



# FREE FLOAT<sup>®</sup> AIR TRAP

## MODEL JA3D ZINC ALLOY

### FREE FLOAT AIR TRAP WITH TIGHT SHUT-OFF

#### Features

**Compact free float air trap to automatically drain condensate from compressed air systems.**

1. Self-modulating free float provides soft, continuous, and smooth, low velocity 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 valve wear and provides long maintenance-free service life.
4. Built-in screen with large surface area ensures extended trouble-free service.
5. Manual blowdown device allows cleaning of the valve seat from outside during operation in case of oil and dirt accumulation.
6. All internal parts made of stainless steel.
7. For either horizontal or vertical installation.



#### Specifications

|                                     |         |     |
|-------------------------------------|---------|-----|
| Model                               | JA3D    |     |
| Connection                          | Screwed |     |
| Size                                | 1/2"    |     |
| Maximum Operating Pressure (barg)   | PMO     | 16  |
| Maximum Differential Pressure (bar) | Δ PMX   | 16  |
| Maximum Operating Temperature (°C)  | TMO     | 100 |
| 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: 16

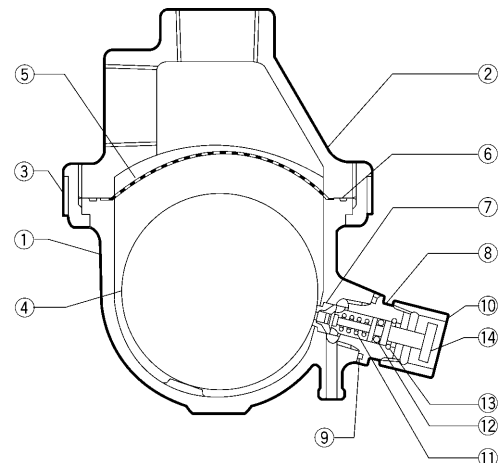
Maximum Allowable Temperature (°C) TMA: 100



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.

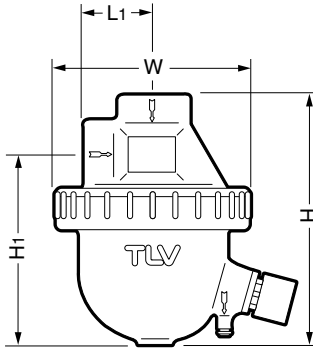
| No. | Description       | Material                | DIN*      | ASTM/AISI* |
|-----|-------------------|-------------------------|-----------|------------|
| ①   | Body              | Zinc Alloy ZDC2         | 2.2140.05 | B86 AC140A |
| ②   | Cover             | Zinc Alloy ZDC2         | 2.2140.05 | B86 AC140A |
| ③   | Union Nut         | Zinc Alloy ZDC2         | 2.2140.05 | B86 AC140A |
| ④   | Float             | Stainless Steel SUS316L | 1.4404    | AISI316L   |
| ⑤   | Screen            | Stainless Steel SUS430  | 1.4016    | AISI430    |
| ⑥   | Cover Gasket      | Nitrile Rubber NBR      | NBR       | D2000BF    |
| ⑦   | Valve Seat        | Nitrile Rubber NBR      | NBR       | D2000BF    |
| ⑧   | Valve Seat Holder | Stainless Steel SUS420F | 1.4028    | AISI420F   |
| ⑨   | Holder Gasket     | Fluorine Resin PTFE     | PTFE      | PTFE       |
| ⑩   | Guard Bushing     | Carbon Steel SGP        | 1.0035    | A53 type F |
| ⑪   | Coil Spring       | Stainless Steel SUS304  | 1.4301    | AISI304    |
| ⑫   | Plunger O-Ring    | Nitrile Rubber NBR      | NBR       | D2000BF    |
| ⑬   | Snap Ring         | Stainless Steel SUS304  | 1.4301    | AISI304    |
| ⑭   | Plunger           | Stainless Steel SUS416  | 1.4005    | AISI416    |

\* Equivalent materials



**Dimensions**

● **JA3D** Screwed



**JA3D** Screwed\* (mm)

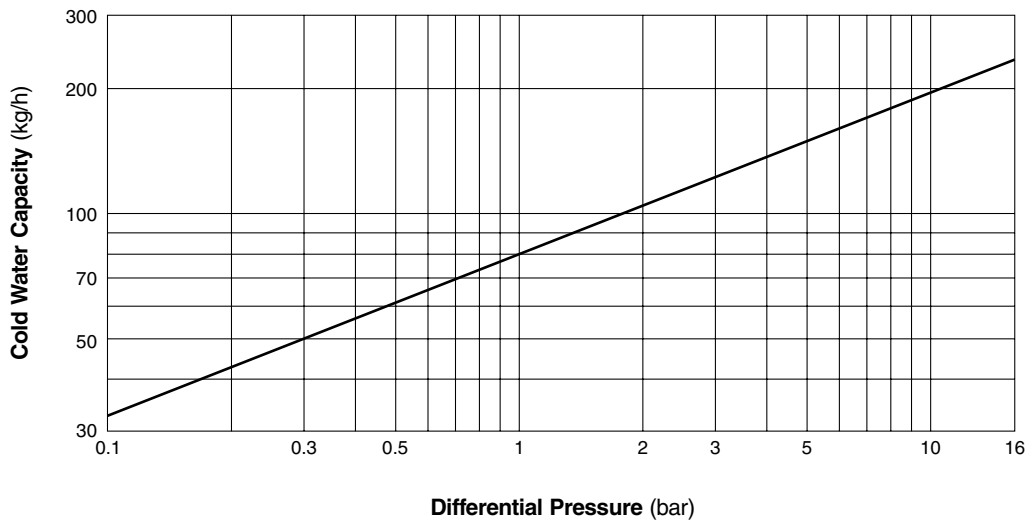
| Size | L <sub>1</sub> | H   | H <sub>1</sub> | φW | Weight (kg) |
|------|----------------|-----|----------------|----|-------------|
| 1/2" | 28             | 104 | 80             | 80 | 0.6         |

\* BSP DIN 2999, other standards available

**NOTE**

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

**Discharge Capacity**



1 bar = 0.1 MPa

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.



DO NOT use traps 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

