

# TLV PROCESS FLOAT STEAM TRAP

MODEL JL9X/JLH9X CAST IRON/CAST STEEL

#### HIGH-CAPACITY IRON OR STEEL FLOAT STEAM TRAP WITH THERMOSTATIC AIR VENTING

#### **Features**

Extremely durable, inline-repairable, compact float trap with thermostatic air venting for large process or heating

- 1. Double-seated valve with heat-treat hardened valve seat and valve head provides continuous, smooth, low-velocity condensate discharge as process loads vary.
- 2. Self-aligning valve mechanism with stainless steel internals minimizes wear.
- 3. Thermostatic capsule (X-element) with "fail open" feature vents air automatically until close-to-steam temperature.
- Easy, inline access to internal parts simplifies cleaning and reduces maintenance costs.
- High-quality stainless steel internals and hardened valve surfaces ensure reliability.



### **Pressure Equipment Directive (PED)**

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

Model	Size	Category	CE marking
JL9X	DN 50	I	With CE marking and Declaration of Conformity
JLH9X	DN 50	II	With CE marking and Declaration of Conformity

## **Specifications**

Model	JL9X	JLH9X			
Connection	Screwed, Flanged*	Screwed, Socket Welded, Flanged			
Size / DN	2" / 50				
Orifice No.	10, 13	10, 18	32		
Maximum Operating Pressure (barg) PMO	10, 13	10, 18	32		
Maximum Differential Temperature (bar) ΔPMX	10, 13	10, 18	32		
Maximum Operating Temperature (°C) TMO	200	220	240		

<sup>\*</sup> JL9X has a screwed-in flange

PRESSURE SHELL DESIGN CONDITIONS (NOT OPERATING CONDITIONS): Maximum Allowable Pressure (barg) PMA: 13 (JL9X), 32 (JLH9X) Maximum Allowable Temperature (°C) TMA: 200 (JL9X), 400 (JLH9X)

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*	
	Dark	JL9X	Cast Iron FC250	0.6025	A126 CI.B	
1	Body	JLH9X	Cast Steel A216/A216M Gr.WCB	1.0619	-	
( <u>2</u> )	Cover	JL9X	Cast Iron FC250	0.6025	A126 CI.B	
2	Cover	JLH9X	Cast Steel A216/A216M Gr.WCB	1.0619	-	
3 <sup>MR</sup>	Cover Gasket		Graphite/Stainless Steel SUS316L	-/1.4404	-/AISI316L	
<b>(4</b> )	Cover Bolt	JL9X	Carbon Steel S45C	1.0503	AISI1045	
<u>•</u>	Cover Boil	JLH9X	Alloy Steel SNB7	1.7225	A193 Gr.B7	
(5)FR	Float / Lever		Stainless Steel SUS316L/	1.4404/	_	
	Float / Level		Cast Stainl. Steel A351/A351M Gr.CF8	1.4312		
(6)R	Trap Unit		Cast Stainl. Steel A351/A351M Gr.CF8/	1.4312/	_	
<b>6</b>	(Main Valve Un	it)	Cast Stainl. Steel A743/A743M Gr.CA40	1.4027		
7	Valve Seat Gasket		Stainless Steel SUS304	1.4301	AISI304	
<b>8</b> R	Air Vent (X-element) Unit		Stainless Steel SUS304/420F	1.4301/1.4028	AISI304/420F	
	Cover Plug	JL9X	Carbon Steel SS400 1.0037		A6	
( <del>9</del> )		JLH9X	Carbon Steel S25C	1.1158	AISI1025	
9	Drain Dlug	JL9X	Carbon Steel SS400	1.0037	A6	
	Drain Plug	JLH9X	Carbon Steel S25C	1.1158	AISI1025	
(10)	Cover Plug Gas	ket (JLH9X)	Soft Iron SUYP	1.1121	AISI1010	
10	Drain Plug Gask	et (JLH9X)	Soft Iron SUYP	1.1121	AISI1010	
11)	Nameplate		Stainless Steel SUS304	1.4301	AISI304	
12	Eye Bolt		Carbon Steel SS400	1.0037	A307 Gr.B	
13	Flange**		Carbon Steel	1.0460	A105	

<sup>9</sup> -(10) II H9X (12) (8) (4) JLH9X

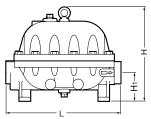
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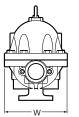
<sup>\*</sup> Equivalent materials \*\* Shown on reverse

## **Consulting · Engineering · Services**

#### **Dimensions**

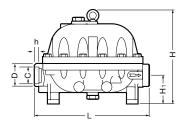
#### JL9X/JLH9X Screwed

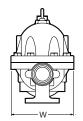




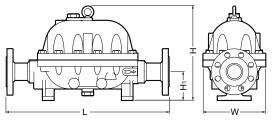
JL9X shown. Cover plug and drain plug on the JLH9X differ slightly.

#### JLH9X Socket Welded





#### JL9X/JLH9X Flanged



JLH9X shown. Cover plug and drain plug on the JL9X differ slightly.

## JL9X/JLH9X Screwed\* (mm) Model Size L H H1 W Weight (kg)

Model	Size	L	Н	H <sub>1</sub>	W	Weight (kg)
JL9X	0"	414	338	102	225	34
JLH9X	2"					36

<sup>\*</sup> BSP DIN 2999, other standards available

#### JLH9X Socket Welded\*

(mm)

DN	L	Н	H <sub>1</sub>	W	φD	φС	h	Weight (kg)
50	414	338	102	225	78	61.2	16	36

<sup>\*</sup> ASME B16.11-2005, other standards available

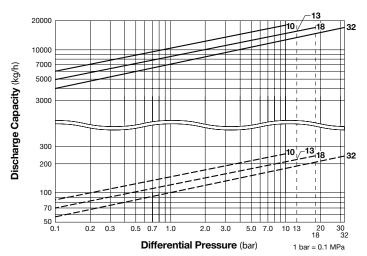
#### JL9X\*/JLH9X Flanged\*

(mm)

Model	DN	L								
		DIN 2501		ASME Class		Н	H <sub>1</sub>	W	Weight (kg)	
		PN16	PN25/40	150RF	300RF	600RF				. 3/
JL9X	-0	584	_	504	504	_	000	100	005	42
JLH9X	50	_	584	584	584	584	338	102	225	44

Other standards available, but length and weight may vary \* JL9X has a screwed-in flange

## **Discharge Capacity**



-: Maximum capacity of JL9X/JLH9X.

----: Minimum amount of condensate required to prevent steam leakage.

- 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.
- Capacities are based on continuous discharge of condensate 6 °C below saturated steam temperature.
- 4. Recommended safety factor: 1.5.



DO NOT use this product under conditions that exceed maximum differential pressure, as condensate backup will occur!

Manufacturer

Kakogawa, Japan

ISO 14001

LRQA
CERTIFIED

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ISO 9001

is approved by LRQA Ltd. to ISO 9001/14001