



# FREE FLOAT<sup>®</sup> AIR TRAP

## MODEL JA7.5 CAST IRON

### 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 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 made of stainless steel.



#### Specifications

Model	JA7.5
Connection	Flanged
Size	DN 40, 50, 65, 80
Orifice No.	2, 5, 10, 13
Maximum Operating Pressure (barg) PMO	2, 5, 10, 13
Maximum Differential Pressure (bar) ΔPMX	2, 5, 10, 13
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 bar = 0.1 MPa

PRESSURE SHELL DESIGN CONDITIONS (**NOT** OPERATING CONDITIONS): Maximum Allowable Pressure (barg) PMA: 13  
Maximum Allowable Temperature (°C) TMA: 200



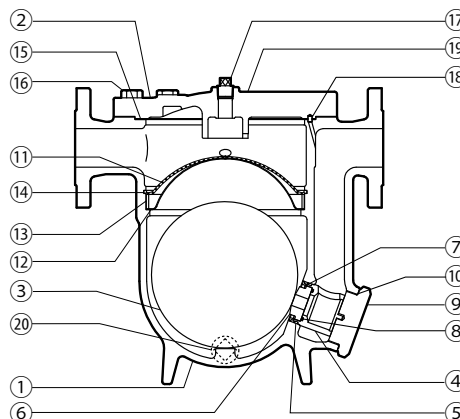
#### CAUTION

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*
①	Body	Cast Iron FC250	0.6025	A126 Cl.B
②	Cover	Cast Iron FC250	0.6025	A126 Cl.B
③ <sup>F</sup>	Float	Stainless Steel SUS316L	1.4404	AISI316L
④ <sup>R</sup>	Valve Seat Holder	Stainless Steel SUS420F	1.4028	AISI420F
⑤ <sup>MR</sup>	Valve Seat Holder O-Ring	Fluorine Rubber FPM	FPM	D2000HK
⑥ <sup>R</sup>	Valve Seat (Orifice)	Fluorine Resin PTFE	PTFE	PTFE
⑦	Snap Ring	Stainless Steel SUS304	1.4301	AISI304
⑧ <sup>MR</sup>	Valve Seat O-Ring	Fluorine Rubber FPM	FPM	D2000HK
⑨	Valve Seat Holder Plug	Ductile Cast Iron FCD450	0.7040	A536
⑩ <sup>MR</sup>	Holder Plug Gasket	Fluorine Resin PTFE	PTFE	PTFE
⑪ <sup>R</sup>	Screen	Stainless Steel SUS430	1.4016	AISI430
⑫	Screen Holder	Stainless Steel SUS304	1.4301	AISI304
⑬	Screen Holder Retainer	Stainless Steel SUS304	1.4301	AISI304
⑭	Snap Ring	Stainless Steel SUS304	1.4301	AISI304
⑮ <sup>MR</sup>	Cover Gasket	Fluorine Resin PTFE	PTFE	PTFE
⑯	Cover Bolt	Carbon Steel S45C	1.0503	AISI1045
⑰	Balancing Line Plug	Carbon Steel S10C	1.0301	AISI1010
⑱	Alignment Pin	Steel SUJ2	1.2067	A485
⑲	Nameplate	Stainless Steel SUS304	1.4301	AISI304
⑳	Drain Plug	Carbon Steel SS400	1.0037	A307 Gr.B

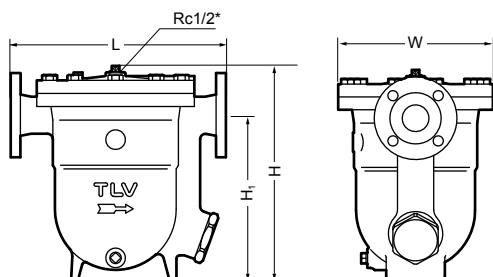
\* Equivalent materials

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



## Dimensions

### ● JA7.5 Flanged



### JA7.5 Flanged (mm)

DN	L	H	H <sub>1</sub>	øW	Weight (kg)
	DIN 2501 PN 10/16				
40	386	393	307	290	42
50	400	398			44
65	406	408			48
80	430	413			51

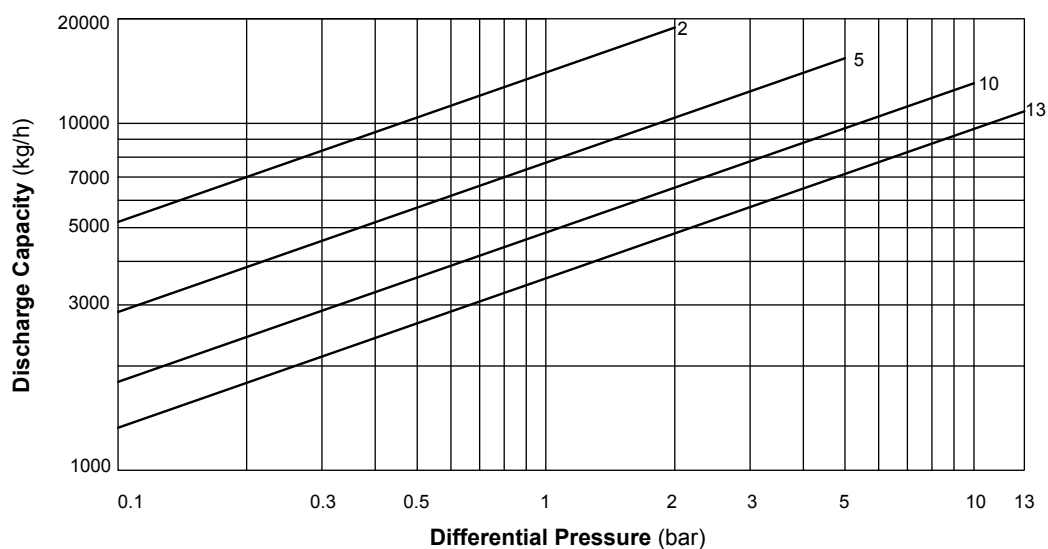
Other standards available, but length and weight may vary

\* Rc is equivalent to BSPT

#### 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

ISO 9001/ISO 14001

**TLV** CO., LTD.

Kakogawa, Japan

is approved by LRQA Ltd. to ISO 9001/14001

