

Auto Drain Valve

AD402/600 Series

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

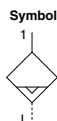
Highly resistant to dust and corrosion, operates reliably, and a bowl guard is provided as standard equipment.



AD402



AD600



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
Weight (g)	590	1310

(Note) 400 L/min (ANR) or more

⚠ Specific Product Precautions

Be sure to read this before handling the products.
Refer to back page 50 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 $\phi 10$ and length not more than 5 m.
Avoid riser piping.

How to Order

AD402- 03 -

Thread type

NII	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

NII	—
2	Metal bowl

AD600- 06 -

Thread type

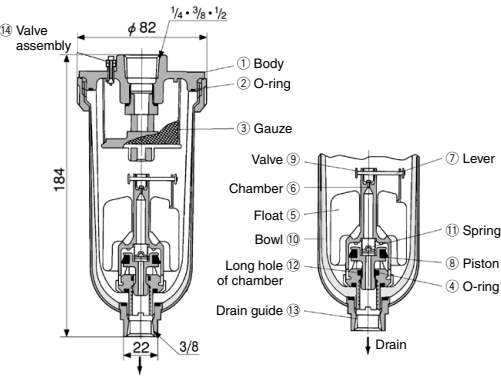
NII	Rc
N	NPT
F	G

Port size

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

Construction/Dimensions

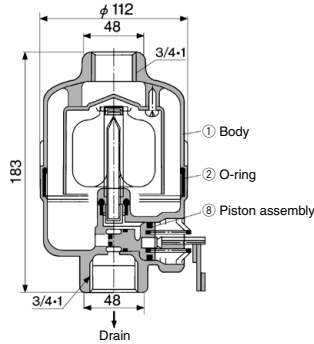
AD402



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.

AD600



Component Parts

No.	Description	Material
1	Body	Aluminum die-casted

Replacement Parts

No.	Description	Material	Model	
			AD402	AD600
2	O-ring	NBR	113136	KA00452
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