

# Magnet Gripper

## Adsorbs and Holds with a Magnet

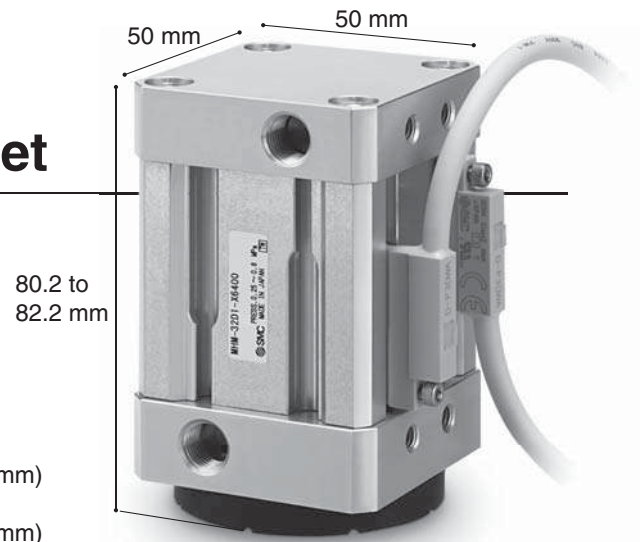
■ **Steel plates can be transferred without a vacuum.**

Supports workpieces with holes and uneven surfaces where a vacuum pad cannot be used.

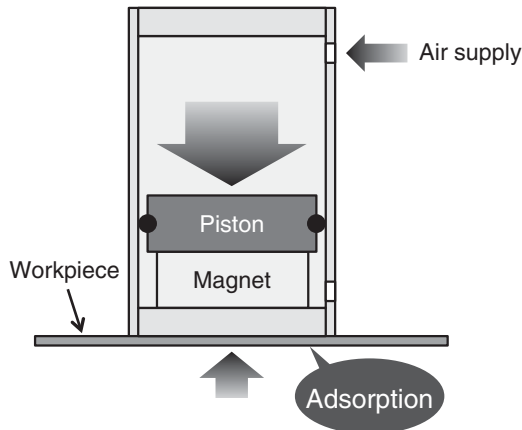
■ **Holds workpieces even when air is shut off.**

■ **High holding force** **80 N** (Workpiece plate thickness: 0.6 mm)  
**120 N** (Workpiece plate thickness: 1.4 mm)

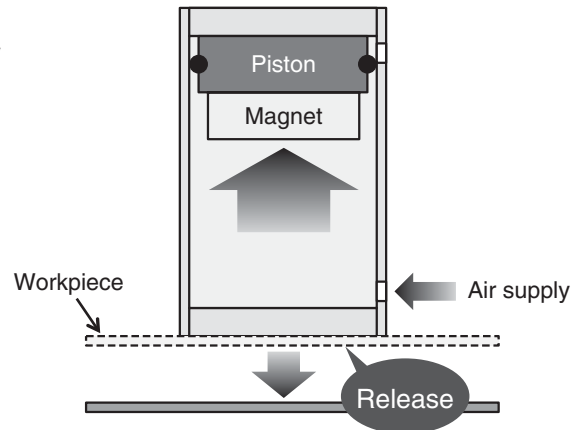
■ **Residual holding force 0.3 N or less** (Reduces workpiece release time)



Workpiece adsorption/holding



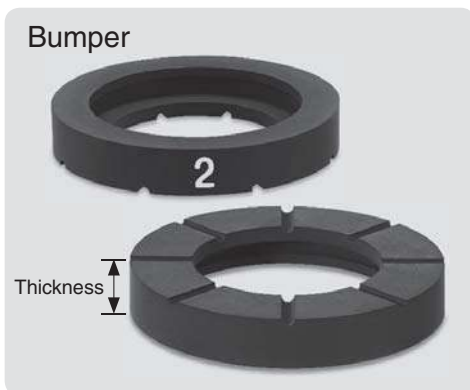
Workpiece release



■ **Holding force can be adjusted with a bumper with 3 types of thicknesses.**

Thickness	Holding force
6 mm	80 N
7 mm	50 N
8 mm	30 N

Prevents deformation of workpieces and accidental adsorption of a second piece. Fluororubber with excellent oil resistance is used. Has a contact surface structure which reduces sideslip. Bumper can be replaced without a tool.



■ **Auto switches can be mounted on 4 surfaces.**

Magnetic field resistant auto switch:

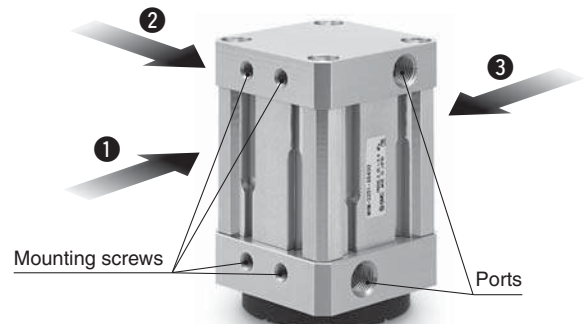
D-P3DWA

Small auto switch:

D-M9□V



■ **Mountable on 3 surfaces.**



**MHM-X6400**

# Magnet Gripper MHM-X6400

## How to Order

MHM-32D **1** - **P3DWAL** - **□** - X6400

### Holding force

Symbol	Holding force
1	80 N
2	50 N
3	30 N

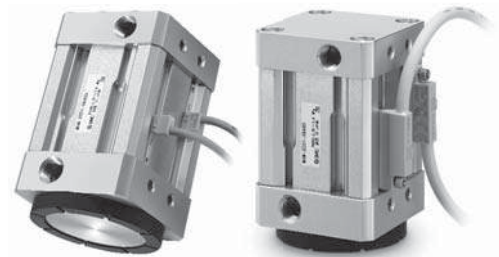
### Number of auto switches

—	2
S	1

### Auto switch

—	Without auto switch
P3DWA□	D-P3DWA□
M9□V	D-M9□V□

\*: For applicable auto switches, refer to the table below.



**Applicable Auto Switches:** Refer to Auto Switch Guide on [www.smc.eu](http://www.smc.eu) for further information on auto switches.

### Magnetic Field Resistant Auto Switches

Type	Auto switch model	Applicable magnetic field	Electrical entry	Indicator light	Wiring (Pin no. in use)	Load voltage	Lead wire length	Applicable load
Solid state auto switch	P3DWASC	AC magnetic field (Single-phase AC welding magnetic field)	Pre-wired connector	2-colour	2-wire (3-4)	24 V DC	0.3 m 0.5 m 3 m 5 m	Relay, PLC
	P3DWASE				2-wire (1-4)			
	P3DWA		Grommet		2-wire			
	P3DWAL							
	P3DWAZ							

### Small 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		0.5 (-)	1 (M)	3 (L)	5 (Z)		IC circuit	Relay, PLC					
Solid state auto switch	—	Grommet	Yes	3-wire (NPN)	24 V	—	M9NV	●	●	●	○	○			IC circuit	Relay, PLC			
				3-wire (PNP)				●	●	●	○	○							
				2-wire				●	●	●	○	○							
				3-wire (NPN)				●	●	●	○	○							
				3-wire (PNP)				●	●	●	○	○							
	2-wire			●	●	●		○	○	—									
	Diagnostic indication (2-colour indicator)			24 V	—	—		3-wire (NPN)	24 V	—	M9WV	●	●	●	○		○	IC circuit	Relay, PLC
								3-wire (PNP)				●	●	●	○		○		
								2-wire				●	●	●	○		○		
								3-wire (NPN)				○	○	●	○		○		
3-wire (PNP)		○	○				●	○				○							
Water resistant (2-colour indicator)	24 V	—	—	2-wire	24 V	—	M9BV	○	○	●		○	○	IC circuit	Relay, PLC				
				3-wire (NPN)				○	○	●		○	○						
				3-wire (PNP)				○	○	●		○	○						
				2-wire				○	○	●		○	○						

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

\*: For details about auto switches with pre-wired connectors, refer to Auto Switch Guide.

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

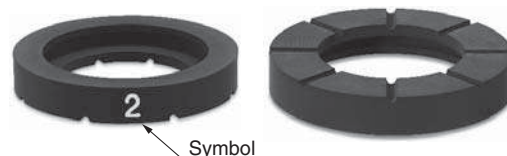
\*: Lead wire length symbols: 0.5 m ..... — (Example) M9WV  
1 m ..... M (Example) M9WVM  
3 m ..... L (Example) M9WVL  
5 m ..... Z (Example) M9WVZ

## Specifications

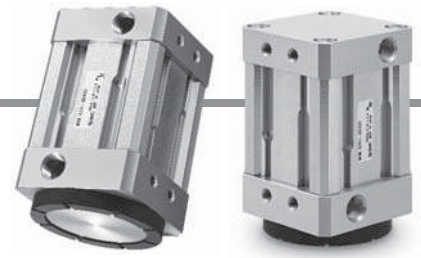
<b>Action</b>	Double acting	
<b>Fluid</b>	Air	
<b>Operating pressure</b>	0.25 to 0.6 MPa	
<b>Ambient and fluid temperature</b>	-10 to 60 °C (No freezing)	
<b>Holding force</b>	MHM-32D1-X6400	80 N
<b>(Workpiece thickness: 0.6 mm)</b>	MHM-32D2-X6400	50 N
	MHM-32D3-X6400	30 N
<b>Residual holding force</b>	0.3 N or less	
<b>Lubrication</b>	Non-lube	
<b>Weight</b>	475 g	

## Bumper Order No.

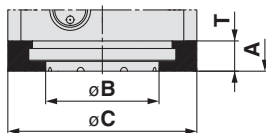
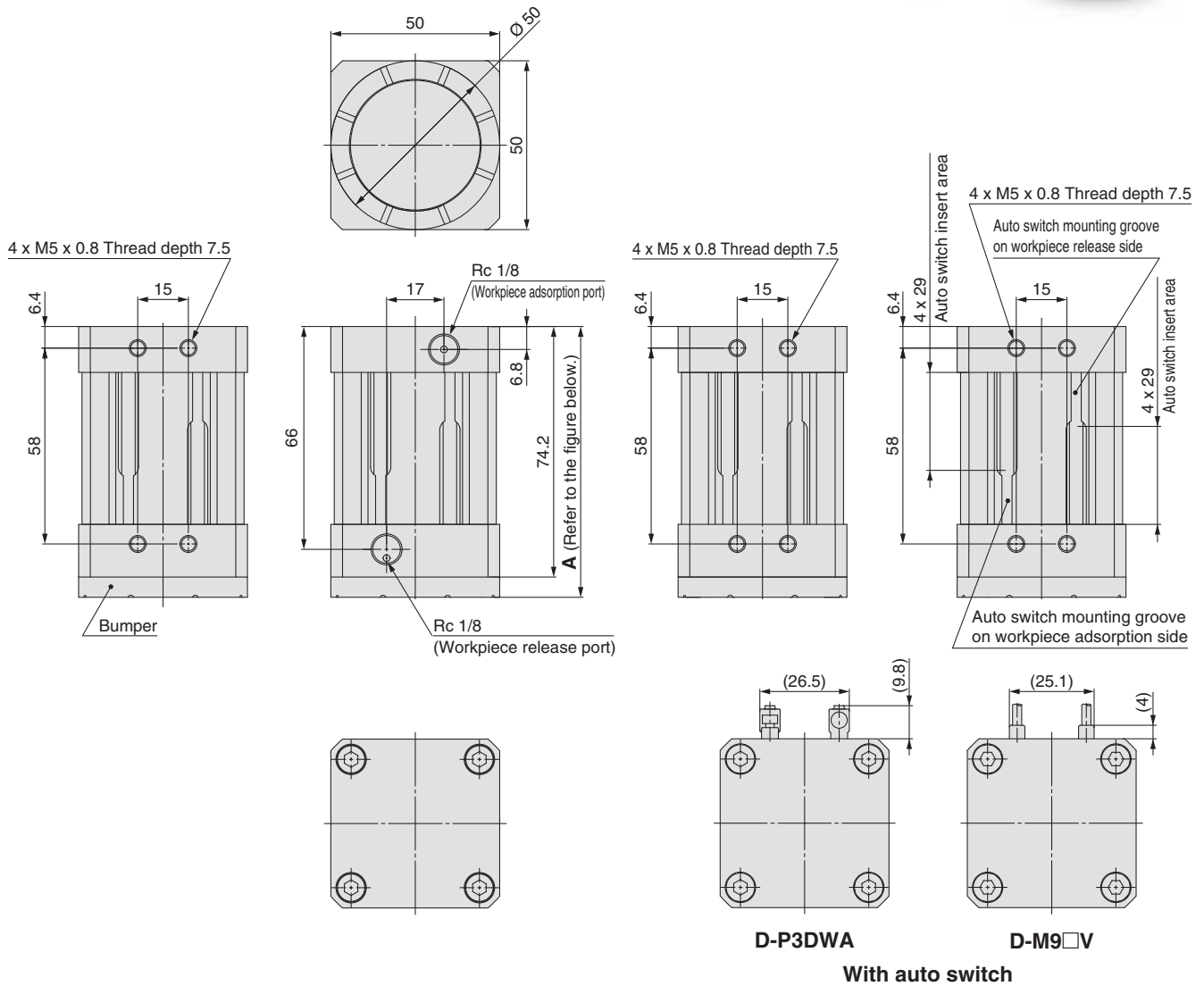
Symbol	Holding force	Model
1	80 N	MHM-A3201-1-X6400
2	50 N	MHM-A3201-2-X6400
3	30 N	MHM-A3201-3-X6400



Symbol



## Dimensions



Symbol	Part number	A	$\varnothing B$	$\varnothing C$	T
1	MHM-32D1-X6400	80.2	39	50	(6)
2	MHM-32D2-X6400	81.2	30		(7)
3	MHM-32D3-X6400	82.2			(8)

**Bumper dimensions**

## ⚠ Caution

- Since a thin plate is used for the metal surface on the end, damage may occur when an impact load is applied due to contact with a workpiece. Be sure to attach a bumper before use, and check and adjust operation so that no impact load is applied to the metal surface.
- 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 (IDK series) to the actuator will prevent dew condensation from occurring. For details, refer to the IDK series in the catalogue on [www.smc.eu](http://www.smc.eu).



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