

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

Standard Specifications

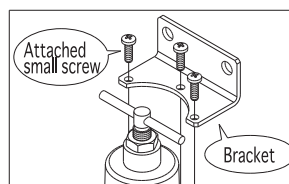
Model code		LU21-04			LU2-08	
Port size		8A	10A	15A	20A	25A
		Rc1/4	Rc3/8	Rc1/2	Rc3/4	Rc1
Operating pressure	Primary side (IN)	Max.1MPa				
	Secondary side (OUT)	0.05~0.7MPa				
Proof pressure		1.05MPa				
Operating temperature		General purpose 5~60°C / Heat-resistant 5~100°C				
Components	Air filter	AF21-04			AF2-08	
	Regulator	RV21-04			RV2-08	
	Lubricator	OL21-04			OL2-08	
	Pressure gauge	50mm dia (Scale : 0 to 1MPa)				
Mass		2.1kg			4.0kg	

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

Before Installation

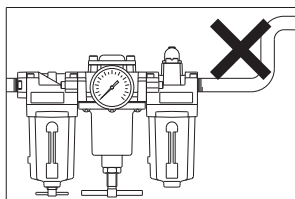
- Do not leave the units unpacked at the place where they are exposed to water and dusts.
- Do not remove the plugs at the ports until just before piping.
- Mount a pressure gauge and a bracket as instructed below before piping.
(Pressure gauge is attached to the unit as standard. Bracket is optionally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

- (1) Mounting a pressure gauge**
Remove hex socket plug at the mounting port (Rc 1/4) of the regulator (tool: hex wrench, nominal 8) and mount the pressure gauge. Torque of the gauge: 7.8~12.7 N · m.
- (2) Mounting a bracket**
Remove 3 small screws from the regulator and mount the bracket with attached small screws. Fasten the screws alternately to avoid uneven clamping. Clamping torque: 0.98N · m.

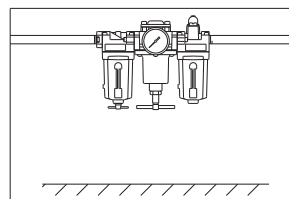


Installation Precautions

- (1) Installation site**
 - Install the unit as far from the air source as possible. Avoid the use of riser piping between the FRL unit and the actuator.



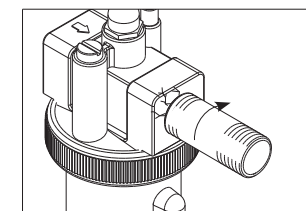
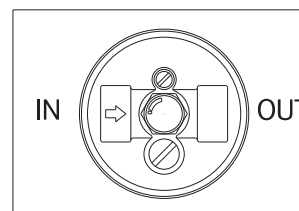
- (2) Mounting**
 - Avoid installation of the unit at the site affected by frequent vibration and shock.



- If air flow is reversed from secondary side to primary side in the circuit, install a check valve in parallel or use the unit with check valve.
- For maintenance of elements, install the unit so that the bowl of the air filter can be removed.
- Install the unit so that the drain port of the air filter is placed downward.

- Do not use the unit at the place where aluminum corrosion is anticipated or the unit is exposed to salt water and other liquids.

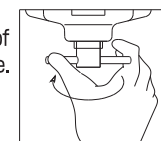
Piping Precautions



- 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) Drain exhaustion**
 - Turn the drain cock handle of the air filter counterclockwise. Drain is exhausted by the pressure inside the bowl.



- (2) Pressure adjustment**
 - 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.

- (3) Pressure fluctuation**
 - 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.
 - For details refer to the pressure characteristics chart in the Line Components catalogue.

- (4) Type of lubricating oil**
 - JIS K2213 (ISO VG32 or VG46) type turbine oil is recommended. Do not use spindle oil.

- (5) Adjust the volume of oil drop as follows**
 - Increase the volume: Turn the adjustment screw counterclockwise.
 - Decrease the volume: Turn the adjustment screw clockwise.
 - For the first time of oil drop after installation, drop more than the standard volume of oil.
 - After adjustment tighten the locknut.

- (6) Lubrication**
 - To add oil to the lubricator, remove the plug from the lubrication port and fill the oil. Oil can be added to the lubricator even during operation.
 - It is recommended that oil be added at regular intervals on the basis of the oil consumption volume, calculated from the frequency of line operations.

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

Konan Electric Co., Ltd.

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

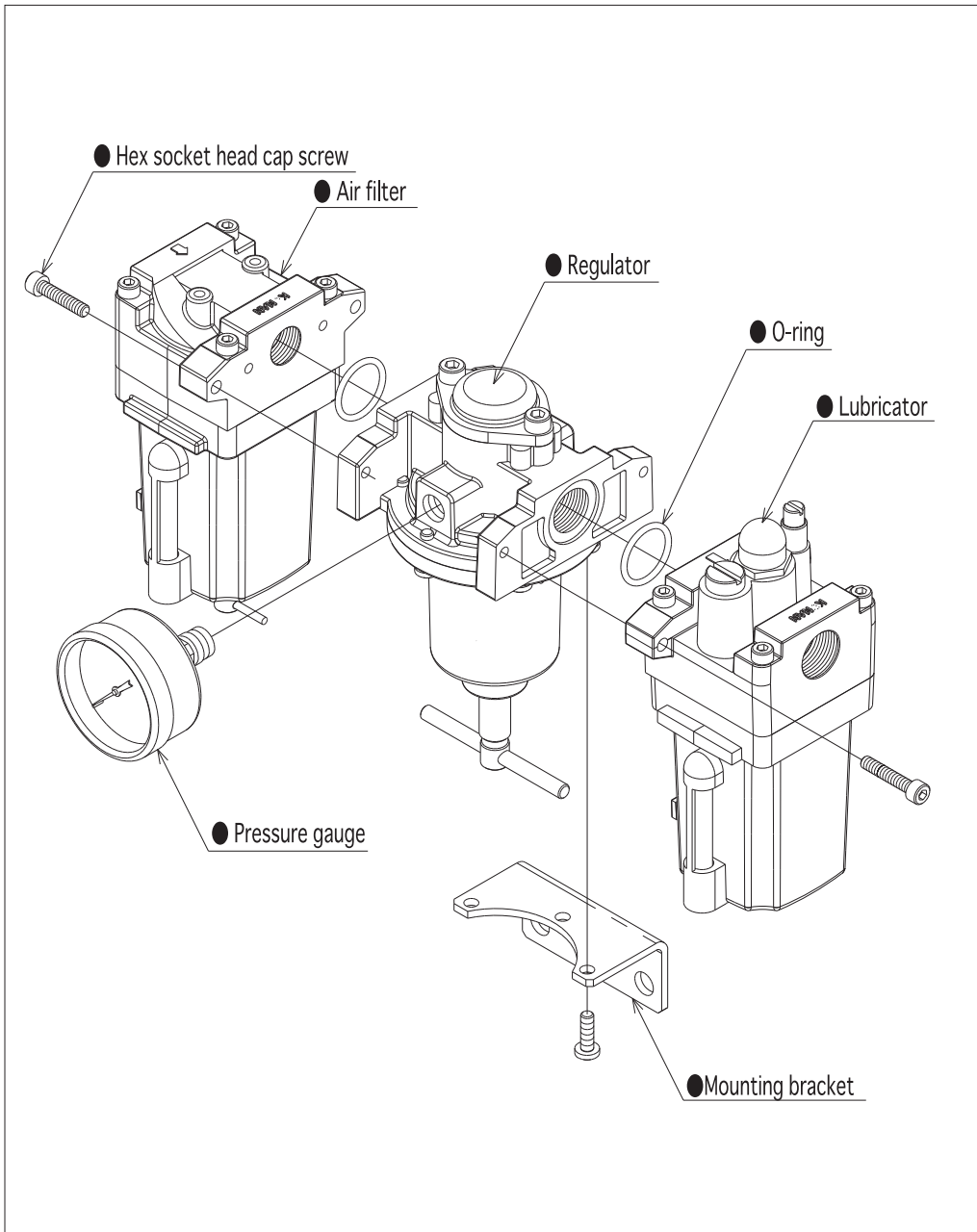
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LU21-04



LU2-08

