



# FREE FLOAT<sup>®</sup> STEAM TRAP

## MODEL J7.5X CAST IRON

### FREE FLOAT STEAM TRAP WITH THERMOSTATIC AIR VENTING

#### Features

**A reliable and durable cast iron steam trap with tight shut-off for use on large-size process equipment.**

1. Self-modulating free float provides continuous, smooth, low velocity condensate discharge as process loads vary.
2. Only one moving part, the free float, prevents concentrated wear and provides long maintenance-free service life.
3. Thermostatic capsule (X-element) with "fail open" feature vents air automatically until close-to-steam temperature.
4. Built-in screen with large surface area ensures extended trouble-free operation.
5. Easy, inline access to internal parts simplifies cleaning and reduces maintenance costs.

#### Pressure Equipment Directive (PED)

Classification according to PED 2014/68/EU, fluid group 2

Size	Category	CE marking
DN 40, DN 50, DN 80	II	with CE marking and Declaration of Conformity



#### Specifications

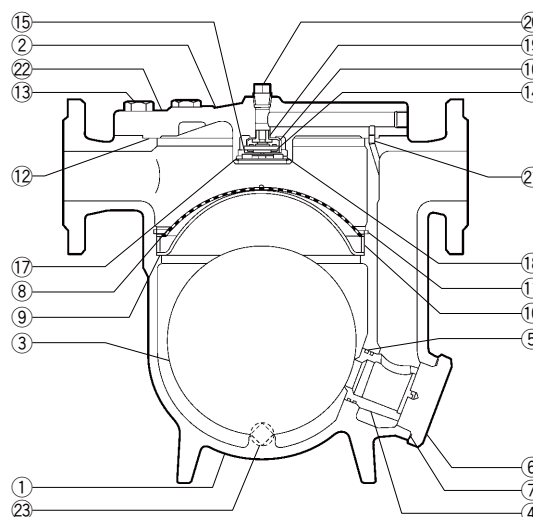
Model	J7.5X	
Connection	Flanged	
Size	DN 40, 50, 80	
Orifice No.	1, 2, 5, 10, 13	
Maximum Operating Pressure (barg)	PMO	1, 2, 5, 10, 13
Maximum Differential Pressure (bar)	Δ PMX	1, 2, 5, 10, 13
Maximum Operating Temperature (°C)	TMO	200
Subcooling of X-element Fill (°C)		up to 6
Type of X-element		C6

PRESSURE SHELL DESIGN CONDITIONS (**NOT** OPERATING CONDITIONS): Maximum Allowable Pressure (barg) PMA: 13      1 bar = 0.1 MPa  
Maximum Allowable Temperature (°C) TMA: 200



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 Iron FC250	0.6025	A126 CI.B
②	Cover	Cast Iron FC250	0.6025	A126 CI.B
③ <sup>F</sup>	Float	Stainless Steel SUS316L	1.4404	AISI316L
④ <sup>R</sup>	Orifice	—	—	—
⑤ <sup>MR</sup>	Orifice O-Ring	Ethylene Propylene Rubber	EPR	D2000CA
⑥	Orifice Holder Plug	Ductile Cast Iron FCD450	0.7040	A536
⑦ <sup>MR</sup>	Holder Plug Gasket	Fluorine Resin PTFE	PTFE	PTFE
⑧ <sup>R</sup>	Screen	Stainless Steel SUS430	1.4016	AISI430
⑨	Screen Holder	Stainless Steel SUS304	1.4301	AISI304
⑩	Screen Holder Retainer	Stainless Steel SUS304	1.4301	AISI304
⑪	Snap Ring	Stainless Steel SUS304	1.4301	AISI304
⑫ <sup>MR</sup>	Cover Gasket	Graphite/Stainl. Stl. SUS316L	- /1.4404	- /AISI316L
⑬	Cover Bolt	Carbon Steel S45C	1.0503	AISI1045
⑭ <sup>R</sup>	X-element	Stainless Steel	—	—
⑮ <sup>R</sup>	Spring Clip	Stainless Steel SUS304	1.4301	AISI304
⑯ <sup>R</sup>	X-element Guide	Stainless Steel SUS304	1.4301	AISI304
⑰ <sup>R</sup>	X-element Cover	Stainless Steel SUS304	1.4301	AISI304
⑱ <sup>R</sup>	Snap Ring	Stainless Steel SUS304	1.4301	AISI304
⑲ <sup>R</sup>	Air Vent Valve Seat	Stainless Steel SUS420F	1.4028	AISI420F
⑳	Plug	Carbon Steel SS400	1.0037	A6
㉑	Connector	Stainless Steel SUS416	1.4005	AISI416
㉒	Nameplate	Stainless Steel SUS304	1.4301	AISI304
㉓	Drain Plug	Carbon Steel SS400	1.0037	A6



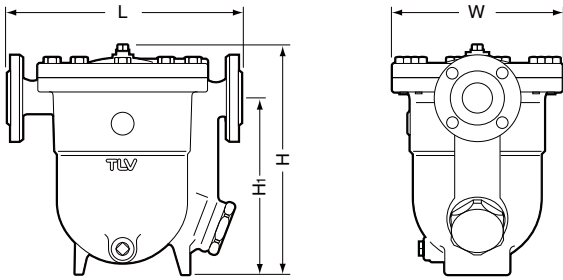
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\* Equivalent materials

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

**Dimensions**

● **J7.5X** Flanged

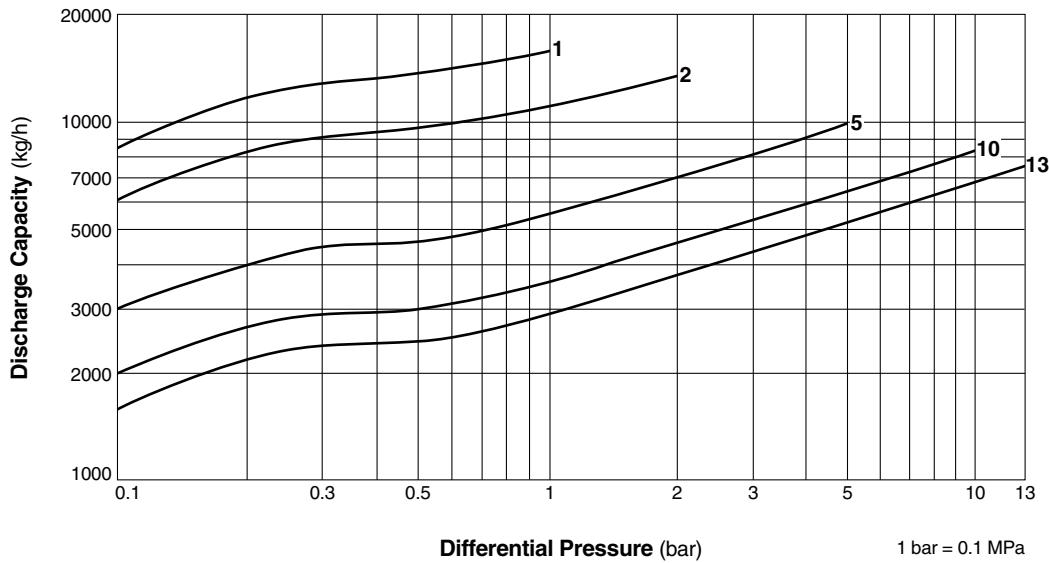


**J7.5X** Flanged (mm)

DN	L		H	H <sub>i</sub>	φW	Weight (kg)
	DIN 2501	PN 10/16				
40	386	397	307	290		42
50	400	402				45
80	430	417				49

Other standards available, but length and weight may vary

**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 this product 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

