

DEGASSERS VASA – VASATRE SERIES

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PRODUCTION RANGE

VASA SERIES DEGASSERS WITH HEAD PROTECTION CAP Code Component Size Connection Type 37.03.60 Degasser 3/8" M UNI-EN-ISO 228 Vasa 37.04.60 Degasser 1/2" M UNI-EN-ISO 228 Vasa 37.05.60 3/4" M UNI-EN-ISO 228 Vasa Degasser 37.06.60 Degasser M UNI-EN-ISO 228 Vasa

VASATRE SERIES DEGASSERS WITH HEAD PROTECTION CAP

	Code	Component	Size	Connection	Pressure gauge connection	Туре
	216.05.60	Degasser	3/4"	M-UNI-EN ISO 228	F G 1/4"	Vasatre
	216.06.60	Degasser	1"	M-UNI-EN ISO 228	F G 1/4"	Vasatre
	216.07.60	Degasser	1"1/4	M-UNI-EN ISO 228	F G 1/4"	Vasatre

DESCRIPTION

Vasa is an automatic float operated air relief valve.

PURPOSE

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

PRECAUTIONS

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.

THE CHOICE

The Vasa diameter $\underline{\text{MUST}}$ be the same as the diameter of the manifold on which it is fitted.

<u>USE</u>

- 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.

CONSTRUCTION CHARACTERISTICS

Casing: Nickel-plated brass CW 617N UNI EN 12165

Elastomers used: EPDM and NBR

Float: lever type made of polypropylene resin

• Spring: stainless steel AISI 302

Surface finish Nickel-plated satin finisch

Threaded connection
 M UNI-EN-ISO-228

Pressure gauge connection (only for Vasatre)
 F G 1/4"

TECHNICAL CHARACTERISTICS

Usable fluid: Water

Water / Air

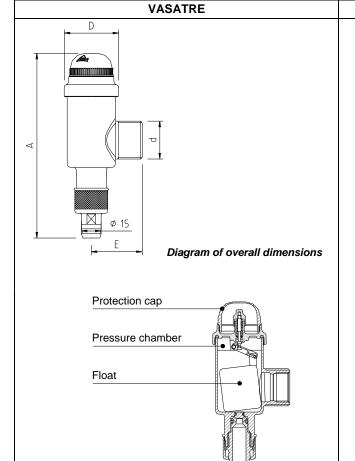
Water + Glycol 30%

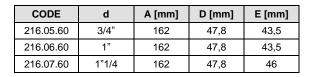
Maximum temperature of the fluid: 100°C

Maximum working pressure:
 600 KPa (6 bar)

Maximum pressure withstood: 1000 KPa (10 bar)

SIZES





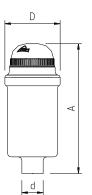
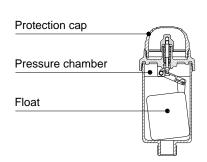


Diagram of overall dimensions

VASA



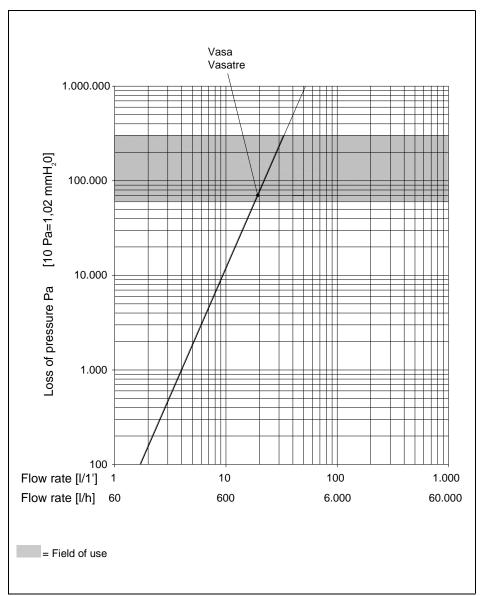
Section

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

Section

CHARACTERISTICS OF FLUID MECHANICS

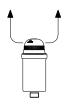
Pressure loss diagram



Vasa – Vasatre deaerator Gas discharge in the system filling phase.



d	K L/1'	
Vasa	52,00	
Vasatre	52,00	



Discharge of dissolved gases like: air oxygen carbon dioxide chlorine oxygen

 $Pa = (Q/K)^m \times 1.000.000$

 $bar = (Q/K)^m \times 10$

 $Q = (P/1.000.000)^{1/m} \times K = L/1'$

 $Q = (bar/10)^{1/m} x K = L/1'$

m = 2,7

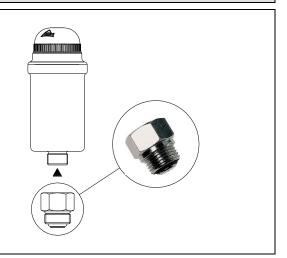
AUXILIARY COMPONENTS

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: 600 KPa (6 bar)



EXAMPLE APPLICATIONS

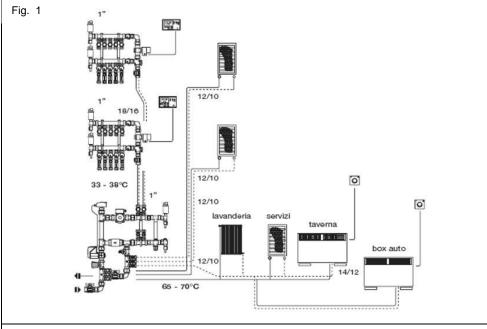


Fig. 1
Heating system in a mixed configuration:
two pipes with floor radiant panels.
Fixed point system.
Application of Vasa degassers on standard distribution control units with horizontal layout.

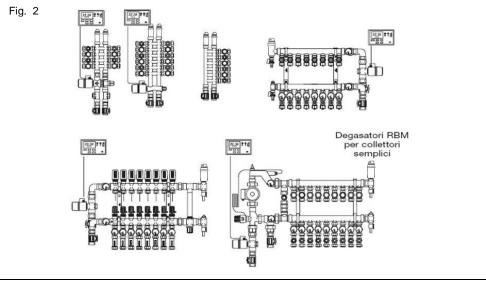


Fig. 2 Application of Vasa degassers on various types of RBM manifolds for twopipe and radiant panel distribution. **Note:** in horizontal systems

Vasa can be replaced by Vasare in order to simplify the layout by reducing the number of products used.

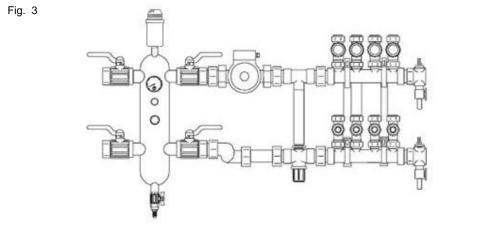


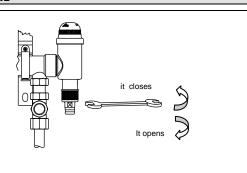
Fig. 3
This picture shows a Vasa degasser fitted on an hydraulic separator with a distribution system subdivided into different areas in a block of flats or in a single household unit.

WAYS OF USING VASATRE

Filling and emptying of the system:

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

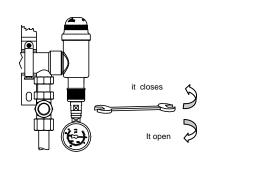
When the discharge valve is open, VasaTre is predisposed for the filling and the emptying of the system.



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"





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 department is always at your disposal for any doubt, problem or clarification.

