

Parallel Style Air Gripper with Dust Cover

Series *MHZJ2*

How to Order

MHZJ2-16 D - M9BW

Number of fingers

2	2 fingers
---	-----------

Bore size

6	6 mm
10	10 mm
16	16 mm
20	20 mm
25	25 mm

Action

D	Double acting
S	Single acting (Normally open)
C	Single acting (Normally closed)

Body option
 * ø6 is only applicable with basic type.

Made to Order
 Refer to page 425 for details.

Number of auto switches

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

Auto switch

Nil	Without auto switch (Built-in magnet)
-----	---------------------------------------

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

Dust cover type

Nil	Chloroprene rubber (CR)
F	Fluororubber (FKM)
S	Silicon rubber (Si)

Port

Nil: Basic type

E: End boss type Side ported (Double acting / Single acting)

W: End boss type Axial ported with ø4 One-touch fitting for coaxial tubing (Double acting)

K: End boss type Axial ported with ø4 One-touch fitting for coaxial tubing (Single acting)

M: End boss type Axial ported with M5 port (Single acting)

Applicable Auto Switch/Refer to pages 761 to 809 for further information on the auto switch.

Type	Special function	Electrical entry	Indicator light	Wiring (Output)	Load voltage		Auto switch model		Lead wire length (m) *				Applicable model					Pre-wired connector	Applicable load			
							Electrical entry direction		0.5 (Nil)	1 (M)	3 (L)	5 (Z)	ø6	ø10	ø16	ø20	ø25					
					DC	AC	Perpendicular	In-line														
Solid state switch	—	Grommet	Yes	3-wire (NPN)	5 V, 12 V	—	M9NV	M9N	●	●	●	○	●	●	●	●	●	○	IC circuit	Relay, PLC		
				F8N			—	●	—	●	○	●	—	●	●	●	—					
				M9PV			M9P	●	●	●	○	●	●	●	●	●	○					
				F8P			—	●	—	●	○	●	—	●	●	●	—					
				M9BV			M9B	●	●	●	○	●	●	●	●	●	○					
				F8B			—	●	—	●	○	●	—	●	●	●	—					
	Diagnosis (2-color indicator)			3-wire (NPN)	5 V, 12 V		M9NWV	M9NW	●	●	●	○	●	●	●	●	●	●	○		IC circuit	
				3-wire (PNP)			M9PWV	M9PW	●	●	●	○	●	●	●	●	●	○				
				2-wire			M9BWV	M9BW	●	●	●	○	●	●	●	●	●	○				
				3-wire (NPN)			5 V, 12 V	M9NAV	M9NA	○	○	●	○	●	●	●	●	●	○			IC circuit
				3-wire (PNP)				M9PAV	M9PA	○	○	●	○	●	●	●	●	●	○			
				2-wire				12 V	M9BAV	M9BA	○	○	●	○	●	●	●	●	●			

* 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.

Note 1) Take note of hysteresis with 2-color indication type switches. Refer to page 438 for detailed auto switch specifications.

Note 2) When using a D-F8□ switch on sizes ø6, mount it at a distance of 10 mm or more from magnetic substances such as iron, etc.

Specifications

Fluid			Air
Operating pressure	Double acting		ø6: 0.15 to 0.7 MPa ø10: 0.2 to 0.7 MPa ø16 to ø25: 0.1 to 0.7 MPa
	Single acting	Normally open	ø6: 0.3 to 0.7 MPa ø10: 0.35 to 0.7 MPa ø16 to ø25: 0.25 to 0.7 MPa
		Normally closed	
Ambient and fluid temperature			−10 to 60°C
Repeatability			±0.01 mm
Max. operating frequency			180 c.p.m.
Lubrication			Not required
Action			Double acting, Single acting
Auto switch (option) ^{Note)}			Solid state auto switch (3-wire, 2-wire)

Note) Refer to pages 761 to 809 for further information on auto switches.

Model

Action		Model	Bore size (mm)	Gripping force ^{Note 1)}		Opening/ Closing stroke (Both sides) (mm)	^{Note 2)} Mass (g)
				Gripping force per finger Effective value (N)			
				External	Internal		
Double acting		MHZJ2- 6D	6	3.3	6.1	4	28
		MHZJ2-10D	10	9.8	17	4	60
		MHZJ2-16D	16	30	40	6	130
		MHZJ2-20D	20	42	66	10	250
		MHZJ2-25D	25	65	104	14	460
Single acting	Normally open	MHZJ2- 6S	6	1.9	—	4	28
		MHZJ2-10S	10	6.3		4	60
		MHZJ2-16S	16	24		6	130
		MHZJ2-20S	20	28		10	255
		MHZJ2-25S	25	45		14	465
	Normally closed	MHZJ2- 6C	6	—	3.7	4	28
		MHZJ2-10C	10		12	4	60
		MHZJ2-16C	16		31	6	130
		MHZJ2-20C	20		56	10	255
		MHZJ2-25C	25		83	14	460

Note 1) Values based on pressure of 0.5 MPa, gripping point L = 20 mm, at center of stroke.

Note 2) Values excluding mass of auto switch.

Option

●Body Option/End Boss Type

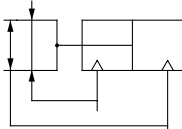
Symbol	Piping port location	Type of piping port				Applicable model	
		MHZJ2-10	MHZJ2-16	MHZJ2-20	MHZJ2-25	Double acting	Single acting
Nil	Basic type	M3 x 0.5		M5 x 0.8		●	●
E	Side ported	M3 x 0.5		M5 x 0.8		●	●
W	Axial ported	With $\phi 4$ One-touch fitting for coaxial tubing				●	—
K	Axial ported	With $\phi 4$ One-touch fitting				—	●
M	Axial ported	M5 x 0.8				—	●

* For detailed body option specifications, refer to option specifications on pages 434 and 435.

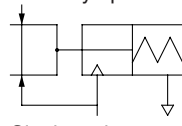


JIS Symbol

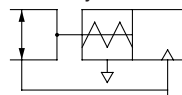
Double acting



Single acting type, Normally open



Single acting type, Normally closed



Refer to pages 436 to 440 for the specifications with auto switch.

- Auto switch installation examples and mounting positions
- Auto switch hysteresis
- Auto switch mounting
- Protrusion of auto switch from edge of body



Made to Order

(Refer to pages 683 to 713 for details.)

Symbol	Specifications/Description
-X4	Heat resistance (100°C)
-X5	Fluororubber seal
-X7	Closing direction spring assist
-X12	Opening direction spring assist
-X50	Without magnet
-X53	EPDM seal/Fluorine grease
-X56	Axial ported type
-X63	Fluorine grease
-X64	Finger: Side tapped mounting
-X65	Finger: Through-hole mounting
-X77A	Dust cover adhesion
-X77B	Dust cover adhesion (Finger part only)
-X78A	Dust cover caulking
-X78B	Dust cover caulking (Finger part only)
-X79	Grease for food