

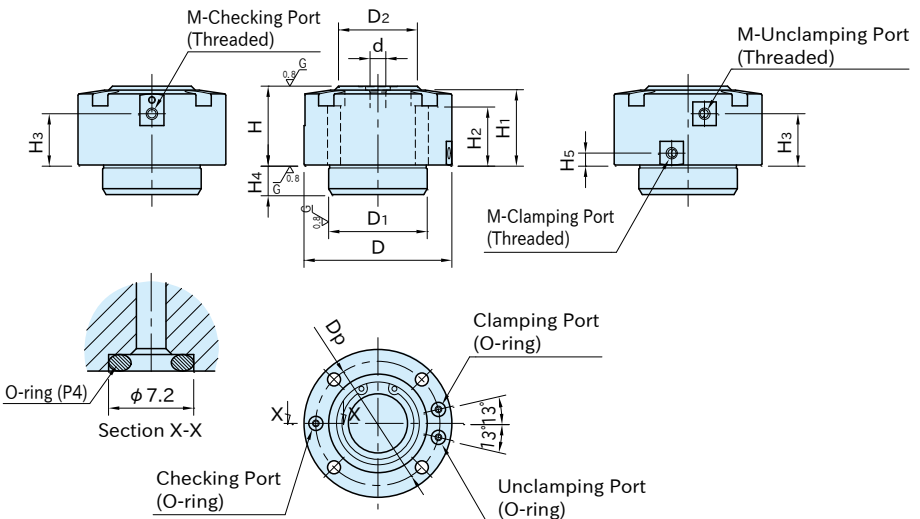
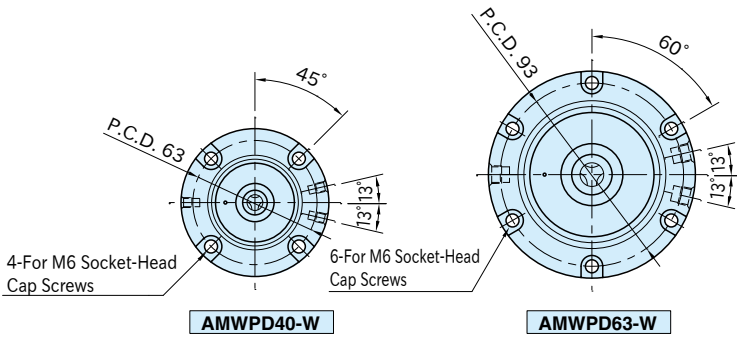
# AMWPD-W

# PNEUMATIC PULL CLAMPS



★ **Key Point**  
High clamping force by wedge mechanism.

| Body                             | Cylinder        |
|----------------------------------|-----------------|
| S45C steel                       | SCM440 steel    |
| Induction hardened (top surface) | Nitrocarburized |
| Black oxide finished             |                 |
| Precision ground                 |                 |



| Part Number      | d (F7) | D <sub>2</sub> | H (±0.01) | D   | H <sub>1</sub> | D <sub>1</sub> (g6) | H <sub>4</sub> | H <sub>2</sub> | Dp *) | M      | H <sub>3</sub> | H <sub>5</sub> |
|------------------|--------|----------------|-----------|-----|----------------|---------------------|----------------|----------------|-------|--------|----------------|----------------|
| <b>AMWPD40-W</b> | 8      | 40             | 40        | 75  | 38             | 50                  | 15             | 30             | 63    | M5×0.8 | 26             | 6              |
| <b>AMWPD63-W</b> | 12     | 63             | 50        | 105 | 47             | 75                  | 19             | 35             | 88    | Rc1/8  | 31             | 10             |

| Part Number      | Furnished O-ring | Operating Air Pressure (MPa) | Clamping Force (kN)** | Weight (kg) |
|------------------|------------------|------------------------------|-----------------------|-------------|
| <b>AMWPD40-W</b> | P4               | 0.3~1.0                      | 1                     | 1.3         |
| <b>AMWPD63-W</b> |                  |                              | 2.5                   | 3.2         |

\*) The dimensions above are for ports with o-ring.

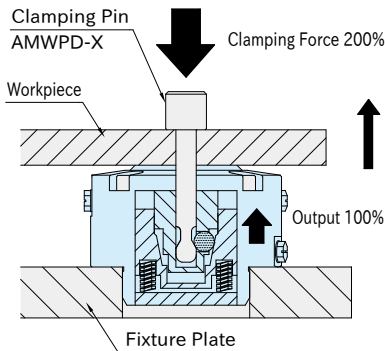
\*\*) The clamping forces above are at 0.5 MPa.

### Feature

#### ■ High Clamping Force

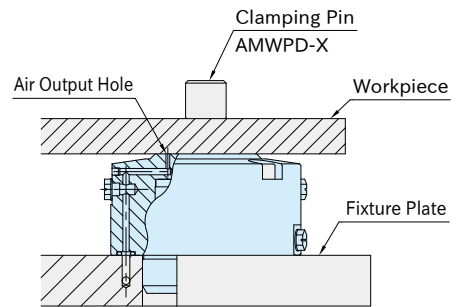
- Wedge mechanism increases clamping force to 200% compared to the air cylinder of the same size.
  - When the air pressure is lowered by such as an air leakage, wedge mechanism prevents prompt lowering of the clamping force.
- Clamping Force at 0 Mpa Air Pressure (by spring force)

- AMWPD40-W···160N
- AMWPD63-W···500N



#### ■ Checking Hole

Can check if the workpiece is clamped properly by applying air through the checking hole.



### Technical Information

#### ■ Allowable Counterforce (Per Clamp)

| Part Number                          | Max. load(N)       |
|--------------------------------------|--------------------|
| <b>AMWPD40-W</b><br><b>AMWPD63-W</b> | Clamping force × 2 |

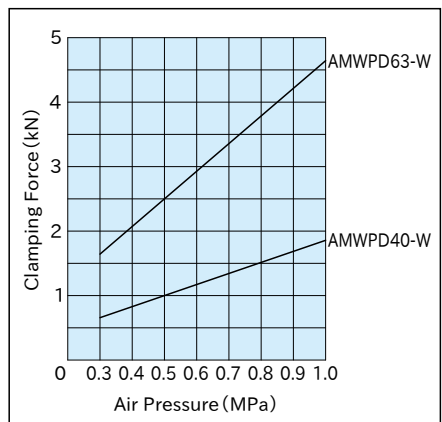
### Related Product

- AMWPD-X** CLAMPING PINS
- AMWPD-M** CLAMPING SCREWS

### Note

- Use clean air by removing dust with filter or draining with dryer.
- Impure compressed air may cause malfunction of the products.
- Using lubricator is recommended.

### Performance Curve

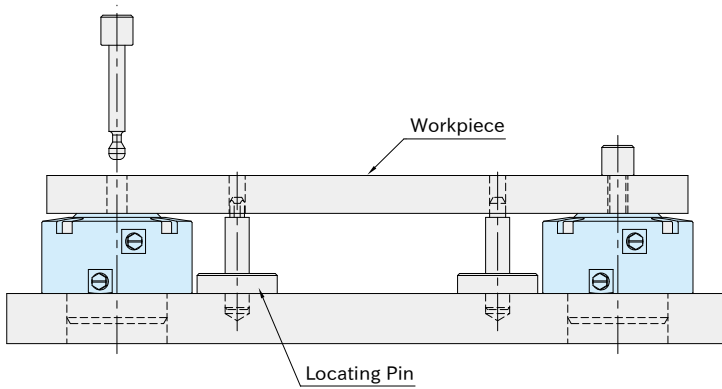


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## How To Use

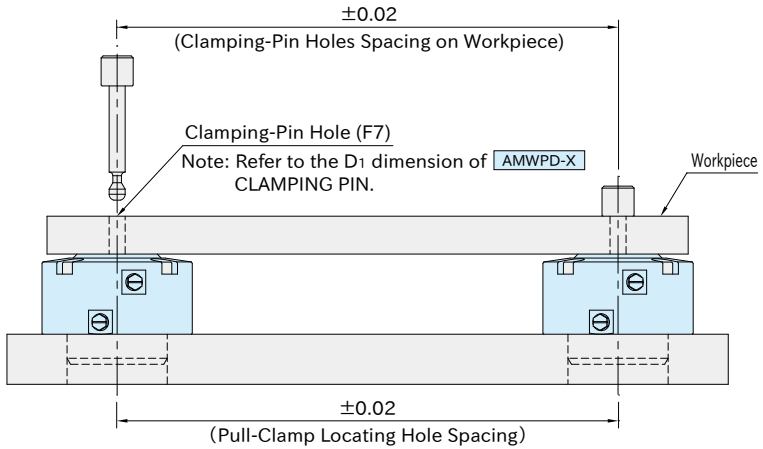
### How to Locate Workpiece

#### 1. Basic Method



#### 2. Method for clamping and locating at a time

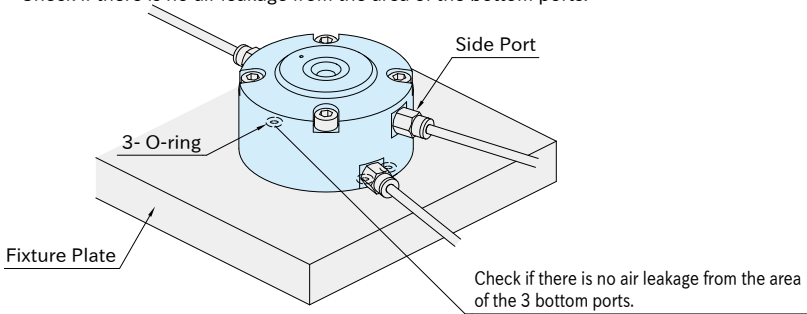
Locating Accuracy  $\pm 0.08$



## ■ How to Install

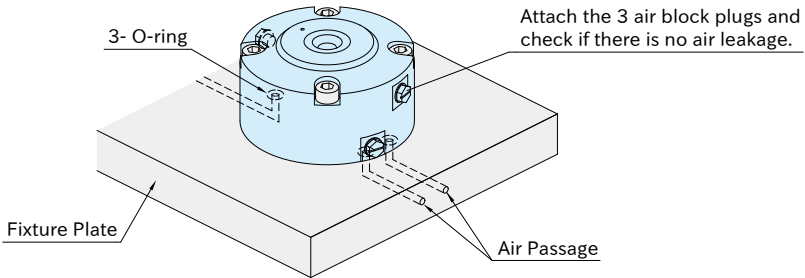
### 1. With Side Ports

- Attach the furnished o-rings to the bottom ports.
- Plate surface must be flat ( $\frac{6.3}{\sqrt{}}$ ) to get the bottom ports sealed up.
- Check if there is no air leakage from the area of the bottom ports.



### 2. With Bottom Ports

- Attach the furnished o-rings to the bottom ports.
- Plate surface must be flat ( $\frac{6.3}{\sqrt{}}$ ) to get the bottom ports sealed up.
- Refer to the figure below for the hole details.
- Ensure that the furnished air block plugs are attached to the side ports.



## ■ Hole Preparation

