

# Parallel Type Air Gripper 3-Finger Type Through-hole Type

# MHSH3 Series

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

## How to Order

**MHSH 3 - 32 D - M9BW**

**Through-hole**

**Dust cover**

Nil	None
J	With dust cover

Note) ø16, ø20 and ø25 are not available with dust cover.

**Number of fingers**

3	3 fingers
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**Port thread type**

Symbol	Type	Cylinder bore
Nil	M thread	ø16 to ø63
TN	NPT	ø80
TF	G	

**Bore size**

Symbol	Type	Cylinder bore	
16	16 mm	40	40 mm
20	20 mm	50	50 mm
25	25 mm	63	63 mm
32	32 mm	80	80 mm

**Center pusher**

Nil	Without center pusher
A	Cylinder type
B	Spring type

Note) ø16, ø20 and ø25 are not available with center pusher.

**Dust cover type (with dust cover only)**

Nil	Chloroprene rubber (CR)
F	Fluororubber (FKM)
S	Silicone rubber

**Number of auto switches**

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

Made to Order Refer to page 603 for details.

Note) Symbol entry examples when mounting auto switches on air gripper with cylinder type center pusher

- Air gripper unit ..... 1 pc. } Total of 2 pcs. → Nil  
Center pusher unit ..... 1 pc. } MHSH3-32DA-M9N
- Air gripper unit ..... 2 pcs. } Total of 4 pcs. → Enter "4"  
Center pusher unit ..... 2 pcs. } MHSH3-32DA-M9N4

**Action**

D	Double acting
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**Auto switch**

Nil	Without auto switch (Built-in magnet)
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### Applicable Auto Switches /Refer to pages 797 to 850 for further information on auto switches.

\* For the applicable auto switch model, refer to the table below.

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				M9BV	M9B	●	●	●	○	○			○	
				3-wire (NPN)				M9NwV	M9Nw	●	●	●	○	○			○	IC circuit
				3-wire (PNP)				M9PwV	M9Pw	●	●	●	○	○			○	
				2-wire				M9BwV	M9Bw	●	●	●	○	○			○	○
	Diagnostic (2-color indicator)	Grommet	Yes	3-wire (NPN)	24 V	5 V, 12 V	—	M9NAV**	M9NA**	○	○	●	○	○	IC circuit			
				3-wire (PNP)				M9PAV**	M9PA**	○	○	●	○	○				
				2-wire				M9BAV**	M9BA**	○	○	●	○	○			○	
				3-wire (NPN)				M9NAV**	M9NA**	○	○	●	○	○			IC circuit	
				3-wire (PNP)				M9PAV**	M9PA**	○	○	●	○	○				
				2-wire				M9BAV**	M9BA**	○	○	●	○	○			○	
Water resistant (2-color indicator)	Grommet	Yes	3-wire (NPN)	24 V	5 V, 12 V	—	M9NAV**	M9NA**	○	○	●	○	○	IC circuit				
			3-wire (PNP)				M9PAV**	M9PA**	○	○	●	○	○					
			2-wire				M9BAV**	M9BA**	○	○	●	○	○		○			
			3-wire (NPN)				M9NAV**	M9NA**	○	○	●	○	○		IC circuit			
			3-wire (PNP)				M9PAV**	M9PA**	○	○	●	○	○					
			2-wire				M9BAV**	M9BA**	○	○	●	○	○		○			

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

\* 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 a "○" symbol are produced upon receipt of order.

Note) When using the 2-color indicator type, please make the setting so that the indicator is lit in red to ensure the detection at the proper position of the air gripper.

### Center pusher assembly

**MHSH 3 - A 50 A - M9BW**

**Through-hole**

**Number of fingers**

3	3 fingers
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**Bore size**

32	32 mm
40	40 mm
50	50 mm
63	63 mm
80	80 mm

**Center pusher assembly**

**Center pusher**

A	Cylinder type
B	Spring type

**Number of auto switches**

Nil	2 pcs.
S	1 pc.

**Auto switch (Cylinder type only)**

Nil	Without auto switch (Built-in magnet)
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Made to Order Refer to page 603 for details.

\* For the applicable auto switch model, refer to the table below.

### Applicable Auto Switches /Refer to pages 797 to 850 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				M9BV	M9B	●	●	●	○	○			○
				3-wire (NPN)				M9NwV	M9Nw	●	●	●	○	○			IC circuit
				3-wire (PNP)				M9PwV	M9Pw	●	●	●	○	○			
				2-wire				M9BwV	M9Bw	●	●	●	○	○			○
	Diagnostic (2-color indicator)	Grommet	Yes	3-wire (NPN)	24 V	5 V, 12 V	—	M9NAV**	M9NA**	○	○	●	○	○	IC circuit		
				3-wire (PNP)				M9PAV**	M9PA**	○	○	●	○	○			
				2-wire				M9BAV**	M9BA**	○	○	●	○	○			○
				3-wire (NPN)				M9NAV**	M9NA**	○	○	●	○	○			IC circuit
				3-wire (PNP)				M9PAV**	M9PA**	○	○	●	○	○			
				2-wire				M9BAV**	M9BA**	○	○	●	○	○			○
Water resistant (2-color indicator)	Grommet	Yes	3-wire (NPN)	24 V	5 V, 12 V	—	M9NAV**	M9NA**	○	○	●	○	○	IC circuit			
			3-wire (PNP)				M9PAV**	M9PA**	○	○	●	○	○				
			2-wire				M9BAV**	M9BA**	○	○	●	○	○		○		
			3-wire (NPN)				M9NAV**	M9NA**	○	○	●	○	○		IC circuit		
			3-wire (PNP)				M9PAV**	M9PA**	○	○	●	○	○				
			2-wire				M9BAV**	M9BA**	○	○	●	○	○		○		

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

\* 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 a "○" symbol are produced upon receipt of order.

Note) When using the 2-color indicator type, please make the setting so that the indicator is lit in red to ensure the detection at the proper position of the air gripper.