

Automatic air vent valves



R88

R88I

R88 and R88I automatic air vent valves can discharge the air that formed into the hydraulic circuits of the heating/cooling or domestic water systems.

This avoids the onset of negative phenomenon, that could compromise the lifetime and the efficiency of the thermal system.

The automatic air vent valves are performing either during the initial phases of the system filling, where the air quantity to be discharged is high, or during the operation where the discharge shall not happen continuously but intermittently, with modest air amounts to be discharged in a progressive way.

➤ Versions and product codes

SERIES	PRODUCT CODE	CONNECTIONS	FEATURE
R88	R88Y001	1/4" (G, ISO 228)	
	R88Y002	3/8" (G, ISO 228)	
R88I	R88IY002	3/8" (G, ISO 228)	With R160 shut-off valve
	R88IY003	1/2" (G, ISO 228)	

➤ Technical data

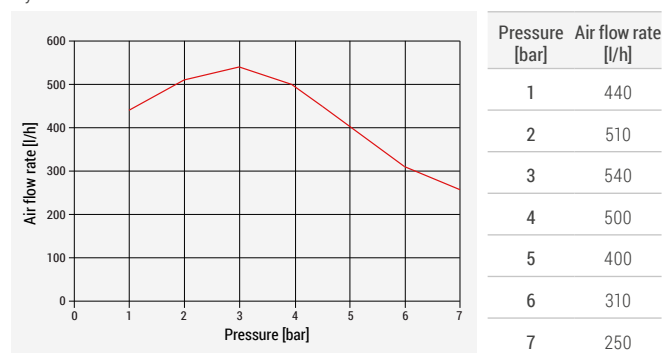
- Temperature range: 5÷120°C
- Max. working pressure: 14 bar
- Max. pressure of air vent operation: 7 bar
- Use fluids: water and glycol solutions (max. 50%)

Materials

- Body: UNI EN 12165 CW617N brass
- O-Ring: EPDM
- Stopper spring: stainless steel
- Internal float: PP-H

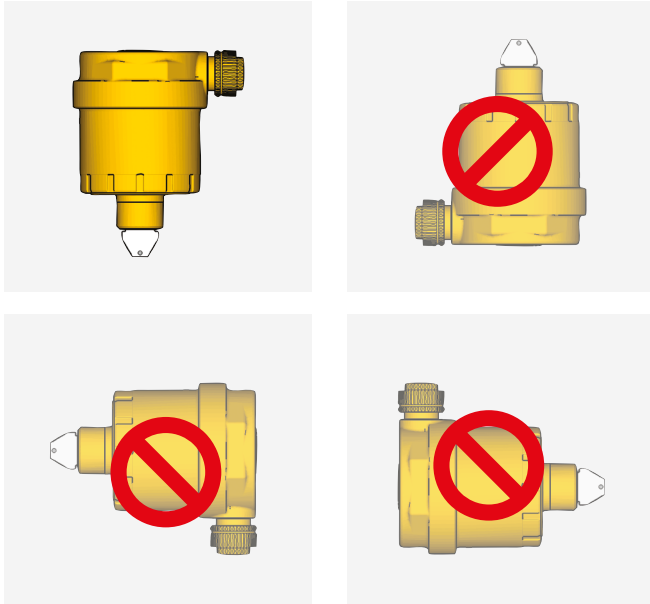
Performance

The table and the graph report the discharge air capacities, in standard conditions, at the change of the pressure of the system.



➤ Installation

R88 and R88I automatic air vent valves are usually installed on each type of manifolds, at "high points" of the pipes where an air pocket could form, on wall heating boilers or ground-floor boilers, near unit heaters or heat exchangers. The automatic air vent valves must be installed vertically, with the plug facing upwards. The installation is advisable in places that can be easily inspected.



⚠ WARNING. Close the cap of the air vent valve when rinsing out and filling the system, to prevent impurities from entering the mechanisms of the valve and damaging it.

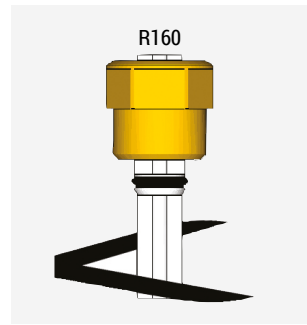
🔗 NOTE. It is possible combining a R160 shut-off valve in sizes 1/4"x3/8" and 1/4"x1/2", to the automatic valve R88.

R160 valve permits the disassembly of the valve for possible maintenance, without emptying the system.

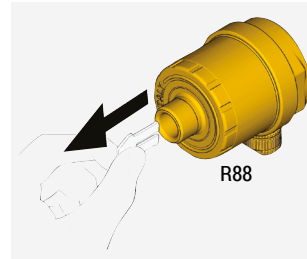
This combination (valve R88 + valve R160) can be also purchased and it is distinguished by the product series R88I in sizes 3/8" and 1/2".

➤ Mounting instruction: R88 + R160

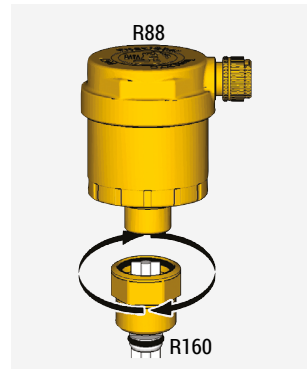
In order to equip the R88 valve with R160 shut-off valve, proceed as follows:



Before screwing the R160 valve, verify that the plastic paddle does not interfere with the parts inside the seat, it is necessary to have a free space of at least 35 mm. If any interference is present, cut the exceeding part of the paddle with a shear.



After the screwing of the R160 valve on the installation seat, remove the possible plastic paddle of the automatic air vent valve and proceed with the assembly.



Screw the automatic air vent valve to the R160 valve, by making the plastic paddle be guided by the hole of the body of the air vent valve.

Operation

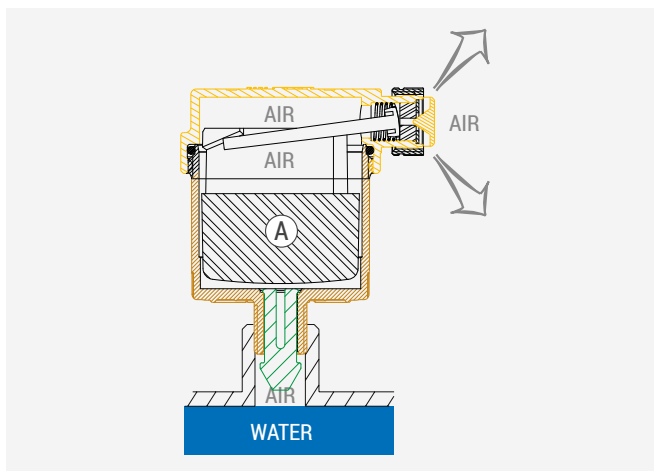
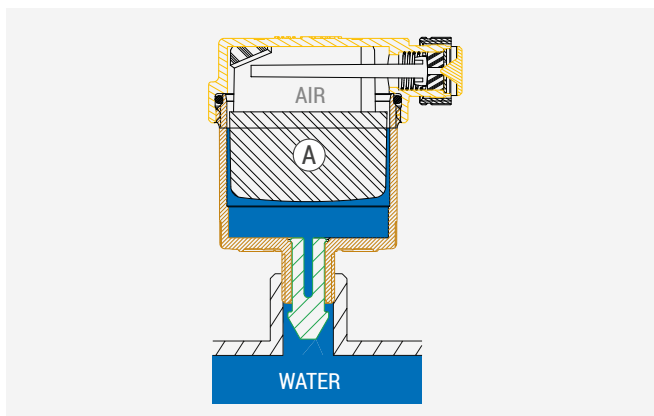
The operation of the automatic air vent valve is very simple and it is based on the principle of the floating of bodies immersed in a fluid.

When there is no air accumulation into the valve body, the float (A) is in raised position and through the mechanism, it keeps the stopper under closing.

The lowering of the floating level caused by the air accumulation into the valve body, involves the stopper opening and the consequent discharge that persists up to the reintroduction of the normal conditions.

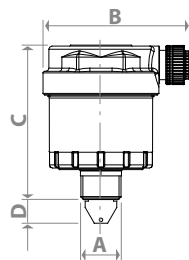
At the system filling, as there is no water into the valve body, the float is completely down permitting the air to flow quickly.

The air discharge is prevented by screwing the lateral plug. In normal operation conditions, the plug shall be unscrewed.



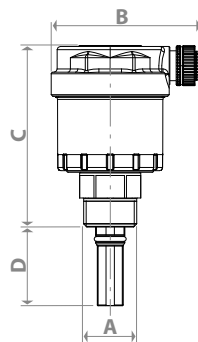
Dimensions

R88



PRODUCT CODE	A	B [mm]	C [mm]	D [mm]
R88Y001	1/4" (G, ISO 228)	47	49	8
R88Y002	3/8" (G, ISO 228)	47	49	8

R88I



PRODUCT CODE	A	B [mm]	C [mm]	D [mm]
R88IY002	3/8" (G, ISO 228)	47	56	25
R88IY003	1/2" (G, ISO 228)	47	56	25

➤ Product specifications

R88

Automatic air vent for heating/cooling or domestic water systems. Body in UNI EN 12165 CW617N brass. O-Ring in EPDM. Stopper spring in stainless steel. Internal float in PP-H. Use fluids: water and glycol solutions (max. 50%). Temperature range 5÷120 °C. Max. working pressure 14 bar. Max. pressure of air vent operation 7 bar.

R88I

Automatic air vent valve equipped with R160 shut-off valve, for heating/cooling or domestic water systems. Body in UNI EN 12165 CW617N brass. O-Ring in EPDM. Stopper spring in stainless steel. Internal float in PP-H. Use fluids: water and glycol solutions (max. 50%). Temperature range 5÷120 °C. Max. working pressure 14 bar. Max. pressure of air vent operation 7 bar.

⚠ Safety Warning. Installation, commissioning and periodical maintenance of the product must be carried out by qualified operators in compliance with national regulations and/or local standards. A qualified installer must take all required measures, including use of Individual Protection Devices, for his and others' safety. An improper installation may damage people, animals or objects towards which Giacomini S.p.A. may not be held liable.

♻ Package Disposal. Carton boxes: paper recycling. Plastic bags and bubble wrap: plastic recycling.

ℹ Additional information. For more information, go to giacomini.com or contact our technical assistance service. This document provides only general indications. Giacomini S.p.A. may change at any time, without notice and for technical or commercial reasons, the items included herewith. The information included in this technical sheet do not exempt the user from strictly complying with the rules and good practice standards in force.

♻ Product Disposal. Do not dispose of product as municipal waste at the end of its life cycle. Dispose of product at a special recycling platform managed by local authorities or at retailers providing this type of service.