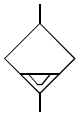
Auto Drain Valve
Series AD401, AD402

ANSSION PNEUMATIC & HYDRAULIC

AD401

AD402

Symbol



◆ Specifications

Model	AD401	AD402
Proof pressure	1.5 MPa	1.5 MPa
Max. operating pressure	1.0 MPa	1.0 MPa
Operating pressure range (1)	0.15~1.0 MPa	0.1~1.0 MPa
Ambient and fluid temperature	-5 to 60℃ (No freezing)	-5 to 60℃ (No freezing)
Port size	Rc1/4, 3/8, 1/2	Rc1/4, 3/8, 1/2
Drain discharge port size	1/8	3/8
Weight	300g	620g

Note1): Use for air compressor with flow larger than 400 l/min (ANR).

Drainage 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.

Selection

⚠ Warning

1. Use auto-drain under the following operating conditions, or it will lead to malfunctions.
1) Operate the compressor above 3.7 kw {400 l/min (ANR)}.
2) Use AD402 at an operating pressure above 0.1 Mpa.

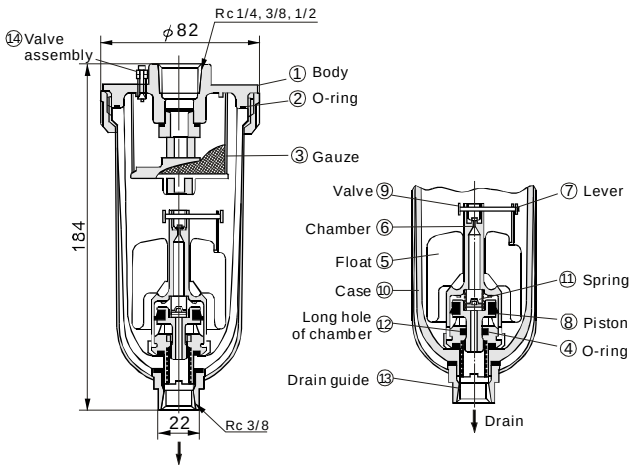
Piping

⚠ Warning

1. Use auto-drain under the following operating conditions, or it will lead to alfunctions.
To connect a drain discharge pipe, use a pipe with a minimum bore of Φ10, and a maximum length of 5 m. Avoid using a riser pipe.

◆ Construction

AD402



◆ Component Parts

No.	Description	Material
①	Body	Aluminum die-casted

◆ Replacement Parts

No.	Description	Material	Model	
			AD402	AD402S
②	O-ring	NBR	11316	
③	Gauze	Stainless steel	20062	
(1)	Internal assembly	—	AD34PA	
⑧	Piston assembly	—	—	
⑭	Valve assembly	—	201037P	

Note 1) Internal assembly: Assembly for parts④to⑫except⑩.
Note 2) Part no. for bowl assembly: AD34
Note 3) Part no. for bowl⑩: 201016

- **Working principle (AD402)**
- When no pressure is applied internally to bowl⑩, float⑤descends of its own weight and valve⑨closes chamber hole⑥. Piston⑧is pushed down by spring⑪, and the drainage passes through the chamber's elongated hole⑫to enter the housing and is discharged. When pressure is applied internally to the bowl: When pressure is larger than 1 MPa, it overcomes the force of spring⑪, allowing piston⑧to ascend, and comes in contact with O-ring④.
- Thus, the inside of bowl⑩is isolated from the outside.
When drainage has accumulated: Float⑤ascends due to flotation and opens the chamber's hole ⑥, allowing the pressure to enter chamber⑥. Piston⑧descends due to the force of the internal pressure and spring⑩, and the accumulated drainage is discharged through drain guide ⑬