



**Air Gripper Unit** 

for Collaborative Robots

Mitsubishi Electric Corporation collaborative robot

**MELFA ASSISTA** compliant







# **Air Gripper Unit** for Collaborative Robots

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**MELFA ASSISTA compliant** 

- Compact, lightweight product with high gripping force due to air operation
- An air gripper that realizes high rigidity and high precision due to its guide-integrated construction

With high-precision linear guide

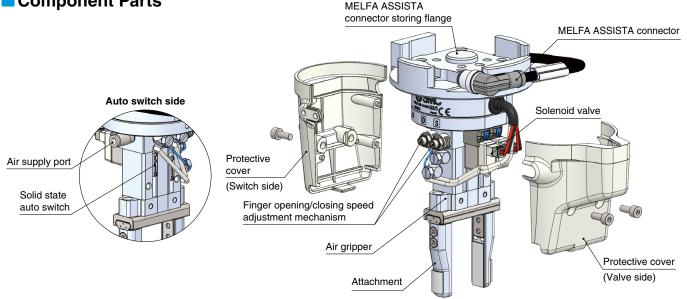
Repeatability:  $\pm 0.01$  mm

Linear guide of the higher rigidity and precision is used.

Higher rigidity (Compared with the same size of the existing MHZ2)

- Operate by simply connecting 1 air supply tube and an electrical wiring M12 connector.
- Integrated solenoid valve, speed adjustment mechanism, and auto switch
- A split protective cover for easy air gripper maintenance Allows you to maintain the air gripper without removing the user-specific attachment

Component Parts



# How to Order



JMHZ2-16D-X7400B-ASSISTA-P

# Auto switch output type

Symbol	Auto switch model	Output type
Nil	D-M9N-5	NPN
P	D-M9P-5	PNP

# **Specifications**

Bore size [mm]	16	
Fluid	Air	
Action	Double acting	
Operating pressure [MPa]	0.1 to 0.7	
Repeatability [mm]	±0.01	
Gripping force	External	32.7
Effective value per finger [N]	Internal	43.5
Opening/Closing stroke (Both	10	
Weight [g]	680	
Standards	ISO 9409-1-31.5-4-M5	
Auto switch model	D-M9P-5, D-M9N-5	
Connector type	M12 8-pin connector (Plug)	

■ Included parts: Connector storing flange, Mounting bolt, Positioning pin, Coil tube for piping (ø4), Piping fittings (2 types)



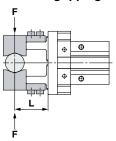
# **Characteristics**

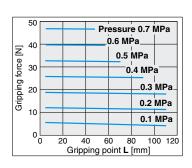
## **Gripping force**

#### Indication of effective gripping force

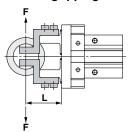
The gripping force shown in the graphs below represents the gripping force of one finger when all fingers and attachments are in contact with the workpiece.  $\mathbf{F} = \text{One}$  finger thrust

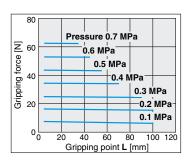
#### **External gripping force**





# Internal gripping force

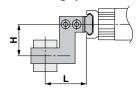


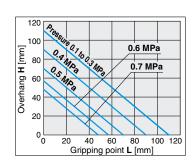


#### **Gripping point**

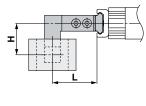
- The air gripper should be operated so that the workpiece gripping point "L" and the amount of overhang "H" stay within the range shown for each operating pressure given in the graphs below.
- If the workpiece gripping point goes beyond the range limits, this will have an adverse effect on the life of the air gripper.

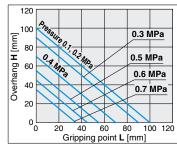
#### **External grip**



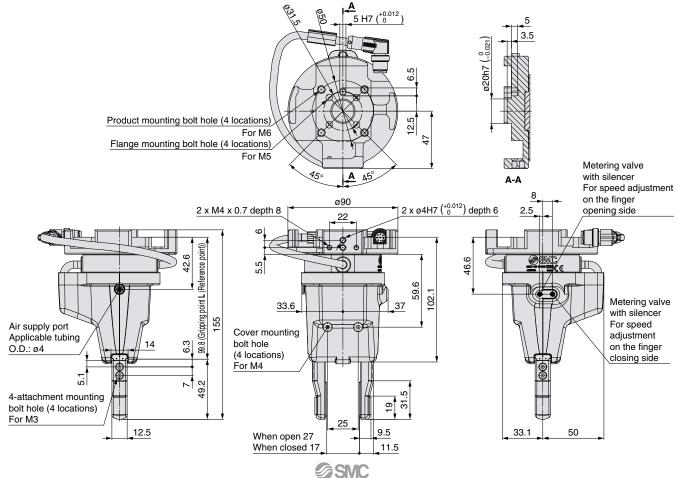


#### Internal grip





## **Dimensions**





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