



LOCK RELEASE VALVE

MODEL LR3 / LR5

Features

Lock release valve to eliminate steam-locking of steam traps J3X and J5X 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.



Picture shows LR3 on trap J3X

Specifications

Model	LR3	LR5
For Steam Trap Model	J3X, JF3X	J5X, JF5X
Max. Operating Pressure (barg) PMO	21	
Max. Operating Temperature (°C) TMO	220	

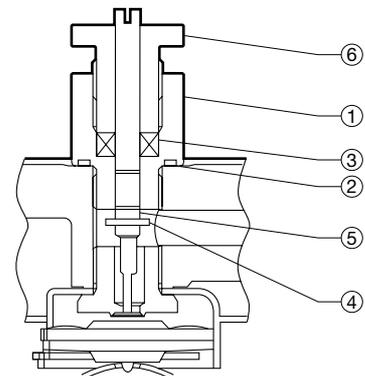
PRESSURE SHELL DESIGN CONDITIONS (**NOT** OPERATING CONDITIONS) : Maximum Allowable Pressure (barg) PMA: 13 1 bar = 0.1 MPa
 Maximum Allowable Temperature (°C) TMA: 200



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.

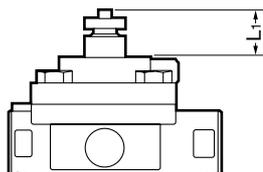
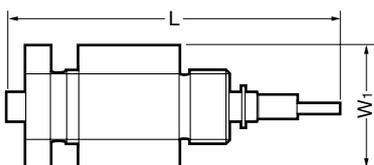
No.	Description	Material	DIN	ASTM/AISI*
①	Gland Case	Stainless Steel SUS303	1.4305	AISI303
②	Gasket	Fluorine Resin PTFE	—	—
③	Gland Packing	Graphite	—	—
④	Snap Ring	Stainless Steel SUS304	1.4301	AISI304
⑤	Element Retainer	Stainless Steel SUS303	1.4305	AISI303
⑥	Gland Retainer Nut	Stainless Steel SUS303	1.4305	AISI303

* Equivalent



Dimensions

•LR3, LR5

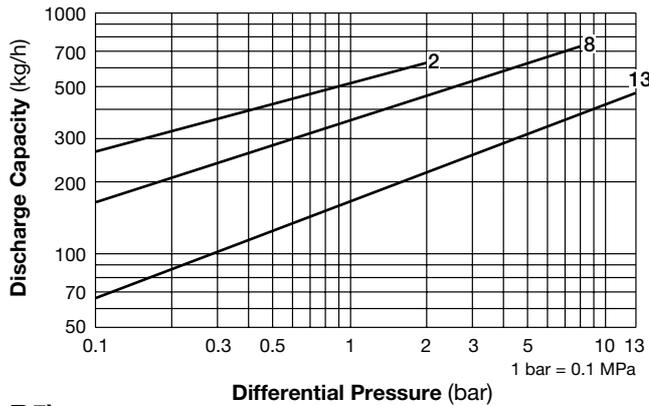


LR3, LR5

Model	L	L ₁	W ₁	Weight (kg)
LR3	58	23	22	0.08
LR5	66			

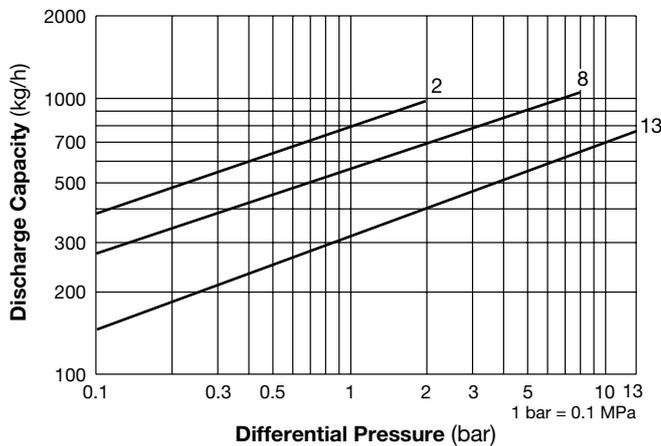
Trap Capacity (Lock Release Valve fully open)

•J(F)3X (LR3)



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.

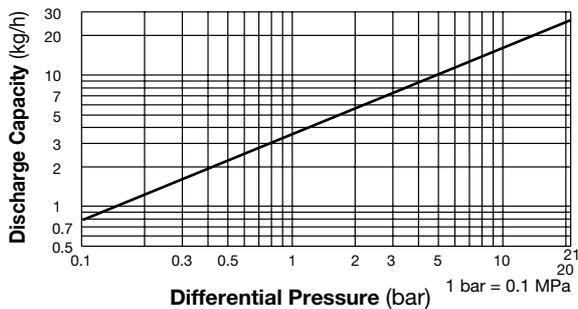
•J(F)5X (LR5)



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

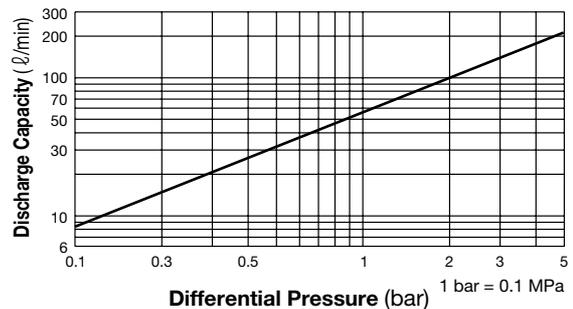
Steam/Air Discharge through trap air vent (Lock Release Valve fully open)

•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

