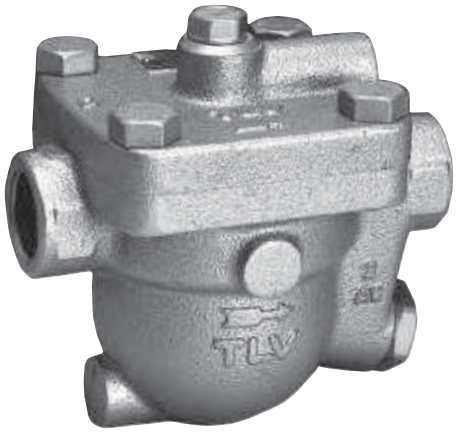
J5X/JF5X
Free Float Steam Trap

Features

A reliable and durable ductile cast iron or cast iron steam trap with tight shut-off for use on small to medium-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 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 20 to DN 50	—*	Art. 4, Sec. 3 (sound engineering practice), CE marking not allowed

* Manufactured in accordance with sound engineering practice

Specifications

Model		J5X	JF5X
Connection		Screwed	Flanged*
Size		¾″, 1″, 1¼″, 1½″	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)	Δ PMX	2, 5, 8, 10, 13	
Maximum Operating Temperature (°C)	TMO	200	
Subcooling of X-element Fill (°C)		up to 6	
Type of X-element		C6	

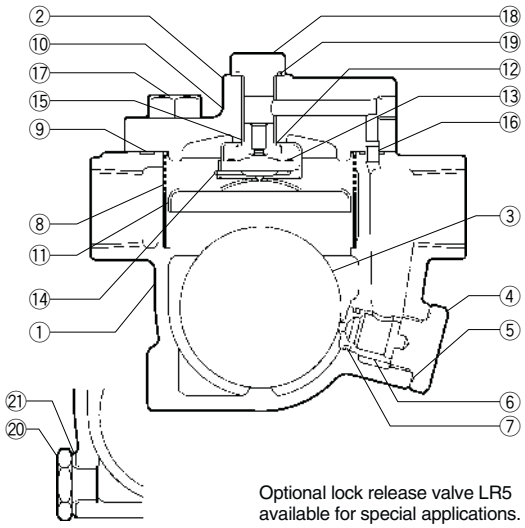
* JF5X DN 20 and DN 25 have screwed-in flanges

1 bar = 0.1 MPa

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

⚠ 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	J5X, JF5X DN 20, 25	Ductile Cast Iron GGG40.3	0.7043	A395
		JF5X DN 32, 40, 50	Cast Iron FCV400	—	A842 Gr.400
②	Cover		Ductile Cast Iron GGG40.3	0.7043	A395
③F	Float		Stainless Steel SUS316L	1.4404	AISI316L
④	Orifice Holder Plug		Carbon Steel S25C	1.1158	AISI1025
⑤MR	Orifice Plug Gasket		Fluorine Resin PTFE	PTFE	PTFE
⑥R	Orifice		—	—	—
⑦MR	Orifice O-Ring		Synthetic Rubber EPR	EPR	D2000CA
⑧R	Screen inside/outside		Stainless Steel SUS430/304	1.4016/1.4301	AISI430/304
⑨MR	Cover Gasket		Fluorine Resin PTFE	PTFE	PTFE
⑩	Nameplate		Stainless Steel SUS304	1.4301	AISI304
⑪R	Float Cover		Stainless Steel SUS304	1.4301	AISI304
⑫R	X-element Guide		Stainless Steel SUS304	1.4301	AISI304
⑬R	X-element		Stainless Steel	—	—
⑭R	Spring Clip		Stainless Steel SUS304	1.4301	AISI304
⑮R	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
⑲MR	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	AISI1010
㉒	Flange (JF5X DN 20, 25)***		Carbon Steel S25C	1.1158	AISI1025
㉓	Pipe (JF5X DN 20, 25)***		Carbon Steel STPG370	1.0308	A53 Type S Gr.A

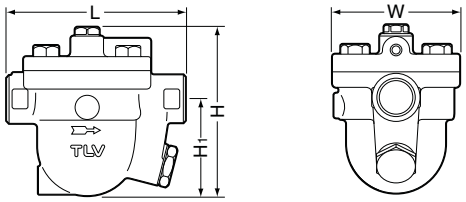


Optional lock release valve LR5 available for special applications.

* Equivalent materials ** Option *** Shown on reverse
Replacement kits available: (M) maintenance parts, (R) repair parts, (F) float

Dimensions

● **J5X** Screwed

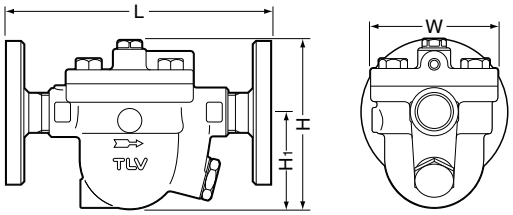


J5X Screwed* (mm)

Size	L	H	H_1	W	Weight (kg)
¾″	155	149	84	108	4.4
1″					4.3
1¼″	160	182	106		5.8
1½″					

* BSP DIN 2999, other standards available

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

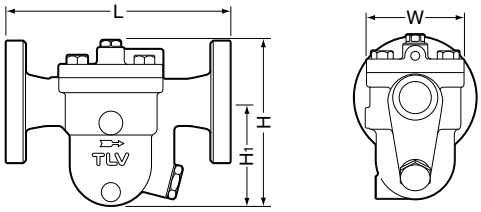


JF5X Flanged (mm)

DN	L DIN 2501 PN10/16	H	H_1	W	Weight (kg)
20	250	149	84	108	6.3
25					6.9

Other standards available, but length and weight may vary

● **JF5X** Flanged DN 32, 40, 50

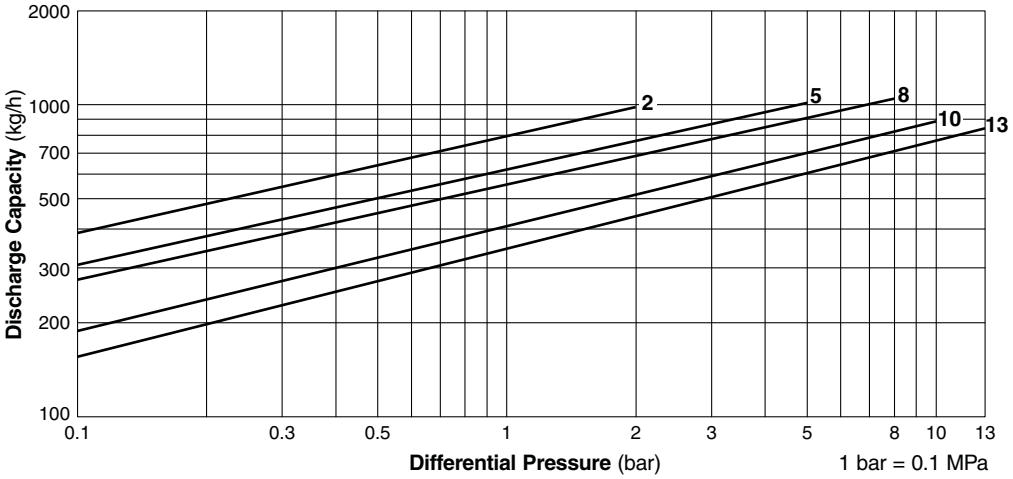


JF5X Flanged (mm)

DN	L DIN 2501 PN10/16	H	H_1	W	Weight (kg)
32	241	185	115	108	9.5
40	256		120		10
50	265	200			11

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!