## LOCK RELEASE VALVE model LR3/LR5

## Benefits

Lock release valve maximizes production of rotating cylinder dryers, presses, and other steam-using equipment by preventing steam locking of the trap. The lock release valve can be used with J3X or J5X steam traps.

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 |  |
| Max. Operating Pressure (psig) | PMO |  | $300^{\star}$ |
| Max. Operating Temperature ( ${ }^{\circ}$ F) | TMO | $428^{\star}$ |  |
| Maximum Allowable Pressure (psig) | PMA | $300^{\star}$ |  |
| Maximum Allowable Temperature ( ${ }^{\circ}$ F) | TMA | $428^{\star}$ |  |

* 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.
! CAUTION
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 | ASTM/AISI | JIS |
| :---: | :--- | :--- | :--- | :--- |
| $(1)$ | Gland Case | Stainless Steel | AISI303 | SUS303 |
| $(2)$ | Gasket | Fluorine Resin | PTFE | PTFE |
| $(3)$ | Gland Packing | Graphite | - | - |
| (4) | Snap Ring | Stainless Steel | AISI304 | SUS304 |
| (5) | Element Retainer | Stainless Steel | AISI303 | SUS303 |
| (6) | Gland Retainer Nut | Stainless Steel | AISI303 | SUS303 |

* Equivalent


Dimensions
-LR3, LR5


LR3, LR5

| Model | L | $\mathrm{L}_{1}$ | $\mathrm{~W}_{1}$ | Weight (lb.) |
| :---: | :---: | :---: | :---: | :---: |
| LR3 | $25 / 16$ | $15 / 16$ | $7 / 8$ | 0.036 |
| LR5 | $25 / 8$ |  |  |  |

## Trap Capacity (Lock Release Valve fully open)



## -J(F)5X (LR5)



Orifices for J3X, screwed:
No. 1, 2, 5, 10, 21
Orifices for JF3X, flanged:
No. 1, 2, 5, 10, 18

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 $11^{\circ} \mathrm{F}$ 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.

## 1 Caution

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

Orifices for J5X, screwed:
No. 2, 5, 10, 21
Orifices for JF5X, flanged:
No. 2, 5, 10, 18*
*Available on special request.

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


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Manufacturer ISO 9001/ISO 14001 TLV ${ }_{\text {co.uro }}$

Kakogawa, Japan
is approved by LRQA Ltd. to ISO 9001/14001


