

Serial No.	H – V034E – 2
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Sediment strainer (Type Y)

User’s Manual



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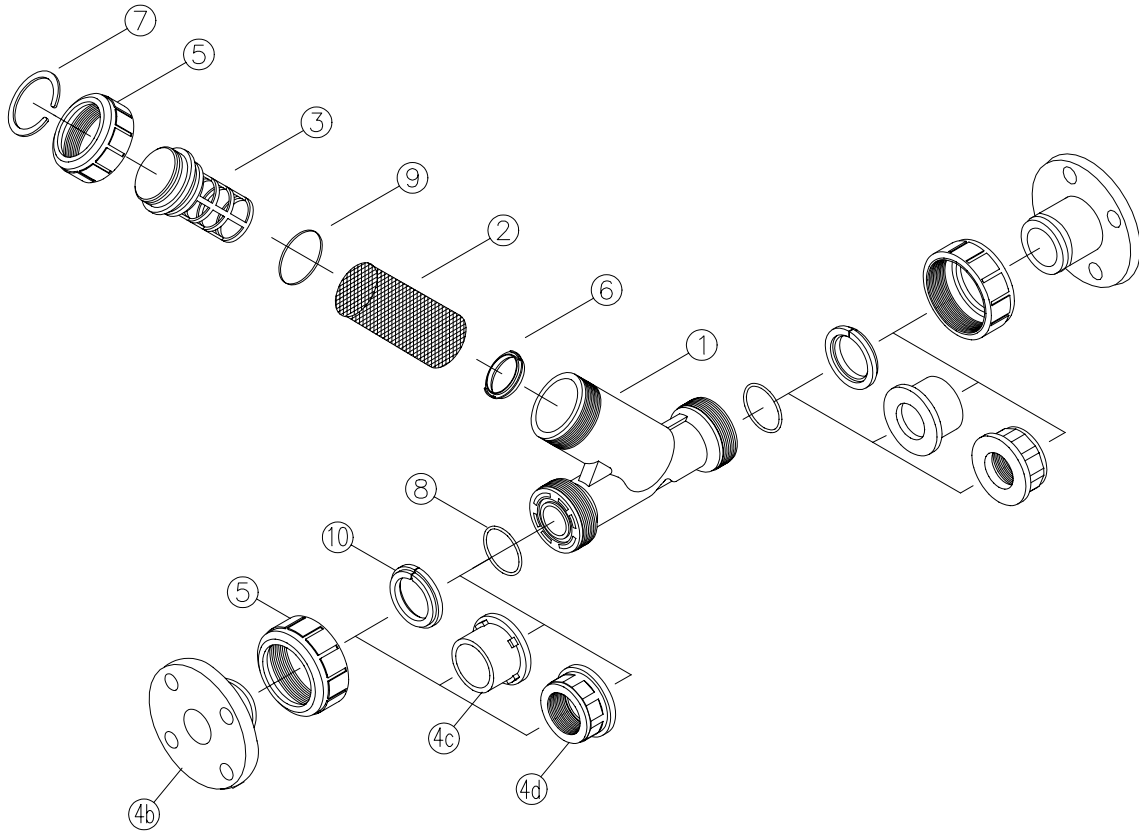
(1) General operating instruction

- Operate the valve within the range of the published working temperature and pressure.
(The valve can be damaged by operation beyond the maximum allowable range of temperature vs pressure.)
- To select a valve in appropriate materials, refer to “CHEMICAL RESISTANCE ON ASAHI AV VALVE”.
(Some chemicals give heavy damage to valve materials.)
- The valve is not designed to bear any kind of external load. Never stand on or place anything heavy on the valve at anytime.
- When the valve is disposed of, contact waste disposal specialist.
- The valve should be installed at place where space for periodic inspection & maintenance is sufficient.
- Do not store or install the valve near any heat source or hot surface.
(The valve may cause deformation, destruction, and fire.)
- Volatile liquids such as a hydrogen peroxide (H₂O₂) and sodium hypochlorite (NaClO) may vaporize, thus causing an abnormal pressure increase in the valve.
(If the pressure rises abnormally, gas may break a valve into pieces.)
- Plumb in the strainer considering the fluid direction (the arrow is shown on the body) so that the screen points downward.
- Avoid excessive force on the strainer when plumbed in.
- As for the flanged end type, tighten bolts in turn diagonally not to tighten unevenly. Avoid excessive tightening the union nut (5) of the screen. There is no influence on sealing.

(2) General instructions for transportation, unpacking and storage

- Keep the valve in its original packaging until needed for installation.
- Avoid contact with any coal tar creosote, insecticides, vermicides or paint.
(The force of swelling may damage the valve.)
- The valve is not designed to handle any kind of impact. Avoid throwing or dropping the valve.
- Avoid scratching the valve with any sharp object.

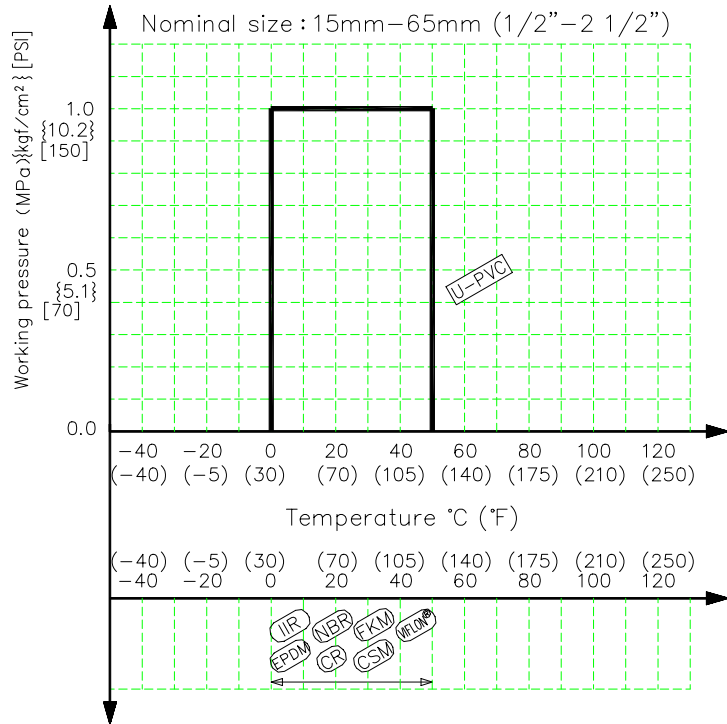
(3) Name of parts



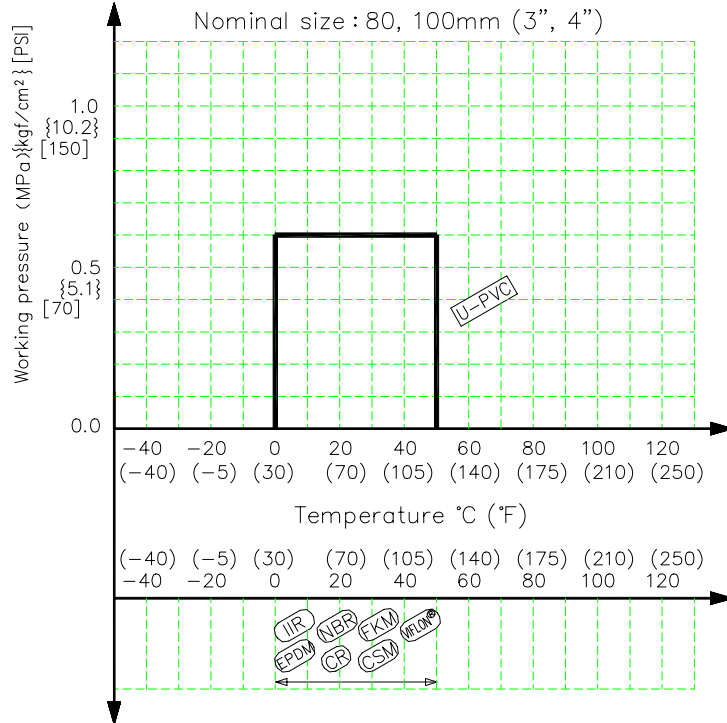
No.	DESCRIPTION	No.	DESCRIPTION
①	Body	⑤	Union nut
②	Filter screen	⑥	Retaining ring
③	Screen support	⑦	Split ring
④b	End connector (Flanged end type)	⑧	O-ring(A)
④c	End connector (Socket end type)	⑨	O-ring(B)
④d	End connector (Threaded end type)	⑩	Stop ring


(4) Comparison between operating temperature and pressure

Nominal size: 15mm-65mm (1/2"-2")



Nominal size: 80mm, 100mm (3", 4")



 **Caution**
 Do not operate the valve beyond the range of working temperature and pressure.
 (The valve can be damaged.)

(5) Installation procedure

Flanged type (Material; PVC, CPVC, PVDF)

Necessary items

- Torque wrench
- Spanner wrench
- Bolt, Nut, Washer (For many flanges specification)
- AV gasket (When a non-AV gasket is used, a different tightening torque specification should be followed.)

Procedure

- 1) Set the AV gasket between the flanges.
- 2) Insert washers and bolts from the pipe side, insert washers and nuts from the valve side, then temporarily tighten them by hand.

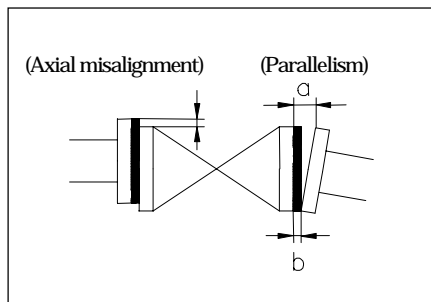
 **Caution**

The parallelism and axial misalignment of the flange surface should be under the values shown in the following table to prevent damage the valve.

(A failure to observe them can cause destruction due to stress application to the pipe)

Unit: mm (inch)

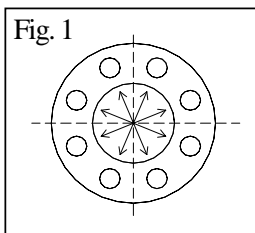
Nom. Size	Axial Misalignment	Parallelism (a-b)
15-25mm (1/2"-1")	1.0 (0.04)	0.5 (0.02)
40-80mm (1 1/2"-3")	1.0 (0.04)	0.8 (0.03)
100mm (4")	1.0 (0.04)	1.0 (0.04)



- 3) Using a torque wrench, tighten the bolts and nuts gradually to the specified torque in a diagonal manner (Refer to fig.1.)

 **Caution**

Avoid excessive tightening. (The valve can be damaged.)



Recommended torque value

Unit: N-m {kgf-cm} [lb-inch]

Nom. Size	15mm (1/2")	20mm (3/4")	25mm (1")	40mm (1 1/2")	50mm (2")	80mm (3")	100mm (4")
Torque value	17.5 {179} [155]	17.5 {179} [155]	20.0 {204} [200]	20.0 {204} [200]	22.5 {230} [200]	30.0 {306} [266]	30.0 {306} [266]

*Be sure to set the union nut ⑤ when it was removed or loosen from body ①.

- 1) The o-ring(A) ⑧ should be set on surface of the end connector ④b).
- 2) The end connector ④b) must be put onto the carrier, then ensure that the o-ring(A) ⑧ is being between the end connector ④b) and the carrier.
- 3) Tighten the union nut ⑤ hardly with hand.
- 4) Screw the union nut ⑤ on the body ① by quarter or half turn using a strap wrench without damaging it.

 **Caution**

Avoid excessive tightening. (The valve can be damaged.)

Threaded type

Necessary items

- Sealing tape (A non-sealing tape can cause leakage.)
- Strap wrench (Do not use Pipe wrench.)
- Spanner wrench



Caution

Make sure that the threaded connections are plastic x plastic.
(Metallic thread might damage the body cap.)

Procedure

- 1) Wind a sealing tape around the external thread of joint, leaving the end (about 3mm) free.
- 2) Loosen the union nut (5) with a strap wrench.
- 3) Remove the union nut (5) and the end connector (4d).
- 4) Lead the union nut (5) through the pipe.
- 5) Tighten the external thread of the joint and the end connector (4d) hardly with hand.
- 6) Using a spanner wrench, screw the end connector (4d) by turning 180° ~ 360° carefully without damaging it.



Caution

Avoid excessive tightening. (The valve can be damaged.)

- 7) Make sure that the O-ring(A) (8) is mounted.
- 8) Set the end connector (4d) and union nut (5) directly on the body without allowing the O-ring (A) (8) to come off.
- 9) Tighten the union nut (5) hardly with hand.
- 10) Using a strap wrench, screw it in by turning 90° - 180° carefully without damaging it.



Caution

Avoid excessive tightening. (The valve can be damaged.)

Socket type

Necessary items

- Adhesive for hard vinyl chloride pipes
- Spanner wrench (Do not use a piping wrench.)



Caution

Do not install a socket type valve where the atmospheric temperature is 5°C or lower. (The valve can be damaged.)

Procedure

- 1) Loosen the union nut ⑤ with a spanner wrench.
- 2) Remove the union nut ⑤ and end connector ④c.
- 3) Lead the union nut ⑤ through the pipe.
- 4) Clean the hub part of the end connector ④c by wiping with waste cloth.
- 5) Apply adhesive evenly to the hub part of the end connector ④c and the pipe spigot.



Caution

Do not apply more adhesive than necessary.
(The valve can be damaged due to solvent cracking.)

Adhesive quantity (guideline)

Nom. Size	15mm (1/2")	20mm (3/4")	25mm (1")	40mm (1 1/2")	50mm (2")	80mm (3")	100mm (4")
Quantity (g)	1.0	1.3	2.0	3.5	4.8	9.0	13.0

- 6) After applying adhesive, insert the pipe quickly to the end connector ④c and leave it alone for at least 60 seconds.
- 7) Wipe away overflowing adhesive.
- 8) Make sure that O-ring(A) ⑧ is mounted
- 9) Set the end connector ④c and union nut ⑤ directly on the body without allowing the O-ring (A) ⑧ to come off.
- 10) Tighten the union nut ⑤ hardly with hand.
- 11) Using a strap wrench, screw it in by turning 90° -180° carefully without damaging it.



Caution

Avoid excessive tightening. (The valve can be damaged.)

(6) Cleaning and Replacing Method for Screen

Necessary items

- Strap wrench
- Protective gloves
- Safety goggles



Caution

Wear protective gloves and safety goggles as some fluid remains in the valve.
(You may be injured.)

- 1) Loosen the union nut (5), and remove the screen part (the numbers or the part are (2), (3), (5), (6), and (7)) from the body (1).
- 2) Remove the retaining ring (6), and pull the filter screen (2) out then wash it to remove the dust or foreign matter.
- 3) If the filter screen (2) or the O-ring (B) (9) is damaged, replace with a new one.
(Replace the O-ring (B) (9) removing the split ring (7) from the screen support (3).)
- 4) Carry out the assembly work in the reverse procedure from 3).

(7) Inspection items

- Periodically clean the screen in accordance with the use.
- Inspect the following items.

(1)	Check for any flaw, crack, or deformation on the outside.
(2)	Check whether fluid leaks to the outside.
(3)	Check the tightness of union nuts (loose or not).

(8) Troubleshooting

Problem	Cause	Treatment
Fluid leaks to the outside.	The union nut is loose.	Retighten.
	The O-ring is scratched or worn.	Replace the O-ring.

(9) Handling of residual and waste materials



Caution

In discarding remaining or waste materials, be sure to ask waste service company.

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Distributor

Sediment strainer (Type Y)



ASAHI AV VALVES
