

# **VASASETTE SERIES DEGASSERS**

CT0037.1\_00 UK July 2008



# **PRODUCTION RANGE**

# VASASETTE DEGASSERS WITH HEAD PROTECTION CAP

Figure	Code	Component	Size A	Size B	Connection	Туре
В	37.05.70	Degasser	3/4"	1/2"	FF UNI-EN-ISO 228	Vasasette



### **DESCRIPTION**

Vasasette 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.

## THE PRODUCTION RANGE

The Vasasette air relief valve is produced in just one model with 3/4" connections on the system side and 1/2" connections on the air vent side.

### <u>USE</u>

The item has been designed for application on the service pipe of heating and air conditioning systems.

For the high level mechanical resistance of the part, it is also used on mains water service pipes.

It is an excellent replacement for "breakaway tanks" located on buildings for the purpose of disconnecting the mains supply from the service line, preventing the latter from returning to the mains system in the event of a drop in water pressure.

When used on water service lines, it removes residual chlorine from the water preventing the start of galvanic processes and the perforation of pipes in the presence of modest stray currents (10 – 50 mA).

#### **NOTES**

The air vent area is shaped in such a way that an elbow pipe can be inserted to enable the condensate to be expelled when it is carried with the air leaving the system.

This condensate should be channelled into plastic polymer pipes that run into the drainage system.

# **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 finish

Threaded connection FF UNI-EN-ISO-228

# TECHNICAL CHARACTERISTICS

Usable fluid: Water

Water + Glycol 30%

Maximum temperature of the fluid: 100°C

Maximum working pressure: 600 KPa (6 bar)

Maximum pressure withstood: 1000 KPa (10 bar)

# **AUXILIARY COMPONENTS**

Example of the application of the device to transfer acid condensate in heating systems and chlorine gas for water systems.

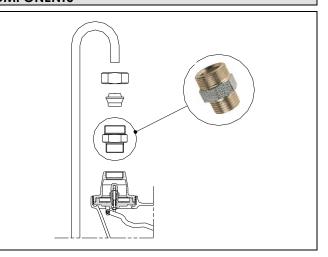
Connection by means of a 1/2 " (M) fitting – RBM (M)

Art. code 83.04.00

#### CHARACTERISTICS:

Max. temperature: 110°C

- Max. working temperature: 1000 KPa (10 bar)



# SIZES CODE d A B C D 37.05.70 G 3/4" 156 64,5 53,5 118 The sizes shown are in mm

Figure 1: Diagram of overall dimensions

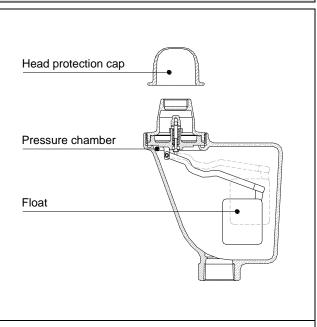
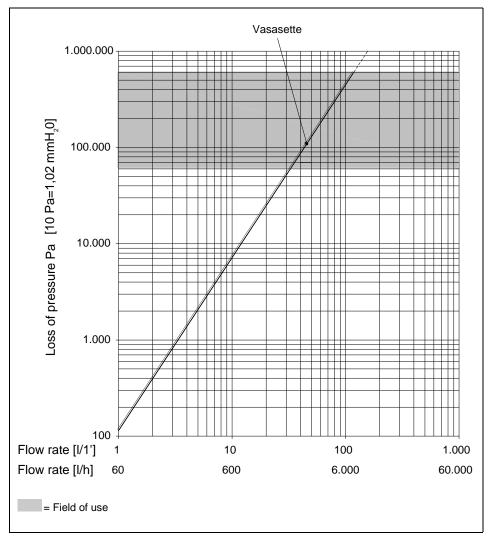


Figure 2: Valve cross-section

# **CHARACTERISTICS OF FLUID MECHANICS**

# Pressure loss diagram



Deaerator Vasasette. Gas discharge capacity during the filling phase of the system.



VASASETTE				
d	K L/1'			
3/4"	170.00			



Discharge of dissolved gasses such as: Air Oxygen Carbon dioxide Oxygen chlorine

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

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

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

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

m = 2,7

### **EXAMPLE APPLICATIONS**

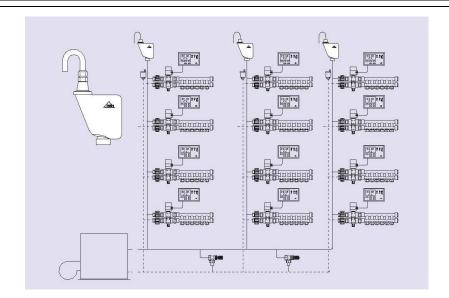


Fig. 1 Vasasette degassers fitted on the end of heating system service pipes in a block of flats.

It can be seen that the Vasa degassers are fitted on a lower level for easier access to open the pawl during the system emptying phase and to close it after the system has been filled.

The Vasasette does not require any monitoring.

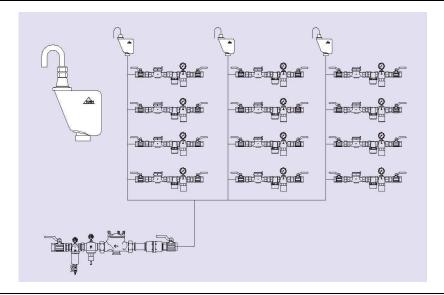


Fig. 2 Vasasette degasser fitted on the end of the water distribution service pipes in a block of flats.

The function of the degasser is expressly for the residue chlorine present in the mains water system and sent indirectly to the service line. The Vasasette also works as a deaerator for the high content of air present in the mains which is dissolved when the water goes through the filter, the reducer and the separator.

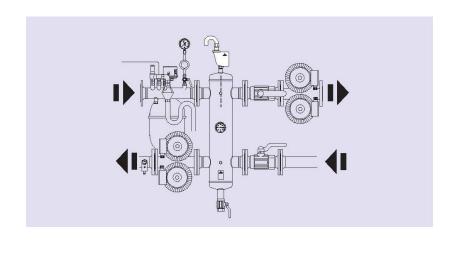


Fig. 3 Typical example of the application of the Vasasette degasser on a hydraulic separator installed in a heating plant.



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