



# FREE FLOAT<sup>®</sup> AIR TRAP

## MODEL JA7.5

### FREE FLOAT AIR TRAP WITH LARGE CAPACITY FOR AIR SERVICE

#### Features

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

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. Built-in screen with large surface area ensures extended trouble-free operation.
4. The valve seat is made of PTFE and other major internal parts are made of stainless steel.



#### Specifications

Model	JA7.5	
Connection	Flanged	
Size (mm)	40, 50, 65, 80	
Orifice No.	2, 5, 10, 16	
Maximum Operating Pressure (MPaG) PMO	0.2, 0.5, 1.0, 1.6	
Maximum Differential Pressure (MPa) ΔPMX	0.2, 0.5, 1.0, 1.6	
Maximum Operating Temperature (°C) TMO	150	
Minimum Condensate Load for Tight Sealing (kg/h)	10	
Applicable Fluid*	Air	

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

1 MPa = 10.197 kg/cm<sup>2</sup>

PRESSURE SHELL DESIGN CONDITIONS (**NOT** OPERATING CONDITIONS): Maximum Allowable Pressure (MPaG) PMA: 1.6  
Maximum Allowable Temperature (°C) TMA: 220

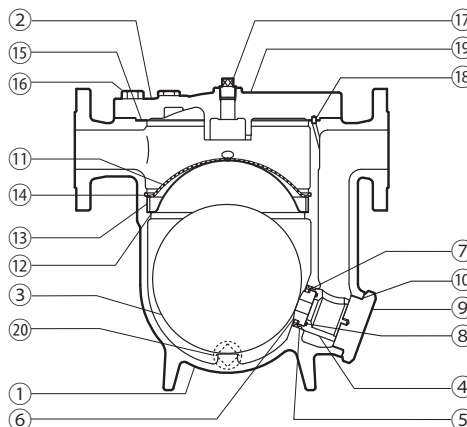


To avoid abnormal operation, accidents or serious injury, DO NOT use this product outside of the specification range. Local regulations may restrict the use of this product to below the conditions quoted.

No.	Description	Material	JIS	ASTM/AISI*
①	Body	Cast Iron	FC250	A126 Cl.B
②	Cover	Cast Iron	FC250	A126 Cl.B
③ <sup>F</sup>	Float	Stainless Steel	SUS316L	AISI316L
④ <sup>R</sup>	Valve Seat Holder	Stainless Steel	SUS420F	AISI420F
⑤ <sup>MR</sup>	Valve Seat Holder O-Ring	Fluorine Rubber	FPM	D2000HK
⑥ <sup>R</sup>	Valve Seat (Orifice)	Fluorine Resin	PTFE	PTFE
⑦ <sup>R</sup>	Snap Ring	Stainless Steel	SUS304	AISI304
⑧ <sup>MR</sup>	Valve Seat O-Ring	Fluorine Rubber	FPM	D2000HK
⑨	Valve Seat Holder Plug	Cast Iron	FCV400	A842 Gr.400
⑩ <sup>MR</sup>	Holder Plug Gasket	Fluorine Resin	PTFE	PTFE
⑪ <sup>R</sup>	Screen	Carbon Steel	S45C	AISI1045
⑫	Screen Holder	Stainless Steel	SUS304	AISI304
⑬	Screen Holder Retainer	Stainless Steel	SUS304	AISI304
⑭	Snap Ring	Stainless Steel	SUS304	AISI304
⑮ <sup>MR</sup>	Cover Gasket	Fluorine Resin	PTFE	PTFE
⑯	Cover Bolt	Carbon Steel	S45C	AISI1045
⑰	Balancing Line Plug	Carbon Steel	S10C	AISI1010
⑱	Alignment Pin	Steel	SUJ2	A485
⑲	Nameplate	Stainless Steel	SUS304	AISI304
⑳	Drain Plug	Carbon Steel	SS400	A6

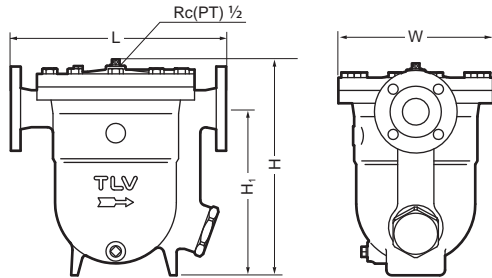
\* Equivalent

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



**Dimensions**

• **JA7.5 Flanged**



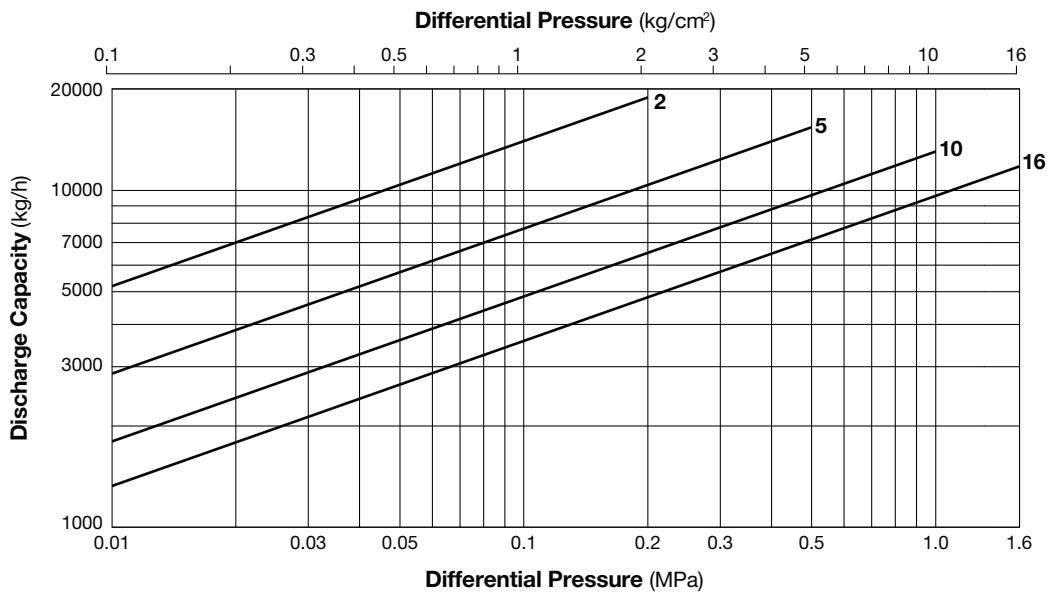
**JA7.5 Flanged (mm)**

Size	L				H	H <sub>1</sub>	φ W	Weight* (kg)
	ASME Class							
	125FF	(150RF)	250RF	(300RF)				
40	380	390	392	394	393	307	290	43
50	392	400	405	406	398			46
65	401	412	417	418	408			49
80	426	434	443	444	413			53

( ) 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

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

