

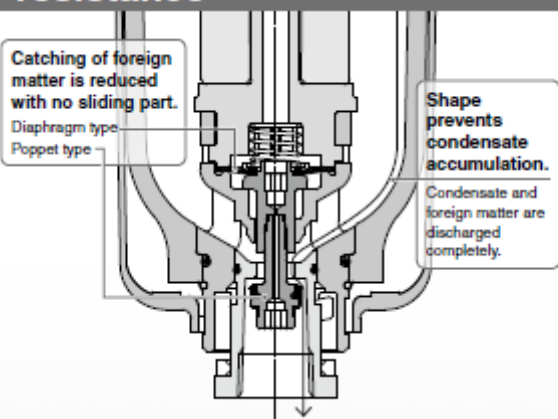
Auto Drain Valve

AD402-A Series



Longer life & Higher resistance to foreign matter

Improved foreign matter resistance



Increase in condensate discharge

Reduction of operation frequency due to increased condensate discharge

- Drain discharge: Max. **100 cm³/cycle**
(3 times compared with the current model)

New A lateral piping specification has been added.

Piping direction **Vertical**



Piping direction **Lateral**



Double layer design

- Better visibility & environmental resistance
- The bowl is covered with a transparent bowl guard.

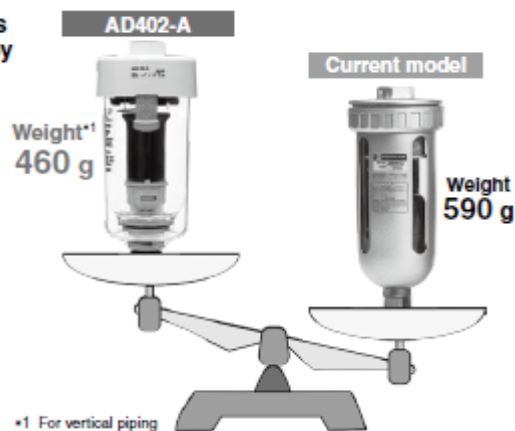
With manual discharge mechanism

N.O.: Black
N.C.: Gray

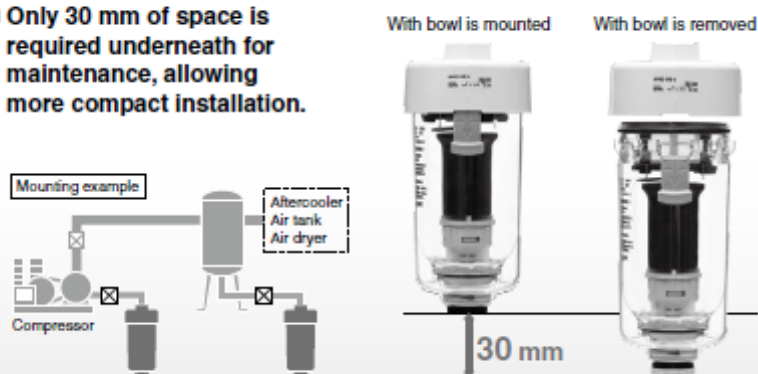


Auto Drain Valve *AD402-A Series***Lightweight**

- Resin bowl guard has reduced the weight by up to 22%

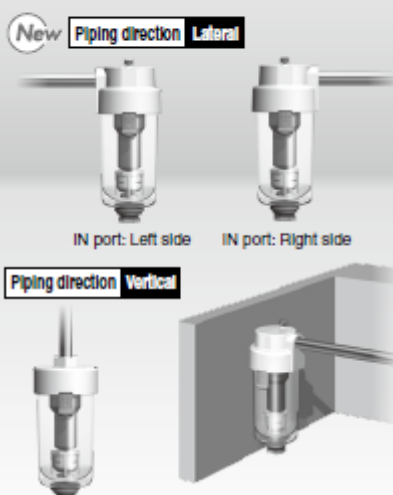
**Reduced required maintenance space**

- Only 30 mm of space is required underneath for maintenance, allowing more compact installation.

**Easier maintenance**

- One-touch mounting and removal of the bowl is possible without using a tool.

Release the lock by sliding the lock button down while holding the body. Then, rotate the bowl guard and pull down for removal.

**Selectable piping direction**

Auto Drain Valve AD402-A Series

Piping direction **Vertical**



Symbol



Piping direction **Lateral**



Flow direction: IN port: Left side

Flow direction: IN port: Right side

Specifications

Standard Specifications

Model	AD402-A	AD402T-A
Piping direction	Vertical (From the top of the product)	Lateral (From the side of the product)
Auto drain type	Float type	
Auto drain valve type	N.C. (Normally closed: Drain port is closed when pressure is not applied) N.O. (Normally open: Drain port is open when pressure is not applied)	
Fluid	Compressed air	
Ambient and fluid temperatures	-5 to 60°C (No freezing)	
Proof pressure	1.5 MPa	
Max. operating pressure	1.0 MPa	
Operating pressure range*1	N.C.	0.15 to 1.0 MPa
	N.O.	0.1 to 1.0 MPa
Port size	1/4, 3/8, 1/2	
Drain port size	3/8	
Bowl material	Polycarbonate	
Bowl guard material	Polycarbonate	
Weight	0.46 kg	0.52 kg
Appearance color	White	

*1 For the N.O. (Normally open) type, the discharged flow rate of the air compressor should be 400 L/min (ANR) or more.

How to Order

AD402 [] - [] 04 D - [] - A

Piping direction

Symbol	Type
Nil	Vertical piping
T	Lateral piping

Thread type

Symbol	Type
Nil	Rc
F	G
N	NPT

Port size

Symbol	Port size
02	1/4
03	3/8
04	1/2

Auto drain type

Symbol	Description
C*1	N.C. (Normally closed) Drain port is closed when pressure is not applied.
D*2	N.O. (Normally open) Drain port is open when pressure is not applied.

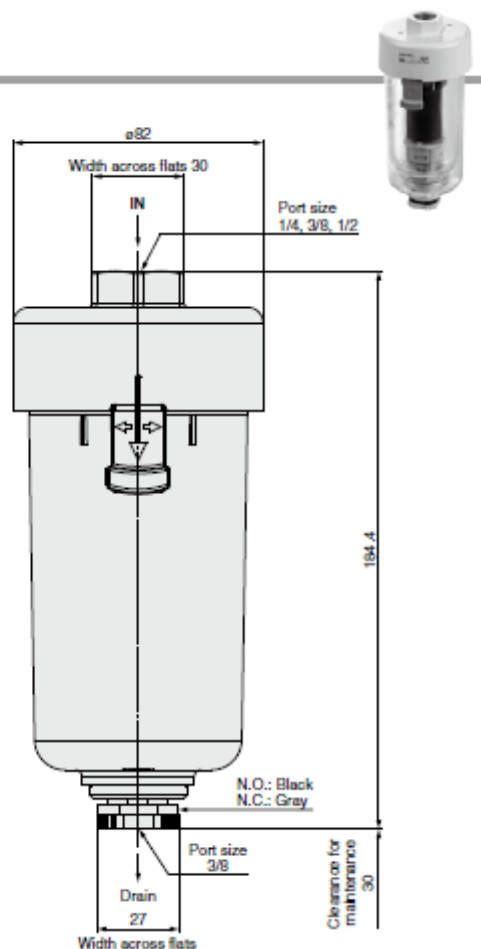
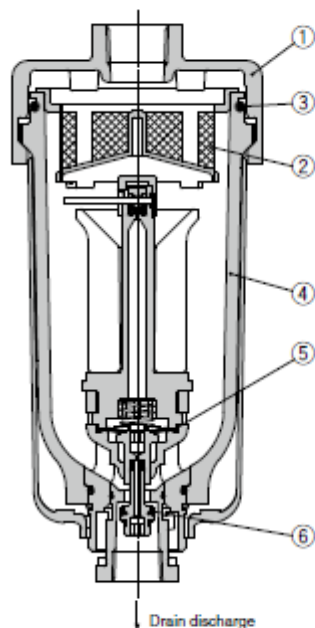
- *1 When pressure is not applied, condensate which does not start the auto drain mechanism will be left in the bowl. Releasing the residual condensate before ending operations for the day is recommended.
- *2 If the compressor is smaller than 3.7 kW, or discharge flow is less than 400 L/min (ANR), air leakage from the drain cock may occur during start of operations. N.C. type is recommended.
Proper use of float type auto drain ▶ See **P.493**

Semi-standard symbol: When plural options are required, indicate them in alphanumeric order.
Example) AD402-N04D-2VZ-A

Semi-standard specifications

	Symbol	Description
Bowl*3	Nil	Polycarbonate bowl
	2	Metal bowl
	6	Nylon bowl
Flow direction*4	Nil	IN port: Left side
	R	IN port: Right side
Valve	Nil	None*5
	V	With bleed valve
Pressure unit	Nil	Name plate and caution plate for bowl in SI units
	Z*6	Name plate and caution plate for bowl in Imperial units

- *3 Chemical resistance of the bowl ▶ See **P.494**
- *4 Applicable only when the piping direction is lateral piping
Indicates the port direction when the name plate is viewed from the front
- *5 For port size 1/4, the valve already mounted.
- *6 Only NPT can be selected.
This product is for overseas use only according to the New Measurement Act. (The SI unit type is provided for use in Japan.)

Auto Drain Valve **AD402-A Series****Construction/Dimensions**AD402-A Piping direction **Vertical****Component Parts**

No.	Description	Material	Color
1	Body	Aluminum die-cast	White
5	Diaphragm	FKM	—
6	Main valve	FKM	—

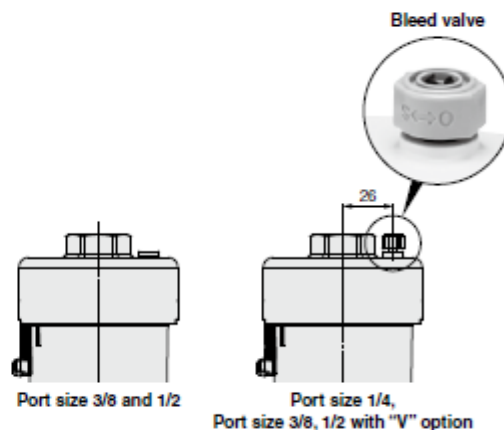
Replacement Parts

No.	Description	Material	Part no.
2	Element	Nylon	AD402P-040S
3	Bowl O-ring	NBR	KA00463
4	Bowl assembly*1	See below.	See below.

Bowl Assembly Part Nos.

Bowl material	Bowl assembly part nos.	
	Normally open	Normally closed
Polycarbonate	AD52□-A	AD51□-A
Nylon	AD52□-6-A	AD51□-6-A
Metal	AD52□-2-A	AD51□-2-A

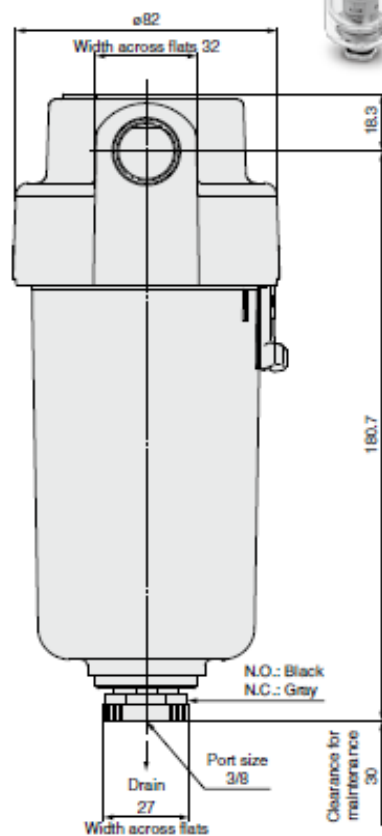
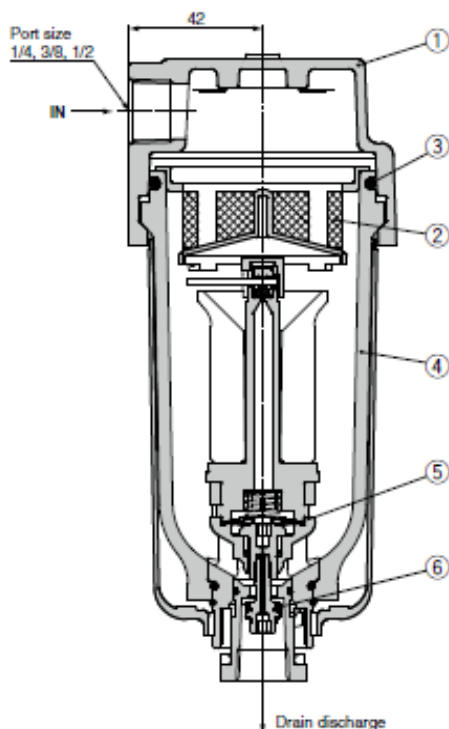
*1 Enter the piping thread type to □ of the bowl assembly part number.
 Nil: Rc thread, N: NPT thread, F: G thread
 Please consult with SMC separately for psi and "F" unit display specifications.
 Including the bowl O-ring.



AD402-A Series

Construction/Dimensions

AD402T-A Piping direction **Latrol**



Component Parts

No.	Description	Material	Color
1	Body	Aluminum die-cast	White
5	Diaphragm	FKM	—
6	Main valve	FKM	—

Replacement Parts

No.	Description	Material	Part no.
2	Element	Nylon	AD402P-040S
3	Bowl O-ring	NBR	KA00463
4	Bowl assembly*1	See below.	See below.

Bowl Assembly Part Nos.

Bowl material	Bowl assembly part nos.	
	Normally open	Normally closed
Polycarbonate	AD52□-A	AD51□-A
Nylon	AD52□-6-A	AD51□-6-A
Metal	AD52□-2-A	AD51□-2-A

*1 Enter the piping thread type to □ of the bowl assembly part number.
 NI: Rc thread, N: NPT thread, F: G thread
 Please consult with SMC separately for psi and °F unit display specifications.
 Including the bowl O-ring.

Bleed valve

