Rev. 02/2018

MINILUFT HP

Small size automatic air vent valves for small high performance systems.

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Small size automatic air vent valves for small high performance systems.

- Limited overall dimensions
- High performance (max. discharge pressure 8 bar)
- Air discharge automatic operation

MAXIMUM DISCHARGE PRESSURE 8 bar

PRODUCTION RANGE

AUTOMATIC AIR VENT VALVE COMPLETE WITH MANUAL CLOSING PAWL – VERTICAL DISCHARGE		
Code	**Size**	**Connection**
3574.03.00	3/8"	M UNI-EN-ISO 228
3574.04.00	1/2"	M UNI-EN-ISO 228
3574.05.00	3/4"	M UNI-EN-ISO 228

DESCRIPTION

THE PURPOSE:

Miniluft HP valves are automatic, float-operated air vent valves that remove air and gases from heating or cooling systems.

They are ideal for application on vertical or horizontal columns, on manifolds or boilers, and can be installed in every zone of the system where bubbles may develop.

Featuring a small size and high performance (they have a wider pressostatic chamber compared to Miniluft valves), they are very effective in removing air both during filling and emptying, they have a high venting capacity which helps you keep the areas on the system where they are installed free from air.

By removing air from the system, unnecessary faults 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 costs of system management.

USE:

Miniluft HP valves are used in areas where the formation of air bubbles is likely; they are particularly suitable for direct mounting on manifolds as well as in horizontal columns (horizontal risers) and vertical columns (vertical risers).

CAUTIONS:

To always be installed in a vertical position.

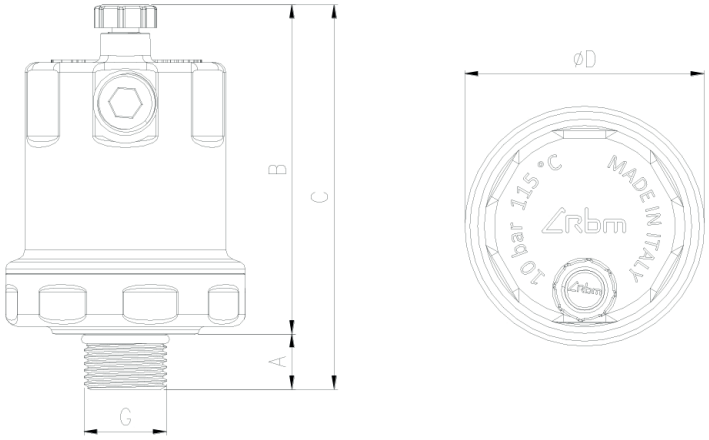
CONSTRUCTION FEATURES

Bottom / cap	Brass CW 617N UNI EN 12165
Elastomers used	EPDM PEROX
Float	with levers made of polypropylene resin
Spring	AISI 302 stainless steel
Connection	M UNI-EN-ISO-228

TECHNICAL FEATURES

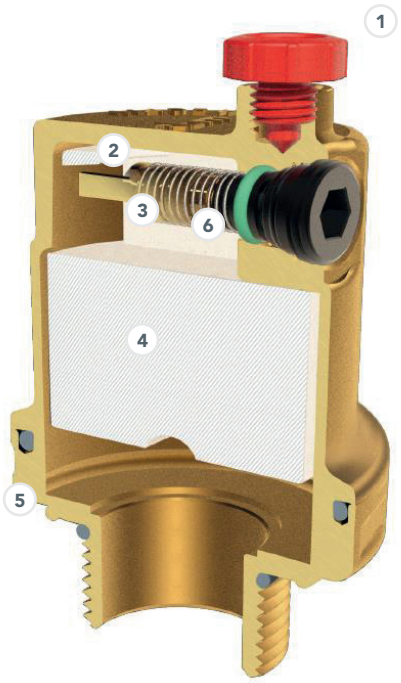
Usable fluid	Water, Water + Glycol 30%
Maximum fluid temperature	115 °C
Maximum operating pressure	10 bar (1000 kPa)
Maximum discharge pressure	8 bar (800 kPa)

DIMENSIONAL FEATURES



Code	G	A [mm]	B [mm]	C [mm]	Ø D [mm]
3574.03.00	3/8"	11	65,5	76,5	47,7
3574.04.00	1/2"	11,5	65,5	77	47,7
3574.05.00	3/4"	15	65,5	80,5	47,7

STRENGTHS / COMPONENT DESCRIPTION



1. **Closure cap**
2. **Air accumulation pressostatic chamber:** The pressostatic chamber 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.
3. **Gas ejection device:** The ejection of gases (such as oxygen, hydrogen and 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. This component must be regarded as a system safety device thanks to its high functional properties.
4. **Float: Te**chnopolymer float, fitted inside the body in such a way that its functionality cannot be influenced by external movements, including rotation and vibration.Struttura completamente in ottone.
5. **Structure completely made of brass**
6. **Molla**

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 opens.

For the valve to function properly, make sure that the water pressure remains lower than the maximum discharge pressure value **(8 bar)**.

Position valve **CLOSED**

Position valve **OPEN**

USE / INSTALLATION AND AUXILIARY COMPONENTS

Miniluft HP valves are used in areas where the formation of air bubbles is likely; they are particularly suitable for direct mounting on manifolds, in horizontal columns and vertical columns.

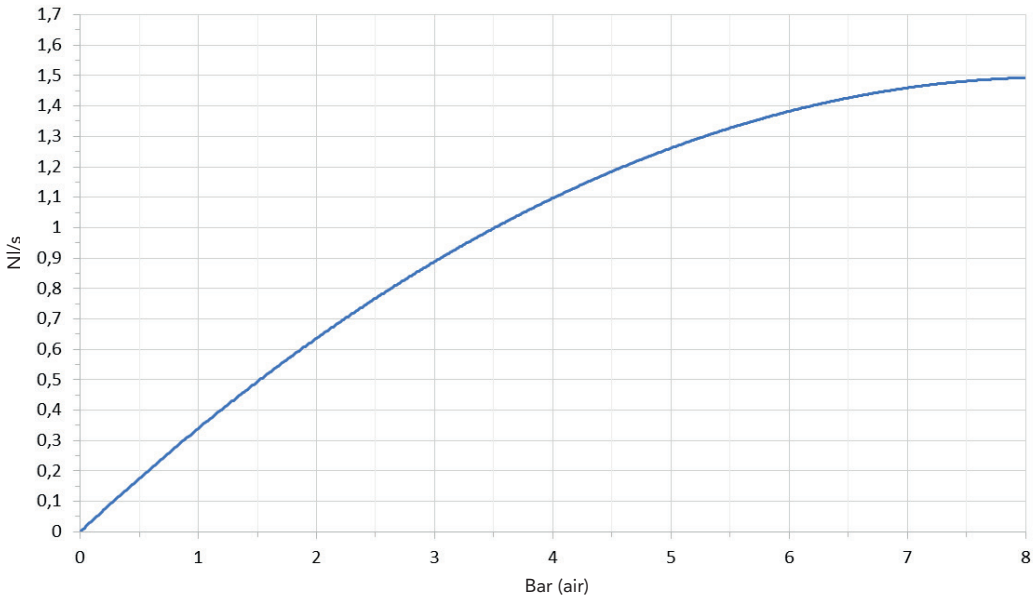
To always be installed in a vertical position.

Precautions:

- Use the air vent valve with an open pawl during the system loading / unloading.
- If it is installed on manifolds close to By-passes, 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 and inspection of the air vent device without stopping the system, it is recommended to shut-off the device with ball or check valves.

FLUID DYNAMICS FEATURES

DISCHARGE CAPACITY DIAGRAM



SPECIFICATION ITEMS

3574 SERIES

Automatic high-performance air vent valve with Miniluft HP manual locking pawl. UNI-EN-ISO 228 M threaded connection. Brass bottom and cap. PP float. AISI 302 stainless steel spring Ethylene-propylene elastomer seals. Usable fluid water - water+glycol 30%. Maximum fluid temperature 115 °C. Maximum operating pressure 10 bar. Max. discharge pressure 8 bar. Vertical discharge. Available sizes 3/8" ÷ 3/4".

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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