



FREE FLOAT STEAM TRAP

MODEL JH5R/JH5RH 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 small to medium-size 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 facilitates rapid start-up.
5. Built-in screen with large surface area ensures extended trouble-free operation.
6. Easy, inline access to internal parts simplifies cleaning and lowers maintenance costs.

* Stainless Steel body available on request



Specifications

Model	JH5R			JH5RH	
	Screwed	Socket Welded	Flanged	Socket Welded	Flanged
Connection					
Size	1/2", 3/4", 1"	DN 15, 20, 25		DN 15, 20, 25,	
Orifice No.	1, 2, 5, 10, 14, 22, 32, 40, 46, 65			70, 80	
Maximum Operating Pressure (barg) PMO	1, 2, 5, 10, 14, 22, 32, 40, 46, 65			70, 80	
Maximum Differential Pressure (bar) ΔPMX	1, 2, 5, 10, 14, 22, 32, 40, 46, 65			70, 80	
Maximum Operating Temperature (°C) TMO				400	

PRESSURE SHELL DESIGN CONDITIONS (NOT OPERATING CONDITIONS):

Maximum Allowable Pressure (barg) PMA: 65 (JH5R), 80 (JH5RH)

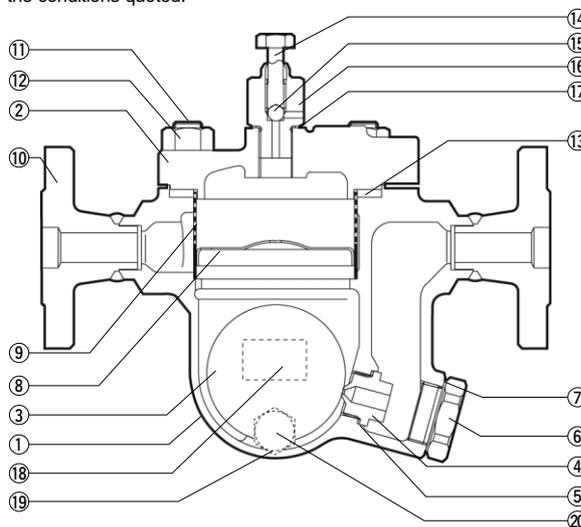
Maximum Allowable Temperature (°C) TMA: 400

1 bar = 0.1 MPa



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 (JH5R)	Carbon Steel A105	1.0460	—
	Cover (JH5RH)	Cast Steel A216 Gr. WCB	1.0619	—
③ ^F	Float	Stainless Steel SUS316L	1.4404	AISI316L
④ ^R	Orifice	—	—	—
⑤ ^{MR}	Orifice Gasket	Soft Iron SUYP	1.1121	AISI1010
⑥	Orifice Plug	Cast Stainl. Steel SCS2A	1.4027	A217 Gr. CA15
⑦ ^{MR}	Orifice Plug Gasket	Soft Iron SUYP	1.1121	AISI1010
⑧ ^R	Float Cover	Stainless Steel SUS304	1.4301	AISI304
⑨ ^R	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
⑬ ^{MR}	Cover Gasket	Stainl. Steel/Graphite SUS304	1.4301	AISI304
⑭ ^V	Air Vent Valve Stem	Stainless Steel SUS304	1.4301	AISI304
⑮ ^V	Steel Ball	Stainless Steel SUS440C	1.4125	AISI440C
⑯ ^V	Air Vent Valve Body	Stainless Steel SUS303	1.4305	AISI303
⑰ ^{MR}	Air Vent Valve Gasket	Soft Iron SUYP	1.1121	AISI1010
⑱	Nameplate	Stainless Steel SUS304	1.4301	AISI304
⑲	Drain Plug Gasket***	Soft Iron SUYP	1.1121	AISI1010
⑳	Drain Plug***	Carbon Steel S25C	1.1158	AISI1025



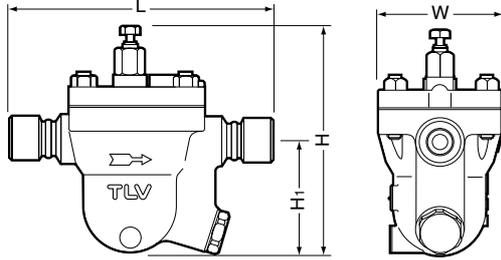
* Equivalent materials ** Shown on reverse *** Option

Replacement kits available: (M) maintenance parts, (R) repair parts, (F) float, (V) air vent valve unit

Copyright © TLV

Dimensions

● **JH5R** Screwed

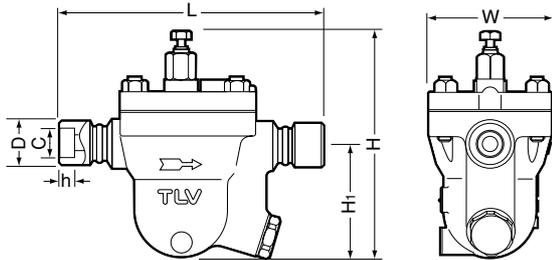


JH5R Screwed* (mm)

Size	L	H	H ₁	W	Weight (kg)
1/2"	234	210	105	115	6.5
3/4"	246				6.6
1"	258				6.7

* BSP DIN 2999, other standards available

● **JH5R/JH5RH** Socket Welded

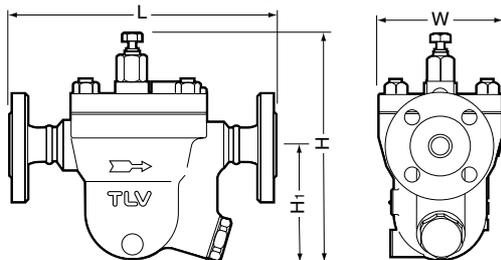


JH5R/JH5RH Socket Welded* (mm)

Model	DN	L	H	H ₁	W	φD	φC	h	Weight (kg)
JH5R	15	234	210	105	115	34	21.70	12	6.5
	20	246				40	27.05	14	6.6
	25	258				49	33.80	14	6.7
JH5RH	15	234	212	107	125	34	21.70	12	10
	20	246				40	27.05	14	
	25	258				49	33.80	14	

* ASME B16.11, other standards available

● **JH5R/JH5RH** Flanged



JH5R/JH5RH Flanged (mm)

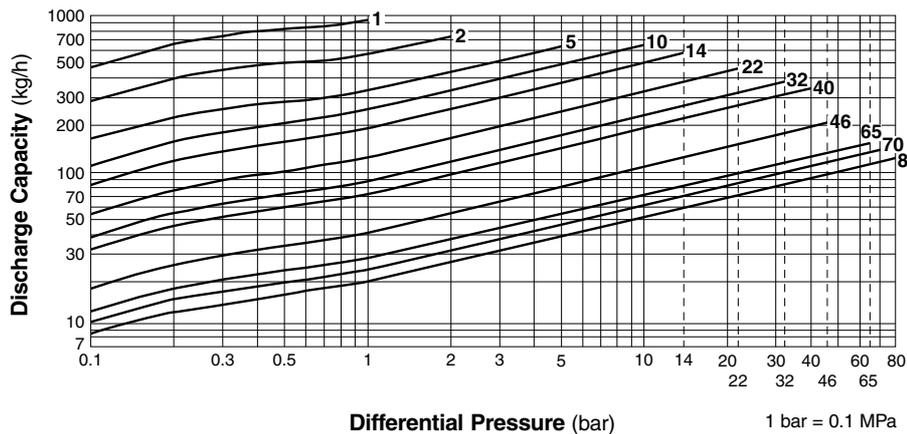
Model	DN	L				H	H ₁	W	Weight* (kg)
		DIN 2501		ASME Class					
		PN25/40	150RF 300RF	600RF	900RF				
JH5R	15	239	239	239	269	210	105	115	8.4
	20	264	264	264	294				9.8
	25	309	309	309	319				11
JH5RH	15	-	-	239	269	212	107	125	12
	20	-	-	264	294				14
	25	-	-	309	319				16

Other standards available, but length and weight may vary

* Weight is for Class 600 RF

JH5R shown. Configuration of JH5RH differs slightly.

Discharge Capacity



- Line numbers within the graph refer to orifice numbers.
- 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

