FREE FLOAT STEAM TRAP

MODEL JH3LX

FREE FLOAT STEAM TRAP WITH THERMOSTATIC AIR VENTING

Features

Inline repairable stainless steel steam trap for drainage of high-pressure heat exchangers and process heaters.

1. Self-modulating free float provides continuous, smooth, low velocity condensate discharge as process loads vary.
2. Precision-ground float, constant water seal and unique three-point seating ensure steam-tight seal, even under no-load conditions.
3. Only one moving part, the free float, eliminates concentrated wear and provides long maintenance-free service life.
4. Thermostatic capsule (X-element) with “fail open” feature vents air automatically until close to steam temperature.
5. Easy, inline access to internal parts slimplifies cleaning and reduces maintenance costs.
6. Built-in screen with large surface ensures trouble-free operation.

Specifications

Model		JH3LX		
Connection		Screwed	Socket Welded	Flanged
Size (mm)		15, 20, 25		
Orifice No.		2, 5, 10, 14, 22, 32		
Maximum Operating Pressure (MPaG)	PMO	0.2, 0.5, 1.0, 1.4, 2.2, 3.2		
Maximum Differential Pressure (MPa)	ΔPMX	0.2, 0.5, 1.0, 1.4, 2.2, 3.2		
Minimum Operating Pressure (MPaG)		0.01		
Maximum Operating Temperature (°C)	TMO	240		
Subcooling of X-element Fill (°C)		up to 6		
Type of X-element		B		

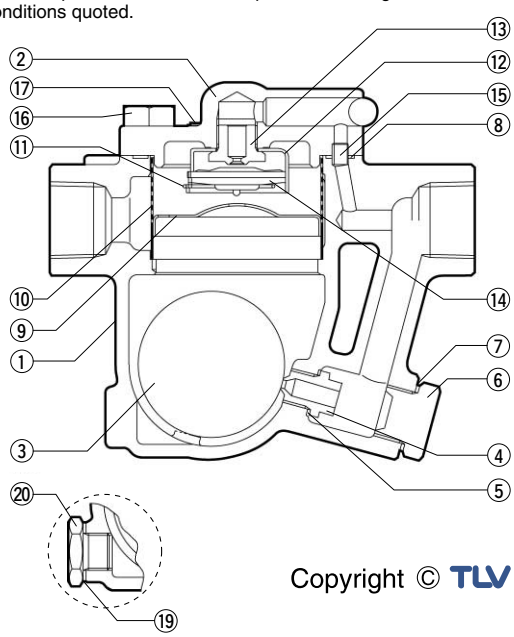
1 MPa = 10.197 kg/cm²

PRESSURE SHELL DESIGN CONDITIONS (**NOT** OPERATING CONDITIONS): Maximum Allowable Pressure (MPaG) PMA: 3.2
Maximum Allowable Temperature (°C) TMA: 350

⚠ 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.

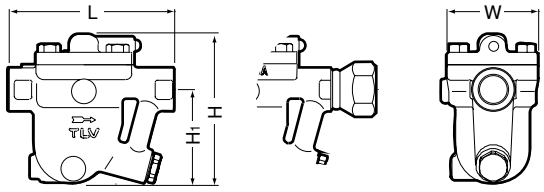
No.	Description	Material	JIS	ASTM/AISI*
①	Body	Cast Stainless Steel	—	A351 Gr. CF8
②	Cover	Cast Stainless Steel	—	A351 Gr. CF8
③F	Float	Stainless Steel	SUS316L	AISI316L
④R	Orifice	—	—	—
⑤MR	Orifice Gasket	Stainless Steel	SUS316L	AISI316L
⑥	Orifice Plug	Stainless Steel	SUS303	AISI303
⑦MR	Orifice Plug Gasket	Stainless Steel	SUS316L	AISI316L
⑧MR	Cover Gasket	Stainl. Steel/Graphite	SUS316L	AISI316L
⑨R	Float Cover	Stainless Steel	SUS304	AISI304
⑩R	Screen inner/outer	Stainless Steel	SUS304/430	AISI304/430
⑪R	Spring Clip	Stainless Steel	SUS304	AISI304
⑫R	X-element Guide	Stainless Steel	SUS304	AISI304
⑬R	Air Vent Valve Seat	Stainless Steel	SUS420F	AISI420F
⑭R	X-element	Stainless Steel	—	—
⑮	Connector	Stainless Steel	SUS416	AISI416
⑯	Cover Bolt	Stainless Steel	SUS304	AISI304
⑰	Nameplate	Stainless Steel	SUS304	AISI304
⑱	Socket**/Flange**	Cast Stainless Steel	—	A351 Gr. CF8
⑲	Drain Plug Gasket***	Stainless Steel	SUS316L	AISI316L
⑳	Drain Plug***	Stainless Steel	SUS303	AISI303

* Equivalent ** Shown on reverse, sockets 25 mm are welded on *** Option
Replacement kits available: (M) maintenance parts, (R) repair parts, (F) float



Dimensions

● **JH3LX** Screwed

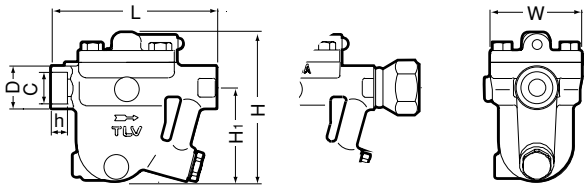


JH3LX Screwed* (mm)

Size	L	H	H1	W	Weight (kg)
15	145	129	82	80	2.7
20					
25	203				2.8

* Rc(PT), other standards available

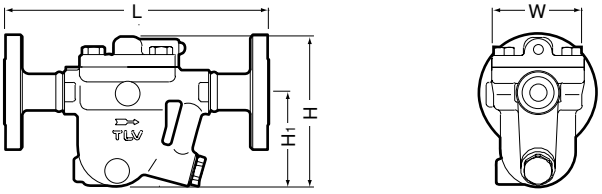
● **JH3LX** Socket Welded



JH3LX Socket Welded (mm)

Size	L	H	H1	W	ϕD	ϕC	h	Weight (kg)
15	145	129	82	80	36	22.2	12	2.7
20						27.7	14	
25	203				44	34.5		2.8

● **JH3LX** Flanged

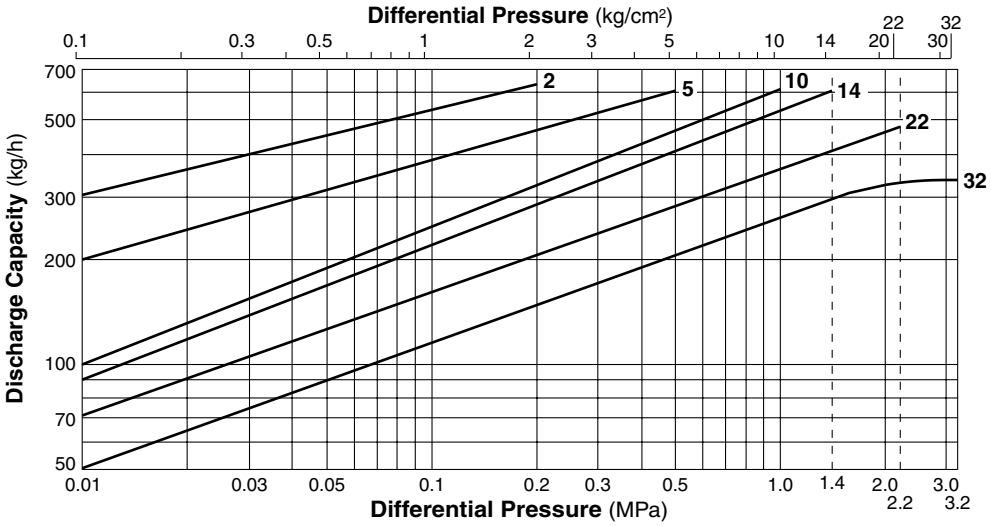


JH3LX Flanged (mm)

Size	L			H	H1	W	Weight* (kg)
	ASME Class						
	150RF	300RF	600RF				
15	210	210	220	129	82	80	4.3
20	230	230	230				5.1
25	250	250	250				5.8

Other standards available, but length and weight may vary
* Weight is for class 600 RF

Discharge Capacity



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.

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

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