



PROCESS FLOAT STEAM TRAP

MODEL JL14-X/JLH14-X CAST IRON/
CAST STEEL

HIGH-CAPACITY IRON OR STEEL FLOAT STEAM TRAP WITH THERMOSTATIC AIR VENTING

Features

Extremely durable, inline-repairable, compact float trap with thermostatic air venting for large process or heating equipment.

1. Double-seated valve with heat-treat hardened valve seat and valve head provides continuous, smooth, low-velocity condensate discharge as process loads vary.
2. Self-aligning valve mechanism with stainless steel internals minimizes wear.
3. Thermostatic capsule (X-element) with “fail open” feature vents air automatically until close-to-steam temperature.
4. Easy, inline access to internal parts simplifies cleaning and reduces maintenance costs.
5. High-quality stainless steel internals and hardened valve surfaces ensure reliability.



Specifications

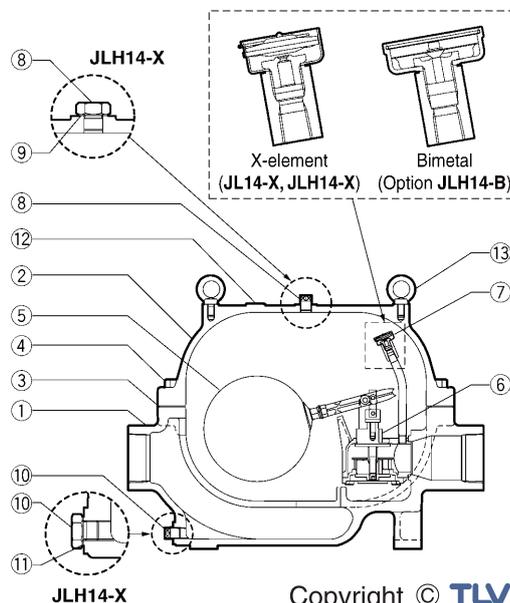
| Model | JL14-X | | JLH14-X | | |
|--|---------|----------|-------------|---------------|---------|
| | Screwed | Flanged* | Screwed | Socket Welded | Flanged |
| Connection | | | | | |
| Size / DN | 3" | DN 80 | 3" | DN 80 | |
| Orifice No. | 10, 13 | | 10, 18 | | |
| Maximum Operating Pressure (barg) PMO | 10, 13 | | 10, 18 | | |
| Maximum Differential Pressure (bar) ΔPMX | 10, 13 | | 10, 18 | | |
| Maximum Operating Temperature (°C) TMO | 200 | | 240 (400**) | | |

* JL14-X has a screwed-in flange ** Optional JLH14-B with bimetal-type air vent unit for initial air venting 1 bar = 0.1 MPa
 PRESSURE SHELL DESIGN CONDITIONS (NOT OPERATING CONDITIONS):
 Maximum Allowable Pressure (barg) PMA: 13 (JL14-X), 32 (JLH14-X)
 Maximum Allowable Temperature (°C) TMA: 200 (JL14-X), 400 (JLH14-X)

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 | DIN* | ASTM/AISI* |
|-----|-----------------------------|--|---------------|-----------------|
| ① | Body | JL14-X Cast Iron FC250 | 0.6025 | A126 Cl.B |
| | | JLH14-X Cast Steel A216 Gr.WCB | 1.0619 | — |
| ② | Cover | JL14-X Cast Iron FC250 | 0.6025 | A126 Cl.B |
| | | JLH14-X Cast Steel A216 Gr.WCB | 1.0619 | — |
| ③ | Cover Gasket | Graphite / Stainless Steel SUS316L | - / 1.4404 | - / AISI316L |
| ④ | Cover Bolt | JL14-X Carbon Steel S45C | 1.0503 | AISI1045 |
| | | JLH14-X Alloy Steel SNB7 | 1.7225 | A193 Gr.B7 |
| ⑤ | Float / Lever Unit | Stainless Steel SUS316L / Cast Stainl. Steel A351 Gr.CF8 | 1.4404/1.4312 | AISI316L / — |
| ⑥ | Trap Unit | Stainless Steel SUS304 / Cast Stainl. Steel A743 Gr.CA40 | 1.4301/1.4027 | AISI304 / — |
| ⑦ | Air Vent Pipe | Stainl. Steel SUS304/420F | 1.4301/1.4028 | AISI304/420F |
| ⑧ | Cover Plug | JL14-X Carbon Steel SS400 | 1.0037 | A6 |
| | | JLH14-X Carbon Steel S25C | 1.1158 | AISI1025 |
| ⑨ | Cover Plug Gasket (JLH14-X) | Soft Iron SUYP | 1.1121 | AISI1010 |
| ⑩ | Drain Plug | JL14-X Carbon Steel SS400 | 1.0037 | A6 |
| | | JLH14-X Carbon Steel S25C | 1.1158 | AISI1025 |
| ⑪ | Drain Plug Gasket (JLH14-X) | Soft Iron SUYP | 1.1121 | AISI1010 |
| ⑫ | Nameplate | Stainless Steel SUS304 | 1.4301 | AISI304 |
| ⑬ | Eye Bolt | Carbon Steel SS400 | 1.0037 | A6 |
| ⑭ | Flange** | Cast Steel A216 Gr.WCB | 1.0619 | — |
| ⑮ | Flange Pipe** | JL14-X Carbon Steel STPG370 | 1.0308 | A53 Type S Gr.A |
| | | JLH14-X Carbon Steel STPT370 | 1.0305 | A106 Gr.A |

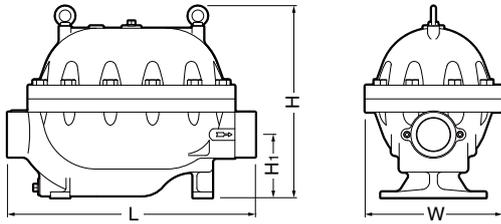
* Equivalent materials ** Shown on reverse



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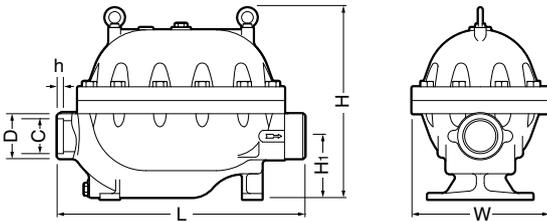
Dimensions

● **JL14-X/JLH14-X** Screwed

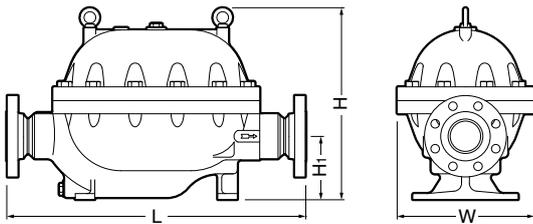


JL14-X shown.

● **JLH14-X** Socket Welded



● **JL14-X/JLH14-X** Flanged



JLH14-X shown.

JL14-X/JLH14-X Screwed* (mm)

| Size | L | H | H ₁ | W | Weight (kg) |
|------|-----|-----|----------------|-----|-------------|
| 3" | 635 | 490 | 163 | 350 | 107 (110) |

* BSP DIN 2999, other standards available
() JLH14-X

JLH14-X Socket Welded* (mm)

| DN | L | H | H ₁ | W | φD | φC | h | Weight (kg) |
|----|-----|-----|----------------|-----|-----|------|----|-------------|
| 80 | 635 | 490 | 163 | 350 | 105 | 89.8 | 16 | 110 |

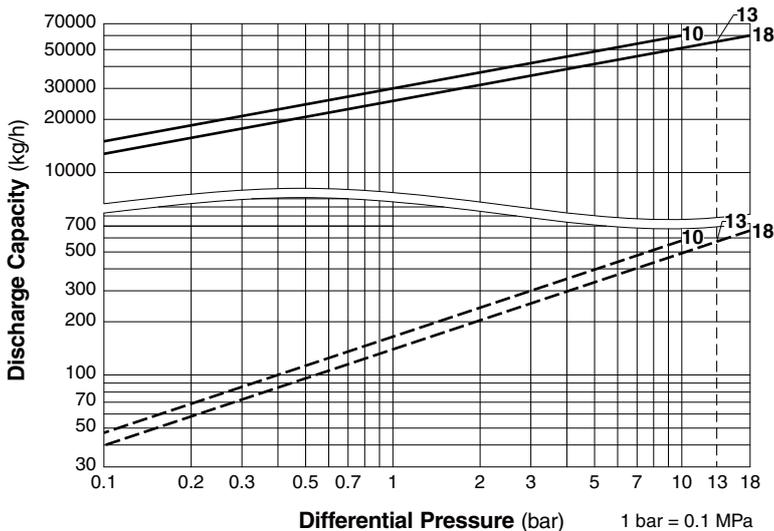
* ASME B16.11-2005, other standards available

JL14-X*/JLH14-X Flanged (mm)

| DN | L | | | | H | H ₁ | W | Weight** (kg) |
|----|----------|---------|------------|-------|-----|----------------|-----|---------------|
| | DIN 2501 | | ASME Class | | | | | |
| | PN16 | PN25/40 | 150RF | 300RF | | | | |
| 80 | 766 | 766 | 766 | 766 | 490 | 163 | 350 | 121 (124) |

PN 16 for JL14-X, PN 25/40 for JLH14-X
Other standards available, but length and weight may vary
* JL14-X has a screwed-in flange
** Weight is for DIN PN 25/40
() JLH14-X

Discharge Capacity



———— : Maximum capacity of JL14-X/JLH14-X.
- - - - : Minimum amount of condensate required to prevent steam leakage.

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 steam temperature.
4. Recommended safety factor: 1.5.

CAUTION

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

Manufacturer

ISO 9001/ISO 14001

TLV CO., LTD.
Kakogawa, Japan

is approved by LRQA Ltd. to ISO 9001/14001

