



R437

Description

The R437 valve is designed to enable single-pipe systems to adopt the methods already in use in traditional manifold systems. Thus, offering the market a compact micrometric valve with thermostatic option that is compatible with any type of thermostatic head or electrical actuator of the Giacomini range.

Technical data

- Temperature range: 5÷110 °C (5÷90 °C with plastic probe)
- Max. working pressure: 10 bar
- Centre distance: 50 mm
- Plastic probe (R171P): length 450 mm, Ø 12 mm
- Percentage of power supply to the radiator: 50% with manual handwheel
35% with thermostatic head

Versions and product codes

| Product code | Size | Characteristics |
|--------------|-------------|--------------------------------|
| R437X032 | 1/2" M x 18 | Plastic probe (R171P) included |

Spare parts

R171PY002: plastic probe, length 450 mm, Ø 12 mm

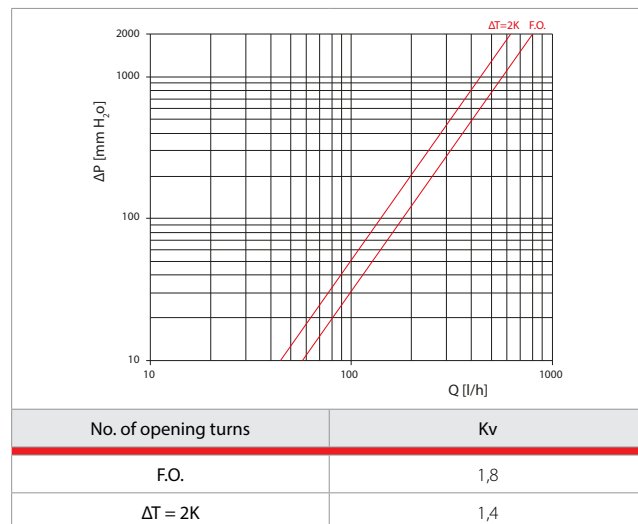
P12X004: 1/2" bonnet, Ø 12 mm

Materials

- Body and nut: brass UNI EN 12165 CW617N
- Command handwheel: ABS
- Monobloc command stem: stainless steel
- O-Ring seal on command stem: EPDM
- Self-sealing tail piece: EPDM
- Probe: plastic

Losses of pressure

Pressure losses of the valve, in the fully open (F.O.) **manual version** and with a fully open micrometric lockshield valve in the **thermostatic version**, with an opening corresponding to $\Delta T = 2K$.



Main features

The R437 valve for single-pipe systems allows the total exclusion of the heating element from the supply circuit, so interventions can be made on it even when the system is operating. By closing the handwheel and built-in lockshield valve, in fact, the heating fluid crosses over the valve bypass and reaches the heating element.

Warning.
With thermostatic head installed on the valve body, to avoid excessive loads on the seal gasket of the thermostatic bonnet (with the resulting risk of jamming and locking) during the summer, it is recommended to place the handwheel of the thermostatic head in the fully open position, marked by the symbol *.

In case of malfunction of the valve it is possible to replace the O-ring, by unscrewing the nut using an hexagonal wrench 11 mm

If the problem persists is also possible to replace the complete bonnet using the appropriate key R400.

Installation and operation

Connection to the heating element

The connection to the heating element is made with a self-sealing tail piece. The tail piece is, in fact, fitted with an elastomer part so it can be assembled on the heating element without the addition of hemp, paste or other sealing materials. To tighten the tail piece, just apply a torque no greater than 25 Nm, lubricating the elastomer element if necessary with silicone-based products.

Warning.

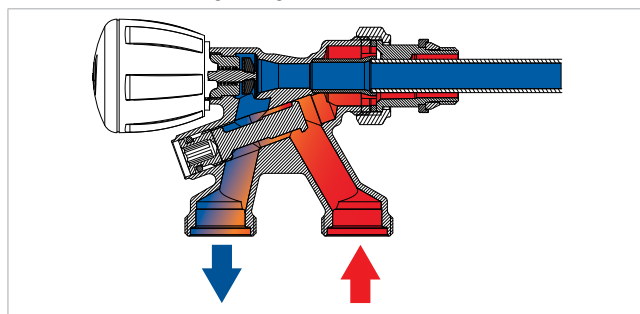
To ensure correct system operation, you are advised to install the probe Ø 12 mm so that it protrudes by at least 2÷3 mm inside the tail piece; this will avoid short-circuits in the heating fluid.

To obtain a good yield from the heating element, you are advised to apply probes with a length equal to roughly 2/3 of the heating element itself.



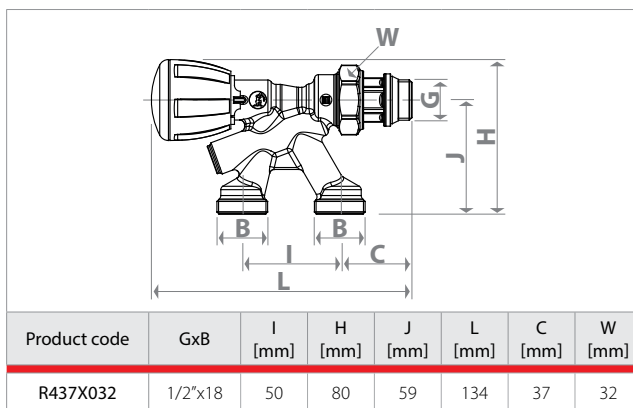
Connection to the system

With the R437 valve, the supply and return connections can be inverted without greatly altering the pressure losses or radiator emissions. Installation with the flow entry from the connection nearest the radiator is recommended however, so that the flow can enter from the very first element. In addition (and as should be the case in every thermostatic valve or valve with thermostatic option), this solution means that the shutter is struck by the flow in the opening direction: this ensures better flow adjustment and less turbulence when crossing through the valve.



For the connection to the system, use the R178, R179 or R179AM adaptors.

Dimensions



Product specifications

R437

Micrometric valve with thermostatic option, chrome-plated, with connection for copper/plastic/multilayer pipe adaptor. Body in brass UNI EN 12165 CW617N. ABS handwheel. Monobloc command stem in stainless steel. Seal on command stem with O-Ring in EPDM. Self-sealing tail piece in EPDM. For single-pipe systems. With plastic probe, length 450 mm, Ø 12 mm. Temperature range 5÷110 °C (5÷90 °C with plastic probe). Max. working pressure 10 bar. 1/2"M radiator connection and connection for base 18 adaptors R178, R179, R179AM. Centre distance of 50 mm. Percentage of power supply to the radiator: 50% with manual handwheel; 35% with thermostatic head.

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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 Giacomini S.p.A. Via per Alzo, 39 - 28017 San Maurizio d'Opaglio (NO) Italy