



MEGALUFT

AUTOMATIC AIR VENT VALVE WITH HIGH DISCHARGE CAPACITY

CT2840.0_00
EN
April 2015



MAXIMUM
DISCHARGE
PRESSURE **5 bar**



- Ensures system efficiency
- High discharge capacity.
- Air discharge automatic operation.

PRODUCTION RANGE

AUTOMATIC AIR VENT VALVE COMPLETE WITH MANUAL CLOSING PAWL - MEGALUFT

Code	Size	Connection
2840.03.00	3/8"	M UNI-EN-ISO 228
2840.04.00	1/2"	M UNI-EN-ISO 228

DESCRIPTION

THE PURPOSE:

Megaluft valves are automatic, **float-operated air vent valves with high discharge capacity**, whose function is removing air and gases from heating or cooling systems.

Used especially on vertical and horizontal pillars as well as for applications on various types of manifolds and in the boiler, they can be ideally installed in all system areas where the formation of bubbles is likely.

Without requiring any manual operation, *Megaluft valves* are intended to remove air both during loading and emptying, and have a high venting capacity that helps to keep the system areas where they are installed free of air.

By removing air from the system, unnecessary breakdowns and malfunctions can be reduced, helping to:

- Increase heating and cooling efficiency
- Reduce the formation of corrosion in all points of the system
- Reduce extraordinary maintenance work
- Reduce the effects causing system noise
- Lower the cost of system management

USE:

Megaluft valves are used in areas where the formation of air bubbles is likely.

They are particularly suitable for direct installation on manifolds, in horizontal and vertical pillars (horizontal and vertical risers).

CAUTIONS:

To be always installed in a vertical position.

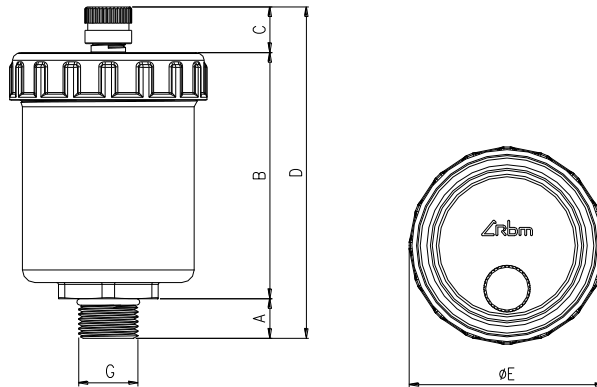
CONSTRUCTION FEATURES

- Body / cap: Brass CW 617N UNI EN 12165
- Elastomers used: EPDM and NBR
- Float: With levers, made of polypropylene resin
- Spring: AISI 302 stainless steel
- Threaded connection: M UNI-EN-ISO-228

TECHNICAL FEATURES

- Usable fluid: Water
Water + Glycol 30%
- Maximum fluid temperature: 115°C
- Maximum operating pressure: 10 bar (1000 kPa)
- Maximum discharge pressure: 5 bar (500 kPa)

DIMENSIONAL FEATURES



Code	G	A [mm]	B [mm]	C [mm]	D [mm]	Ø E [mm]
2840.03.00	3/8"	11	68,4	12,7	92,1	55
2840.04.00	1/2"	11,5	68,4	12,7	92,6	55

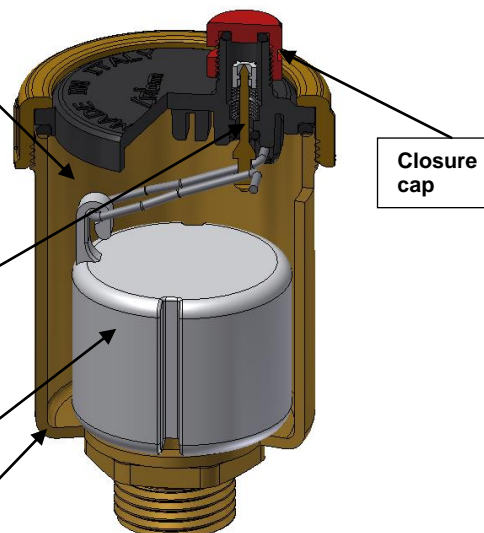
STRENGTHS / COMPONENT DESCRIPTION

Air accumulation pressostatic chamber: The pressostatic chamber is wide and it is designed to prevent contact between the impurities present on the fluid free surface and the sealing device, especially when the circulation pump is started.

Gas ejection device: Located far away from the water free surface, outside of the valve, it prevents residual impurities present in the system liquid from impairing the ejection device tightness. The ejection of gases (such as oxygen, hydrogen, carbon dioxide) prevents the latter, if retained, from forming corrosive acid solutions or activating galvanic drilling processes in the presence of stray currents. The gas ejection device can be closed by completely screwing the end pawl. Said component must be regarded as a system safety device thanks to its high functional properties.

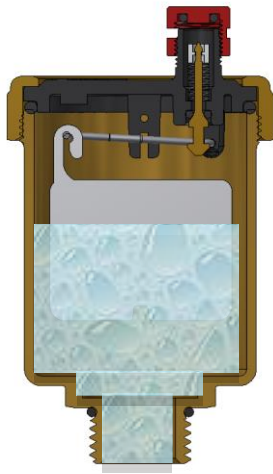
Float: Technopolymer float, fitted inside the body in such a way that its functionality cannot be influenced by external movements, including rotation and vibration.

Structure completely made of brass

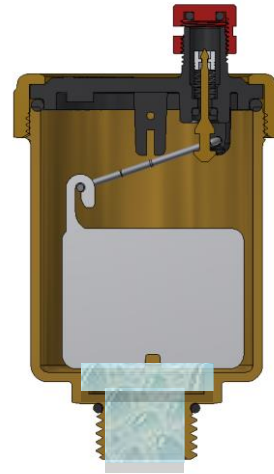


OPERATING PRINCIPLE

The accumulation of air bubbles in the upper part of the valve body (air accumulation pressostatic chamber) causes the float descent and, consequently, the gas ejection device opening.
For the valve to properly operate, make sure that the water pressure remains lower than the maximum discharge pressure value (**5 bar**)



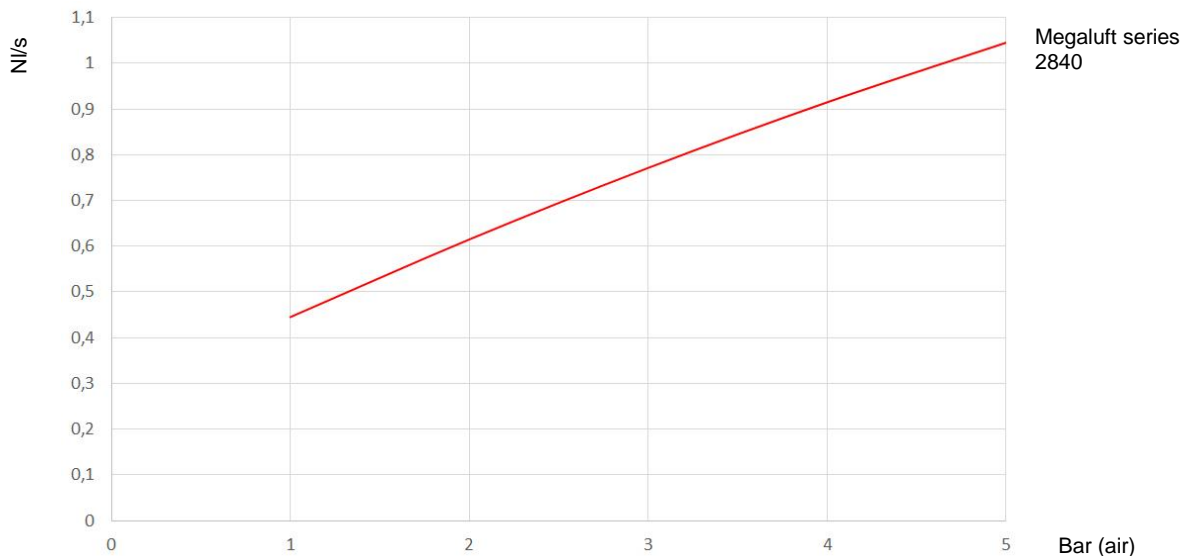
Valve position **CLOSED**



Valve position **OPEN**

FLUID DYNAMICS FEATURES

Discharge capacity diagram



USE / INSTALLATION AND AUXILIARY COMPONENTS

Megaluft valves are used in areas where the formation of air bubbles is likely; they are particularly suitable for direct mounting on manifolds, in horizontal pillars.

To be always installed in a vertical position.

Precautions:

- Use the air vent valve with an open pawl during the system loading / unloading.
- If it is installed on manifolds close to bypasses, make sure that the pawl is fully screwed, so as to avoid any air suction when the by-pass assembly is used the most (closed distribution ways).
- To be installed on circuits with positive pumping pressures. For circuits with negative pumping pressures, always provide for the component manual shut-off by interposing a suitable ball valve.
- To facilitate any maintenance work and inspection of the air vent device without stopping the system, it is recommended to shut off the device with ball or check valves.

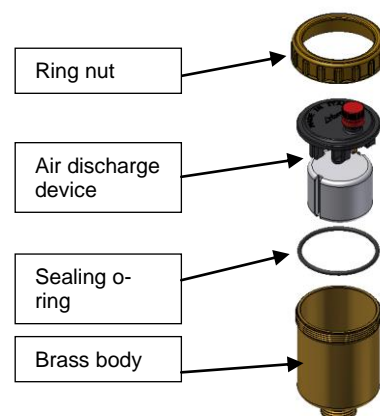


MAINTENANCE INTERVENTIONS

Megaluft valves are designed in such a way that they can be disassembled and serviced.

By simply unscrewing the upper ring nut, it is possible to access the air discharge device to check its functionality and perform any maintenance work.

To facilitate any maintenance work and inspection of the air vent device without stopping the system, it is recommended to shut off the device with ball or check valves (for accessories, please refer to the "USE / INSTALLATION AND AUXILIARY COMPONENTS" section of this data sheet).



SPECIFICATION ITEMS

SERIES 2840

Automatic air vent valve with high discharge capacity model *Megaluft*. 3/8" M (or 1/2" M) threaded connection. Brass body and cap. PP float. Float lever and stainless steel spring. Brass poppet stem. Nitrile elastomer and ethylene-propylene elastomer seals. Usable fluid water - water+glycol 30%. Fluid maximum operating temperature 115°C. Maximum operating pressure 10 bar. Max. discharge pressure 5 bar.



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.

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