



FREE FLOAT[®] AIR TRAP

MODEL JA7

FREE FLOAT AIR TRAP WITH TIGHT SHUT-OFF FOR AIR SERVICE

Features

Free float air trap for large capacities to automatically drain condensate and oil from compressed air systems.

1. Self-modulating free float provides continuous, smooth, low velocity condensate discharge as process loads vary.
2. Perfect, air-tight seal, even under low-load conditions.
3. Only one moving part, the free float, prevents concentrated wear and provides long maintenance-free service life.
4. Built-in screen with large surface area ensures extended trouble free service.
5. Manual blow down device allows cleaning of the valve seat from outside during operation.
6. Major internal parts made of stainless steel.



Specifications

Model	JA7
Connection	Flanged
Size (mm)	15, 20, 25, 40, 50
Maximum Operating Pressure (MPaG) PMO	1.6
Maximum Differential Pressure (MPa) ΔPMX	1.6
Minimum Operating Pressure (MPaG)	0.01
Maximum Operating Temperature (°C) TMO	100
Applicable Fluid*	Air

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

1 MPa = 10.197 kg/cm²

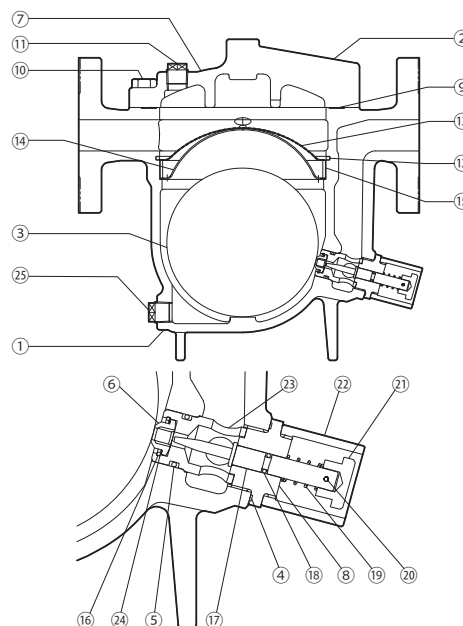
PRESSURE SHELL DESIGN CONDITIONS (**NOT** OPERATING CONDITIONS): Maximum Allowable Pressure (MPaG) PMA: 1.6

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	FCV400	A842 Gr.400
②	Cover	Cast Iron	FCV400	A842 Gr.400
③ ^F	Float	Stainless Steel	SUS316L	AISI316L
④ ^{MR}	Holder Nut Gasket	Fluorine Resin	PTFE	PTFE
⑤ ^{MR}	Valve Seat Holder O-Ring	Nitrile Rubber	NBR	D2000BF
⑥ ^R	Valve Seat	Nitrile Rubber	NBR	D2000BF
⑦	Nameplate	Stainless Steel	SUS304	AISI304
⑧ ^R	Valve Seat Holder Nut	Stainless Steel	SUS420F	AISI420F
⑨ ^{MR}	Cover Gasket	Fluorine Resin	PTFE	PTFE
⑩	Cover Bolt	Carbon Steel	S45C	AISI1045
⑪	Balancing Line Plug	Carbon Steel	SS400	A6
⑫	Snap Ring	Stainless Steel	SUS304	AISI304
⑬ ^R	Screen	Stainless Steel	SUS430	AISI430
⑭	Screen Holder	Stainless Steel	SUS304	AISI304
⑮	Screen Holder Retainer	Stainless Steel	SUS304	AISI304
⑯ ^R	Snap Ring	Stainless Steel	SUS304	AISI304
⑰ ^R	Needle	Stainless Steel	SUS420F	AISI420F
⑱ ^{MR}	Needle O-Ring	Nitrile Rubber	NBR	D2000BF
⑲ ^R	Coil Spring	Stainless Steel	SUS304	AISI304
⑳ ^R	Split Pin	Stainless Steel	SUS304	AISI304
㉑ ^R	Plunger	Stainless Steel	SUS420F	AISI420F
㉒ ^R	Guard Bushing	Synthetic Resin	—	—
㉓ ^R	Valve Seat Holder	Stainless Steel	SUS420F	AISI420F
㉔ ^R	Washer	Stainless Steel	SUS304	AISI304
㉕	Drain Plug	Carbon Steel	SS400	A6



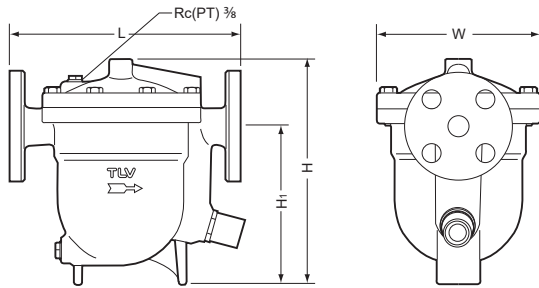
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* Equivalent

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

Dimensions

• **JA7** Flanged



JA7 Flanged (mm)

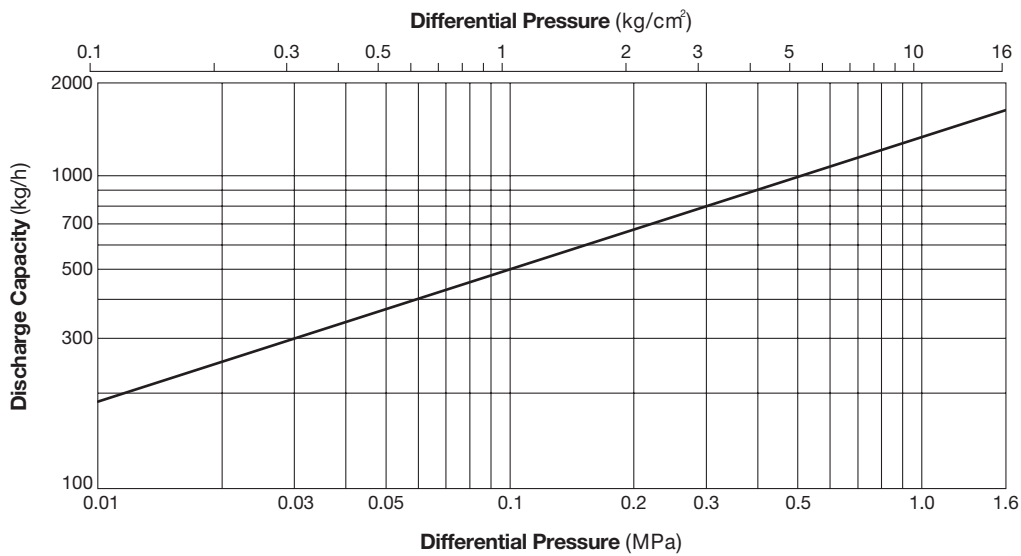
Size	L				H	H ₁	W	Weight* (kg)
	ASME Class							
	125FF	(150RF)	250RF	(300RF)				
(15)	—	270	—	270	251	177	185	12
(20)	—	270	—	270	256	180		14
25	258	270	270	274	260	182		15
40	270	280	282	284	275	190		18
50	282	290	295	296	285	195		

() 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

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. Differential pressure is the difference between the inlet and outlet pressure of the trap.
2. The chart is applicable to condensate below 100 °C
3. The discharge capacity is for a liquid with specific gravity of 1.
4. 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

