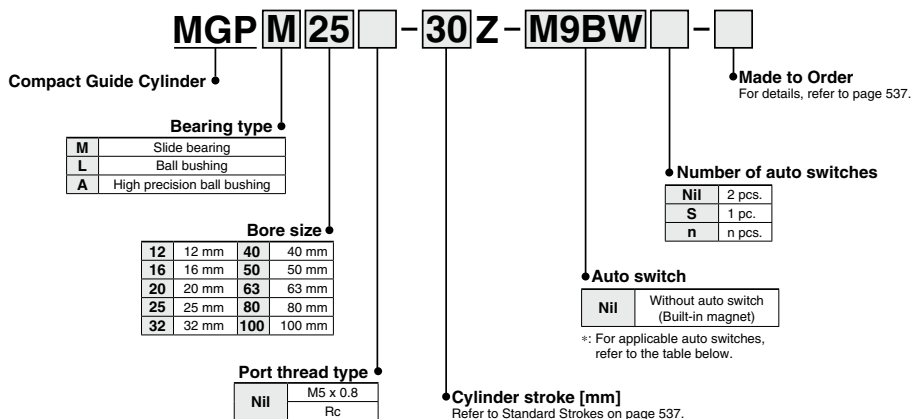


# Compact Guide Cylinder

# MGP Series

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

## How to Order



\*: For bore sizes ø12 and ø16, only M5 x 0.8 is available.

### Proposals for Improving Water and Dust-resistance

SMC offers a wide range of models suitable for various operating environments. This includes models that can be used in environments that the basic model cannot, such as those where coolant liquid, water droplets/splashing, dust, etc., are present. See below for details.

- Water resistant cylinder (➔ Refer to page 540.)
- Cylinder with stable lubrication function (Lube-retainer) (➔ Refer to page 541.)
- Dust resistant cylinder (➔ Web Catalog)

## Applicable Auto Switches/Refer to pages 1289 to 1383 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)	5 V, 12 V	—	M9NV	M9N	●	●	○	○	IC circuit		
				3-wire (PNP)			M9PV	M9P	●	●	○	○			
				2-wire	M9VB		M9B	●	●	○	○	—			
				3-wire (NPN)	M9NVV		M9NV	●	●	○	○				
	Diagnostic indication (2-color indicator)			3-wire (PNP)	M9BWW		M9BW	●	●	○	○	IC circuit			
				2-wire	M9NAV <sup>*1</sup>		M9NA <sup>*1</sup>	○	○	●	○			IC circuit	
	Water resistant (2-color indicator)			3-wire (PNP)	M9PAV <sup>*1</sup>		M9PA <sup>*1</sup>	○	○	●	○	IC circuit			
				2-wire	M9BAV <sup>*1</sup>		M9BA <sup>*1</sup>	○	○	●	○			—	
Magnetic field resistant (2-color indicator)	2-wire (Non-polar)	—	P3DWA <sup>*2</sup>	●	—	●	●	○							
	3-wire (NPN equivalent)	—	5 V	—	A96V	A96	●		—	●	—	—	IC circuit	—	
Reed auto switch	—	Grommet	No	2-wire	24 V	12 V	100 V	A93V <sup>*3</sup>	A93	●	●	●	●		—
				100 V or less	A90V	A90	●	●	—	—	—	—	IC circuit		

\*1: Water resistant type auto switches are mountable on the above models, but in such case SMC cannot guarantee water resistance.

A water resistant type cylinder is recommended for use in an environment which requires water resistance.

However, please contact SMC for water resistant products of ø12 and ø16.

\*2: The D-P3DWA□ is mountable on bore size ø25 to ø100.

\*3: 1 m type lead wire is only applicable to the D-A93.

: Lead wire length symbols: 0.5 m.....Nil (Example) M9NW  
 1 m.....M (Example) M9NWM  
 3 m.....L (Example) M9NWL  
 5 m.....Z (Example) M9NWX

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

: Other than the auto switches listed above, the D-P4DW type can be mounted. Refer to page 595 for details.

: For details about auto switches with pre-wired connector, refer to pages 1358 and 1359.

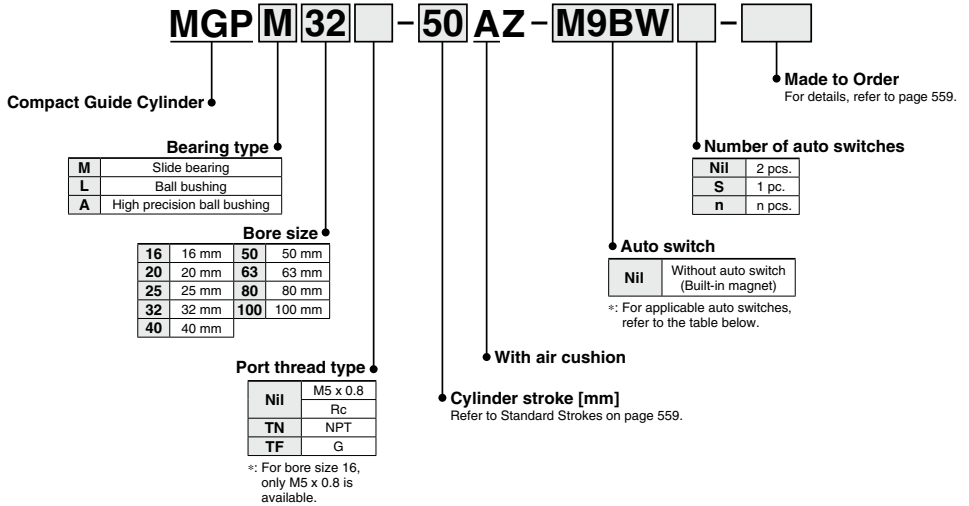
: Auto switches are shipped together, (but not assembled).

# Compact Guide Cylinder With Air Cushion

# MGP Series

∅16, ∅20, ∅25, ∅32, ∅40, ∅50, ∅63, ∅80, ∅100

## How to Order



## Applicable Auto Switches/Refer to pages 1289 to 1383 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	—	<b>M9NV</b>	<b>M9N</b>	●	●	○	○	IC circuit	Relay, PLC	
				3-wire (PNP)				<b>M9PV</b>	<b>M9P</b>	●	●	○	○			
				2-wire				<b>M9BV</b>	<b>M9B</b>	●	●	○	○			—
				3-wire (NPN)				<b>M9NVW</b>	<b>M9NW</b>	●	●	○	○			IC circuit
	Diagnostic indication (2-color indicator)	Grommet	Yes	3-wire (PNP)	24 V	5 V, 12 V	—	<b>M9PWV</b>	<b>M9PW</b>	●	●	○	○	IC circuit		
				2-wire				<b>M9BWV</b>	<b>M9BW</b>	●	●	○	○	—		
	Water resistant (2-color indicator)	Grommet	Yes	3-wire (NPN)	24 V	5 V, 12 V	—	<b>M9NAV</b> *1	<b>M9NA</b> *1	○	○	●	○	IC circuit		
				3-wire (PNP)				<b>M9PAV</b> *1	<b>M9PA</b> *1	○	○	●	○	IC circuit		
Magnetic field resistant (2-color indicator)	Grommet	Yes	2-wire	24 V	12 V	—	<b>M9BAV</b> *1	<b>M9BA</b> *1	○	○	●	○	—			
			2-wire (Non-polar)				—	<b>P3DWA</b> *2	●	—	●	●	○	—		
Reed auto switch	—	Grommet	Yes	3-wire (NPN equivalent)	24 V	5 V	—	<b>A96V</b>	<b>A96</b>	●	—	●	—	IC circuit	—	
				2-wire				100 V	<b>A93V</b> *3	<b>A93</b>	●	●	●	●		—
			No	2-wire	24 V	12 V	100 V or less	<b>A90V</b>	<b>A90</b>	●	—	●	—	IC circuit	—	

\*1: Water resistant type auto switches are mountable on the above models, but in such case SMC cannot guarantee water resistance.

A water resistant type cylinder is recommended for use in an environment which requires water resistance.

However, please contact SMC for water resistant products of ∅12 and ∅16.

\*2: The D-P3DWA□ is mountable on bore size ∅25 to ∅100.

\*3: 1 m type lead wire is only applicable to the D-A93.

\*: Lead wire length symbols: 0.5 m.....Nil (Example) M9NW  
 1 m.....M (Example) M9NWM  
 3 m.....L (Example) M9NWL  
 5 m.....Z (Example) M9NWX

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

\*: Other than the auto switches listed above, the D-P4DW type can be mounted. Refer to page 595 for details.

\*: For details about auto switches with pre-wired connector, refer to pages 1358 and 1359.

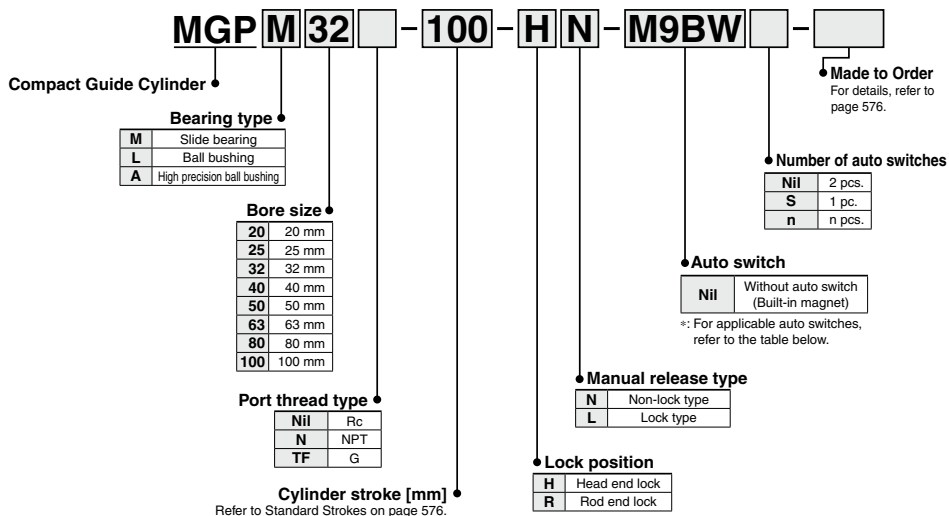
\*: Auto switches are shipped together, (but not assembled).

# Compact Guide Cylinder/With End Lock

# MGP Series

∅20, ∅25, ∅32, ∅40, ∅50, ∅63, ∅80, ∅100

## How to Order



## Applicable Auto Switches

Refer to pages 1289 to 1383 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)	5 V, 12 V	—	M9NV	M9N	●	●	●	○	○	IC circuit	Relay, PLC		
				3-wire (PNP)			M9PV	M9P	●	●	●	○	○				
				2-wire	M9BV		M9B	●	●	●	○	○	—				
				3-wire (NPN)	M9NVV		M9NV	●	●	●	○	○	IC circuit				
	Diagnostic indication (2-color indicator)			3-wire (PNP)	M9PWW		M9PW	●	●	●	○	○	○	○		—	
				2-wire	M9BWW		M9BW	●	●	●	○	○	○	○		—	
	Water resistant (2-color indicator)			3-wire (NPN)	M9NAV <sup>*1</sup>		M9NA <sup>*1</sup>	○	○	○	●	●	○	○		○	IC circuit
				3-wire (PNP)	M9PAV <sup>*1</sup>		M9PA <sup>*1</sup>	○	○	○	●	●	○	○		○	IC circuit
Magnetic field resistant (2-color indicator)	2-wire (Non-polar)	M9BAV <sup>*1</sup>	M9BA <sup>*1</sup>	○	○	○	○	○	○	○	○	—					
	—	—	P3DWA	●	—	●	●	○	○	○	○	—					
Reed auto switch	—	Grommet	Yes	3-wire (NPN equivalent)	—	5 V	A96V	A96	●	—	●	—	—	—	IC circuit	—	
				2-wire			100 V	A93V <sup>*2</sup>	A93	●	●	●	●	—	—	—	Relay, PLC
				2-wire	24 V	100 V or less	A90V	A90	●	—	●	—	—	—	—	IC circuit	—

\*1: Water resistant type auto switches can be mounted on the above models, but in such case SMC cannot guarantee water resistance. Please consult with SMC regarding water resistant types with the above model numbers.

\*2: 1 m type lead wire is only applicable to the D-A93.

\*: Lead wire length symbols: 0.5 m.....Nil (Example) M9NW  
1 m.....M (Example) M9NWM  
3 m.....L (Example) M9NL  
5 m.....Z (Example) M9NWZ

\*: Solid state auto switches marked with "○" are produced upon receipt of order.  
\*: Bore sizes 32 to 100 are available for D-P4DW□.  
\*: Bore sizes 25 to 100 are available for D-P3DWA□.

\*: Since there are other applicable auto switches than listed above, refer to page 595 for details.

\*: For details about auto switches with pre-wired connector, refer to pages 1358 and 1359.

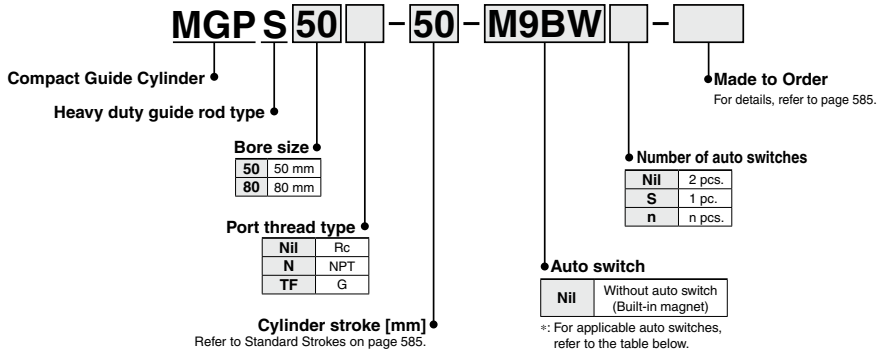
\*: Auto switches are shipped together, (but not assembled).

# Compact Guide Cylinder/ Heavy Duty Guide Rod Type

# MGPS Series

ø50, ø80

## How to Order



### Applicable Auto Switches

Refer to pages 1289 to 1383 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)	Applicable load			
													IC circuit		Relay, PLC	
Solid state auto switch	—	Grommet	Yes	3-wire (NPN)	5 V, 12 V	—	M9NV	M9N	●	●	●	○	○	IC circuit	Relay, PLC	
				3-wire (PNP)			M9PV	M9P	●	●	●	○	○			
				2-wire	M9BV		M9B	●	●	●	○	○	IC circuit			
				3-wire (NPN)	M9NVV		M9NV	●	●	●	○	○				
	Diagnostic indication (2-color indicator)			3-wire (PNP)	M9PWW		M9PW	●	●	●	○	○	IC circuit			
				2-wire	M9BWW		M9BW	●	●	●	○	○		—		
	Water resistant (2-color indicator)			3-wire (NPN)	M9NAV <sup>*1</sup>		M9NA <sup>*1</sup>	○	○	●	○	○	IC circuit			
				3-wire (PNP)	M9PAV <sup>*1</sup>		M9PA <sup>*1</sup>	○	○	●	○	○				
Magnetic field resistant (2-color indicator)	2-wire (Non-polar)	M9BAV <sup>*1</sup>	M9BA <sup>*1</sup>	○	○	●	○	○	—							
	—	—	P3DWA	●	—	●	●	○								
Reed auto switch	—	Grommet	Yes	3-wire (NPN equivalent)	—	5 V	A96V	A96	●	—	●	—	—	IC circuit	—	
				2-wire	24 V	12 V	100 V	A93V <sup>*2</sup>	A93	●	●	●	—	—		Relay, PLC
			No			100 V or less	A90V	A90	●	—	●	—	—	IC circuit	PLC	

\*1: Water resistant type auto switches can be mounted on the above models, but in such case SMC cannot guarantee water resistance.

Please consult with SMC regarding water resistant types with the above model numbers.

\*2: 1 m type lead wire is only applicable to the D-A93.

\*: Lead wire length symbols: 0.5 m..... Nil (Example) M9NW  
 1 m..... M (Example) M9NWM  
 3 m..... L (Example) M9NWL  
 5 m..... Z (Example) M9NWX

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

\*: Since there are other applicable auto switches than listed above, refer to page 595 for details.

\*: For details about auto switches with pre-wired connector, refer to pages 1358 and 1359.

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