

FR units

ARU/FR series

Thank you for selecting KONAN product.
Before installation and use of the products, please read this Service Instructions for proper handling.

Standard Specifications

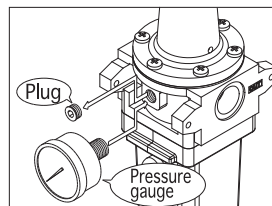
Model code	Standards type	ARU2-02				ARU3A-03		FR21-04	
	Corrosion-resistant type					FR5S-02		ARU3AS-03	
	Instrumentation type					FR5-02		ARU3A-03-5	
Port size	6A	8A	8A	10A	8A	10A	10A	15A	
	Rc 1/8	Rc 1/4	Rc 1/4	Rc 3/8	Rc 1/4	Rc 3/8	Rc 3/8	Rc 1/2	
Operating pressure	Primary side (IN)	Max. 1MPa							
	Secondary side (OUT)	0.05~0.7MPa		0.02~0.2MPa		0.05~0.7MPa			
Proof pressure	1.5MPa								
Operating temperature	-20~60°C		-20~60°C		General purpose -20~60°C / Heat-resistant 5~100°C / Freeze-resistant -40~45°C				
Filteration rating of element	5 μm		5 μm		General purpose 40 μm / Instrumentation 5 μm				
Mass	0.26kg		1kg		0.7kg		0.88kg		

- NPT type pipe screw is available.
- For specifications other than those listed above, please contact us.

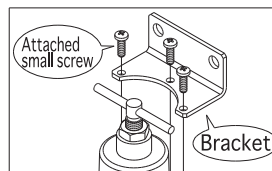
Before Installation

- Do not leave the units unpacked at the place where they are exposed to water and dusts.
- Do not remove the plugs at the ports until just before piping.
- Pressure gauge and bracket are optionally available.
Mount a pressure gauge and a bracket as instructed below before installation of the unit :

(1) Mounting a pressure gauge :
Remove hex socket plug at the mounting port and mount the pressure gauge. Torque of the gauge : 7.8 ~ 12.7 N · m
Excessive screwing may damage the regulator body.

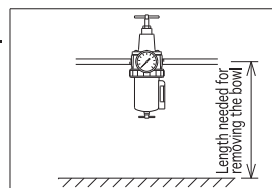


(2) Mounting a bracket :
Remove small screws from the regulator and mount the bracket with attached small screws. Fasten the screws alternately to avoid uneven clamping.
Clamping torque : 0.98 N · m

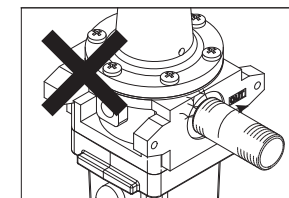
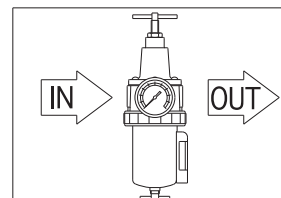


Installation Precautions

- (1) Installation site
 - Install the unit as close to the end operational component as possible.
 - Do not use the unit at the place where aluminum corrosion is anticipated or the unit is exposed to salt water and other liquids.
 - Avoid installation of the unit at the site affected by frequent vibration and shock.
- (2) Mounting
 - For disassembly and parts replacement, install the unit so that the bowl of the filter can be removed. Refer to the product drawing for the length needed for removing the bowl.
 - Install the unit vertically with the drain cock placed downward.



Piping Precautions

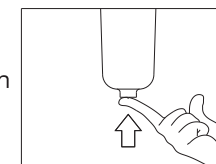


- Make sure to properly connect the ports.
- Use piping elements (pipes and tubes) with the port size same as or larger than the nominal diameter.
- When connecting piping elements (pipes and joints), be careful not to screw in excessively (4- to 5-thread screwing is enough).
- After piping sufficiently perform air flushing to remove dusts, rusts, sealing scraps, oil, etc.

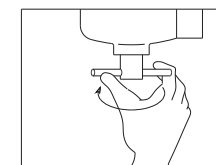
Handling Precautions

- (1) Pressure at secondary side
 - Adjust the pressure to the predetermined value while watching the pressure gauge needle, operate the unit 2 to 3 cycles, and then reconfirm if the pressure is as predetermined.
- (2) Pressure fluctuation at secondary side
 - Set pressure may slightly change due to pressure fluctuation at the primary side.
For accurate pressure setting reduce the pressure fluctuation at the primary side.

(3) Drain exhaustion
<ARU2-02>
Push the push rod of the drain valve upwards.



<Other types>
Turn the handle of the drain cock counterclock-wise. The pressure in the bowl will discharge the drain.



- See back page for disassembly/assembly procedure.
- For questions please contact the nearest Konan branch office.

Konanelectric Co., Ltd.

URL=<https://www.konan-em.com/>

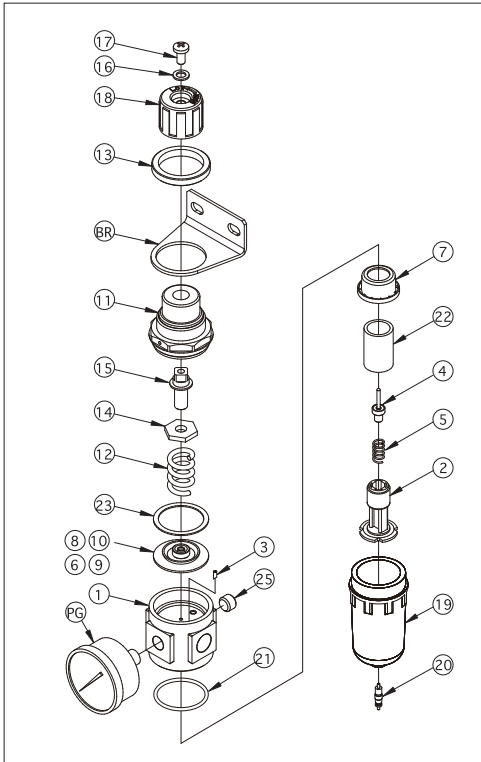
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ARU2-02

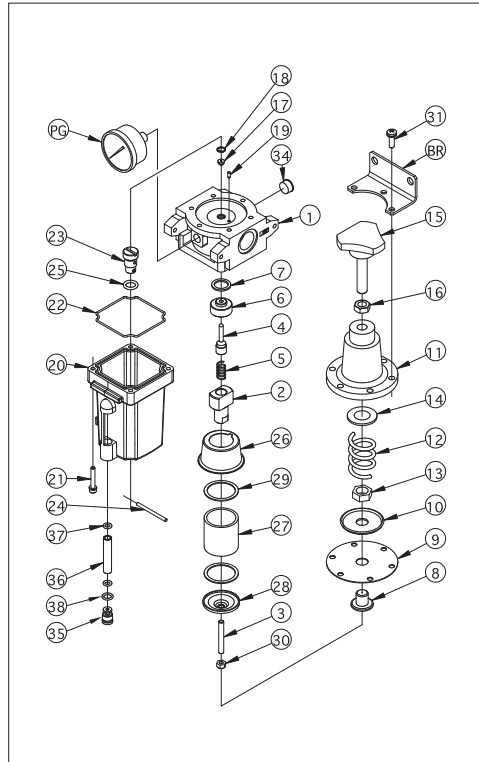


■Parts List

No.	Description	Q'ty
1	Body	1
2	Valve seat	1
3	Syphon tube	1
4	Valve	1
5	Spring	1
6	Spring guide	1
7	Deflector	1
8	Diaphragm seat	1
9	Diaphragm	1
10	Diaphragm clamp	1
11	Spring case	1
12	Spring	1
13	Panel mounting nut	1
14	Spring retainer	1

No.	Description	Q'ty
15	Adjustment screw	1
16	Washer	1
17	Cross-recessed pan head machine screw	1
18	Handle	1
19	Bowl	1
20	Drain valve	1
21	O-ring	1
22	Filter element	1
23	Spacer	1
25	Hex socket plug	2
BR	Bracket	1
PG	Pressure gauge	1

FR5-02 · FR5S-02

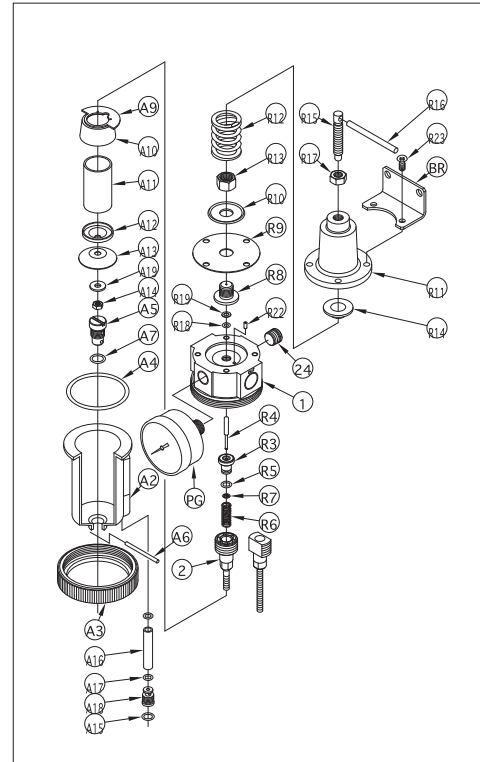


■Parts List

No.	Description	Q'ty
1	Body	1
2	Valve seat	1
3	Rod	1
4	Valve	1
5	Spring	1
6	Valve seat	1
7	Packing	1
8	Diaphragm seat	1
9	Diaphragm	1
10	Diaphragm clamp	1
11	Spring case	1
12	Spring	1
13	Nut	1
14	Spring retainer	1
15	Adjustment screw	1
16	Locknut	1
17	Guide	1
18	Stop ring	1
19	Syphon tube	1
20	Bowl	1

No.	Description	Q'ty
21	Hex socket head cap screw	1
22	Gasket	1
23	Drain cock	1
24	Handle	1
25	O-ring	1
26	Guide plate	1
27	Filter element	1
28	Element retainer	1
29	Packing	2
30	Locknut	1
31	Cross-recessed pan head machine screw	6
34	Hex socket plug	2
35	Bottom cover	1
36	Sight glass	1
37	O-ring	2
38	O-ring	1
PG	Pressure gauge	1
BR	Bracket	1

ARU3A-03 · ARU3AS-03 · ARU3A-03-5



■Parts List

No.	Description	Q'ty
1	Body	1
2	Valve seat	1
R3	Valve	1
R4	Valve shaft	1
R5	O-ring	1
R6	Spring	1
R7	Stop ring	1
R8	Spring	1
R9	Diaphragm	1
R10	Diaphragm clamp	1
R11	Spring case	1
R12	Spring	1
R13	Locknut	1
R14	Spring retainer	1
R15	Adjustment screw	1
R16	Handle	1
R17	Locknut	1
R18	O-ring	1
R19	Packing retainer	1
R22	Syphon tube	1
R23	Cross-recessed pan head machine screw	4
24	Hex socket plug	2

No.	Description	Q'ty
A2	Bowl	1
A3	Clamp ring	1
A4	O-ring	1
A5	Drain cock	1
A6	Handle	1
A7	O-ring	1
A9	Deflector	1
A10	Guide plate	1
A11	Filter element	1
A12	Element seat	1
A13	Baffle plate	1
A14	Locknut	1
A15	O-ring	1
A16	Sight glass	1
A17	O-ring	2
A18	Bottom cover	1
A19	Packing	1
BR	Bracket	1
PG	Pressure gauge	1

FR21-04 · FR21S-04 · FR21-04-5

