FREE FLOAT STEAM TRAP

MODEL J7X

FREE FLOAT STEAM TRAP WITH THERMOSTATIC AIR VENTING

Features

A reliable and durable cast iron steam trap with tight shut-off for use on 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 extended trouble-free operation.
5. Easy, inline access to internal parts simplifies cleaning and reduces maintenance costs.

Patented

Specifications

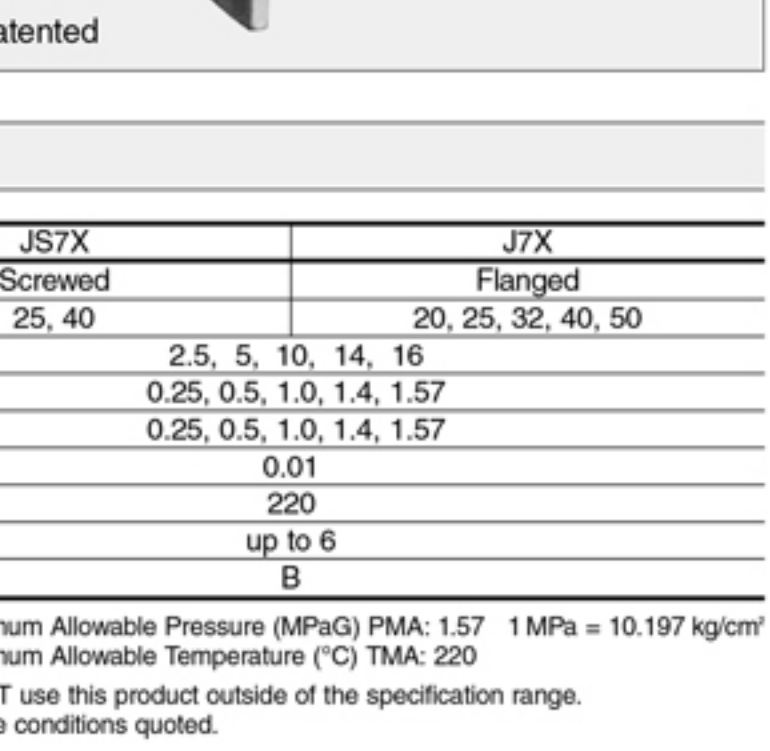
Model		JS7X	J7X
Connection		Screwed	Flanged
Size (mm)		25, 40	20, 25, 32, 40, 50
Orifice No.		2.5, 5, 10, 14, 16	
Maximum Operating Pressure (MPaG)	PMO	0.25, 0.5, 1.0, 1.4, 1.57	
Maximum Differential Pressure (MPa)	ΔPMX	0.25, 0.5, 1.0, 1.4, 1.57	
Minimum Operating Pressure (MPaG)		0.01	
Maximum Operating Temperature (°C)	TMO	220	
Subcooling of X-element Fill (°C)		up to 6	
Type of X-element		B	

PRESSURE SHELL DESIGN CONDITIONS (**NOT** OPERATING CONDITIONS): Maximum Allowable Pressure (MPaG) PMA: 1.57 1 MPa = 10.197 kg/cm²
Maximum Allowable Temperature (°C) TMA: 220

⚠ 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	JIS	ASTM/AISI*
①	Body	Cast Iron	FCV410	A842 Gr.400
②	Cover	Cast Iron	FCV410	A842 Gr.400
③F	Float	Stainless Steel	SUS316L	AISI316L
④R	Orifice	—	—	—
⑤MR	Orifice O-Ring	Ethylene Propylene Rubber	EPR	D2000CA
⑥	Orifice Holder Plug	Carbon Steel	S25C	AISI1025
⑦MR	Orifice Plug Gasket	Fluorine Resin	PTFE	PTFE
⑧R	Screen	Stainless Steel	SUS430	AISI430
⑨	Screen Holder	Stainless Steel	SUS304	AISI304
⑩	Screen Holder Retainer	Stainless Steel	SUS304	AISI304
⑪	Snap Ring	Stainless Steel	SUS304	AISI304
⑫MR	Cover Gasket	Fluorine Resin	PTFE	PTFE
⑬	Cover Bolt	Carbon Steel	S45C	AISI1045
⑭R	X-element	Stainless Steel	—	—
⑮R	Spring Clip	Stainless Steel	SUS304	AISI304
⑯R	X-element Guide	Stainless Steel	SUS304	AISI304
⑰R	X-element Cover	Stainless Steel	SUS304	AISI304
⑱R	Snap Ring	Stainless Steel	SUS304	AISI304
⑲R	Air Vent Valve Seat	Stainless Steel	SUS420F	AISI420F
⑳	Plug	Carbon Steel	SS400	A6
㉑	Connector	Stainless Steel	SUS416	AISI416
㉒	Nameplate	Stainless Steel	SUS304	AISI304
㉓	Drain Plug	Carbon Steel	SS400	A6

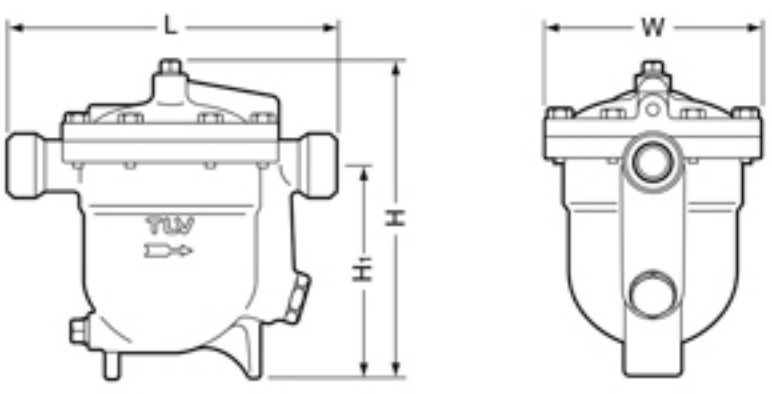
* Equivalent
Replacement Kits available: (M) maintenance parts, (R) repair parts, (F) float



TLV **Consulting & Engineering Service**

Dimensions

● **JS7X** Screwed

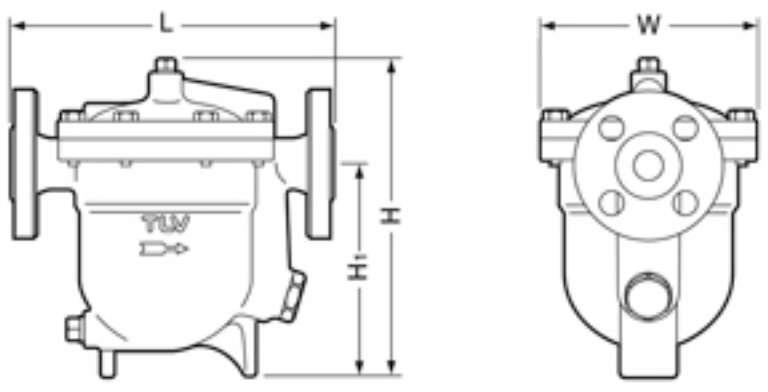


JS7X Screwed* (mm)

Size	L	H	H1	W	Weight (kg)
25	280	276	182	185	13
40		291	190		14

* Rc(PT), other standards available

● **J7X** Flanged

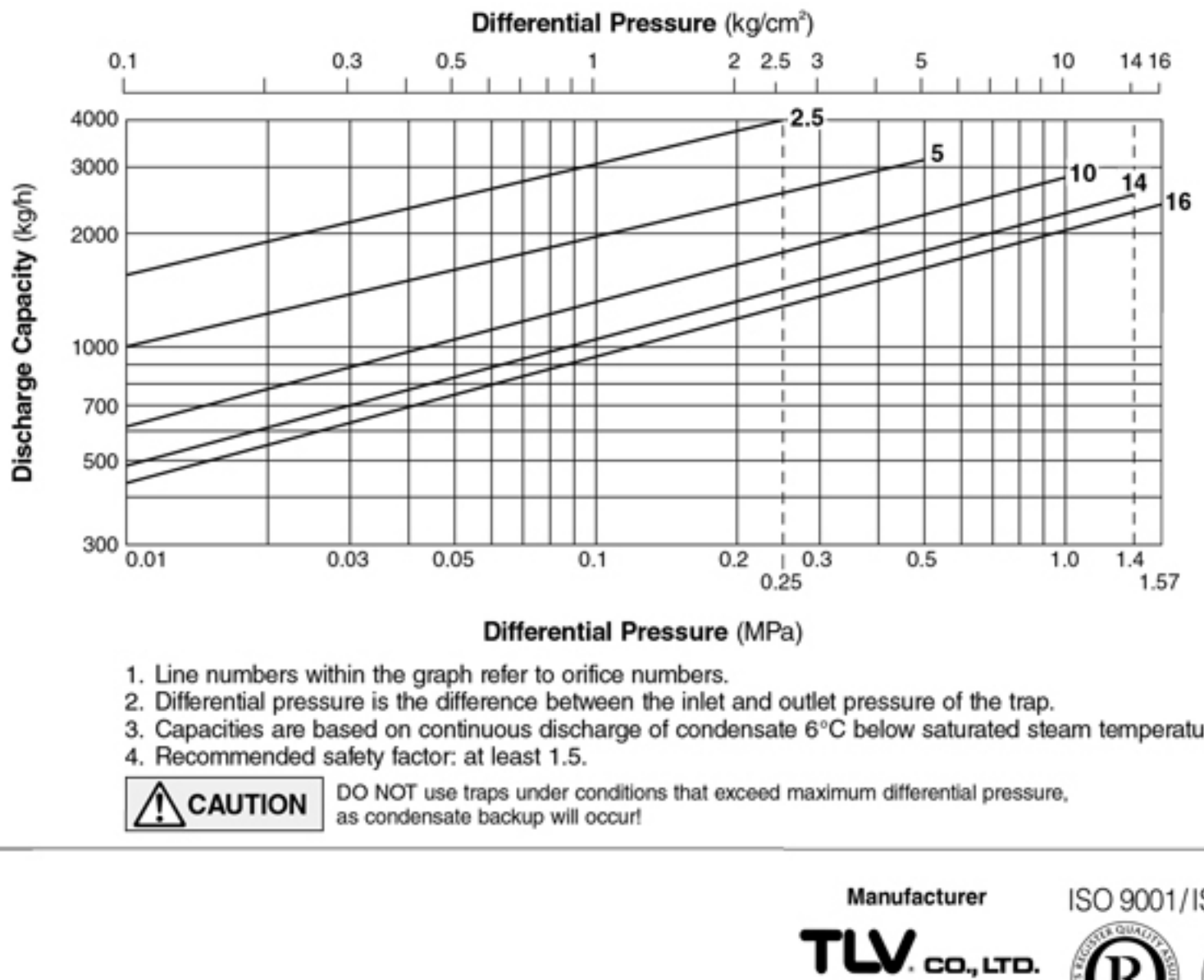


J7X Flanged (mm)

Size	L ASME Class 125FF	L ASME Class (150RF)	L ASME Class 250RF	L ASME Class (300RF)	H	H1	W	Weight* (kg)
20	—	270	—	270	272	180	185	14
25	258		270	274	276	182		15
32	—		—	270	286	187		16
40	270	280	282	284	291	190		18
50	282	290	295	296	301	195		

( ) No ASME standard exists for cast iron; machined to fit steel flanges; Class 125 FF can connect to 150 RF, 250 RF can connect to 300 RF
Other standards available, but length and weight may vary
* Weight is for Class 250 RF/300 RF

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
TLV CO., LTD.
Kakogawa, Japan
is approved by LRQA Ltd. to ISO 9001/14001

ISO 9001/ISO 14001