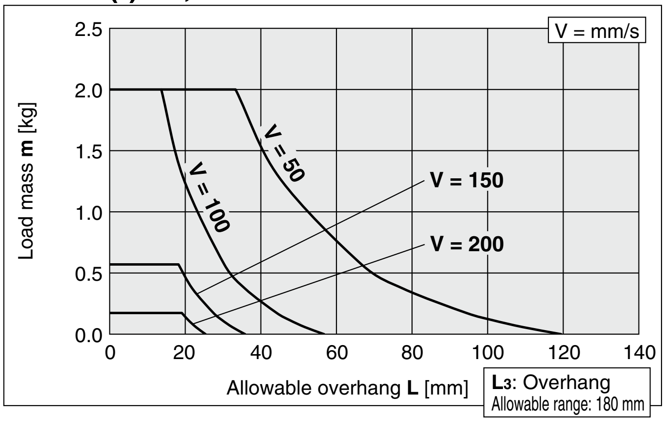
MXQ12($^{A}_{C}$)-10, 20, 30Z□



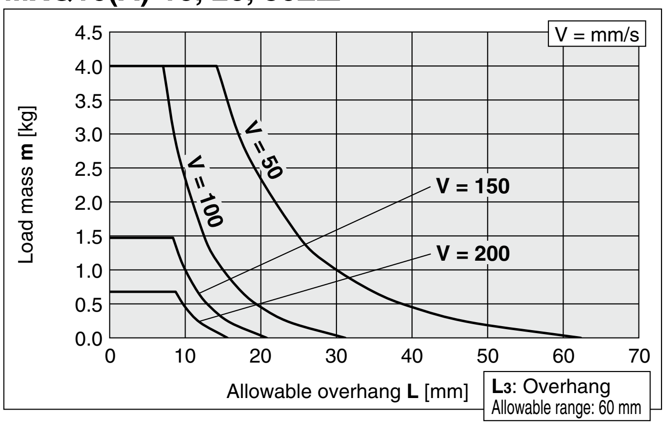
MXQ12($^{A}_{C}$)-40, 50Z□



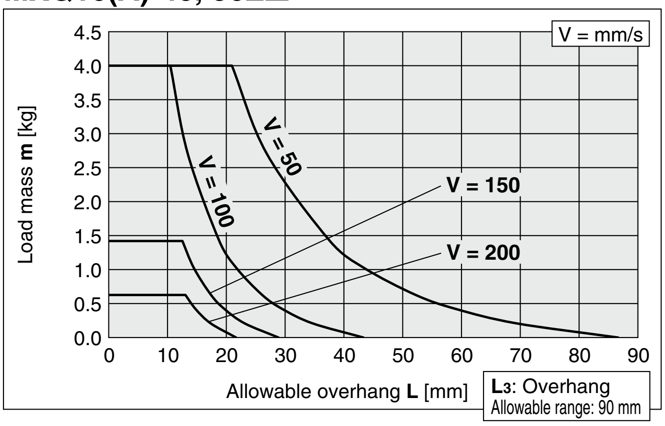
MXQ12($^{A}_{C}$)-75, 100Z□



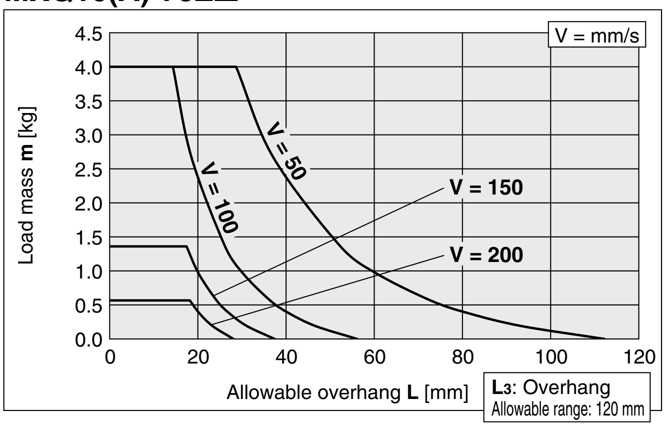
MXQ16(A)-10, 20, 30Z□



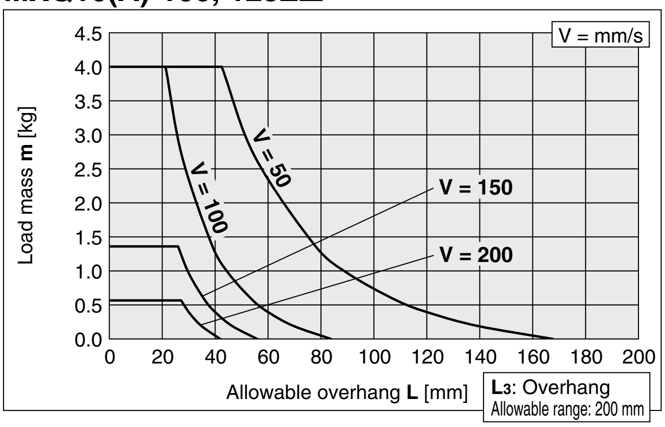
MXQ16(A)-40, 50Z□



MXQ16(A)-75Z□



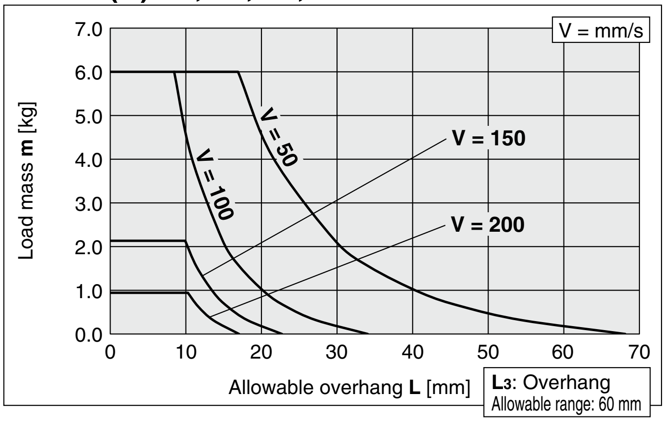
MXQ16(A)-100, 125Z□



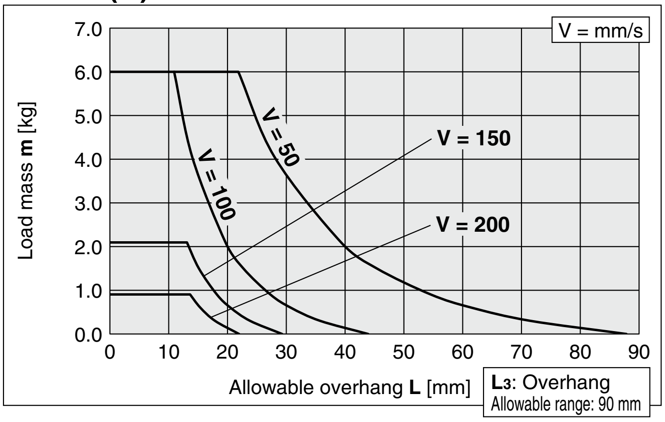
MXQ 20A-□Z□, MXQ 20-□Z□ (Height interchangeable type) MXQ 25A-□Z□, MXQ 25-□Z□ (Height interchangeable type) / For Transfer/ Metal Stopper

Determine the overhang. (Refer to page 158 for details.)
L_1, L_2: Check from the cross point of the load mass and driving speed.
L_3: Can be used within the "Allowable overhang range" in the selection graph if the load mass and driving speed values are within the allowable range

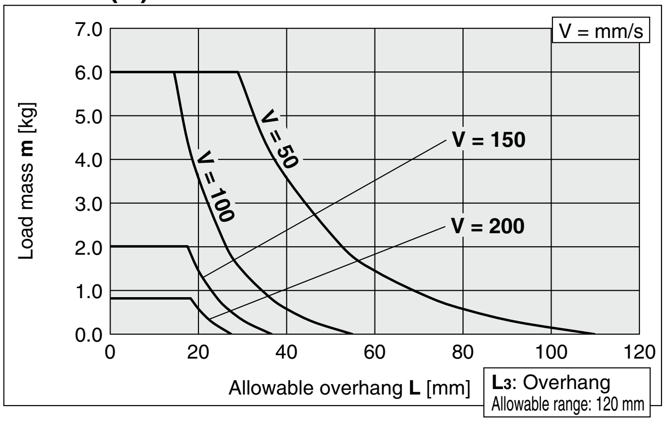
MXQ20(A)-10, 20, 30, 40Z□



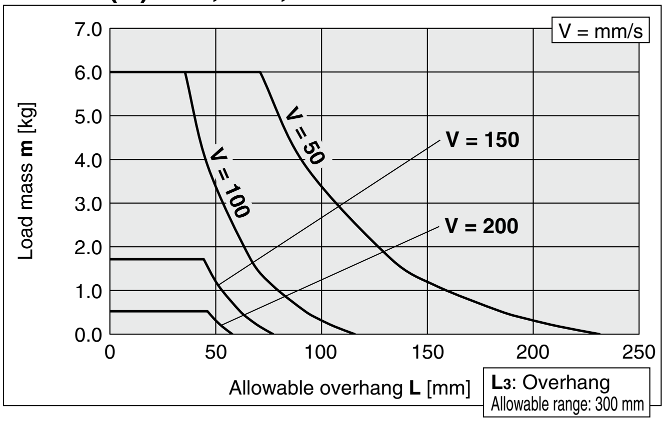
MXQ20(A)-50Z□



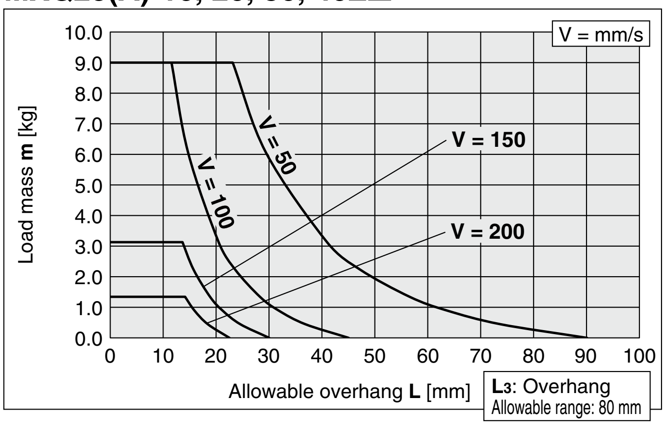
MXQ20(A)-75Z□



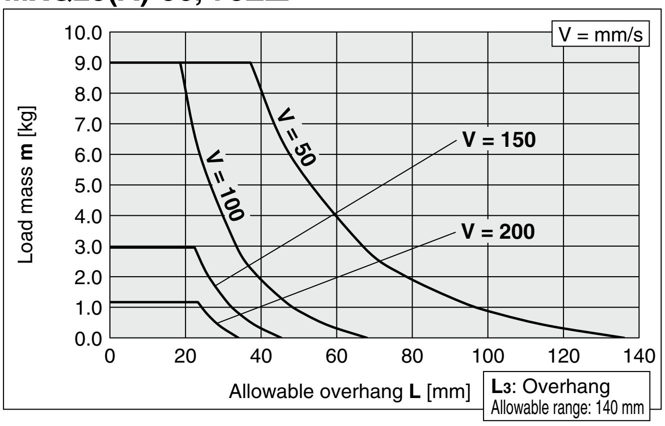
MXQ20(A)-100, 125, 150Z□



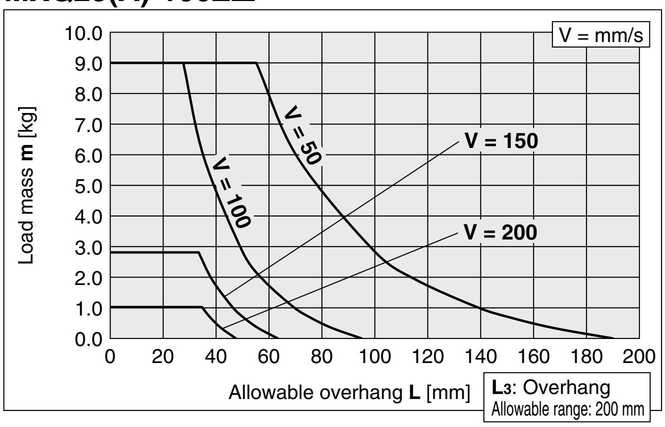
MXQ25(A)-10, 20, 30, 40Z□



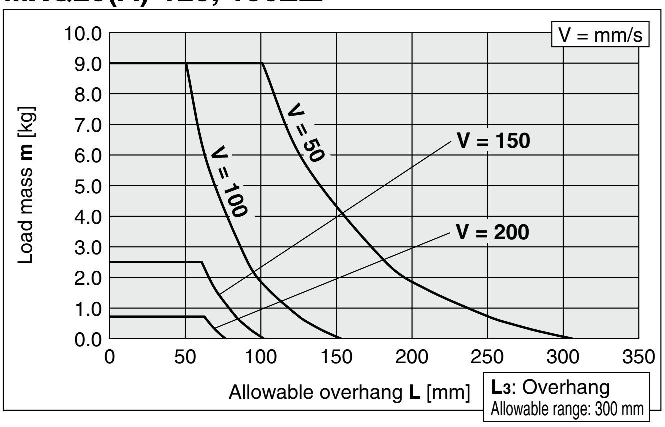
MXQ25(A)-50, 75Z□



MXQ25(A)-100Z□



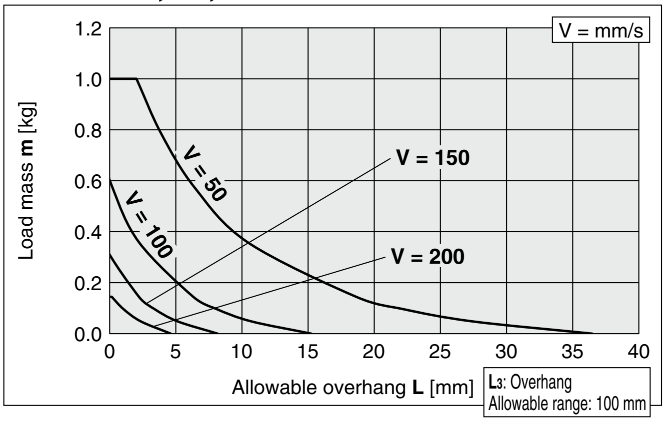
MXQ25(A)-125, 150Z□



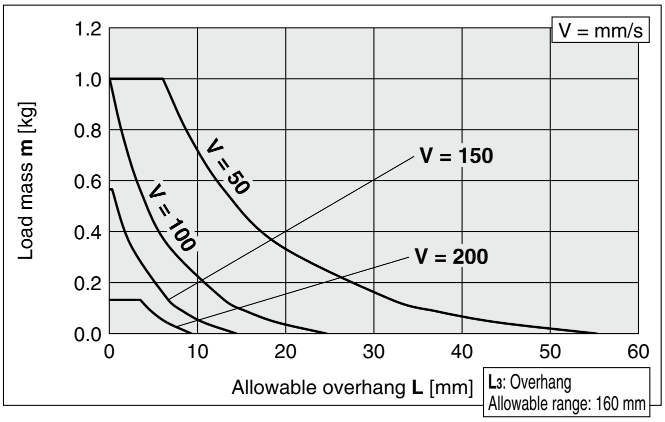
Determine the overhang. (Refer to page 158 for details.)
L_1, L_2: Check from the cross point of the load mass and driving speed.
L_3: Can be used within the "Allowable overhang range" in the selection graph if the load mass and driving speed values are within the allowable range

MXQ 6B-□Z□/For Transfer/Metal Stopper

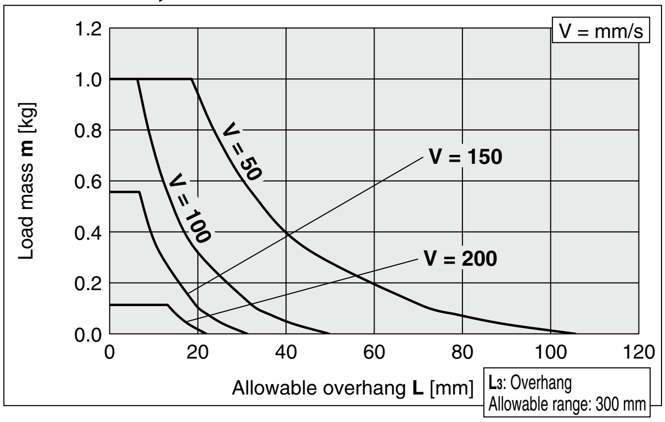
MXQ6B-10, 20, 30Z□



MXQ6B-40Z□



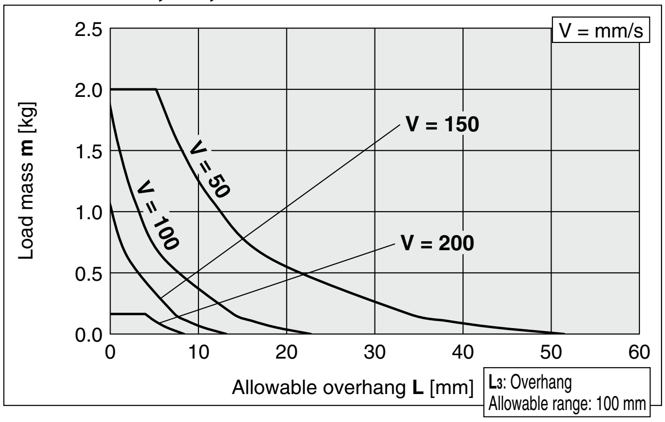
MXQ6B-50, 75Z□



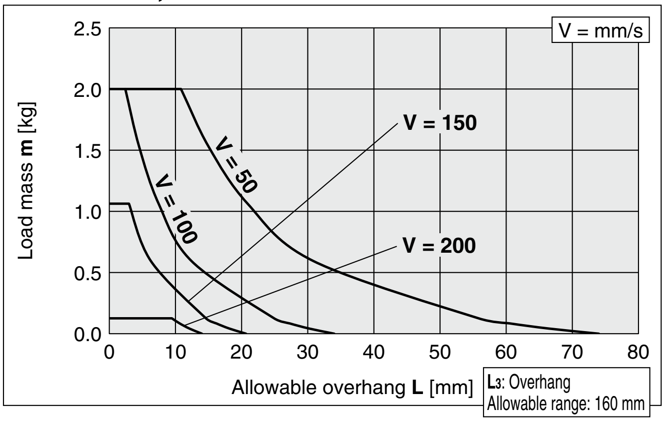
Determine the overhang. (Refer to page 158 for details.)
L1, L2: Check from the cross point of the load mass and driving speed.
L3: Can be used within the "Allowable overhang range" in the selection graph if the load mass and driving speed values are within the allowable range

MXQ 8B-□Z□, MXQ 12B-□Z□ / For Transfer/ Metal Stopper

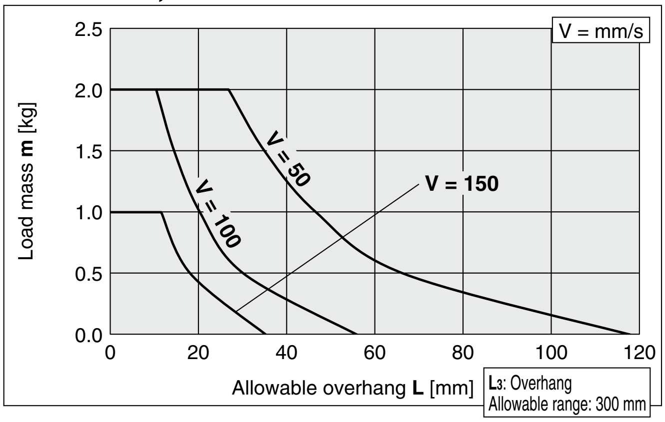
MXQ8B-10, 20, 30Z□



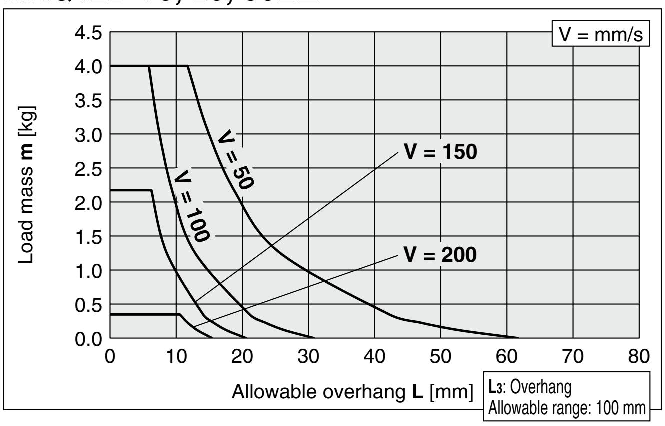
MXQ8B-40, 50Z□



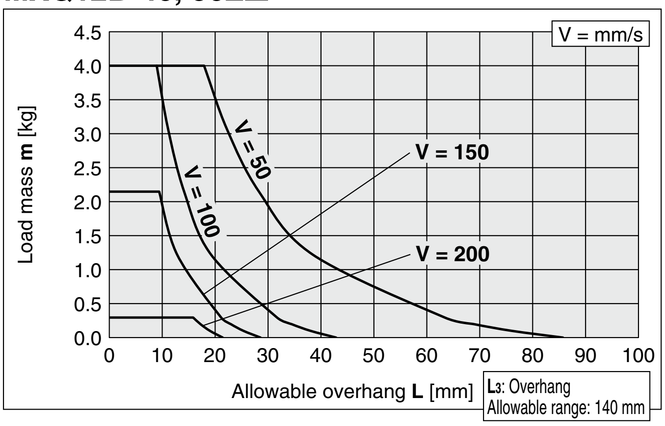
MXQ8B-75, 100Z□



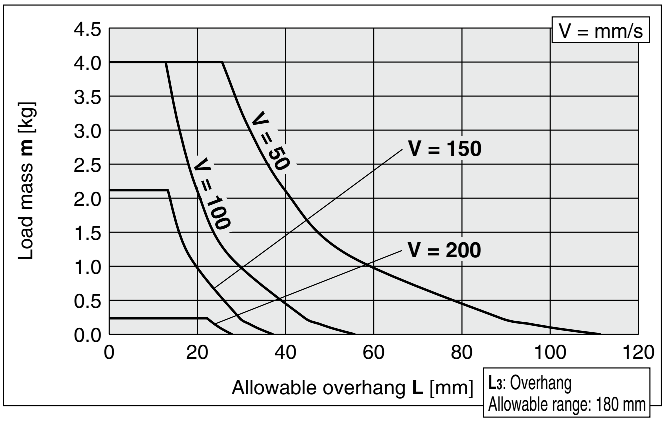
MXQ12B-10, 20, 30Z□



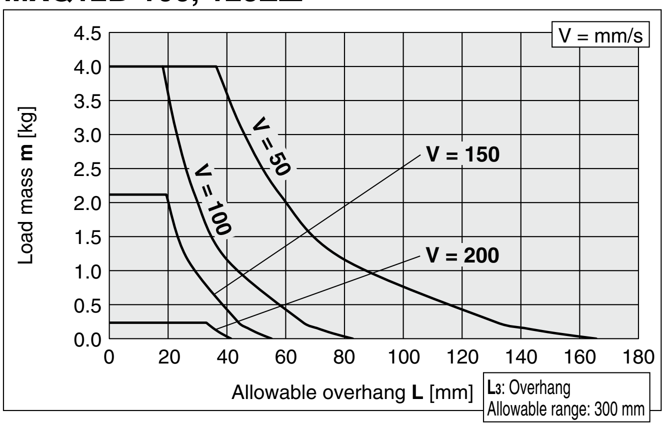
MXQ12B-40, 50Z□



MXQ12B-75Z□



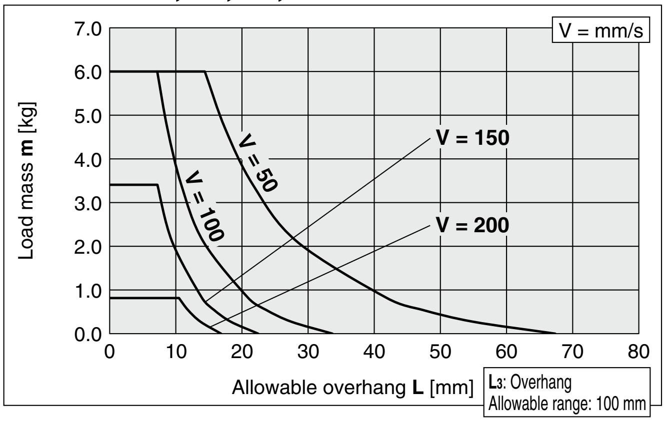
MXQ12B-100, 125Z□



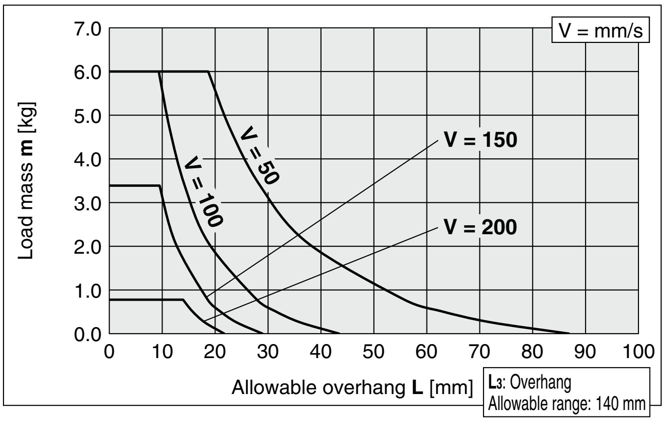
MXQ 16B-□Z□, MXQ 20B-□Z□ / For Transfer/ Metal Stopper

Determine the overhang. (Refer to page 158 for details.)
L_1, L_2: Check from the cross point of the load mass and driving speed.
L_3: Can be used within the "Allowable overhang range" in the selection graph if the load mass and driving speed values are within the allowable range

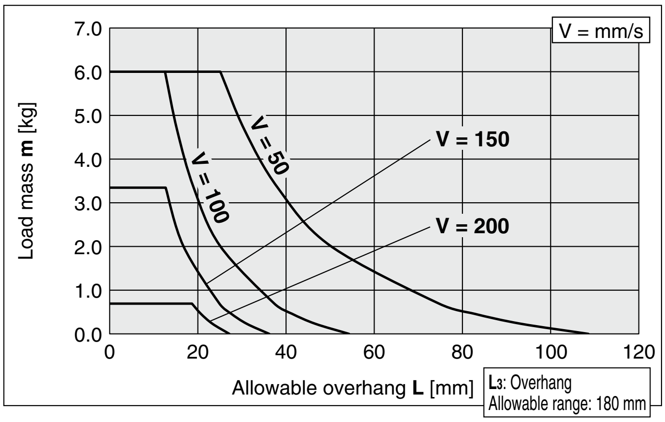
MXQ16B-10, 20, 30, 40Z□



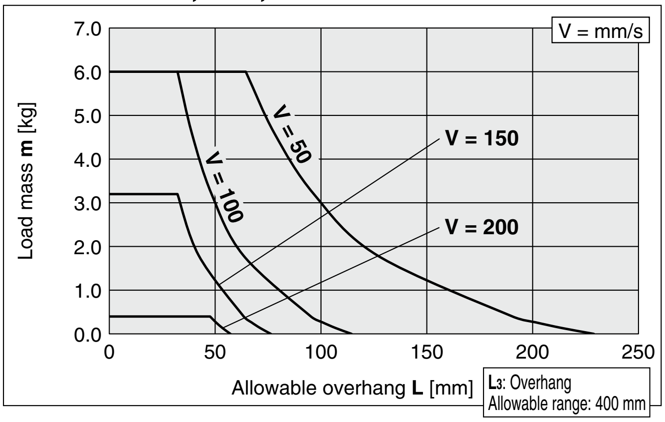
MXQ16B-50Z□



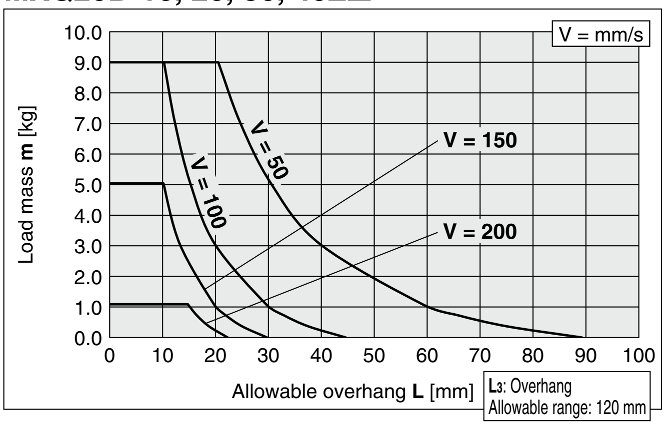
MXQ16B-75Z□



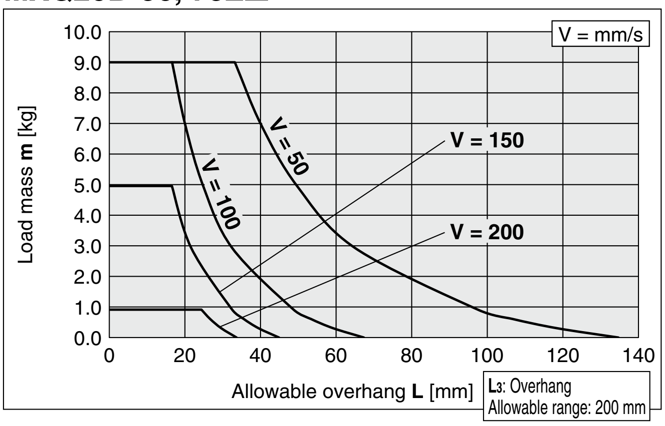
MXQ16B-100, 125, 150Z□



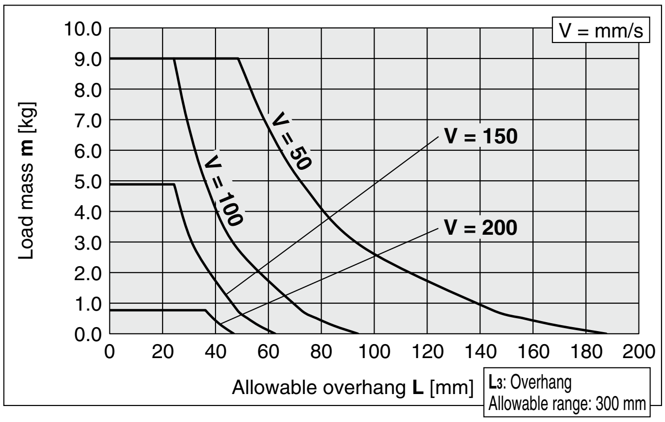
MXQ20B-10, 20, 30, 40Z□



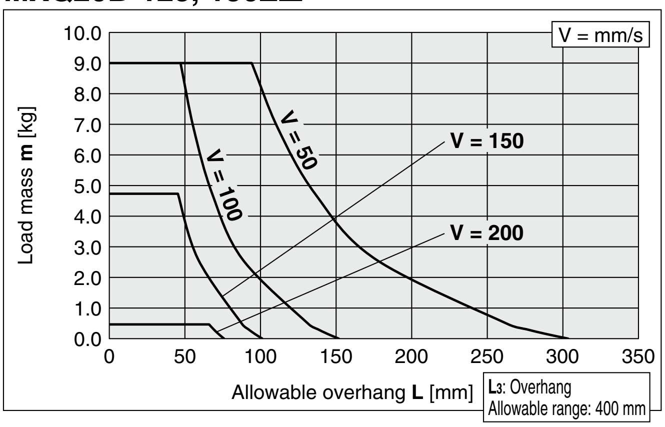
MXQ20B-50, 75Z□



MXQ20B-100Z□



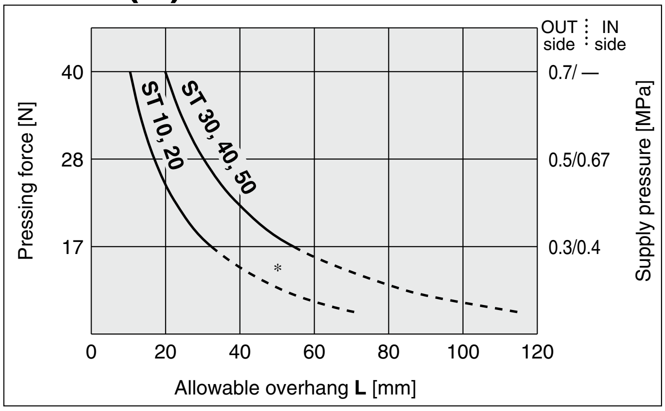
MXQ20B-125, 150Z□



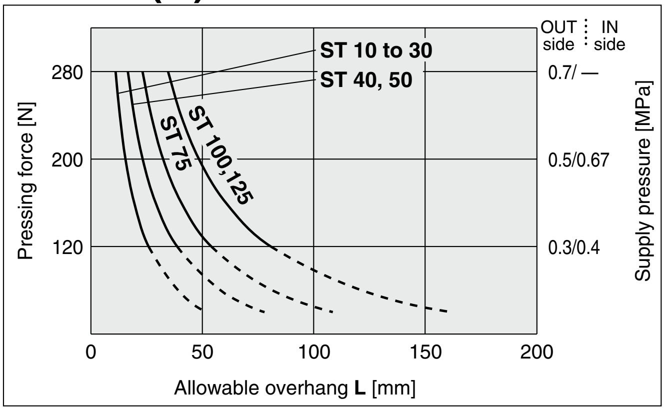
Double-ported Type, Single Side-ported Type, Height Interchangeable Type/For Pressing

Determine the overhang. (Refer to page 159 for details.)
L_1, L_2: Check from the cross point of the pressing force and driving speed.

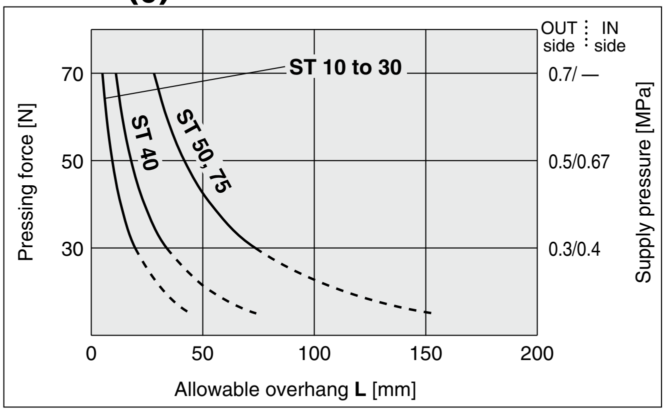
MXQ6(A)-□Z



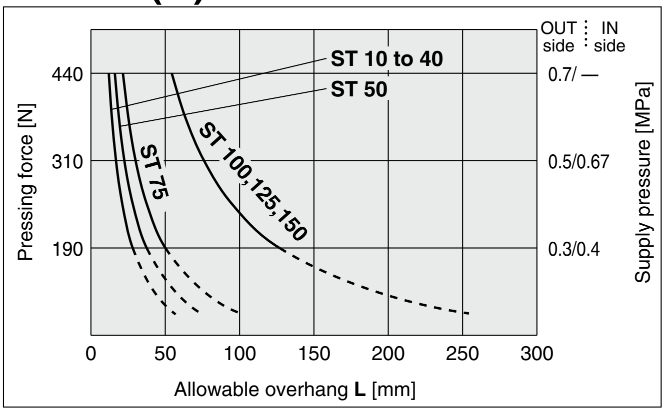
MXQ16(A)-□Z



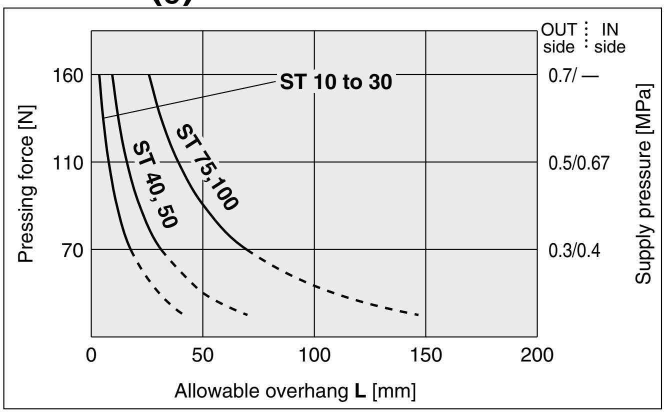
MXQ8(^A_C)-□Z



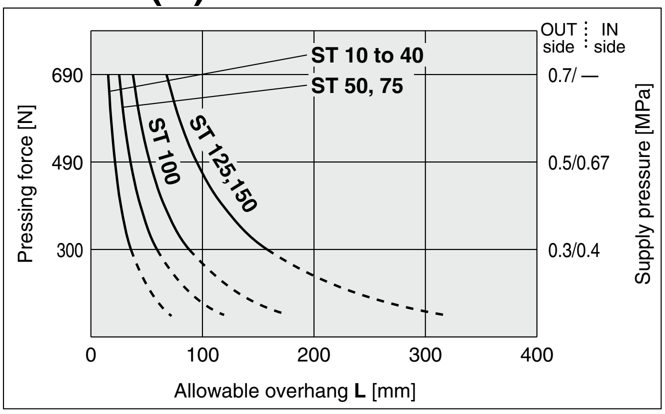
MXQ20(A)-□Z



MXQ12(^A_C)-□Z



MXQ25(A)-□Z

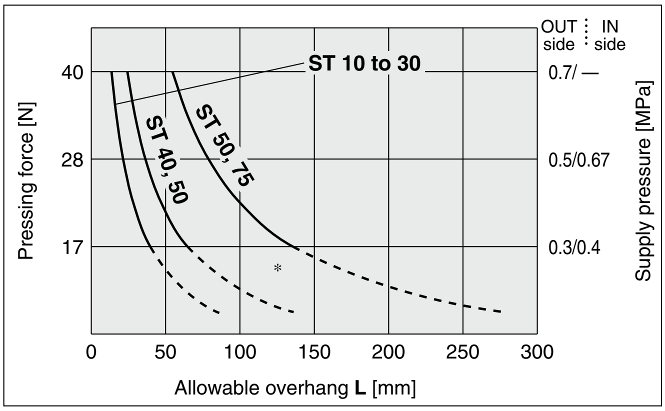


* Pressing forces that fall in the dotted line portion of the graphs are reference values as pressing forces may vary.
* ST = Stroke

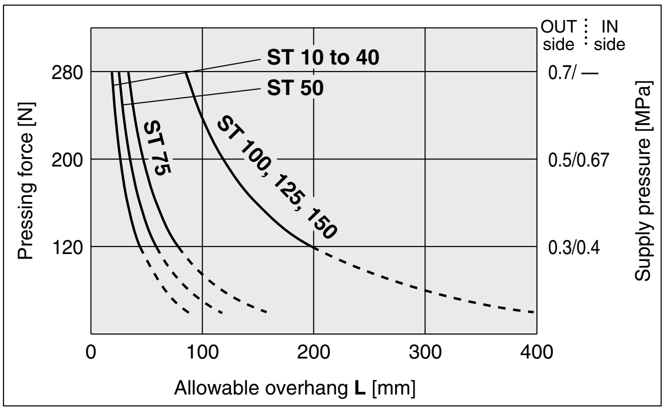
Determine the overhang. (Refer to page 159 for details.)
L_1, L_2: Check from the cross point of the pressing force and driving speed.

Low Thrust with High Rigidity Type/For Pressing

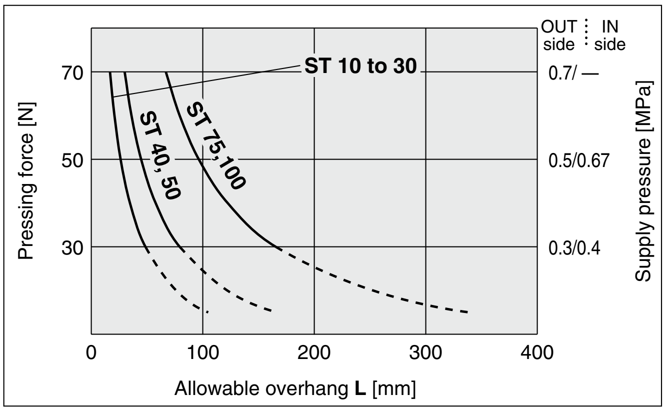
MXQ6B-□Z



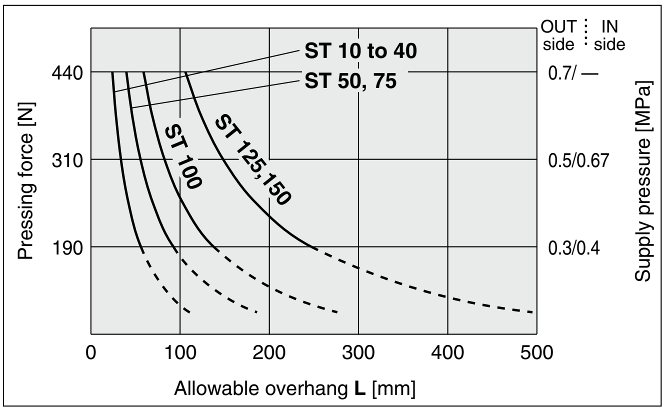
MXQ16B-□Z



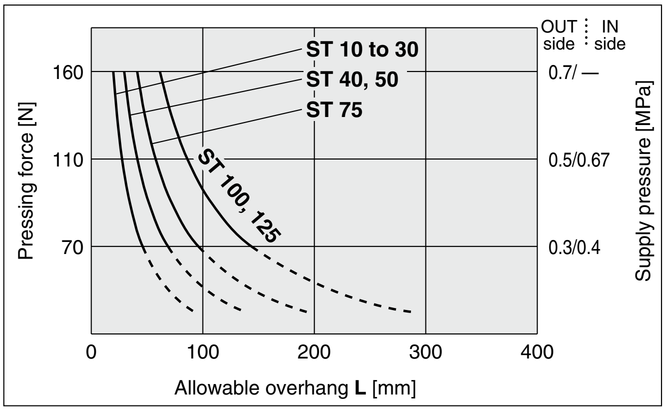
MXQ8B-□Z



MXQ20B-□Z



MXQ12B-□Z

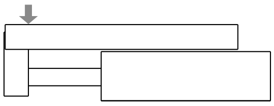


* Pressing forces that fall in the dotted line portion of the graphs are reference values as pressing force may vary.
* ST = Stroke

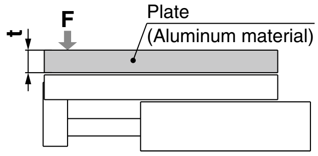
Table Deflection (Reference Values)

Table displacement due to pitch moment load

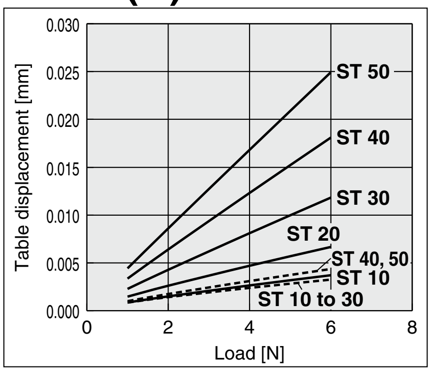
Displacement when a load is applied to the part indicated by the arrow for the entire stroke of the air slide table



The dotted line shown in the graph below shows the displacement of the portion indicated by the arrow when the plate is mounted by the customer.

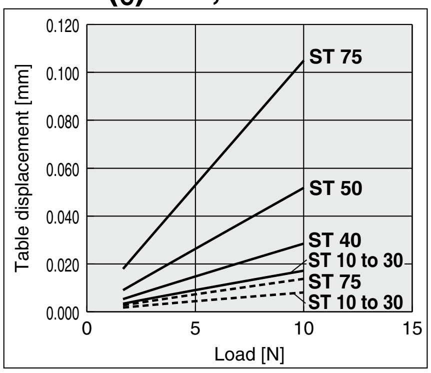


MXQ6(A)-□Z



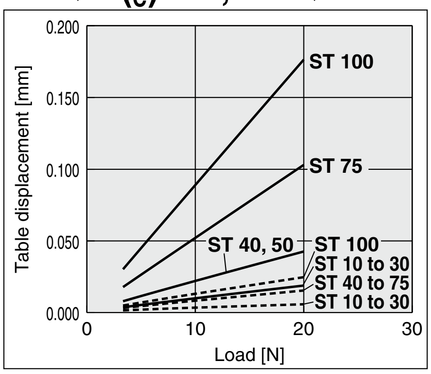
(Plate size: t = 8)

MXQ8($^{A}_{C}$)-□Z, MXQ6B-□Z



(Plate size: t = 8)

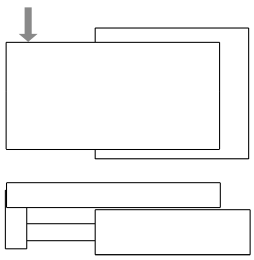
MXQ12($^{A}_{C}$)-□Z, MXQ8B-□Z



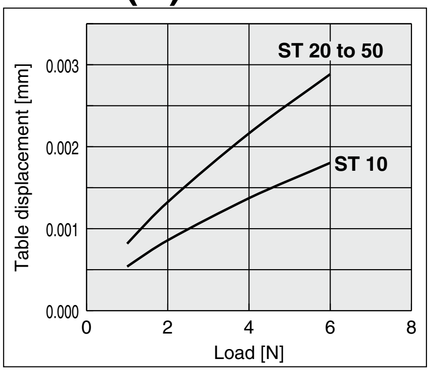
∗ ST = Stroke (Plate size: t = 10)

Table displacement due to yaw moment load

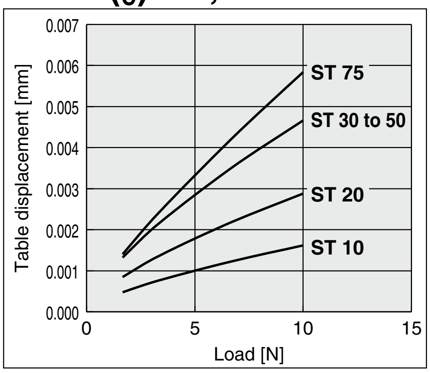
Displacement when a load is applied to the part indicated by the arrow for the entire stroke of the air slide table



MXQ6(A)-□Z



MXQ8($^{A}_{C}$)-□Z, MXQ6B-□Z



MXQ12($^{A}_{C}$)-□Z, MXQ8B-□Z

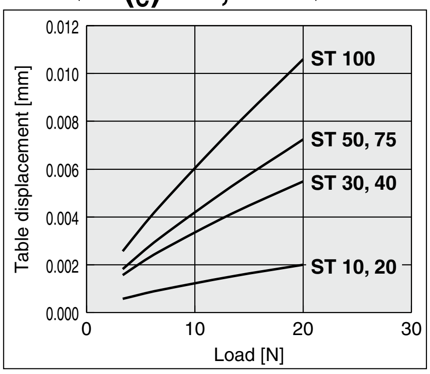
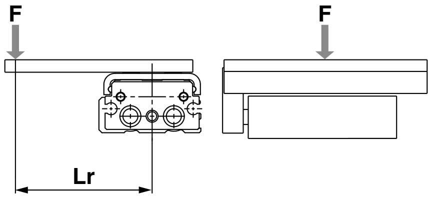


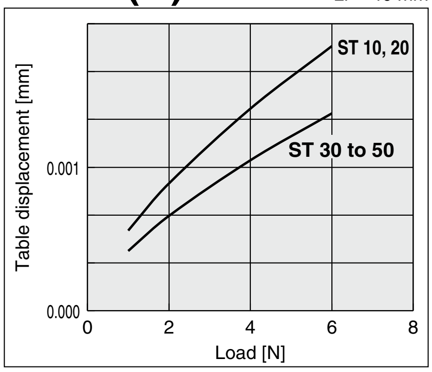
Table displacement due to roll moment load

Displacement of part F when a load is applied to part F with the air slide table retracted



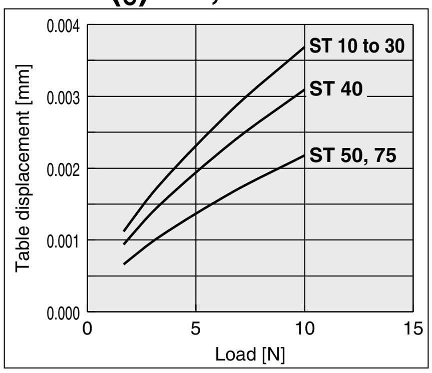
MXQ6(A)-□Z

Lr = 40 mm



Lr = 70 mm

MXQ8($^{A}_{C}$)-□Z, MXQ6B-□Z



Lr = 90 mm

MXQ12($^{A}_{C}$)-□Z, MXQ8B-□Z

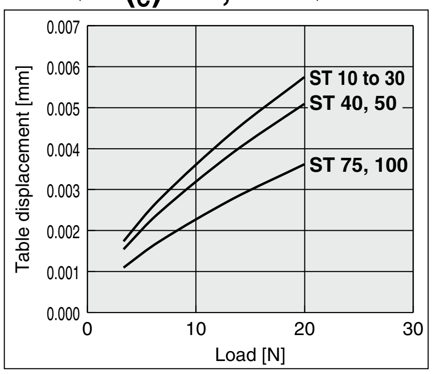
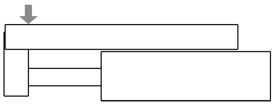


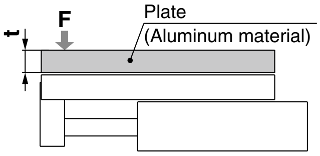
Table Deflection (Reference Values)

Table displacement due to pitch moment load

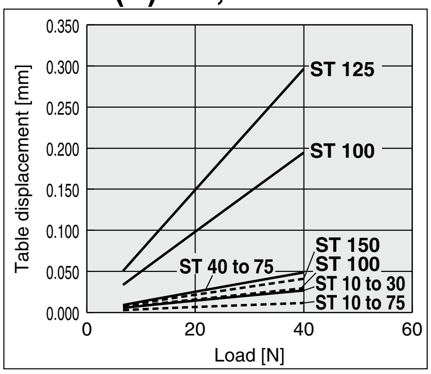
Displacement when a load is applied to the part indicated by the arrow for the entire stroke of the air slide table



The dotted line shown in the graph below shows the displacement of the portion indicated by the arrow when the plate is mounted by the customer.

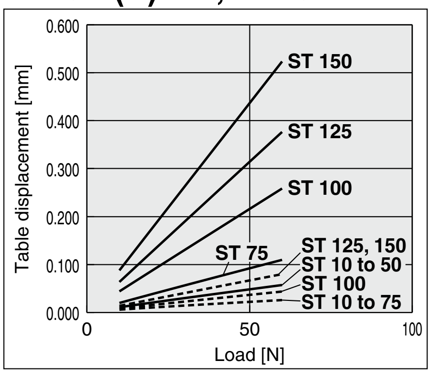


MXQ16(A)-□Z, MXQ12B-□Z



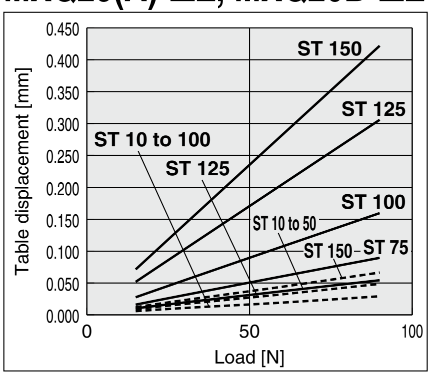
(Plate size: t = 12)

MXQ20(A)-□Z, MXQ16B-□Z



(Plate size: t = 12)

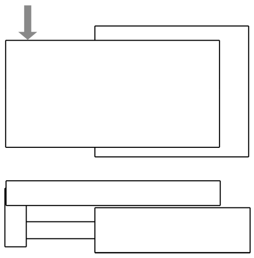
MXQ25(A)-□Z, MXQ20B-□Z



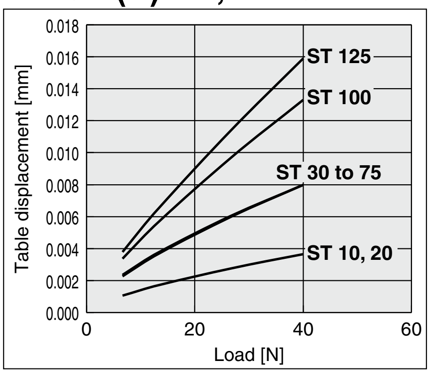
* ST = Stroke (Plate size: t = 15)

Table displacement due to yaw moment load

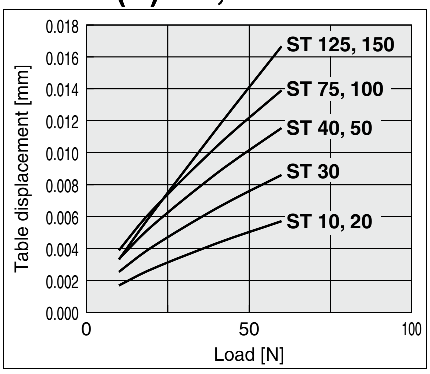
Displacement when a load is applied to the part indicated by the arrow for the entire stroke of the air slide table



MXQ16(A)-□Z, MXQ12B-□Z



MXQ20(A)-□Z, MXQ16B-□Z



MXQ25(A)-□Z, MXQ20B-□Z

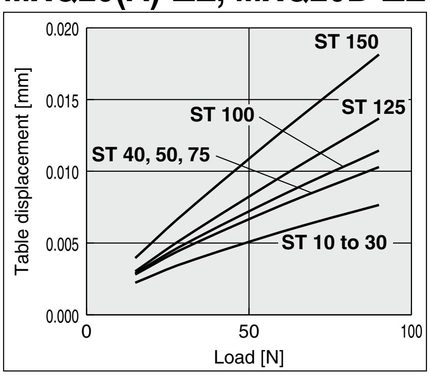
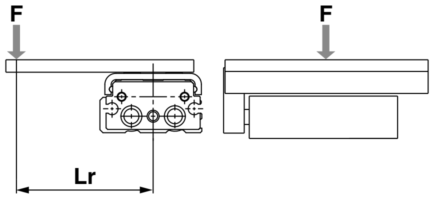


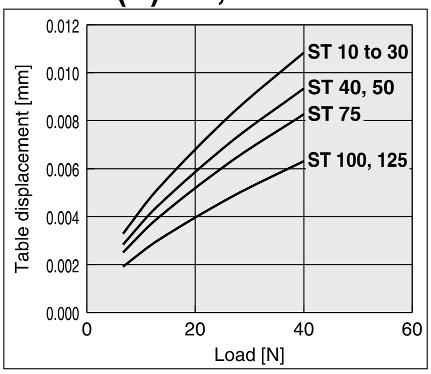
Table displacement due to roll moment load

Displacement of part F when a load is applied to part F with the air slide table retracted



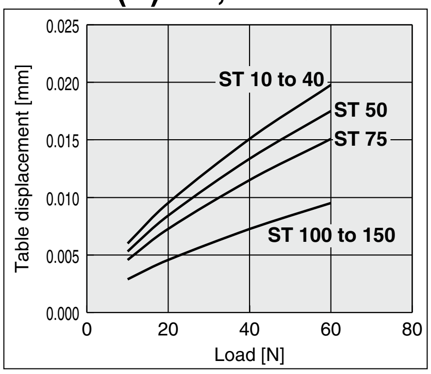
Lr = 120 mm

MXQ16(A)-□Z, MXQ12B-□Z



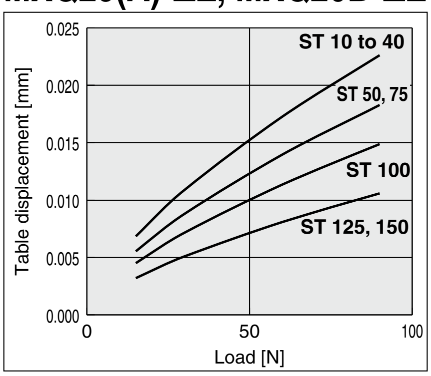
Lr = 160 mm

MXQ20(A)-□Z, MXQ16B-□Z



Lr = 200 mm

MXQ25(A)-□Z, MXQ20B-□Z



MXQ Series
Specific Product Precautions 1

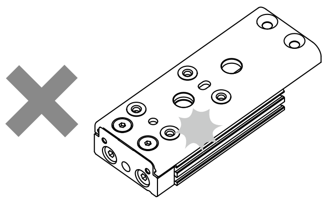
Be sure to read this before handling the products. Refer to the back cover for safety instructions. For actuator and auto switch precautions, refer to the "Handling Precautions for SMC Products" and the "Operation Manual" on the SMC website: http://www.smcworld.com

Mounting

⚠Caution

1. Do not scratch or dent the mounting side of the body, table, or end plate.
This can cause a loss of parallelism in the mounting surfaces, vibration in the guide unit, increased operating resistance, etc.

2. Do not scratch or dent the transfer surface of the rail or guide.
This could result in looseness, increased operating resistance, etc.



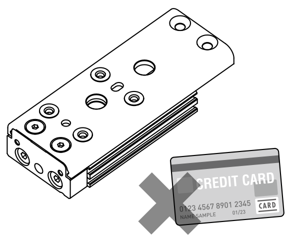
3. Do not apply excessive impact or loads when a workpiece is mounted.
If an external force over the allowable moment is applied, looseness of the guide unit or increased operating resistance may occur.

4. Flatness of mounting surface should be 0.02 mm or less.
Poor parallelism of the workpiece mounted on the body, the base, and other parts can cause vibration in the guide unit, increased operating resistance, etc.

5. Select the proper connection when connecting with a load which has external support and/or a guide mechanism on the outside, and align it properly.

6. Avoid contact with the body during operation.
Hands, etc., may get caught in the stroke adjuster. Install a cover as a safety measure if there are instances when anyone will be near the slide table during operation.

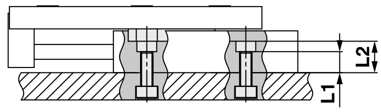
7. Keep away from objects which are influenced by magnets.
As the body magnets are built-in, do not allow close contact with magnetic disks, magnetic cards, or magnetic tapes. Data may be erased.



8. Do not touch a magnet to the table section.
Since the table is made from a magnetic substance, it could become magnetized if put in contact with a magnet, etc.
This could cause auto switches, etc., to malfunction.

9. When mounting the body, use screws of the appropriate length and do not exceed the maximum tightening torque.
Tightening with a torque above the limit could cause a malfunction. Whereas, tightening insufficiently could result in misalignment or dropping.

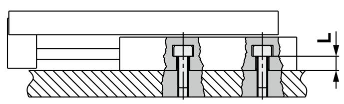
1. Body tapped



⚠Caution Types other than the MXQ20(A) and MXQ25(A) have through tapped holes. Use bolts that are at least 0.5 mm shorter than the maximum screw-in depth (L2). If long bolts are used, they may touch the end plate and cause a malfunction, etc.

Model	Bolt	Max. tightening torque [N·m]	Screw-in depth **L1** [mm]	Max. screw-in depth **L2** [mm]
MXQ6	M4 x 0.7	2.1	5	8
MXQ8	M4 x 0.7	2.1	8	11
MXQ12	M5 x 0.8	4.4	11	15
MXQ16	M6 x 1	7.4	14	19
MXQ20	M6 x 1	7.4	9	
MXQ25	M8 x 1.25	18	12	
MXQ6A	M4 x 0.7	2.1	8	11
MXQ8A	M4 x 0.7	2.1	8	11
MXQ12A	M5 x 0.8	4.4	8	12
MXQ16A	M6 x 1	7.4	12	17
MXQ20A	M6 x 1	7.4	9	
MXQ25A	M8 x 1.25	18	12	
MXQ6B	M4 x 0.7	2.1	5	8
MXQ8B	M5 x 0.8	4.4	4	9
MXQ12B	M6 x 1	7.4	7	12
MXQ16B	M6 x 1	7.4	10	15
MXQ20B	M8 x 1.25	18	14	20
MXQ8C	M4 x 0.7	2.1	6	9
MXQ12C	M5 x 0.8	4.4	8	12

2. Through hole



Model	Bolt	Max. tightening torque [N·m]	**L** [mm]
MXQ6	M3 x 0.5	1.1	5.3
MXQ8	M3 x 0.5	1.1	8.3
MXQ12	M4 x 0.7	2.7	11.5
MXQ16	M5 x 0.8	5.4	14.4
MXQ20	M5 x 0.8	5.4	19.3
MXQ25	M6 x 1	9.2	23.5
MXQ6A	M3 x 0.5	1.1	8.3
MXQ8A	M3 x 0.5	1.1	8.3
MXQ12A	M4 x 0.7	2.7	8.5
MXQ16A	M5 x 0.8	5.4	12.4
MXQ20A	M5 x 0.8	5.4	16.3
MXQ25A	M6 x 1	9.2	20.5
MXQ6B	M3 x 0.5	1.1	5.3
MXQ8B	M4 x 0.7	2.7	4.5
MXQ12B	M5 x 0.8	5.4	7.4
MXQ16B	M5 x 0.8	5.4	10.3
MXQ20B	M6 x 1	9.2	14.5
MXQ8C	M3 x 0.5	1.1	6.3
MXQ12C	M4 x 0.7	2.7	8.5

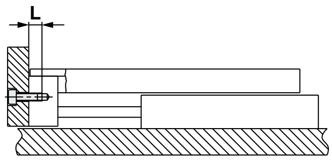
Specific Product Precautions 2

Be sure to read this before handling the products. Refer to the back cover for safety instructions. For actuator and auto switch precautions, refer to the “Handling Precautions for SMC Products” and the “Operation Manual” on the SMC website: http://www.smcworld.com

Mounting

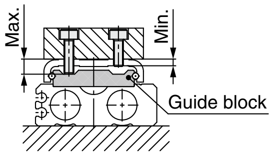
⚠Caution

3. Front mounting



Model		Bolt	Max. tightening torque [N·m]	Max. screw-in depth **L** [mm]
MXQ6(A)	—	M3 x 0.5	0.9	5
MXQ8(A, C)	**MXQ6B**	M3 x 0.5	0.9	5
MXQ12(A, C)	**MXQ8B**	M3 x 0.5	0.9	5
MXQ16(A)	**MXQ12B**	M4 x 0.7	2.1	6
MXQ20(A)	**MXQ16B**	M5 x 0.8	4.4	7
MXQ25(A)	**MXQ20B**	M6 x 1	7.4	9

4. Top mounting



⚠Caution In order to prevent the workpiece fixing bolt from hitting the table, use a bolt of a length at least 0.5 mm shorter than the maximum screw-in depth. If long bolts are used, they may touch the guide block and cause a malfunction, etc.

Model		Bolt	Max. tightening torque [N·m]	Screw-in depth [mm]	
				Max.	Min.
MXQ6(A)	—	M3 x 0.5	1.1	4.1	2.1
MXQ8(A, C)	**MXQ6B**	M3 x 0.5	1.1	4.1	2.1
MXQ12(A, C)	**MXQ8B**	M4 x 0.7	2.7	5.7	2.7
MXQ16(A)	**MXQ12B**	M5 x 0.8	5.4	7.3	3.3
MXQ20(A)	**MXQ16B**	M5 x 0.8	5.4	7.3	3.3
MXQ25(A)	**MXQ20B**	M6 x 1	9.2	9	4

10. **The positioning holes on the table and on the bottom of the body do not have the same center. Use these holes during reinstallation after the table has been removed for the maintenance of an identical product.**

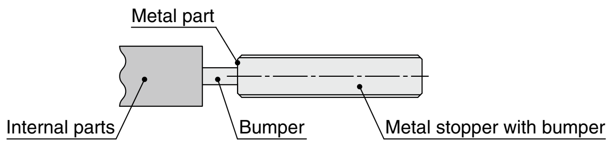
11. **When the adjuster is mounted, a moment is generated by the cylinder thrust, causing displacement of the table end at stop.**
 The displacement amount may vary depending on the supply pressure, mounting orientation, or model.

Mounting

⚠Caution

12. **When using a metal stopper with bumper, use it at the minimum operating pressure level by taking the full compression force into consideration.**
 When using a metal stopper with bumper, the cylinder output decreases by the full compression of the bumper. If the output has no allowance, the bumper will not be fully compressed to the metal, causing the stop position to be unstable. When selecting a model, pay attention to the cylinder output. (Refer to the table below.)
 In particular, when mounted upward in the vertical direction, not only the full compression force of the bumper, but also the workpiece mass should be taken into consideration.

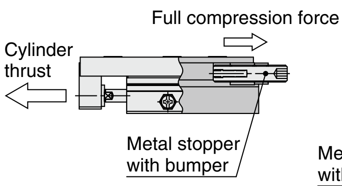
 · Horizontal: Cylinder output > Full compression force of bumper
 · Vertical: Cylinder output > Full compression force of bumper + (Workpiece mass + Mass of product moving parts)



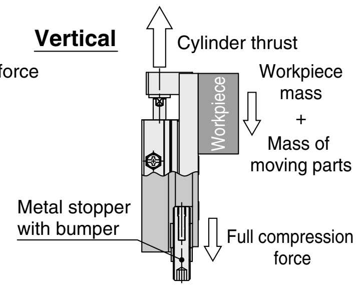
Bore size [mm]	Min. operating pressure of metal stopper with bumper [MPa]	Reference) Full compression force [N]
8	0.3	20
12	0.3	42
16	0.2	65
20	0.2	97
25	0.2	154

∗ Not available for ø6

Horizontal



Vertical



MXQ Series
Specific Product Precautions 3

Be sure to read this before handling the products. Refer to the back cover for safety instructions. For actuator and auto switch precautions, refer to the "Handling Precautions for SMC Products" and the "Operation Manual" on the SMC website: http://www.smcworld.com

Operating Environment

⚠Caution

1. Do not use in environments where the product could be exposed to liquids, such as cutting oil, etc.

Using in an environment where the product could be exposed to cutting oil, coolant, oil, etc., could result in looseness, increased operating resistance, air leakage, etc.

2. Do not use in environments where the product could be exposed directly to foreign matter, such as powder dust, blown dust, cutting chips, spatter, etc.

This could result in looseness, increased operating resistance, air leakage, etc.

3. Do not use in direct sunlight.

4. When there are heat sources in the surrounding area, block them off.

When there are heat sources in the surrounding area, radiated heat may cause the product's temperature to rise and exceed the operating temperature range. Block off the heat with a cover, etc.

5. Do not subject the product to excessive vibration and/or impact.

This can cause damage or a malfunction.

Although the table has adequate strength, if it is damaged, do not touch it with bare hands as the product may be razor-sharp. Serious injury may result.

6. Use caution for the anti-corrosiveness of the linear guide section.

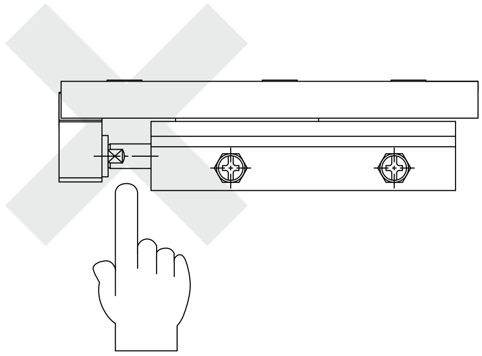
In particular, rust may be generated in environments where waterdrops are likely to adhere due to condensation, etc.

Other

⚠Warning

1. Do not put hands or fingers between the table and bracket.

Never put hands or fingers in the gap between the table and bracket when retracted. Doing so will result in injury to the hands, or fingers.



2. Be aware that smoking cigarettes, etc., after your hands have come into contact with the grease used in the cylinder section of this product can create a gas that is hazardous to humans.

⚠Caution

1. Do not disassemble or modify the product.

2. Performance stability

The piston speed in the specification table shows the average speed. The actual speed of this product may vary slightly during the stroke depending on the operating conditions, such as the change of load resistance and pressure.

⚠ Safety Instructions

These safety instructions are intended to prevent hazardous situations and/or equipment damage. These instructions indicate the level of potential hazard with the labels of **"Caution," "Warning"** or **"Danger."** They are all important notes for safety and must be followed in addition to International Standards (ISO/IEC)*1), and other safety regulations.

⚠ Caution: **Caution** indicates a hazard with a low level of risk which, if not avoided, could result in minor or moderate injury.

⚠ Warning: **Warning** indicates a hazard with a medium level of risk which, if not avoided, could result in death or serious injury.

⚠ Danger : **Danger** indicates a hazard with a high level of risk which, if not avoided, will result in death or serious injury.

*1) ISO 4414: Pneumatic fluid power – General rules relating to systems.
ISO 4413: Hydraulic fluid power – General rules relating to systems.
IEC 60204-1: Safety of machinery – Electrical equipment of machines. (Part 1: General requirements)
ISO 10218-1: Manipulating industrial robots – Safety.
etc.

⚠Warning

1. The compatibility of the product is the responsibility of the person who designs the equipment or decides its specifications.

Since the product specified here is used under various operating conditions, its compatibility with specific equipment must be decided by the person who designs the equipment or decides its specifications based on necessary analysis and test results. The expected performance and safety assurance of the equipment will be the responsibility of the person who has determined its compatibility with the product. This person should also continuously review all specifications of the product referring to its latest catalog information, with a view to giving due consideration to any possibility of equipment failure when configuring the equipment.

2. Only personnel with appropriate training should operate machinery and equipment.

The product specified here may become unsafe if handled incorrectly. The assembly, operation and maintenance of machines or equipment including our products must be performed by an operator who is appropriately trained and experienced.

3. Do not service or attempt to remove product and machinery/equipment until safety is confirmed.

1. The inspection and maintenance of machinery/equipment should only be performed after measures to prevent falling or runaway of the driven objects have been confirmed.
2. When the product is to be removed, confirm that the safety measures as mentioned above are implemented and the power from any appropriate source is cut, and read and understand the specific product precautions of all relevant products carefully.
3. Before machinery/equipment is restarted, take measures to prevent unexpected operation and malfunction.

4. Contact SMC beforehand and take special consideration of safety measures if the product is to be used in any of the following conditions.

1. Conditions and environments outside of the given specifications, or use outdoors or in a place exposed to direct sunlight.
2. Installation on equipment in conjunction with atomic energy, railways, air navigation, space, shipping, vehicles, military, medical treatment, combustion and recreation, or equipment in contact with food and beverages, emergency stop circuits, clutch and brake circuits in press applications, safety equipment or other applications unsuitable for the standard specifications described in the product catalog.
3. An application which could have negative effects on people, property, or animals requiring special safety analysis.
4. Use in an interlock circuit, which requires the provision of double interlock for possible failure by using a mechanical protective function, and periodical checks to confirm proper operation.

⚠Caution

1. The product is provided for use in manufacturing industries.

The product herein described is basically provided for peaceful use in manufacturing industries.
If considering using the product in other industries, consult SMC beforehand and exchange specifications or a contract if necessary.
If anything is unclear, contact your nearest sales branch.

Limited warranty and Disclaimer/ Compliance Requirements

The product used is subject to the following "Limited warranty and Disclaimer" and "Compliance Requirements".
Read and accept them before using the product.

Limited warranty and Disclaimer

1. The warranty period of the product is 1 year in service or 1.5 years after the product is delivered, whichever is first.*2)
   Also, the product may have specified durability, running distance or replacement parts. Please consult your nearest sales branch.
2. For any failure or damage reported within the warranty period which is clearly our responsibility, a replacement product or necessary parts will be provided.
   This limited warranty applies only to our product independently, and not to any other damage incurred due to the failure of the product.
3. Prior to using SMC products, please read and understand the warranty terms and disclaimers noted in the specified catalog for the particular products.

***2) Vacuum pads are excluded from this 1 year warranty.**
A vacuum pad is a consumable part, so it is warranted for a year after it is delivered.
Also, even within the warranty period, the wear of a product due to the use of the vacuum pad or failure due to the deterioration of rubber material are not covered by the limited warranty.

Compliance Requirements

1. The use of SMC products with production equipment for the manufacture of weapons of mass destruction (WMD) or any other weapon is strictly prohibited.
2. The exports of SMC products or technology from one country to another are governed by the relevant security laws and regulations of the countries involved in the transaction. Prior to the shipment of a SMC product to another country, assure that all local rules governing that export are known and followed.

⚠Caution

SMC products are not intended for use as instruments for legal metrology.

Measurement instruments that SMC manufactures or sells have not been qualified by type approval tests relevant to the metrology (measurement) laws of each country. Therefore, SMC products cannot be used for business or certification ordained by the metrology (measurement) laws of each country.

Revision History	
Edition B	* Excerpted from pages 35 to 163 of Best Pneumatics No. 3 (Ver. 5) * Cylinder with stable lubrication function (Lube-retainer) has been added to page 5. RZ
Edition C	* The centralized adjuster is available as standard. * Made to order (Dual stroke specification, Side adjuster specification, Combined use of shock absorber + metal stopper, etc.) options have been added. * Number of pages has been increased from 132 to 200. VR

⚠ Safety Instructions Be sure to read the "Handling Precautions for SMC Products" (M-E03-3) and "Operation Manual" before use.