

Related Equipment: Auto Drain Valve

Series AD402/600

Drain is automatically discharged in a reliable manner, without requiring human operators.

Highly resistant to dust and corrosion, operates reliably, and a bowl guard is provided as standard equipment.

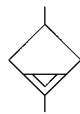


AD402



AD600

JIS Symbol



Model/Specifications

| Model | AD402 | AD600 |
|---|--------------------------|--------------------------|
| Proof pressure | 1.5 MPa | 1.5 MPa |
| Max. operating pressure | 1.0 MPa | 1.0 MPa |
| Operating pressure range ^{Note)} | 0.1 to 1.0 MPa | 0.3 to 1.0 MPa |
| Ambient and fluid temperature | -5 to 60°C (No freezing) | -5 to 60°C (No freezing) |
| Port size | 1/4, 3/8, 1/2 | 3/4, 1 |
| Drain port size | 3/8 | 3/4, 1 |
| Mass (g) | 620 | 2100 |



Note) 400 ℓ /min (ANR) or more

⚠ Specific Product Precautions

Be sure to read before handling.

Refer to front matters 42 and 43 for Safety Instructions and pages 6 to 8 for Air Preparation Equipment Precautions.

Selection

⚠ Warning

Use the auto drain under the following operating conditions in order to prevent malfunction.

- 1) Operate the compressor above 3.7 kw {400 ℓ /min (ANR)}.
- 2) Use the AD402 at an operating pressure above 0.1 MPa and AD600 above 0.3 MPa.

Piping

⚠ Warning

Piping should be done under the following conditions in order to prevent malfunction. For drain piping, use a pipe whose I.D. is not less than ϕ 10 and length not more than 5 m. Avoid riser piping.

How to Order

AD402-03-

Thread type

| | |
|-----|-----|
| Nil | Rc |
| N | NPT |
| F | G |

Port size

| Symbol | IN | OUT |
|--------|-----|-----|
| 02 | 1/4 | 3/8 |
| 03 | 3/8 | 3/8 |
| 04 | 1/2 | 3/8 |

Option

| | |
|-----|------------|
| Nil | — |
| 2 | Metal bowl |

AD600-06

Thread type

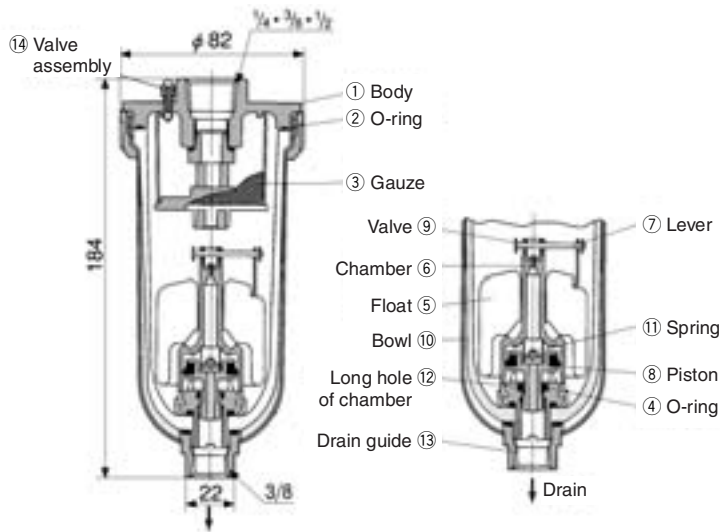
| | |
|-----|-----|
| Nil | Rc |
| N | NPT |
| F | G |

Port size

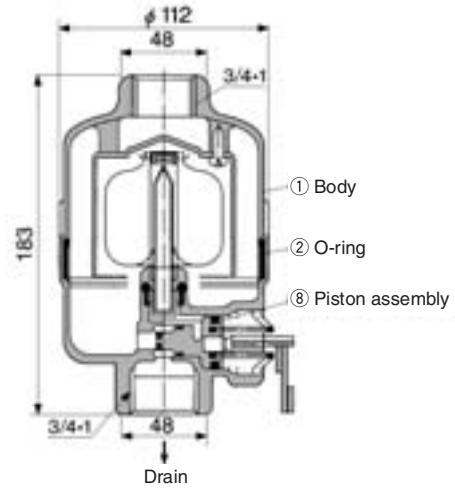
| Symbol | IN | OUT |
|--------|-----|-----|
| 06 | 3/4 | 3/4 |
| 10 | 1 | 1 |

Construction/Dimensions

AD402



AD600



Working Principle (AD402)

- When no pressure is applied inside the bowl ⑩, float ⑤ descends of its own weight and valve ⑨ closes the chamber ⑥ hole. Piston ⑧ is pushed down by spring ⑪, and drain passes through the chamber's long hole ⑫ to enter the housing and is discharged.
- When pressure is applied inside the bowl:
When pressure is 0.1 MPa or more, it overcomes the force of spring ⑪, allowing the piston ⑧ to ascend, and comes in contact with O-ring ④. Thus, the inside of the bowl ⑩ is isolated from the outside.
- When drain has accumulated:
Float ⑤ ascends due to flotation and opens the chamber hole ⑥, allowing the pressure to enter the chamber ⑥. Piston ⑧ descends due to internal pressure and the force of spring ⑪, and the accumulated drain is discharged through drain guide ⑬.

Component Parts

| No. | Description | Material |
|-----|-------------|---------------------|
| 1 | Body | Aluminum die-casted |

Replacement Parts

| No. | Description | Material | Model | |
|---------|-------------------|-----------------|--------|----------------|
| | | | AD402 | AD600 |
| 2 | O-ring | NBR | 113136 | JIS B2401G-100 |
| 3 | Gauze | Stainless steel | 20062 | — |
| Note 1) | Internal assembly | — | AD34PA | — |
| 8 | Piston assembly | — | — | 20025A |

Note 1) Internal assembly: Assembly for parts ④ to ⑫ except ⑩.

Note 2) Part no. for bowl assembly: AD34

Note 3) Part no. for bowl ⑩: 201016