



# **Air Gripper Unit**

for Collaborative Robots

YASKAWA Electric Corporation collaborative robots MOTOMAN-HC10/HC10DT compliant





# Air Gripper Unit for Collaborative Robots

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**MOTOMAN-HC10/HC10DT** 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

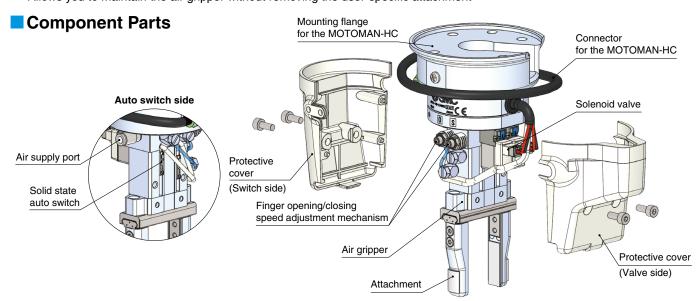
With high-precision linear guide

Repeatability: ±0.01 mm

Linear guide of the higher rigidity and precision is used.

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

- 1 air supply tube and the electric wiring can be operated simply by connecting the annex cable.
- 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



#### **How to Order**



JMHZ2-16D-X7400B-HC10-P

#### Compatible robot •

	•	
HC10	MOTOMAN-HC10	
HC10DT	MOTOMAN-HC10DT	

 The supplied flange differs depending on the product number.

Auto switch output type

Symbol	Auto switch model	Output type
N	D-M9N-5	NPN
Р	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					
Number of fingers	2					
Gripping force	External	32.7				
Effective value per finger [N]	Internal	43.5				
Opening/Closing stroke (Both	10					
Weight [g]	720					

■Included parts: Robot mounting flange, piping tube, cable fixture, accessory cable



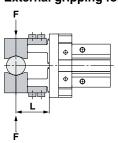
### **Model Selection**

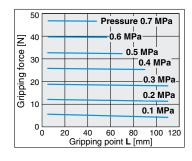
#### **Gripping force**

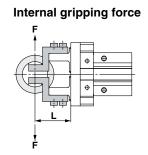
#### Indication of effective gripping force

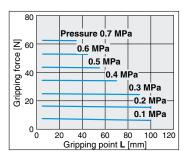
The gripping force shown in the graphs below represents the gripping force of one finger when all fingers and attachments are in contact with the workpiece.  $\mathbf{F} = \text{One}$  finger thrust

#### **External gripping force**





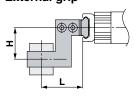


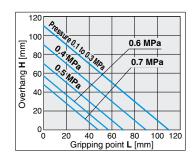


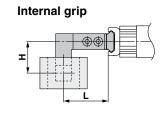
#### **Gripping point**

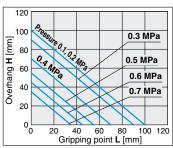
- The air gripper should be operated so that the workpiece gripping point "L" and the amount of overhang "H" stay within the range shown for each operating pressure given in the graphs below.
- If the workpiece gripping point goes beyond the range limits, this will have an adverse effect on the life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

#### **External grip**





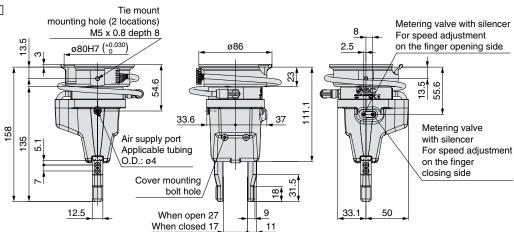




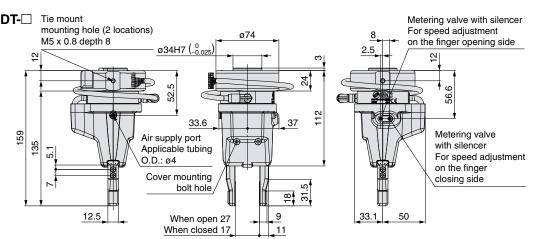
#### **Dimensions**

## JMHZ2-16D-X7400B-HC10-□

Air gripper unit for the MOTOMAN-HC10



JMHZ2-16D-X7400B-HC10DT
Air gripper unit mounting to M5 x 0.8 d more the MOTOMAN-HC10DT





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