



FREE FLOAT STEAM TRAP

MODEL **J5X** DUCTILE CAST IRON
CAST IRON

FREE FLOAT STEAM TRAP WITH THERMOSTATIC AIR VENTING

Features

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

1. Thermostatic capsule with “fail open” feature vents air automatically until close-to-steam temperature, for rapid start-up.
2. Hot air during operation can also be vented allowing increased productivity and even heating.
3. Only one moving part, the free float, eliminates concentrated valve wear and provides long maintenance-free service life.
4. Easy, inline access to internal parts simplifies cleaning and reduces maintenance costs.
5. Built-in screen with large surface area ensures trouble-free operation.
6. Self-modulating free float provides continuous, smooth, low velocity condensate discharge as process loads vary.



Specifications

Model	J5X	JF5X
Connection	Screwed	Flanged
Size	3/4", 1", 1 1/4", 1 1/2"	DN 20*, 25*, 32, 40, 50
Orifice No.		2, 5, 8, 10, 13
Maximum Operating Pressure (barg) PMO		2, 5, 8, 10, 13
Maximum Differential Pressure (bar) ΔPMX		2, 5, 8, 10, 13
Maximum Operating Temperature (°C) TMO		200
Subcooling of X-element Fill (°C)		up to 6
Type of X-element		B

* Screwed-in flange

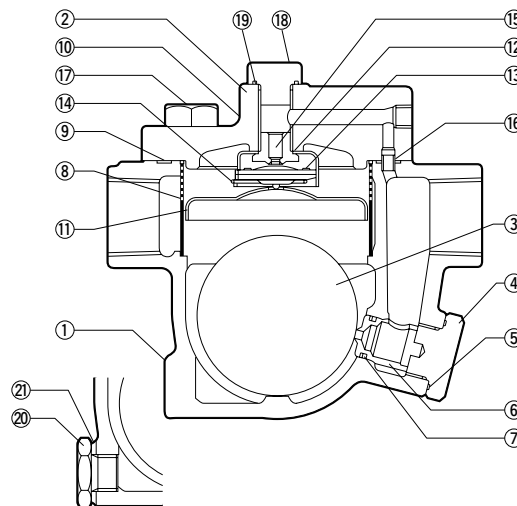
1bar = 0.1MPa

PRESSURE SHELL DESIGN CONDITIONS (NOT OPERATING CONDITIONS): Maximum Allowable Pressure (barg) PMA: 13
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 (J5X, JF5X 20, 25)	Ductile Cast Iron GGG-40.3	0.7043	A395
	Body (JF5X 32, 40, 50)	Cast Iron GG-25	0.6025	A126 Cl. B
②	Cover	Ductile Cast Iron GGG-40.3	0.7043	A395
③ F	Float	Stainless Steel SUS316L	1.4404	AISI316L
④	Orifice Holder Plug	Carbon Steel S25C	1.1158	AISI1025
⑤ MR	Orifice Plug Gasket	Fluorine Resin PTFE	PTFE	PTFE
⑥ R	Orifice	—	—	—
⑦ MR	Orifice O-Ring	Synthetic Rubber EPR	EPR	D2000CA
⑧ R	Screen outside/inside	Stainless Steel SUS304/430	1.4301/4016	AISI304/430
⑨ MR	Cover Gasket	Fluorine Resin PTFE	PTFE	PTFE
⑩	Nameplate	Stainless Steel SUS304	1.4301	AISI304
⑪ R	Float Cover	Stainless Steel SUS304	1.4301	AISI304
⑫ R	X-element Guide	Stainless Steel SUS304	1.4301	AISI304
⑬ R	X-element	Stainless Steel	—	—
⑭ R	Spring Clip	Stainless Steel SUS304	1.4301	AISI304
⑮ R	Air Vent Valve Seat	Stainless Steel SUS420F	1.4028	AISI420F
⑯	Connector	Stainless Steel SUS416	1.4005	AISI416
⑰	Cover Bolt	Carbon Steel S45C	1.0503	AISI1045
⑱	Plug	Carbon Steel S25C	1.1158	AISI1025
⑲ MR	Plug Gasket	Fluorine Resin PTFE	PTFE	PTFE
⑳	Drain Plug***	Carbon Steel S25C	1.1158	AISI1025
㉑	Drain Plug Gasket***	Soft Iron SUYP	1.1121	AISH1010
㉒	Flange (JF5X 20, 25)**	Carbon Steel SS400/S25C	1.1158	A6/AISI1025
㉓	Pipe (JF5X 20, 25)**	Carbon Steel STPT370	1.0305	A106 TYPE S Gr.A



Optional lock release valve available for special applications.

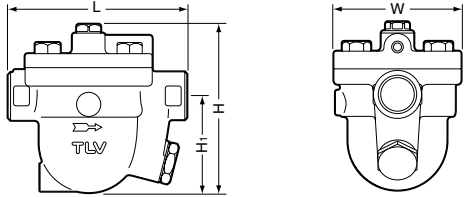
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* Equivalent materials ** Shown overleaf *** Option

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

Dimensions

● **J5X** Screwed

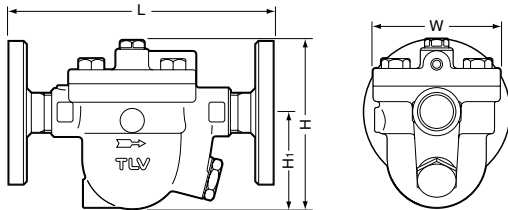


J5X Screwed*

Size	L	H	H ₁	W	Weight (kg)
3/4"	155	149	84	108	4.4
1"					4.3
1 1/4"	160	182	106	108	5.8
1 1/2"					

* BSP DIN 2999, other standards available

● **JF5X** Flanged DN 20, 25 (Screwed-in flange)

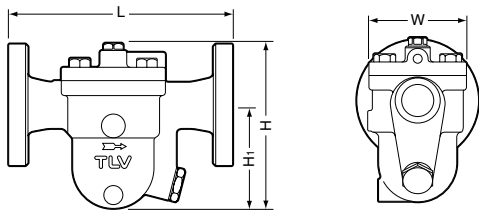


JF5X Flanged

DN	L	H	H ₁	W	Weight* (kg)
	DIN 2501 PN10/16				
20	250	149	84	108	6.0
25					6.9

Other standards available, but length and weight may vary
* Weight is for DIN PN 10/16

● **JF5X** Flanged DN 32, 40, 50

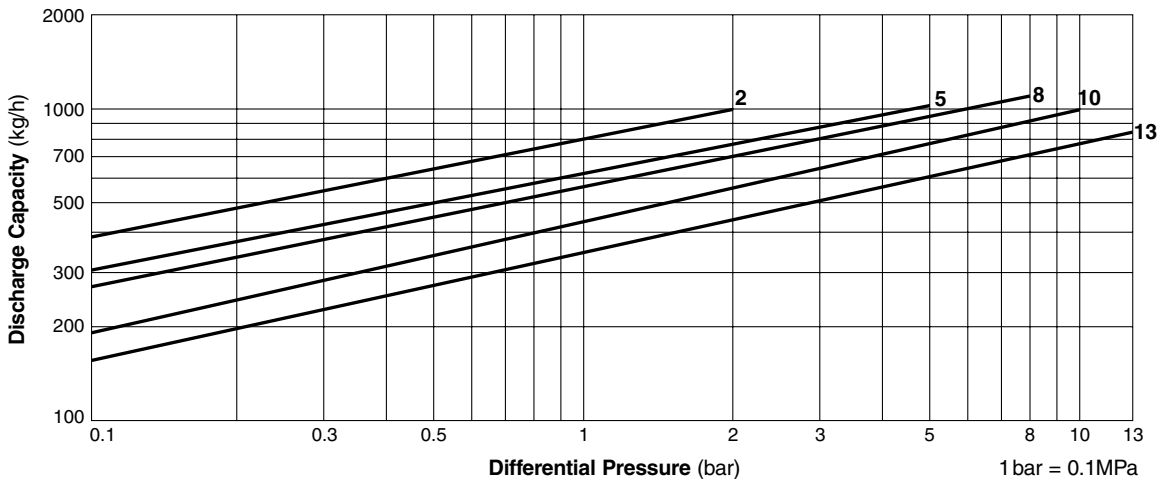


JF5X Flanged

DN	L	H	H ₁	W	Weight* (kg)
	DIN 2501 PN10/16				
32	241	182	113	108	9.5
40	256		116		10
50	265	196	119		11

Other standards available, but length and weight may vary
* Weight is for DIN PN 10/16

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 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

