



Rev. 05/2018

## **VASA - VASATRE**

Automatic air vent valves, degasser.

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Automatic air vent valves, degasser.

MAXIMUM DISCHARGE PRESSURE **2,5 bar**



## PRODUCTION RANGE

### AUTOMATIC AIR VENT VALVE, DEGASSERS WITH HEAD PROTECTION CAP - VASA SERIES



| Code     | Size | Connection       | Type |
|----------|------|------------------|------|
| 37.03.60 | 3/8" | M UNI-EN-ISO 228 | Vasa |
| 37.04.60 | 1/2" | M UNI-EN-ISO 228 | Vasa |
| 37.05.60 | 3/4" | M UNI-EN-ISO 228 | Vasa |
| 37.06.60 | 1"   | M UNI-EN-ISO 228 | Vasa |

### AUTOMATIC AIR VENT VALVE, DEGASSERS WITH HEAD PROTECTION CAP - VASATRE SERIES



| Code      | Size   | Lateral connection | Pressure gauge connection | Type    |
|-----------|--------|--------------------|---------------------------|---------|
| 216.05.60 | 3/4"   | M-UNI-EN ISO 228   | F G 1/4"                  | VasaTre |
| 216.06.60 | 1"     | M-UNI-EN ISO 228   | F G 1/4"                  | VasaTre |
| 216.07.60 | 1 1/4" | M-UNI-EN ISO 228   | F G 1/4"                  | VasaTre |

## DESCRIPTION

**Vasa** and **VasaTre** valves are automatic, float-operated air vent valves whose function is removing air and gases from heating or cooling systems.

The pressure chamber has been designed to prevent contact between the impurities present on the free surface of the fluid and the seal device, especially at the pump start-up (pickup).

It acts as a deaerator during the system filling phase, changing its function to a degasser during operation.

Due to its guaranteed top level operation, this component should be considered as a safety device for systems.

This item has been developed for application on various types of manifolds of heating and air conditioning systems.

### THE PRODUCTION RANGE

This item is produced in different diameters:

- Vasa (for manifolds in vertical position):  
3/8" ÷ 1"
- VasaTre (for individual manifolds in horizontal position):  
3/4" ÷ 1"1/4

### THE CHOICE

The Vasa diameter must be the same as the diameter of the manifold on which it is fitted.

### USE

**Vasa** and **VasaTre** valves are used in areas where the formation of air bubbles is likely;

This item is designed for circuits with positive pumping pressure.

For circuits with negative pumping pressure it is important to provide a manual shut-off of the component by means of a suitable ball valve.

### CAUTIONS

To be always installed in a vertical position.

Make sure that the item is fitted always on the delivery side of the manifold.

The protection cap must be equipped with vent holes. It protects against sudden hot fluid release and its use is therefore absolutely necessary, especially in the case of exposed installations.

## CONSTRUCTION FEATURES

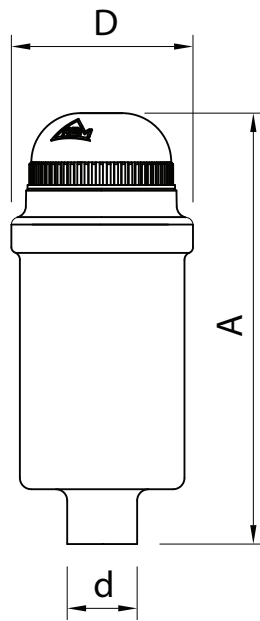
|   |  |
|---|--|
| <b>Casing</b>                                       | Nickel-plated brass CW 617N UNI EN 12165 |
| <b>Elastomers used</b>                              | EPDM PEROX and NBR                       |
| <b>Float</b>  | Lever type made of polypropylene resin   |
| <b>Spring</b>                                       | Stainless steel AISI 302                 |
| <b>Threaded connection</b>                          | M UNI-EN-ISO-228                         |
| <b>Pressure gauge connection (only for VasaTre)</b> | F G 1/4"                                 |

## TECHNICAL FEATURES

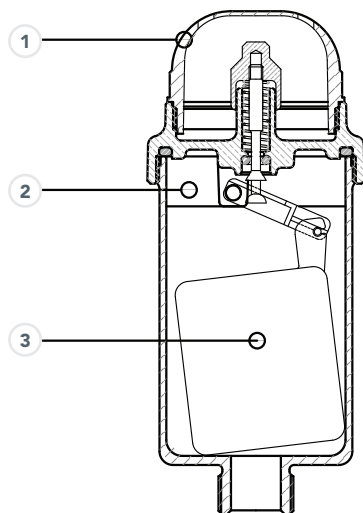
|   |                             |
|---|-----------------------------|
| <b>Usable fluid</b>                     | Water<br>Water + Glycol 30% |
| <b>Maximum temperature of the fluid</b> | 100 °C                      |
| <b>Maximum working pressure</b>         | 6 bar (600 kPa)             |
| <b>Maximum discharge pressure</b>       | 2,5 bar (250 kPa)           |

## DIMENSIONAL FEATURES

### VASA



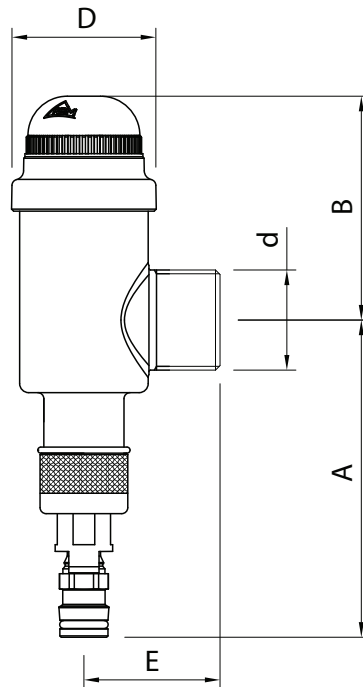
| CODE     | d    | A<br>[mm] | D<br>[mm] |
|----------|------|-----------|-----------|
| 37.03.60 | 3/8" | 109       | 47,8      |
| 37.04.60 | 1/2" | 112       | 47,8      |
| 37.05.60 | 3/4" | 114       | 47,8      |
| 37.06.60 | 1"   | 115       | 47,8      |



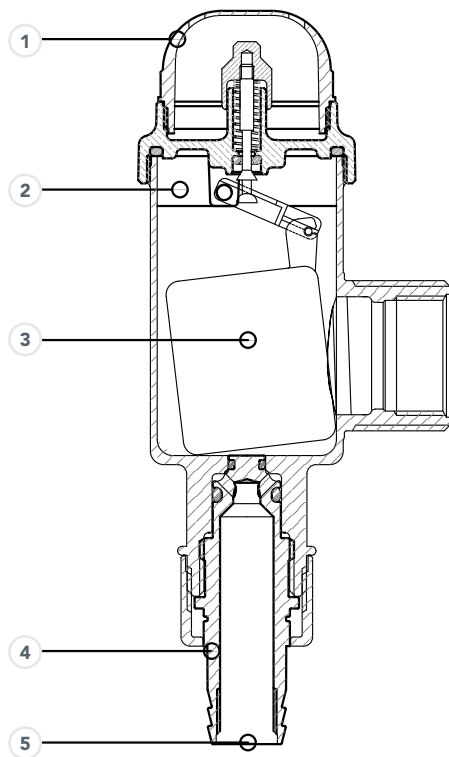
- 1 Protection cap
- 2 Pressure chamber
- 3 Float

## DIMENSIONAL FEATURES

### VASATRE



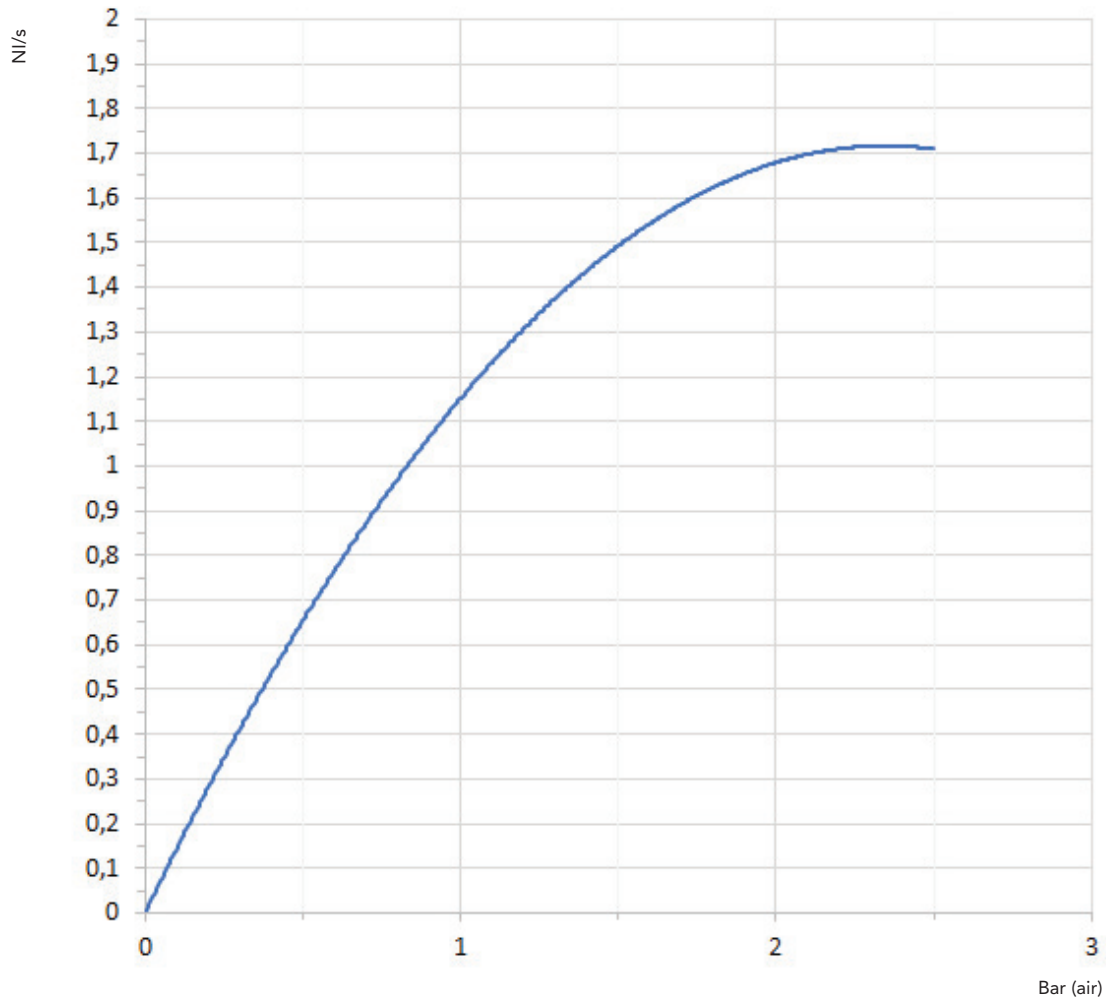
| CODE      | d     | A [mm] | B [mm] | D [mm] | E [mm] |
|-----------|-------|--------|--------|--------|--------|
| 216.05.60 | 3/4"  | 104,8  | 74     | 47,8   | 43,5   |
| 216.06.60 | 1"    | 104,8  | 74     | 47,8   | 43,5   |
| 216.07.60 | 1"1/4 | 104,8  | 74     | 47,8   | 46     |



- 1 Protection cap
- 2 Pressure chamber
- 3 Float
- 4 Connection "Gardena"
- 5 Pressure gauge connection F G1/4"

## FLUID DYNAMICS FEATURES

### DISCHARGE CAPACITY DIAGRAM



### AUXILIARY COMPONENTS

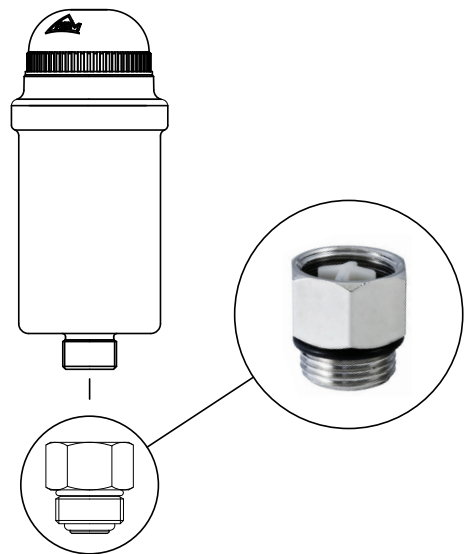
Small non-return valve for automatic shut-off of air vent valves.  
It allows the automatic shut-off of the Vasa air vent valves.

Code. **38.04.10** (1/2")

**It can be applied only to 1/2" Vasa vent valves.**

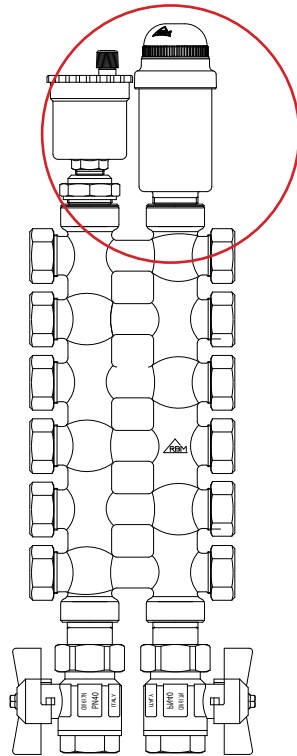
#### CHARACTERISTICS:

- Maximum temperature: 100 °C
- Maximum operating pressure: 6 bar (600 kPa)



## EXAMPLE APPLICATIONS

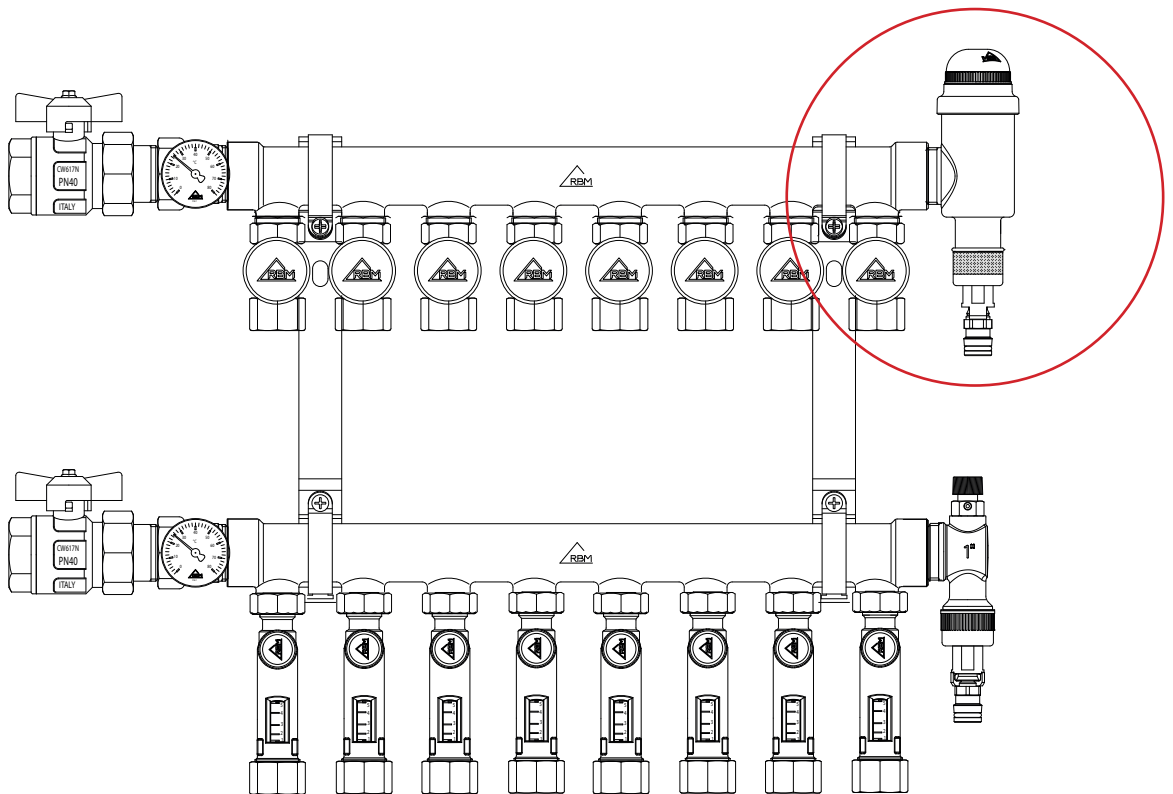
Fig. 1



Application of Vasa degassers on manifolds RBM (fig. 1).

**NOTE:** in horizontal systems (fig. 2) Vasa can be replaced by VasaTre in order to simplify the layout by reducing the number of products used.

Fig. 2

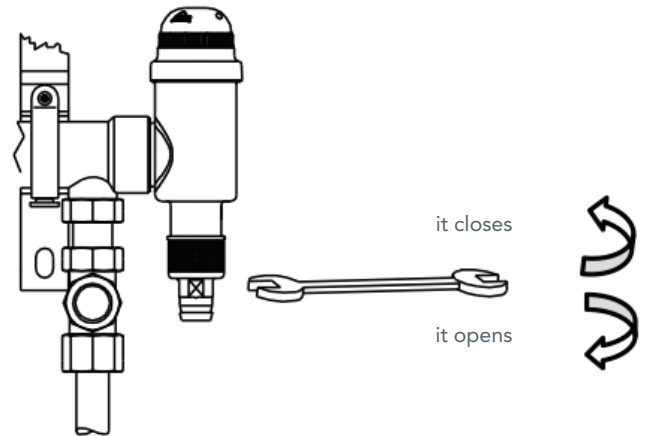


## WAYS OF USING VASATRE

### Filling and emptying of the system:

When the discharge valve is closed, VasaTre is in the standard operation mode.

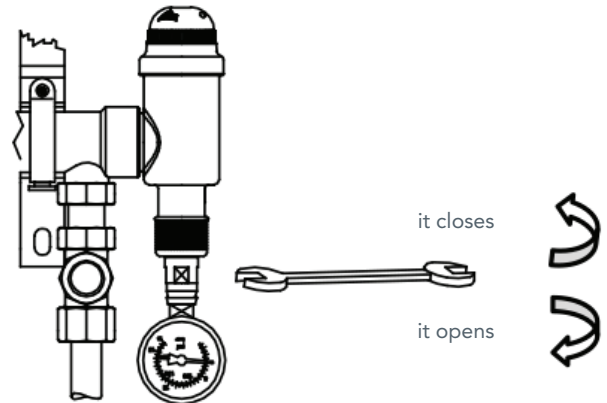
When the discharge valve is open, VasaTre is predisposed for the filling and the emptying of the system.



### System pressure control:

When the discharge valve is open, VasaTre allows to check the pressure in the system.

Pressure gauge connection F G 1/4"





## SPECIFICATION ITEMS

### SERIES 37

Automatic air vent valve, degasser, with protection cap, model Vasa. Threaded connection M UNI-EN-ISO 228. Nickel plated brass body. PP float. AISI 302 stainless steel spring. Nitrile elastomer and ethylene-propylene elastomer seals. Usable fluid water - water+glycol 30%. Maximum fluid temperature 100 °C. Maximum operating pressure 6 bar. Maximum discharge pressure 2,5 bar. Available sizes 3/8" ÷ 1".

### SERIES 216

Automatic air vent valve, degasser, with protection cap, model VasaTre. Complete with integrated venting valve connection "Gardena", pressure gauge connection F G1/4". Threaded lateral connection M UNI-EN-ISO 228. Nickel plated brass body. PP float. AISI 302 stainless steel spring. Nitrile elastomer and ethylene-propylene elastomer seals. Usable fluid water - water+glycol 30%. Maximum fluid temperature 100 °C. Maximum operating pressure 6 bar. Maximum discharge pressure 2,5 bar. Available sizes 3/4" ÷ 1"1/4.

*RBM spa reserves the right to improve and change the described products and related technical data at any moment and without prior notice: always refer to the instructions attached with the supplied components; this sheet is an aid, should the instructions be extremely schematic. Our technical office is always at your disposal for any doubt, problem or explanation.*

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