



R99

R99I

Description

R99 and R99I automatic air vent valves can discharge large air quantities, that formed into the hydraulic circuits of the heating/cooling or sanitary 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 load 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	Size	Feature
R99	R99Y001	1/4"	Male threaded
	R99Y002	3/8"	
	R99Y003	1/2"	
	R99Y033	Ø 15 mm	with nut and bicone
R99I	R99IY002	3/8"	with R160
	R99IY003	1/2"	

Technical data

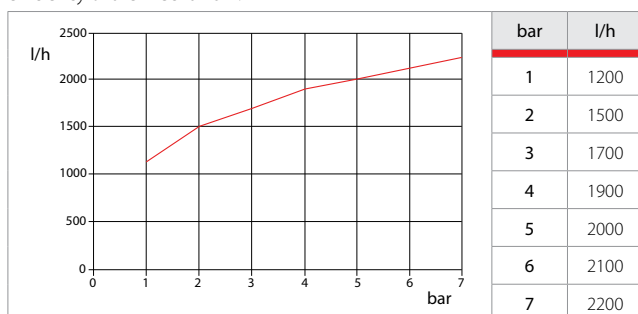
- Temperature range: 5÷120°C
- Maximum working pressure: 14 bar
- Maximum pressure of air vent operation: 7 bar
- Use fluids: water and glycol solutions (maximum 50%)

Material

- Body in UNI EN 12165 CW617N brass
- O-ring in EPDM
- Shutter spring in Inox
- Internal float in PP-H

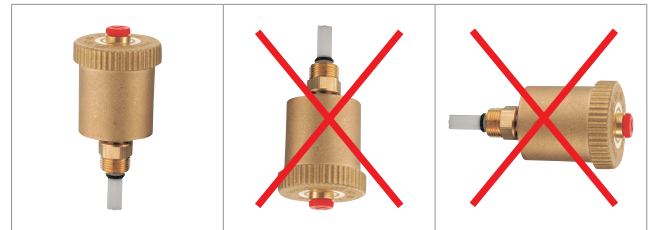
Performance

The graph report the air capacities in discharge, in standard conditions at the change of the relative pressure of the system. The air discharge capacities of the R99 valve increase progressively at the pressure increase by showing the efficiency of the mechanism.



Installation

R99 and R99I 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.



Warning.

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.

It is possible combining a R160 isolating valve in sizes 1/4"x3/8" and 1/4"x1/2", to the automatic valve R99. R160 valve permits the disassembly of the valve for possible maintenance, without emptying the system. This product combination (valve R99 + valve R160) can be also purchased directly, and it is distinguished by the product code R99I in sizes 3/8" and 1/2".

Instructions for the assembly of R99 valve with R160 isolating valve

In order to equip the R99 valve with R160 isolating valve, proceed as follows:

1

R160

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.

2

R99

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.

3

R99

R160

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 automatic air vent valve.



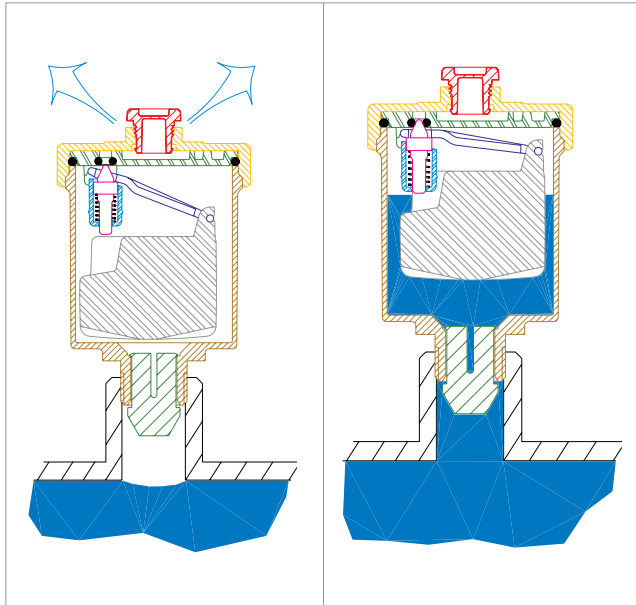
Operation

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 is in raised position and through the mechanism, it keeps the obturator under closing.

The lowering of the floating level caused by the air accumulation into the valve body, involves the obturator opening and the consequent discharge that persists up to the reintroduction of the initial conditions. At the system charge, as there is no water into the valve body, the float is completely down permitting to the air to flow quickly.

The air discharge is prevented by screwing the lateral plug.

In normal operation conditions, the plug shall be unscrewed.



Product specifications

R99

Automatic air vent for heating/cooling or sanitary systems. Body in UNI EN 12165 CW617N brass. O-ring in EPDM. Shutter spring in Inox. Internal float in PP-H. Use fluids: water and glycol solutions (maximum 50%). Temperature range 5÷120 °C. Maximum working pressure 14 bar. Maximum pressure of air vent operation 7 bar.

R99I

Automatic air vent with R160 isolating valve, for heating/cooling or sanitary systems. Body in UNI EN 12165 CW617N brass. O-ring in EPDM. Shutter spring in Inox. Internal float in PP-H. Use fluids: water and glycol solutions (maximum 50%). Temperature range 5÷120 °C. Maximum working pressure 14 bar. Maximum pressure of air vent operation 7 bar.

Dimensions

Product code	G	L [mm]	H [mm]
R99Y001	1/4"	48	81
R99Y002	3/8"	48	82
R99Y003	1/2"	48	75

Product code	G [mm]	L [mm]	H [mm]
R99Y033	Ø 15	48	82

Product code	G	L [mm]	H [mm]
R99IY002	3/8"	48	106
R99IY003	1/2"	48	106

Additional information

For additional information please check the website www.giacomini.com or contact the technical service: ☎ +39 0322 923372 📠 +39 0322 923255 ✉ consulenza.prodotti@giacomini.com
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