



FREE FLOAT STEAM TRAP

MODEL JH7RX CAST STEEL

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.

* Stainless steel body available on request.



Specifications

Model		JH7RX	
Connection		Socket Welded	Flanged
Size		DN 20, 25, 40	DN 20, 25, 40, 50
Orifice No.		1*, 2, 5, 10, 14, 22, 32	
Maximum Operating Pressure (barg)	PMO	1, 2, 5, 10, 14, 22, 32	
Maximum Differential Pressure (bar)	ΔPMX	1, 2, 5, 10, 14, 22, 32	
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 DN 40 and 50

1 bar = 0.1 MPa

PRESSURE SHELL DESIGN CONDITIONS (NOT OPERATING CONDITIONS): Maximum Allowable Pressure (barg) PMA: 40
Maximum Allowable Temperature (°C) TMA: 400



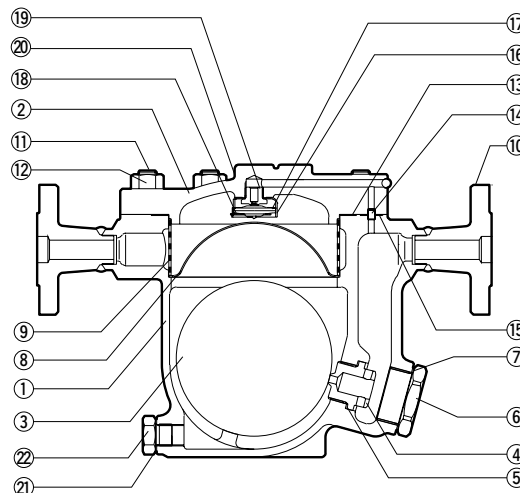
CAUTION

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	Cast Steel A216 Gr. WCB	1.0619	—
②	Cover	Carbon Steel A105	1.0460	—
③ ^F	Float	Stainless Steel SUS 316L	1.4404	AISI316L
④ ^R	Orifice	—	—	—
⑤ ^{MR}	Orifice Gasket	Soft Iron SUYP	1.1121	AISI1010
⑥	Orifice Plug	Cast Stainless Steel A351 Gr. CF8	1.4312	—
⑦ ^{MR}	Orifice Plug Gasket	Soft Iron SUYP	1.1121	AISI1010
⑧	Screen Holder	Stainless Steel SUS304	1.4301	AISI304
⑨ ^R	Screen inside/outside	Stainless Steel SUS430/304	1.4301/1.4016	AISI430/304
⑩	Socket**/Flange	Carbon Steel A105	1.0460	—
⑪	Cover Bolt	Alloy Steel SNB7	1.7225	A193 Gr. B7
⑫	Cover Nut	Carbon Steel S45C	1.0503	AISI1045
⑬ ^{MR}	Cover Gasket	Stainless Steel SUS316L/Graphite	1.4404	AISI316L
⑭	Connector	Stainless Steel SUS416	—	AISI416
⑮ ^{MR}	Connector Gasket	Stainless Steel SUS316L/Graphite	1.4404	AISI316L
⑯ ^R	X-element Guide	Stainless Steel SUS304	1.4301	AISI304
⑰ ^R	X-element	Stainless Steel	—	—
⑱ ^R	Spring Clip	Stainless Steel SUS304	1.4301	AISI304
⑲ ^R	Air Vent Valve Seat	Stainless Steel SUS420F	1.4028	AISI420F
⑳	Nameplate	Stainless Steel SUS304	1.4301	AISI304
㉑ ^{MR}	Drain Plug Gasket	Soft Iron SUYP	1.1121	AISI1010
㉒	Drain Plug	Carbon Steel S25C	1.1158	AISI1025

* Equivalent materials ** Shown on reverse

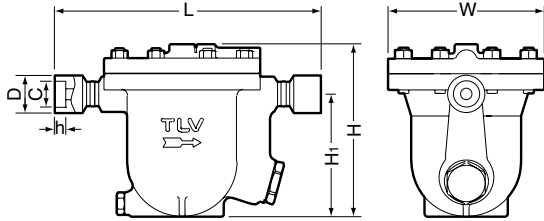
Replacement kits available: (M) maintenance parts, (R) repair parts, (F) float



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Dimensions

● **JH7RX Socket Welded**

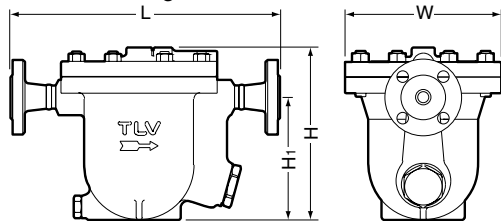


JH7RX Socket Welded* (mm)

DN	L	H	H ₁	φW	φD	φC	h	Weight (kg)
20	322	226	160	206	41.5	27.05	14	17
25	334				50	33.80		
40	336				66	48.65		

* ASME B16.11, other standards available

● **JH7RX Flanged**

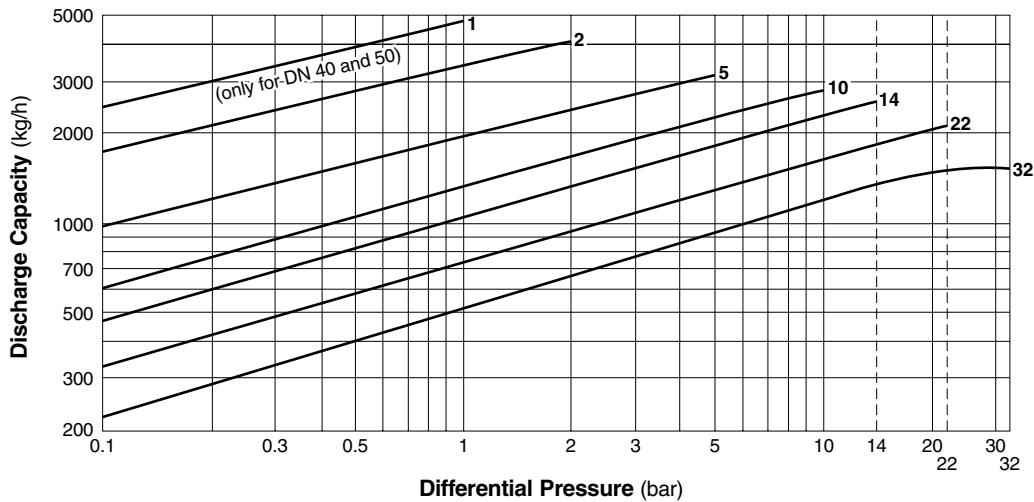


JH7RX Flanged (mm)

DN	L				H	H ₁	φW	Weight* (kg)
	DIN 2501	ASME Class						
	PN25/40	150RF	300RF	600RF				
20	340	340	340	340	226	160	206	20
25	385	385	385	385				21
40	380	380	380	380				23
50	390	390	390	390				24

Other standards available, but length and weight may vary
* Weight is for DIN PN 25/40

Discharge Capacity



- Line numbers within the graph refer to orifice numbers.
- No.1 orifice is available only for DN 40 and 50.
- 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.

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

