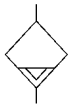
Related Products: Auto Drain Valve
AD402/600

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.

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	Rc 1/4, 3/8, 1/2	Rc 3/4, 1
Drain discharge port size	3/8	3/4, 1
Weight (g)	620	2100

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

Option Specifications

Metal bowl	**AD402-□-2**	—

⚠ Precautions

Be sure to read before handling. Refer to pages 14-21-3 to 4 for Safety Instructions and Common Precautions on the products mentioned in this catalog, and refer to pages 14-14-6 to 8 for Precautions on every series.

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 and AD600 above 0.3 MPa.

Piping

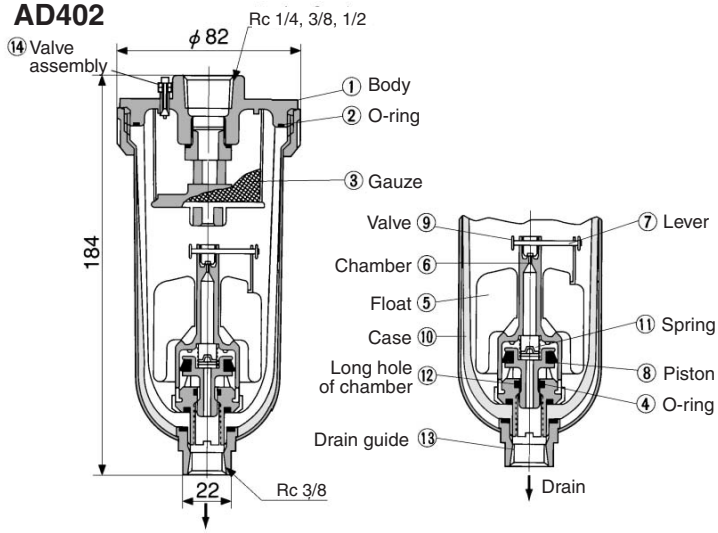
⚠ Warning

1. Use auto-drain under the following operating conditions, or it will lead to malfunctions.

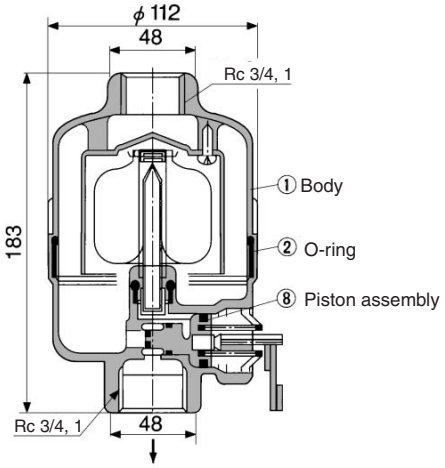
To connect a drain discharge pipe, use a pipe with a minimum bore of ø10, and a maximum length of 5 m. Avoid using a riser pipe.

Construction/Dimensions

AD402



AD600



- **Working principle (AD402)**
  When no pressure is applied internally to bowl ⑩, float ⑤ descends of its own weight and valve ⑨ closes chamber hole ⑥. Piston ⑧ is pushed down by spring ⑪, and the drainage passes through the chamber's elongated hole ⑫ to 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 spring ⑪, allowing piston ⑧ to ascend, and comes in contact with O-ring ④. Thus, the inside of bowl ⑩ is isolated from the outside.
- When drainage has accumulated:
  Float ⑤ ascends due to flotation and opens the chamber's hole ⑥, allowing the pressure to enter chamber ⑥. Piston ⑧ descends due to the force of the internal pressure and spring ⑪, and the accumulated drainage 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 B 2401G-100
③	Gauze	Stainless steel	20062	—
(1)	Internal assembly	—	AD34PA	—
⑧	Piston assembly	—	—	20025A
⑭	Valve assembly	—	201037P	—

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

Related Products: Motor Operated Auto Drain
Series ADM200

Reliably discharges even highly viscous drainage

Highly resistant to dust and highly viscous drainage, the valve opens and closes reliably to discharge the drainage.

Large drain discharge capacity

With a large discharge port, a large amount of drainage can be discharged in a single operation.

Elimination of residual drainage from inside of the tank and pipes prevents the generation of foreign matter as a result of dried rust or drainage, which could adversely affect the equipment located on the outlet side.

Low power consumption: 4 W

A long pipe can also be connected to the discharge port.

It can be connected directly to a compressor.

How to Order

ADM200- □ □ □

Port size

Symbol	IN	OUT
03	3/8	3/8
04	1/2	3/8

Voltage

1	100 VAC 50/60 Hz
2	200 VAC 50/60 Hz
3	240 VAC 50/60 Hz
4	110 VAC 50/60 Hz
5	220 VAC 50/60 Hz
6	24 VDC
7	12 VDC

Operating time/ Applicable compressor

Nil	2 sec/min (1 cycle/min) /3.7 to 37 kW
4	4 sec/min (2 cycle/min) /37 to 75 kW
6	6 sec/min (3 cycle/min) /75 to 110 kW
8	8 sec/min (4 cycle/min) /220 to 370 kW

Model/Specifications

Model	ADM200-□□-□
Fluid	Air
Max. operating pressure	1.0 MPa
Proof pressure	1.5 MPa
Ambient and fluid temperature	–5 to 60°C (No freezing)
Operating cycle*	1 cycle in a minute (Standard)
Operating time	2 sec./cycle (Standard)
Power source	100, 200 VAC 50/60 Hz, Other
Power consumption	4 W
Port size	IN: Rc 3/8, 1/2
	OUT: Rc 3/8
Weight	550 g

* If the operating cycle is twice in a minute (op. time 2 sec. x 2) operating time is 4 sec. each minute.

⚠ Precautions

Be sure to read before handling. Refer to pages 14-21-3 to 4 for Safety Instructions and Common Precautions on the products mentioned in this catalog, and refer to pages 14-14-6 to 8 for Precautions on every series.

Mounting

⚠ Warning

1. Install this product after discharging the drainage that has already accumulated in the tank. Failure to observe this precaution could lead to malfunctions.
2. Install this product, so that its drain port faces down. Failure to observe this precaution could lead to malfunctions.

⚠ Caution

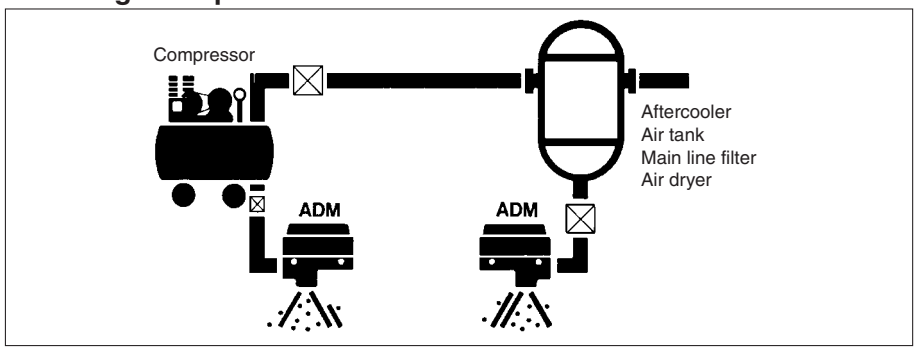
1. Provide a stop valve before ADM200 to facilitate maintenance and inspection.

Maintenance

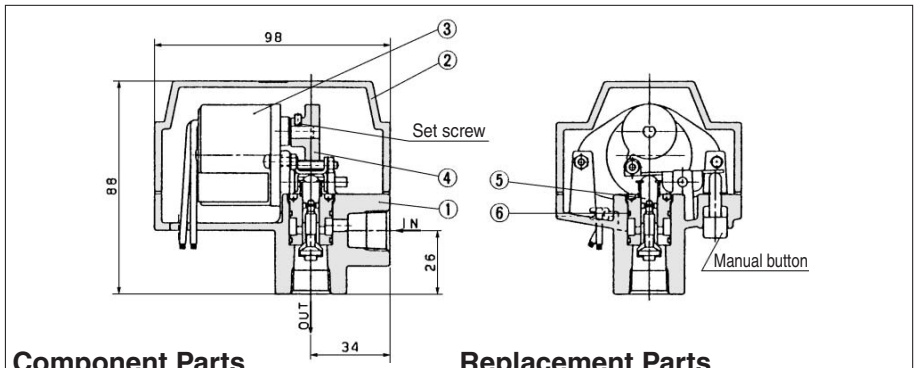
⚠ Caution

1. If the valve becomes clogged with debris, press the manual button to flush out the debris. Failure to observe this precaution could lead to malfunctions.

Mounting Example



Construction/Dimensions



Component Parts

No.	Description	Material	Note
①	Body	ADC12	Chrome treated
②	Cap	ADC12	Chrome treated

Replacement Parts

No.	Description	Material	Part no.
③ Note	Motor	—	812PG-voltage
④	Cam	SCS13	Operating time 201324 (Nil) 201325 (4) 201326 (6) 201327 (8)
⑤	Valve assembly	C3604B	20137-1A
⑥	O-ring	NBR	S-16

Note) Motor port no. in the case of 100 VAC: 812PG-100VAC