



R557F

Description

R557F manifold is used in those applications where in the same housing unit, heat sources supplied at high temperature are installed with radiant panel circuits to be supplied with low temperature water.

It permits distributing the heating fluid in the circuits of the radiant heating system at a prefixed working temperature, set through R462L thermostatic head, by drawing from a primary circuit at higher temperature, needed for the operation of other users (for example radiators).

Versions and product codes

| Product code | Manifold connections x outputs | N° of outputs | Wall-mount cabinet * | |
|--------------|--------------------------------|---------------|------------------------------|----------|
| | | | Series | Code |
| R557FY002 | 1" x base 18 | 2 | R557I Thickness 150 mm | R557Y051 |
| R557FY003 | | 3 | | R557Y051 |
| R557FY004 | | 4 | | R557Y051 |
| R557FY005 | | 5 | | R557Y051 |
| R557FY006 | | 6 | | R557Y051 |
| R557FY007 | | 7 | | R557Y051 |
| R557FY008 | | 8 | | R557Y052 |
| R557FY009 | | 9 | | R557Y052 |
| R557FY010 | | 10 | | R557Y052 |
| R557FY011 | | 11 | | R557Y052 |
| R557FY012 | | 12 | | R557Y052 |

Codici di completamento

- Valve with thermostatic option R401TG, R402TG (iron connection) or R421TG, R422TG (adaptor connection)
- Lockshield valve R14TG, R15TG (iron connection) or R29TG, R31TG (adaptor connection)
- M-F fitting R593D for the connection of valve and lockshield valve
- Circulator (advised centre distance: 130 mm)
- Safety thermostat K373
- Metallic cabinet R557I
- Thermo-electric actuators R473, R473M, R478, R478M



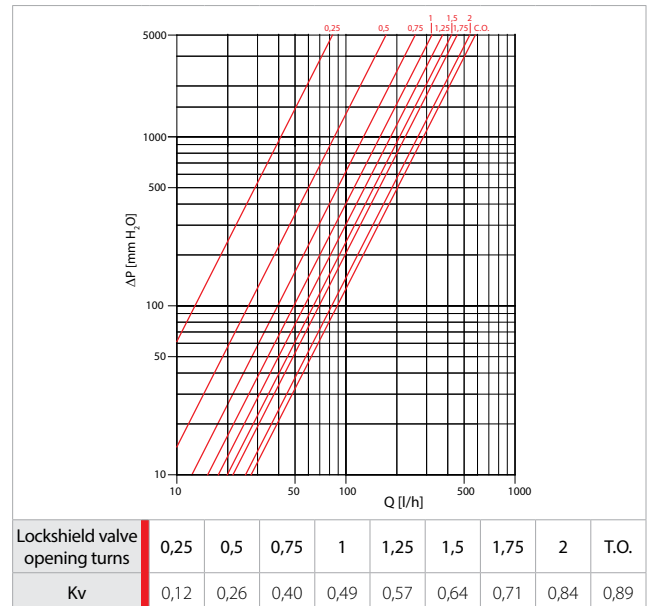
Warning.

When the R557F group is equipped with circulator having 130 mm centre distance, it is inserted into the metal R557I cabinet to be embedded having suitable length. With circulator of 180 mm centre distance (whose use is limited to few particular applications) the height of the group does not allow an easy positioning into the cabinet, therefore this solution is preferable for assembling in technical rooms, or assembling hidden with appropriate cases.

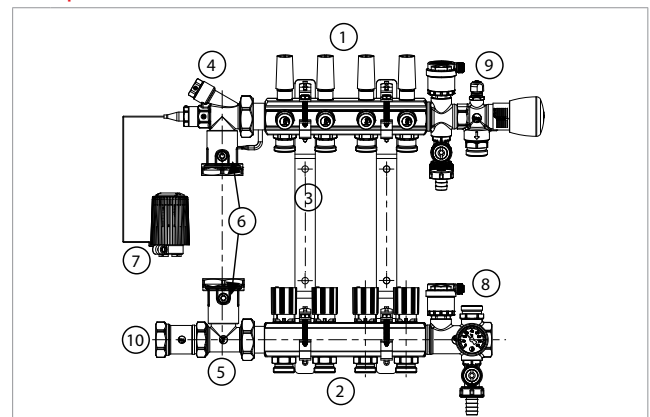
Technical data

- Temperature range: 5÷110 °C
- Maximum working pressure: 10 bar
- Supply water temperature: 75÷80 °C
- Working temperature of the low temperature use: 40÷45 °C (position 2,5 / 3 of the R462L thermostatic head)
- Range of R462L thermostatic head: 20÷70 °C
- Working ΔT: 6÷7 °C
- Scale of the flow meters: 0,5÷5 l/min
- Centre distance among the outlets: 50 mm

Losses of pressure



Components



Legend

| | |
|----|--|
| 1 | R553M flow manifold with frontal balancing lockshield valves and flow meters, scale 0,5÷5 l/min. |
| 2 | R553V return manifold with shut-off valves having manual handwheel, prearranged for electrothermic drive |
| 3 | R588L metallic adjustable supports |
| 4 | R557B flow fitting with housing for probes |
| 5 | R557D mixing fitting |
| 6 | R252 ball valves for circulator |
| 7 | R462L thermostatic head |
| 8 | R554D intermediate fitting with drain tap, thermometer, automatic air vent |
| 9 | R554A intermediate fitting with drain tap, automatic air vent, differential valve. |
| 10 | R557P spacer fitting |

Thermostatic head positioning

The flow temperature of the panel system is predetermined by positioning R462L thermostatic head according to the correspondences of the below table. To avoid possible tampering of the position, by using the proper metallic bush, it is possible making a locking of the head.

| | | | | | | | |
|------------------|----|----|----|----|----|----|----|
| R462L position | * | 1 | 2 | 3 | 4 | 5 | 6 |
| Temperature [°C] | 20 | 23 | 34 | 45 | 56 | 67 | 70 |

Circuit balancing

The flow manifold is equipped with micrometric lockshield valves with mechanical memory, for the circuit balancing. By using the appropriate R558N key, at first open completely the bushes with screwdriver cut and afterwards by starting from the completely closed position, open the Allen screw lockshield valves according to a turn number gathered from the calibration diagram. At the end of the balancing, screw again the bushes up to the stop on the respective lockshield valves. This operation will allow closing the circuits in successive times and reopen them without loosing the initial calibration position.

Thermo-electric actuator installation

If the group R557F supplies circuits positioned in the same space, it is convenient making the regulation of the room temperature with a thermostat, that stops directly the pump by interposing a simple timer that limits frequent starting and switching off. If the group is connected to circuits that heat different rooms, you can obtain the greatest comfort and energy saving by installing in each room electronic thermostats connected to the electrothermic actuators of the R473, R473M, R478, R478M series.

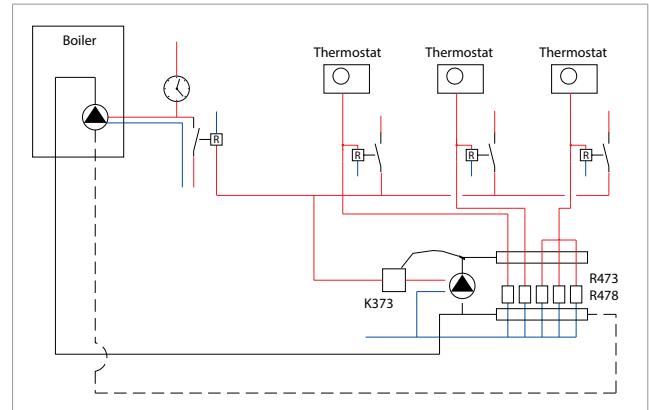
The actuators can be easily installed on the return manifold, by releasing the provided micrometric handwheels.

Example of electrical connection

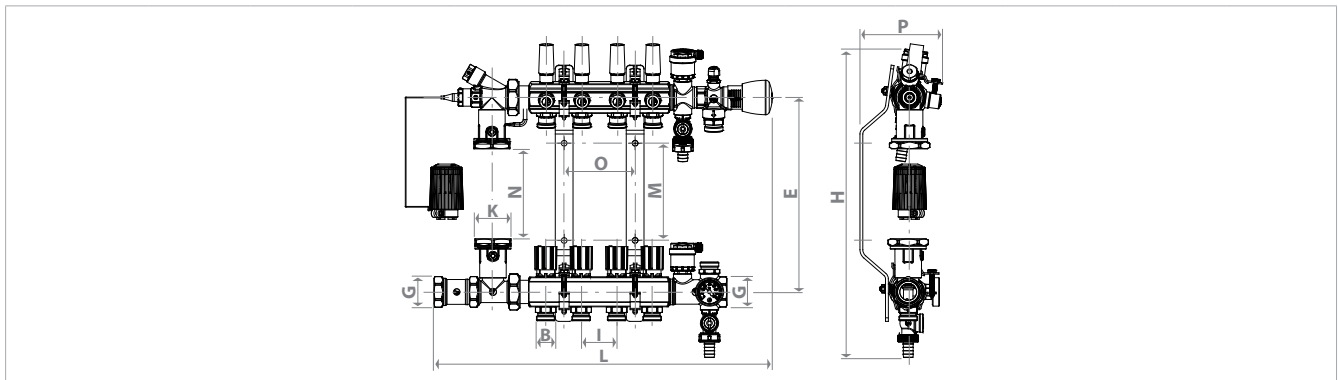
The scheme represents a typical case of mixed system in which high temperature heat sources (for example radiators or towel-dryers) are combined with R557F manifolds for floor heating systems.

The electrical system shall be made so as to make the pump of the primary circuit of the boiler running when the manifold pump starts, and possibly the high temperature part works also with R557F manifold switched off.

The scheme shall be revised depending on the assembled actuator and on the system complexity, by adopting the appropriate compatible electrical components.



Dimensions



| Product codes | G x B | N° of outputs | I [mm] | K | H [mm] | E [mm] | M [mm] | N [mm] | O [mm] | L [mm] | P [mm] |
|---------------|--------------|---------------|--------|--------|---------|---------|--------|---------|--------|--------|--------|
| R557FY002 | 1" x base 18 | 2 | 50 | 1 1/2" | 433÷473 | 274÷314 | 137 | 130÷180 | / | 377 | 117 |
| R557FY003 | 1" x base 18 | 3 | 50 | 1 1/2" | 433÷473 | 274÷314 | 137 | 130÷180 | / | 427 | 117 |
| R557FY004 | 1" x base 18 | 4 | 50 | 1 1/2" | 433÷473 | 274÷314 | 137 | 130÷180 | 100 | 477 | 117 |
| R557FY005 | 1" x base 18 | 5 | 50 | 1 1/2" | 433÷473 | 274÷314 | 137 | 130÷180 | 150 | 527 | 117 |
| R557FY006 | 1" x base 18 | 6 | 50 | 1 1/2" | 433÷473 | 274÷314 | 137 | 130÷180 | 200 | 577 | 117 |
| R557FY007 | 1" x base 18 | 7 | 50 | 1 1/2" | 433÷473 | 274÷314 | 137 | 130÷180 | 250 | 627 | 117 |
| R557FY008 | 1" x base 18 | 8 | 50 | 1 1/2" | 433÷473 | 274÷314 | 137 | 130÷180 | 300 | 677 | 117 |
| R557FY009 | 1" x base 18 | 9 | 50 | 1 1/2" | 433÷473 | 274÷314 | 137 | 130÷180 | 350 | 727 | 117 |
| R557FY010 | 1" x base 18 | 10 | 50 | 1 1/2" | 433÷473 | 274÷314 | 137 | 130÷180 | 400 | 777 | 117 |
| R557FY011 | 1" x base 18 | 11 | 50 | 1 1/2" | 433÷473 | 274÷314 | 137 | 130÷180 | 450 | 827 | 117 |
| R557FY012 | 1" x base 18 | 12 | 50 | 1 1/2" | 433÷473 | 274÷314 | 137 | 130÷180 | 500 | 877 | 117 |

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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