



# FREE FLOAT® AIR TRAP

## MODEL JAH8R

### HIGH-CAPACITY COMPRESSED AIR TRAP FOR HIGH PRESSURE AIR SERVICE

#### Benefits

**Extremely durable, inline-repairable free float trap with a large capacity for automatic drainage of condensate and oil from compressed-air systems. Recommended installations include high pressure large receiver tanks and after coolers.**

1. Self-modulating free float provides continuous, smooth, low velocity condensate discharge as process loads vary, for maximum performance.
2. Unique rotational seating design prevents concentrated wear to provide long maintenance-free service life.
3. Rugged float construction with up to 1600 psig hydraulic shock rating ensures excellent performance of the trap.
4. Easy, inline access to internal parts simplifies cleaning and lowers maintenance costs.
5. Built-in screen with large surface area ensures extended trouble-free service.
6. The valve seat is made of PTFE and other major internal parts are made of stainless steel.



#### Specifications

Model	JAH8R	
Connection	Socket Weld	Flanged
Size (in)	2, 3, 4	2, 3, 4
Orifice No.	2, 5, 10, 20, 30, 40	
Maximum Operating Pressure (psig) PMO	30, 75, 150, 285, 425, 600	
Maximum Differential Pressure (psi) ΔPMX	30, 75, 150, 285, 425, 600	
Minimum Operating Pressure (psig)	Vacuum	
Maximum Operating Temperature (°F) TMO	302	
Maximum Allowable Pressure (psig) PMA	600	
Maximum Allowable Temperature (°F) TMA	800	
Minimum Condensate Load for Tight Sealing (lb/h)	44 (Orifice No. 2, 5) 33 (Orifice No. 10, 20, 30, 40)	
Applicable Fluid*	Air	

\*Do not use for toxic, flammable or otherwise hazardous fluids.

JAH8R is a non-standard product, consult TLV for delivery time required.

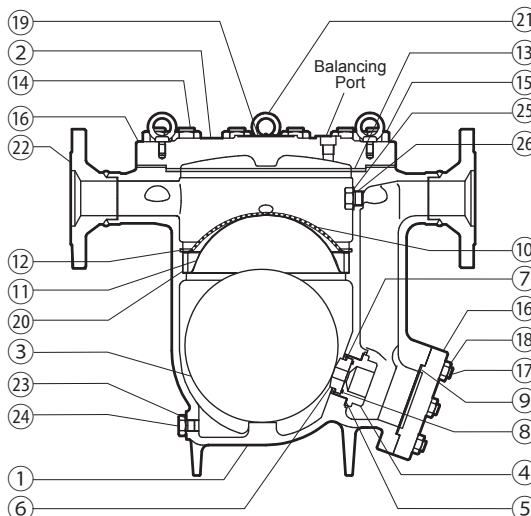


To avoid abnormal operation, accidents or serious injury, DO NOT use this product outside of the specification range. Local regulations may restrict the use of this product to below the conditions quoted.

No.	Description	Material	ASTM/AISI*	JIS
①	Body	Cast Steel	A216 Gr.WCB	—
②	Cover	Carbon Steel	A105	—
③ <sup>F</sup>	Float	Stainless Steel	AISI316L	SUS316L
④ <sup>R</sup>	Valve Seat Holder	Stainless Steel	AISI420F	SUS420F
⑤ <sup>MR</sup>	Valve Seat Holder Gasket	Soft Iron	AISI1010	SUYP
⑥ <sup>R</sup>	Valve Seat (Orifice)	Fluorine Resin	PTFE	PTFE
⑦ <sup>R</sup>	Snap Ring	Stainless Steel	AISI304	SUS304
⑧ <sup>MR</sup>	Valve Seat O-Ring	Fluorine Rubber	D2000HK	FPM
⑨ <sup>MR</sup>	Outlet Cover Gasket	Graphite/Stainless Steel	-/AISI304	-/SUS304
⑩ <sup>R</sup>	Screen	Stainless Steel	AISI430	SUS430
⑪	Screen Holder	Stainless Steel	AISI304	SUS304
⑫	Snap Ring	Stainless Steel	AISI304	SUS304
⑬ <sup>MR</sup>	Cover Gasket	Graphite/Stainless Steel	-/AISI304	-/SUS304
⑭	Cover Bolt	Alloy Steel	A193 Gr.B16	SNB16
⑮	Cover Nut	Carbon Steel	AISI1045	S45C
⑯	Outlet Cover	Stainless Steel	AISI420	SUS420J2
⑰	Outlet Cover Bolt	Alloy Steel	A193 Gr.B16	SNB16
⑱	Outlet Cover Nut	Carbon Steel	AISI1045	S45C
⑲	Nameplate	Stainless Steel	AISI304	SUS304
⑳	Screen Holder Retainer	Stainless Steel	AISI304	SUS304
㉑	Eye Bolt	Carbon Steel	A307 Gr.B	SS400
㉒	Socket**	Carbon Steel	A105	—
㉒	Flange	Cast Steel	A216 Gr.WCB	—
㉓ <sup>MR</sup>	Drain Plug Gasket	Soft Iron	AISI1010	SUYP
㉔	Drain Plug	Carbon Steel	AISI1025	S25C
㉕ <sup>MR</sup>	Plug Gasket (Interior)	Soft Iron	AISI1010	SUYP
㉖	Plug (Interior)	Carbon Steel	AISI1025	S25C

\* Equivalent \*\* Shown on reverse

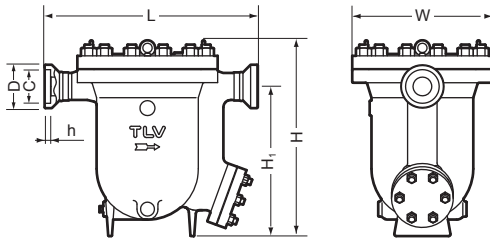
Replacement kits available: (M) maintenance parts, (R) repair parts, (F) float





## Dimensions

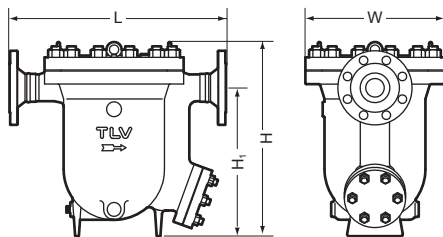
### ● JAH8R Socket Weld



### JAH8R Socket Weld (in)

Size	L	H	H <sub>1</sub>	φ W	φ D	φ C	h	Weight (lb)
2	22 7/16	20 5/8	15 3/4	14 3/4	3 1/16	2.406	5/8	244
3					4 3/8	3.535		260
4	24				5 1/2	4.545		273

### ● JAH8R Flanged

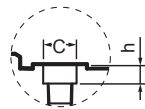


### JAH8R Flanged (in)

Size	L Connects to ASME Class			H	H <sub>1</sub>	φ W	Weight* (lb)
	150RF	300RF	600RF				
2	23 1/4	23 1/2	24 1/4	20 5/8	15 3/4	14 3/4	268
3	23 5/8	23 5/16	24 5/16				284
4	22 7/16	23 7/16	24 1/2				334

Other standards available, but length and weight may vary

\*Weight is for Class 600 RF.



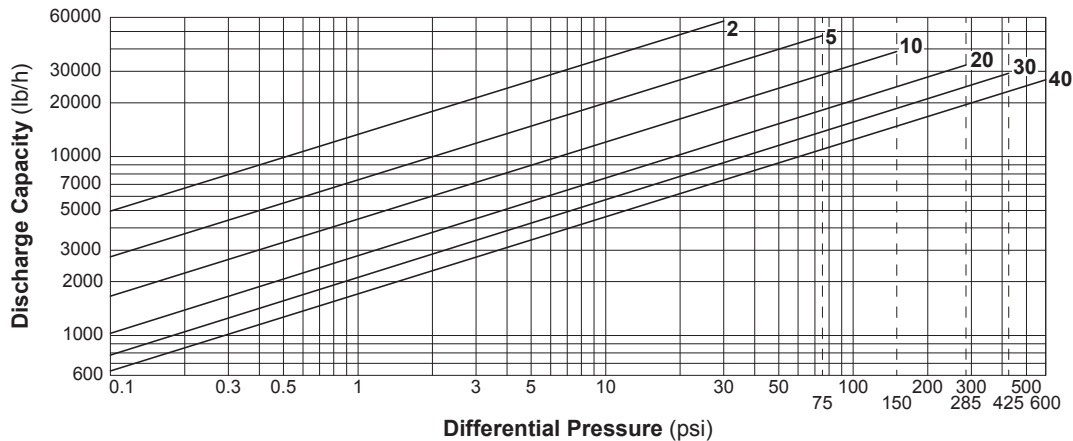
### Balancing Port (Socket Weld) (in)

Inlet/Outlet Connection	Size	φ C	h
Socket Weld	1/2	0.855	1/2
Flanged			

#### NOTE:

A pressure-balancing line must be connected to the air system from the balancing port at the top of the trap to a place above any possible condensate accumulation in the system.

## 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. The chart is applicable to condensate below 212°F.
4. The discharge capacity is for a liquid with specific gravity of 1.
5. Recommended safety factor: at least 1.5.



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



DO NOT DISASSEMBLE OR REMOVE THIS PRODUCT WHILE IT IS UNDER PRESSURE.

Allow internal pressure of this product to equal atmospheric pressure and its surface to cool to room temperature before disassembling or removing. Failure to do so could cause burns or other injury. READ INSTRUCTION MANUAL CAREFULLY.

## TLV CORPORATION

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Manufacturer

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is approved by LRQA Ltd. to ISO 9001/14001

ISO 9001  
 ISO 14001

