

R554I



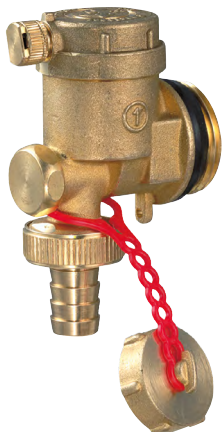
Radiant
Systems



Energy
Management

Compact end piece for distribution manifolds, with air vent valve

Datasheet
0429EN 12/2019



Compact end piece with self-sealing, for distribution manifolds, completed with automatic air vent valve and drain cock.

Suitable for domestic water, heating and cooling systems.

➤ Versions and product codes

PRODUCT CODE	CONNECTIONS	FEATURES
R554IY004	G 3/4" M	Total closure function
R554IY005	G 1" M	
R554IY035	G 1" M	Safety function with hygroscopic cap

➤ Technical data

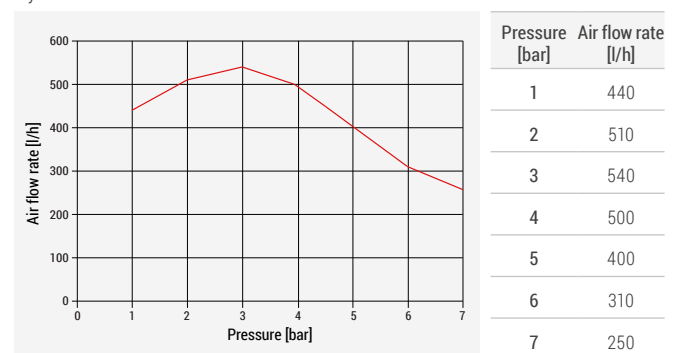
- Temperature range: 5÷90 °C
- Max. working pressure: 7 bar
- Max. pressure of air vent operation: 7 bar
- Use fluids: water and glycol solutions (max. 50%)

Materials

- Body and cap: brass UNI EN 12165 CW617N
- Self-sealing gasket: EPDM
- O-Ring and elastomeric seal: NBR
- Stopper spring: stainless steel
- Internal float: PP-H
- Hygroscopic hydraulic seal (only for R554IY035): cellulose fibre

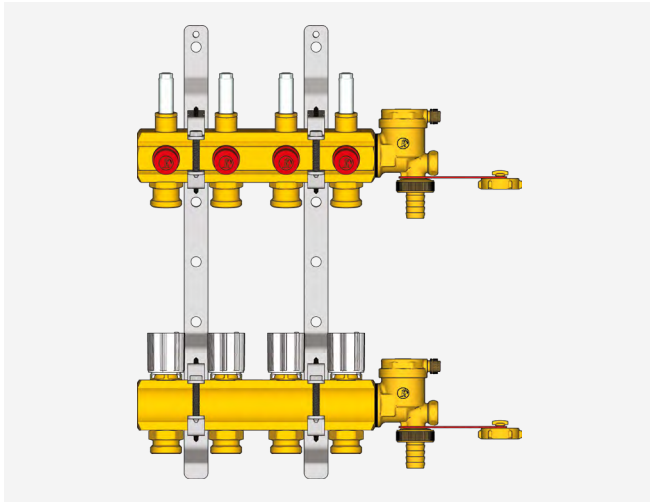
Performance

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

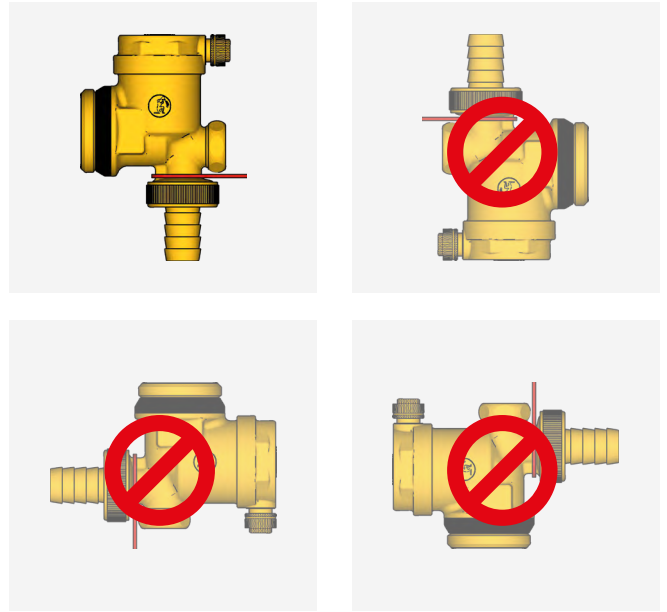


Installation

R554I end pieces are usually installed on distribution manifolds.
The automatic air vent valves must be installed vertically, with the plug facing upwards.



▲ 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.



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.

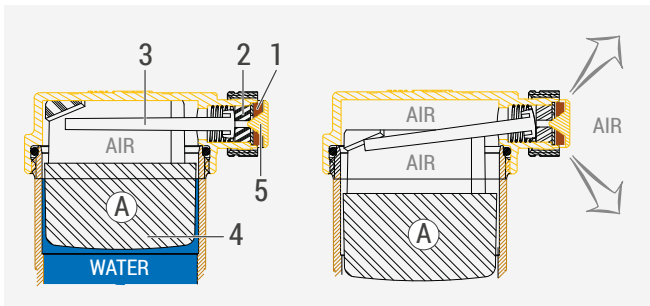
When there is no air accumulation into the valve body, the float (A) is in raised position and through the mechanism, it keeps the stopper under closing.

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 (**total closure function**).

In normal operation conditions, the plug shall be unscrewed.



- | | |
|---|---|
| 1 | Hygroscopic gasket (only for R554IY035) |
| 2 | Elastomeric gasket |
| 3 | Stopper |
| 4 | Float |
| 5 | Plug |

Safety function with hygroscopic cap

In the R554IY035 end piece there is hygroscopic gasket inside the brass cap. This gasket increases in size when it comes into contact with the water, and thereby closes the valve.

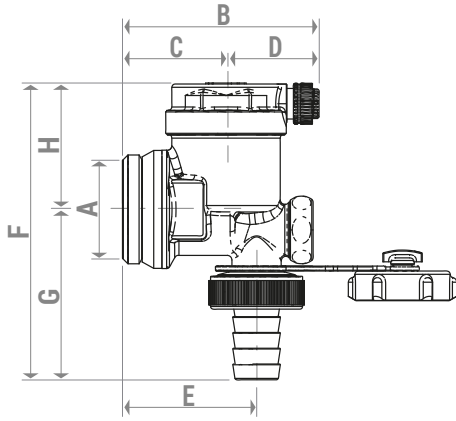
This avoids any possible damage in the event of water leakage (safety function).

In normal operating conditions, the cap may be kept closed or open:

- with the cap closed, the air outlet is via the hygroscopic gasket (dry).
- with the cap open, the safety function is still guaranteed as the cap can only open to a certain degree and this may be counterbalanced by the increase in size of the wet hygroscopic gasket.

🔗 NOTA. In the version with a hygroscopic cap, you are advised to keep the cap closed (not tightened) during the normal operation.

➤ Dimensions



PRODUCT CODE	CONNECTION A	B [mm]	C [mm]	D [mm]	E [mm]	F [mm]	G [mm]	H [mm]
R554IY004	G 3/4" M	60	32	28	41	91	50	40
R554IY005	G 1" M	60	32	28	41	91	52	40
R554IY035	G 1" M	60	32	28	41	91	52	40

➤ Product specifications

R554I

End piece with EPDM self-sealing for manifolds, completed with automatic air vent valve and drain cock. Body and cap: brass UNI EN 12165 CW617N. Self-sealing gasket: EPDM. O-Ring and elastomeric seal: NBR. Stopper spring: stainless steel. Internal float: PP-H. Temperature range: 5÷90 °C. Max. working pressure: 7 bar. Max. pressure of air vent operation: 7 bar. Use fluids: water and glycol solutions (max. 50%).

R554IY035

End piece with EPDM self-sealing for manifolds, completed with automatic air vent valve and drain cock. Body and cap: brass UNI EN 12165 CW617N. Self-sealing gasket: EPDM. O-Ring: NBR. Hygroscopic hydraulic seal: cellulose fibre. Stopper spring: stainless steel. Internal float: PP-H. Temperature range: 5÷90 °C. Max. working pressure: 7 bar. Max. pressure of air vent operation: 7 bar. Use fluids: water and glycol solutions (max. 50%).

⚠ 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.

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♻ 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.