FREE FLOAT STEAM TRAP

MODEL JH7RL CAST STEEL

HIGH-PRESSURE FREE FLOAT STEAM TRAP WITH AIR VENT VALVE

Features

A reliable and durable cast steel* free float steam trap with tight shut-off for drainage from superheated or high-pressure steam mains, equipment and turbines.

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. Easy-to-use air vent valve for rapid start-up.
5. Built-in screen with large surface area ensures extended trouble-free service.
6. Easy, inline access to internal parts simplifies cleaning and lowers maintenance costs.

* Stainless steel body available on request.

Specifications

Model	JH7RL	
Connection	Socket Welded	Flanged
Size	DN 20, 25, 40, 50	
Orifice No.	1*, 2, 5, 10, 14, 22, 32, 40, 46, 65	
Maximum Operating Pressure (barg) PMO	1 , 2, 5, 10, 14, 22, 32, 40, 46, 65	
Maximum Differential Pressure (bar) ΔPMX	1 , 2, 5, 10, 14, 22, 32, 40, 46, 65	
Maximum Operating Temperature (°C) TMO	400	

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

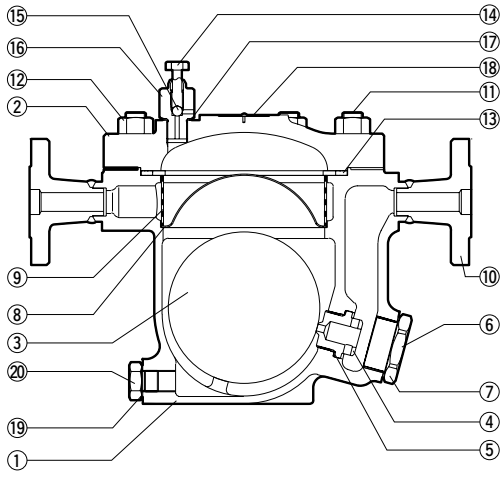
1 bar = 0.1 MPa

PRESSURE SHELL DESIGN CONDITIONS (**NOT** OPERATING CONDITIONS): Maximum Allowable Pressure (barg) PMA: 65
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.

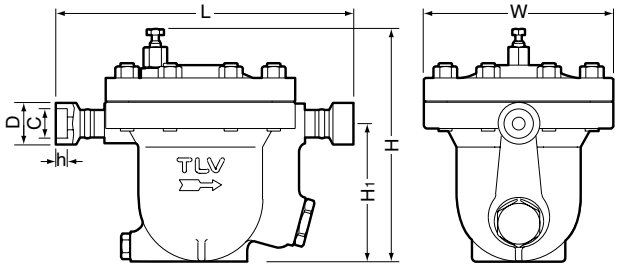
No.	Description	Material	DIN*	ASTM/AISI*
①	Body	Cast Steel A216 Gr. WCB	1.0619	—
②	Cover	Carbon Steel S25C	1.0460	AISI1025
③F	Float	Stainless Steel SUS316L	1.4404	AISI316L
④R	Orifice	—	—	—
⑤MR	Orifice Gasket	Soft Iron SUYP	1.1121	AISI1010
⑥	Orifice Plug	Cast Stainless Steel A351 Gr. CF8	1.4312	—
⑦MR	Orifice Plug Gasket	Soft Iron SUYP	1.1121	AISI1010
⑧	Screen Holder	Stainless Steel SUS304	1.4301	AISI304
⑨R	Screen	Stainless Steel SUS430	1.4016	AISI430
⑩	Socket**/Flange	Carbon Steel A105	1.0460	—
⑪	Cover Bolt	Alloy Steel SNB16	1.7711	A193 Gr. B16
⑫	Cover Nut	Carbon Steel S45C	1.0503	AISI1045
⑬MR	Cover Gasket	Stainless Steel SUS304/Graphite	1.4301	AISI304
⑭V	Air Vent Valve Stem	Stainless Steel SUS304	1.4301	AISI304
⑮V	Steel Ball	Stainless Steel SUS440C	1.4125	AISI440
⑯V	Air Vent Valve Body	Stainless Steel SUS303	1.4305	AISI303
⑰MR V	Air Vent Valve Gasket	Soft Iron SUYP	1.1121	AISI1010
⑱	Nameplate	Stainless Steel SUS304	1.4301	AISI304
⑲MR	Drain Plug Gasket	Soft Iron SUYP	1.1121	AISI1010
⑳	Drain Plug	Carbon Steel S25C	1.1158	AISI1025

* Equivalent materials ** Shown on reverse
Replacement kits available: (M) maintenance parts, (R) repair parts, (F) float, (V) air vent valve unit



Dimensions

● **JH7RL** Socket Welded

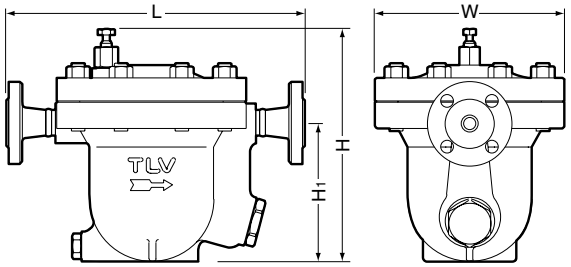


JH7RL Socket Welded* (mm)

DN	L	H	H1	ϕW	ϕD	ϕC	h	Weight (kg)
20	322	271	160	222	41.5	27.05	14	19
25	334				50	33.80		
40	336				66	48.65		21
50					79.5	61.10	17	22

* ASME B16.11, other standards available

● **JH7RL** Flanged

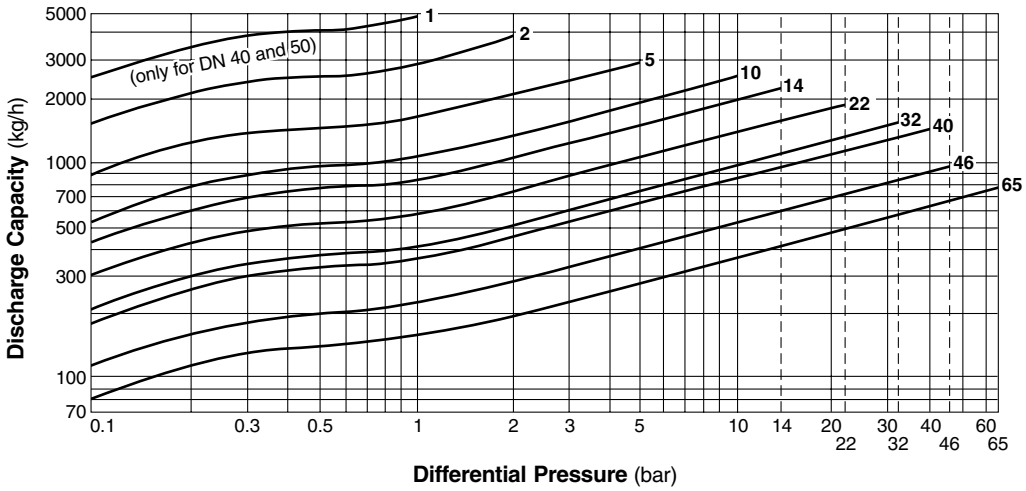


JH7RL Flanged (mm)

DN	L					H	H1	ϕW	Weight* (kg)
	DIN 2501	ASME Class							
	PN25/40	150RF	300RF	600RF	900RF				
20	340	340	340	340	370	271	160	222	22
25	385	385	385	385	395				24
40	380	380	380	380	390				26
50	390	390	390	390	400				27

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

Discharge Capacity



1 bar = 0.1 MPa

1. Line numbers within the graph refer to orifice numbers.
2. No.1 orifice is available only for DN 40 and 50.
3. Differential pressure is the difference between the inlet and outlet pressure of the trap.
4. Capacities are based on continuous discharge of condensate 6 °C below saturated steam temperature.
5. 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
TLV CO.,LTD.
Kakogawa, Japan
is approved by LRQA Ltd. to ISO 9001/14001

ISO 9001/ISO 14001