



FREE FLOAT® AIR TRAP

MODEL JAH8R

FREE FLOAT AIR TRAP WITH LARGE CAPACITY FOR HIGH PRESSURE AIR SERVICE

Features

Free Float air trap for large capacities to automatically drain condensate and oil from compressed air systems. Recommended installations include high pressure large receiver tanks and after coolers.

1. Self-modulating free float provides soft, continuous, and smooth, low velocity discharge as process loads vary.
2. Only one moving part, the free float, prevents concentrated wear and provides long maintenance-free service life.
3. Built-in screen with large surface area ensures extended trouble free service.
4. The valve seat is made of PTFE and other major internal parts are made of stainless steel.



Specifications

Model	JAH8R	
Connection	Socket Welded	Flanged
Size (mm)	50, 80, 100	
Orifice No.	2, 5, 10, 20, 30, 40	
Maximum Operating Pressure (MPaG)	PMO	0.2, 0.5, 1.0, 2.0, 3.0, 4.0
Maximum Differential Pressure (MPa)	ΔPMX	0.2, 0.5, 1.0, 2.0, 3.0, 4.0
Maximum Operating Temperature (°C)	TMO	150
Minimum Condensate Load for Tight Sealing (kg/h)	20 (Orifice No. 2, 5) 15 (Orifice No. 10, 20, 30, 40)	
Applicable Fluid*	Air	

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

1 MPa = 10.197 kg/cm²

PRESSURE SHELL DESIGN CONDITIONS (NOT OPERATING CONDITIONS): Maximum Allowable Pressure (MPaG) PMA: 4.0
Maximum Allowable Temperature (°C) TMA: 425

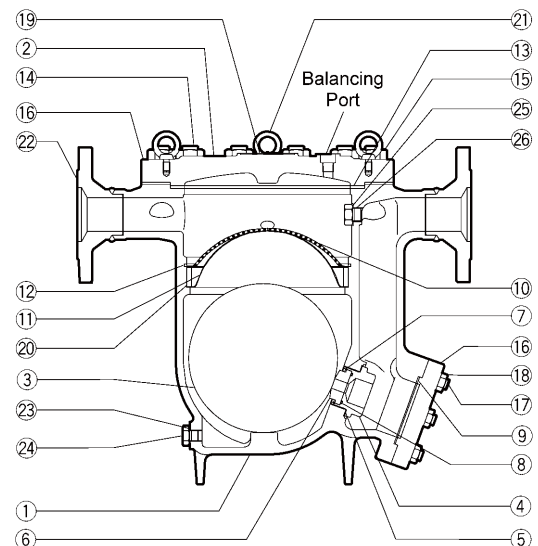


To avoid abnormal operation, accidents or serious injury, DO NOT use this product outside of the specification range. Local regulations may restrict the use of this product to below the conditions quoted.

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

* Equivalent ** Shown on reverse

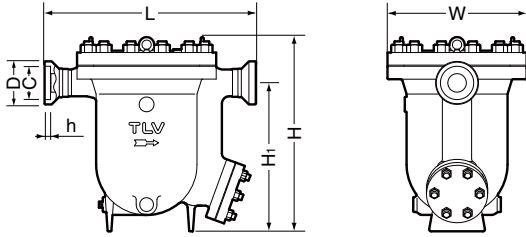
Replacement kits available: (M) maintenance parts, (R) repair parts, (F) float



Copyright © TLV

Dimensions

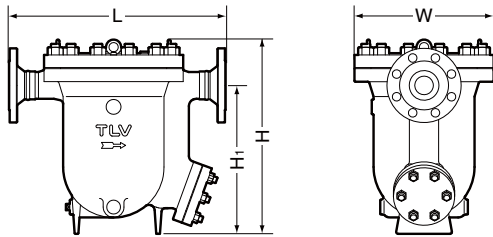
● **JAH8R Socket Welded**



JAH8R Socket Welded (mm)

Size	L	H	H ₁	φW	φD	φC	h	Weight (kg)
50	570	524	400	375	77.5	61.1	16	111
80					112	90.0		118
100	610				140	115.3		124

● **JAH8R Flanged**



JAH8R Flanged (mm)

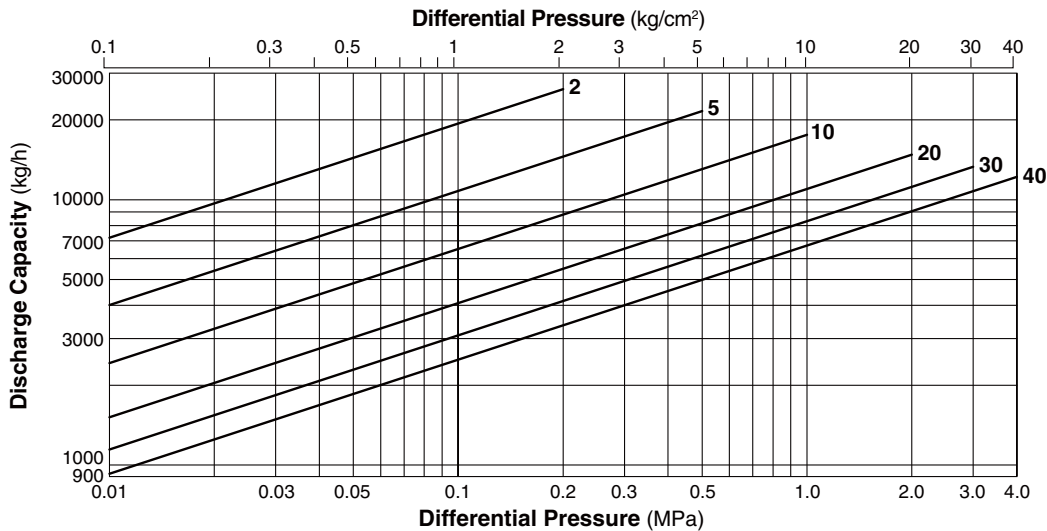
Size	L			H	H ₁	φW	Weight* (kg)
	ASME Class						
	150RF	300RF	600RF				
50	591	597	616	524	400	375	122
80	588	598	617				129
100	570	596	622				152

Other standards available, but length and weight may vary
*Weight is for Class 600 RF

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.

Balancing Port (Socket Welded)		(mm)		
Inlet/Outlet Connection	Size	φC	h	
Socket Welded	15	22.2	13	
Flanged (ASME)		21.8		

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 100 °C
4. The discharge capacity is for a liquid with specific gravity of 1.
5. 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!

Manufacturer

ISO 9001/ISO 14001

TLV CO., LTD.
Kakogawa, Japan

is approved by LRQA Ltd. to ISO 9001/14001

