



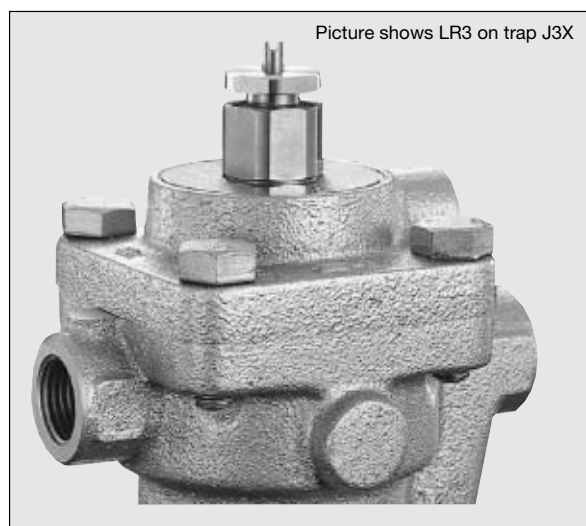
# LOCK RELEASE VALVE

## MODEL LR3, LR5

### Features

Lock release valve to eliminate steam-locking of steam traps J3X/JF3X and J5X/JF5X if installed on cylinder dryers, presses and other steam-using equipment prone to steam-locking.

1. Fine-adjustment to keep steam loss low.
2. Maintenance and repair is possible without removing the valve from the steam trap.
3. Simple construction and compact design.
4. All parts made of stainless steel.

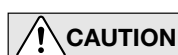


### Specifications

Model	LR3	LR5
For Steam Trap Model	J3X, JF3X	J5X, JF5X
Maximum Operating Pressure MPaG PMO	2.1*	
Maximum Operating Temperature (°C) TMO	220*	

PRESSURE SHELL DESIGN CONDITIONS (**NOT** OPERATING CONDITIONS): Maximum Allowable Pressure (MPaG) PMA: 2.1\* 1 MPa = 10.197 kg/cm<sup>2</sup>  
Maximum Allowable Temperature (°C) TMA: 220\*

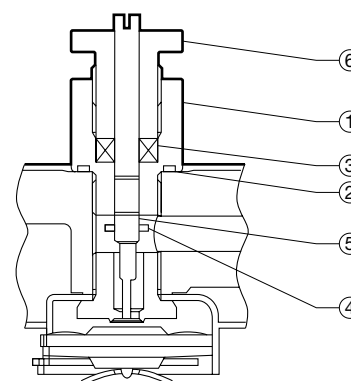
\* Values are for the lock release valve itself. Actual PMO/TMO and PMA/TMA are limited to the specifications of the trap it is installed on.



To avoid abnormal operation, accidents or serious injury, DO NOT use this product outside of the specification range. Local regulations may restrict the use of this product to below the conditions quoted.

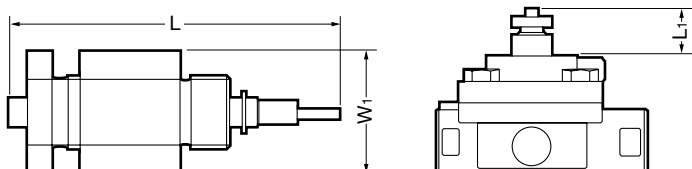
No.	Description	Material	JIS	ASTM/AISI*
①	Gland Case	Stainless Steel	SUS303	AISI303
②	Gasket	Fluorine Resin	PTFE	PTFE
③	Gland Packing	Graphite	—	—
④	Snap Ring	Stainless Steel	SUS304	AISI304
⑤	Element Retainer	Stainless Steel	SUS303	AISI303
⑥	Gland Retainer Nut	Stainless Steel	SUS303	AISI303

\* Equivalent



### Dimensions

#### •LR3, LR5

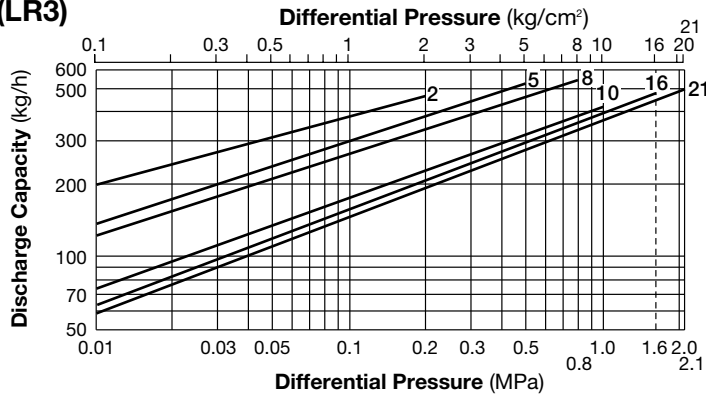


#### LR3, LR5

Model	L	L <sub>1</sub>	W <sub>1</sub>	Weight (kg)
LR3	58	23	22	0.08
LR5	66			

**Trap Capacity (Lock Release Valve fully open)**

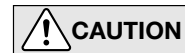
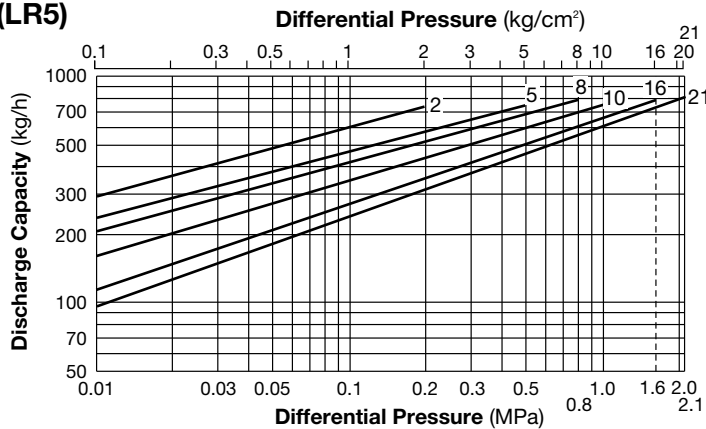
● J(F)3X (LR3)



Orifices for J3X, screwed:  
No. 2, 5, 8, 10, 21  
Orifices for JF3X, flanged:  
No. 2, 5, 8, 10, 16

1. Line numbers within the graph refer to orifice numbers.
2. Differential pressure is the difference between the inlet and outlet pressure of the trap.
3. Capacities are based on continuous discharge of condensate 6 °C below saturated steam temperature.
4. Recommended safety factor: at least 1.5.
5. When the lock release valve is fully closed, the trap capacity will be as shown in the J(F)3X and J(F)5X SDS.

● J(F)5X (LR5)

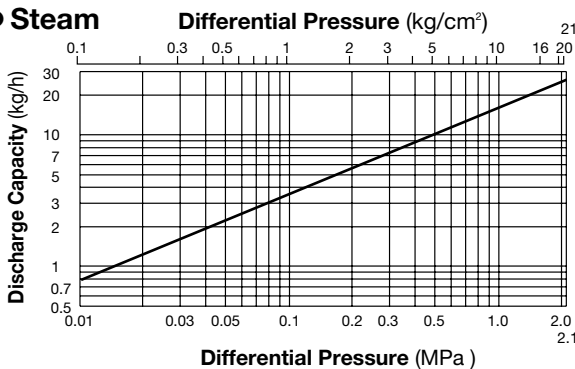


DO NOT use traps under conditions that exceed maximum differential pressure, as condensate backup will occur!

Orifices for J5X, screwed:  
No. 2, 5, 8, 10, 21  
Orifices for JF5X, flanged:  
No. 2, 5, 8, 10, 16

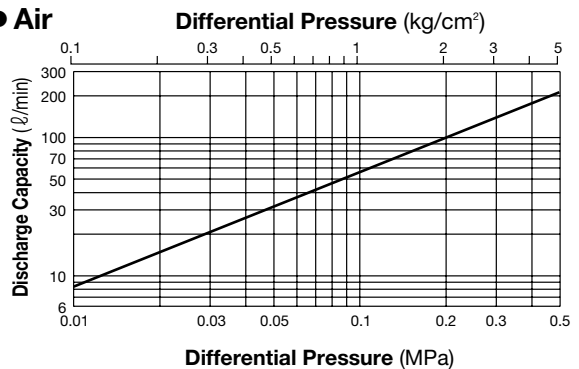
**Steam/Air Discharge through trap air vent (Lock Release Valve fully open)**

● Steam



1. Differential Pressure is the difference between the inlet and outlet pressure of the trap.

● Air



1. Differential Pressure is the difference between the inlet and outlet pressure of the trap.
2. Capacities are equivalent capacities of standard air (air at 20 °C and atmospheric pressure).

Manufacturer  
**TLV**® CO., LTD.  
Kakogawa, Japan  
is approved by LRQA Ltd. to ISO 9001/14001

ISO 9001/ISO 14001

