

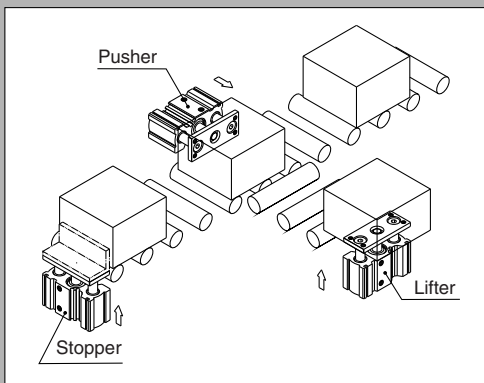
# Compact Guide Cylinder

## Series MGQ

ø12, ø16, ø20, ø25, ø32, ø40, ø50, ø63, ø80, ø100

**Air cylinder with guide integrated that has achieved anti-lateral load and high non-rotating accuracy.**

**Space-saving cylinder.**  
Suitable as stoppers or lifters in conveyor line.



**Cylinder position can be detected.**

All models have built-in magnets for auto switches.



**Two types of guide rod bearing for different applications**

### Slide bearing

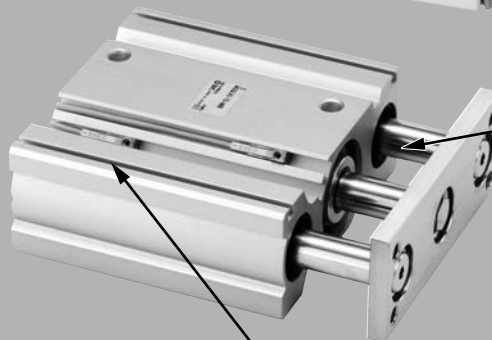
Slide bearing Strength against side load is more than 2 times as compared conventional stopper cylinder (Compared to SMC Series RSQ, round bar type).

### Ball bushing bearing

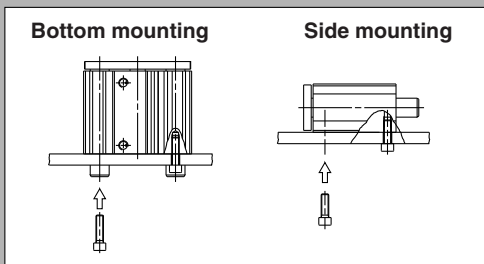
Smooth operation is suitable for pushing, lifter and applications where high precision is required.

**Non-rotating accuracy**

Bore size (mm)	Non-rotating accuracy $\theta$	
	MGQM	MGQL
12	$\pm 0.08^\circ$	$\pm 0.10^\circ$
16		
20	$\pm 0.07^\circ$	$\pm 0.09^\circ$
25		
32	$\pm 0.06^\circ$	$\pm 0.08^\circ$
40		
50	$\pm 0.05^\circ$	$\pm 0.06^\circ$
63		
80	$\pm 0.04^\circ$	$\pm 0.05^\circ$
100		

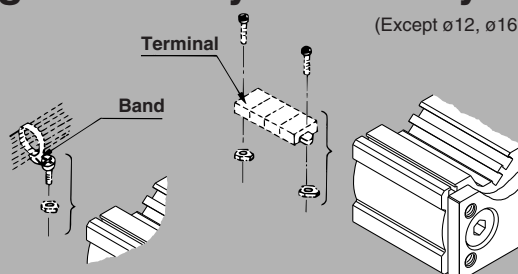


**Can be mounted from two directions**



**Auto switches, lead wires and terminals can be fixed in the groove of cylinder body.**

(Except ø12, ø16, ø20, ø25)



MGJ

MGP

MGQ

MGG

MGK

MGF

MGZ

MGT

D-□

-X□

Individual  
-X□

# Compact Guide Cylinder Series *MGQ*

ø12, ø16, ø20, ø25, ø32, ø40, ø50, ø63, ø80, ø100

## How to Order

**Compact Guide Cylinder** **MGQ** **M** **25** **—** **30** **—** **M9BW** **—** **—**

• **Compact Guide Cylinder**

• **Bearing type**

<b>M</b>	Slide bearing
<b>L</b>	Ball bushing bearing

• **Bore size**

<b>12</b>	12 mm	<b>40</b>	40 mm
<b>16</b>	16 mm	<b>50</b>	50 mm
<b>20</b>	20 mm	<b>63</b>	63 mm
<b>25</b>	25 mm	<b>80</b>	80 mm
<b>32</b>	32 mm	<b>100</b>	100 mm

• **Cylinder stroke (mm)**  
Refer to "Standard Stroke" on page 339.

• **Thread type**

<b>Nil</b>	M5 x 0.8	ø12, ø16
	Rc	
<b>TN</b>	NPT	ø20 to ø100
<b>TF</b>	G	

• **Auto switch**

<b>Nil</b>	Without auto switch (Built-in magnet)
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\* For the applicable auto switch model, refer to the table below.

• **Number of auto switches**

<b>Nil</b>	2 pcs.
<b>S</b>	1 pc.
<b>n</b>	n pcs.

• **Made to Order**  
(Refer to page 339 for details.)

## Applicable Auto Switch/Refer to pages 1719 to 1827 for further information on auto switches.

Type	Special function	Electrical entry	Indicator light	Wiring (Output)	Load voltage		Auto switch model		Lead wire length (m)				Pre-wired connector	Applicable load		
					DC		AC	Perpendicular	In-line	0.5 (Nil)	1 (M)	3 (L)		5 (Z)		
Solid state switch	—	Grommet	Yes	3-wire (NPN)	24V	5V, 12V	—	<b>M9NV</b>	<b>M9N</b>	●	●	●	○	○	IC circuit	Relay, PLC
	3-wire (PNP)			<b>M9PV</b>				<b>M9P</b>	●	●	●	○	○			
	2-wire			12V		<b>M9BV</b>		<b>M9B</b>	●	●	●	○	○	—		
	3-wire (NPN)			5V, 12V		<b>M9NWV</b>		<b>M9NW</b>	●	●	●	○	○	IC circuit		
	3-wire (PNP)					<b>M9PWV</b>		<b>M9PW</b>	●	●	●	○	○			
	2-wire			12V		<b>M9BWV</b>		<b>M9BW</b>	●	●	●	○	○	—		
Reed switch	—	Grommet	Yes	3-wire (NPN equivalent)	—	5V	—	<b>A96V</b>	<b>A96</b>	●	—	●	—	—	IC circuit	—
			No	2-wire	24V	12V	100V 100 V or less	<b>A93V</b> <b>A90V</b>	<b>A93</b> <b>A90</b>	● ●	— —	● ●	— —	— —	— IC circuit	Relay, PLC

\* Lead wire length symbols: 0.5 m ..... Nil (Example) M9NW  
 1 m ..... M (Example) M9NWM  
 3 m ..... L (Example) M9NWL  
 5 m ..... Z (Example) M9NWLZ

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

\* Since there are other applicable auto switches than listed, refer to page 351 for details.  
 \* For details about auto switches with pre-wired connector, refer to pages 1784 and 1785.  
 \* Auto switches are shipped together (not assembled).