



FREE FLOAT STEAM TRAP

MODEL JH7RX

FREE FLOAT STEAM TRAP WITH THERMOSTATIC AIR VENTING

Features

A reliable and durable cast steel free float steam trap with tight shut-off for use on medium-size process equipment.

1. Self-modulating free float provides continuous, smooth, low velocity condensate discharge as process loads vary.
2. Precision ground float, constant water seal and three-point seating design ensure a steam-tight seal, even under no-load conditions.
3. Only one moving part, the free float, eliminates concentrated valve 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, for rapid start-up, increased productivity and even heating.
5. Built-in screen with large surface area ensures trouble-free operation.
6. Easy, inline access to internal parts simplifies cleaning and reduces maintenance costs.



Specifications

Model		JH7RX		
Connection		Screwed	Socket Welded	Flanged
Size (mm)		25, 40	20, 25, 40, 50	
Orifice No.		1*, 2, 5, 10, 14, 22, 32		
Maximum Operating Pressure (MPaG)	PMO	0.1, 0.2, 0.5, 1.0, 1.4, 2.2, 3.2		
Maximum Differential Pressure (MPa)	ΔPMX	0.1, 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		

* No.1 orifice is available only for sizes 40 and 50 mm

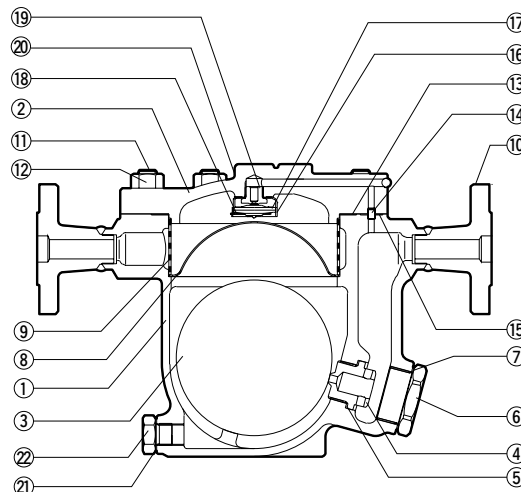
1 MPa = 10.197 kg/cm²

PRESSURE SHELL DESIGN CONDITIONS (**NOT** OPERATING CONDITIONS): Maximum Allowable Pressure (MPaG) PMA: 4.0
Maximum Allowable Temperature (°C) TMA: 425



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 Steel	—	A216 Gr. WCB
②	Cover	Carbon Steel	—	A105
③ ^F	Float	Stainless Steel	SUS316L	AISI316L
④ ^R	Orifice	—	—	—
⑤ ^{MR}	Orifice Gasket	Soft Iron	SUYP	AISI1010
⑥	Orifice Plug	Cast Stainless Steel	—	A351 Gr. CF8
⑦ ^{MR}	Orifice Plug Gasket	Soft Iron	SUYP	AISI1010
⑧	Screen Holder	Stainless Steel	SUS304	AISI304
⑨ ^R	Screen inside/outside	Stainless Steel	SUS430/304	AISI430/304
⑩	Socket**/Flange	Carbon Steel	—	A105
⑪	Cover Bolt	Alloy Steel	SNB7	A193 Gr. B7
⑫	Cover Nut	Carbon Steel	S45C	AISI1045
⑬ ^{MR}	Cover Gasket	Stainless Steel/Graphite	SUS316L	AISI316L
⑭	Connector	Stainless Steel	SUS416	AISI416
⑮ ^{MR}	Connector Gasket	Stainless Steel/Graphite	SUS316L	AISI316L
⑯ ^R	X-element Guide	Stainless Steel	SUS304	AISI304
⑰ ^R	X-element	Stainless Steel	—	—
⑱ ^R	Spring Clip	Stainless Steel	SUS304	AISI304
⑲ ^R	Air Vent Valve Seat	Stainless Steel	SUS420F	AISI420F
⑳	Nameplate	Stainless Steel	SUS304	AISI304
㉑ ^{MR}	Drain Plug Gasket	Soft Iron	SUYP	AISI1010
㉒	Drain Plug	Carbon Steel	S25C	AISI1025



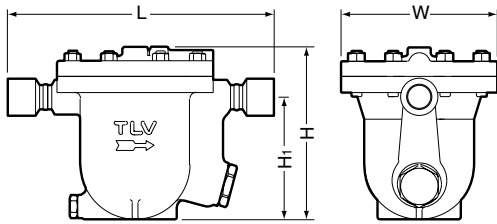
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* Equivalent ** Shown on reverse

Replacement kits available: (M) maintenance parts, (R) repair parts, (F) float,

Dimensions

● **JH7RX** Screwed

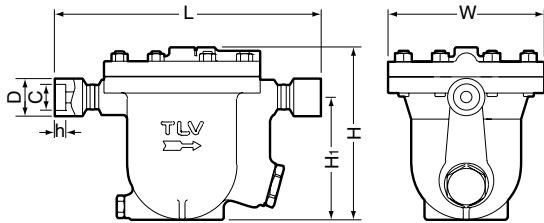


JH7RX Screwed* (mm)

Size	L	H	H ₁	φW	Weight (kg)
25	334	226	160	206	17
40	336				19

* Rc(PT), other standards available

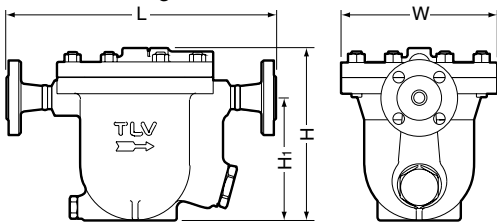
● **JH7RX** Socket Welded



JH7RX Socket Welded (mm)

Size	L	H	H ₁	φW	φD	φC	h	Weight (kg)
20	322	226	160	206	41.5	27.7	14	17
25	334				50	34.5		
40	336				66	49.1		17
50		79.5	61.1					

● **JH7RX** Flanged

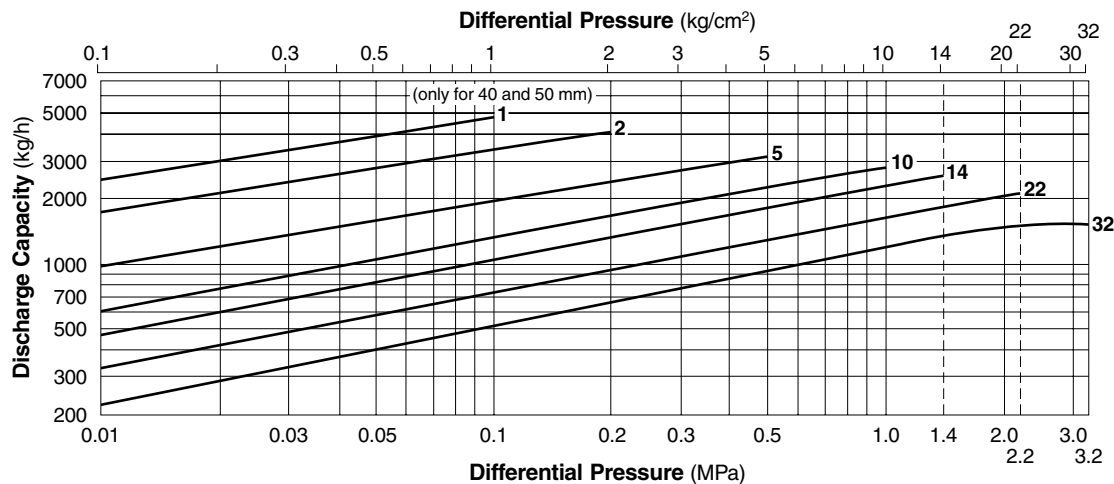


JH7RX Flanged (mm)

Size	L			H	H ₁	φW	Weight* (kg)
	ASME Class						
	150RF	300RF	600RF				
20	340	340	340	226	160	206	21
25	385	385	385				23
40	380	380	380				26
50	390	390	390				30

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

Discharge Capacity



- Line numbers within the graph refer to orifice numbers.
- No.1 orifice is available only for sizes 40 and 50 mm.
- Differential pressure is the difference between the inlet and outlet pressure of the trap.
- Capacities are based on continuous discharge of condensate 6 °C below saturated steam temperature.
- Recommended safety factor: at least 1.5.



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

