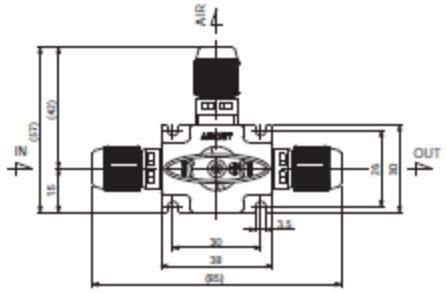
AVC check valve with an air vent (Option)

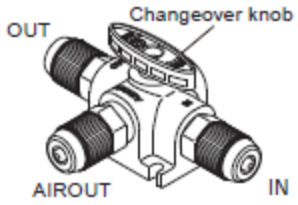
AVC check valve is designed for being used with the HRP and works for both back-flow check and bleeding.

■ **Specification**

Model	Set pressure	Tube connection bore
AVC-FC1	0.1MPa	ø3×ø6mm
AVC-FC2		ø4×ø6mm
AVC-FC3		1/8"×1/4"



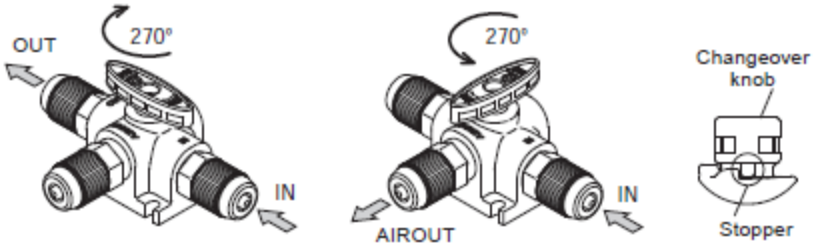
AVC air vent check valve



■ **Back-flow check/Bleeding changeover**

Select either function by rotating the changeover knob.

*The knob can rotate up to 270 degrees. A stopper is provided to determine the rotation limit of the knob.



NOTE

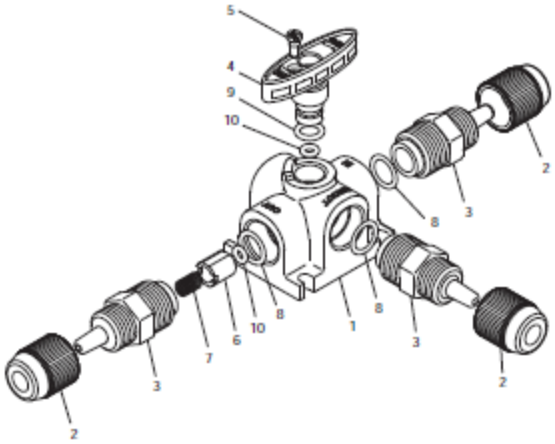
Do not apply much stress to the stopper screw, or it may break.

Maintenance (AVC check valve)

Precautions

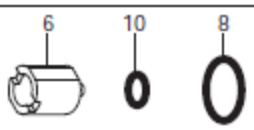
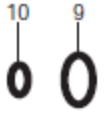
- When dismantling the check valve, pay attention to the residual liquid in the pump.
- Rinse wet ends thoroughly with water.

Exploded view (AVC check valve)



No	Part names	Q'ty
1	Body	1
2	Fitting nut	3
3	Fitting	3
4	Air vent valve	1
5	Stopper screw	1
6	Poppet valve	1
7	Spring	1
8	O ring	3
9	O ring	1
10	O ring	2

Wear part list (AVC check valve)

	Parts		# of parts	Estimated life
Pump	Poppet valve with O rings		1	8000 hours
	Spring		1	
	Orings		1	

*Wear part duration varies with the pressure, temperature and characteristics of the liquid.

*The estimated life is calculated based on the continuous operation with ambient clean water.

*Replace the poppet valve, spring and O rings at the same time.

Wear parts replacement (AVC check valve)

First release the pressure from the discharge line. Otherwise, liquid may gush out during work.

1 **Stop the pump operation.**

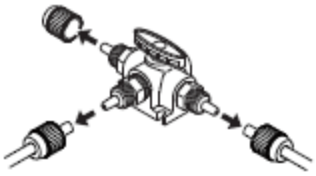
2 **Release the internal pressure.**
Turn the changeover knob and expel air from the air vent.

3 **Check that liquid comes out from the air vent port and the internal pressure has been expelled.**

Dismantlement

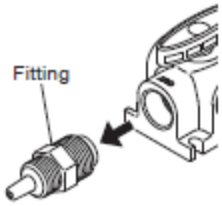
1 **Detach the AVC check valve.**

Loosen the fitting nut and remove tubes from the IN, OUT and AIROUT ports.



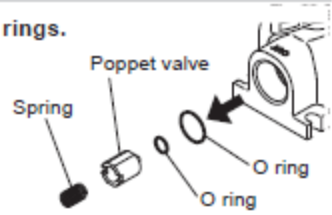
2 **Remove the fitting nut.**

Use an adjustable wrench or spanner to unscrew the fitting nut.



3 **Take out a spring, poppet valve and O rings.**

Use a pair of tweezers as necessary.



4 **Fit a spring, poppet valve and O rings.**

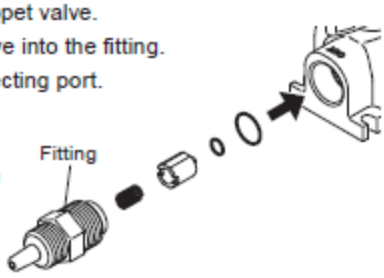
a. Place a small O ring into the poppet valve.

b. Insert the spring and poppet valve into the fitting.

c. Fit the large O ing into the connecting port.

d. Screw in the fitting.

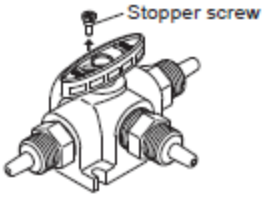
*Tighten the fitting by 2.5N•m. If a torque wrench is not available, tighten the fitting hand-tight and then further rotate it by 90 degrees, using an adjustable wrench or a spanner.



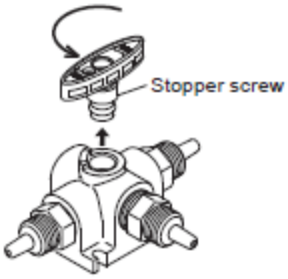
NOTE

- Do not insert poppet valve the other way around. Or a poor flow or a leak may result.
- Be careful not to forget to mount O rings.
- Keep the parts free from dust.

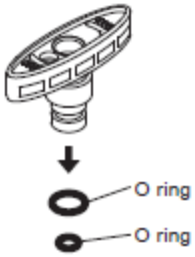
5 Unscrew the stopper from the changeover knob.



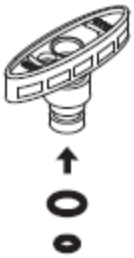
6 Unscrew the changeover knob.



7 Detach O rings.

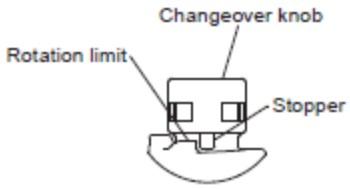


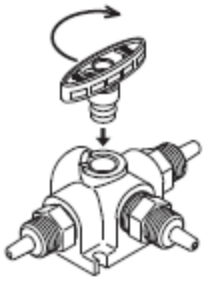
8 Attach new O rings.



9 **Screw in the changeover knob until it bottoms out.**

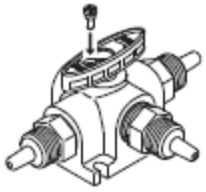
Do not tighten the knob too much so that the changeover knob stops at a rotation limit.





10 **Screw the stopper screw in the knob.**

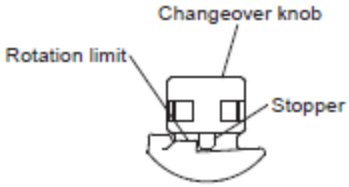
Use a precision screw driver.



NOTE

Do not tighten the stopper screw too much. Or it may break.

11 **Check the knob rotation is stopped by the rotation limit and stopper.**



12 **Connect IN, OUT and AIROUT tubes to each port.**