0105EN November 2013

Modular manifold with balancing lockshield R585M, R585T series





Description

The R585M and R585T modular manifolds have been designed with particular care and attention for use within water distribution systems, with a view to attempting to solve the problems surrounding installation, resulting in a product which offers high flexibility and functionality without neglecting aesthetic and ergonomic qualities. The innovative single module solution allows for the creation of manifolds characterized by multiple connections, depending on the needs of the individual site, eliminating requirements for stockpiled inventories as in the case of conventional preassembled manifolds. The front handwheel means that the circuits can be easily intercepted, suspending the flow rate in cases where only small quantities of water are needed. The R585M manifolds are also suitable for radiator heating distributors, particularly in small systems fed by wall-mounted boilers, where water flow rates of less that 180 l/h are required for each connection. The shape and dimensions of the modules are compatible with supports and cabinets used for other Giacomini bayonet connection manifold models.

Versions and product codes

Product code	Series	Dimensions
R585MY105	R585M	DN25x16
R585TY104	R585T	3/4"xDN25x16
R585TY105	R585T	1"xDN25x16

Characteristics

The modules are made using a hot moulding technique, which gives the products high-end mechanical characteristics while minimising the overall dimensions with significant passage sections. The assembly of the modules is carried out manually without the need for additional materials for sealing - in the bayonet connection manifold series, this is ensured using O-rings. The male and female connections on the manifolds are machined according to a bayonet profile, enabling fast, precise and stable mounting, which can be executed without the use of spanners, pipe wrenches or levers. The connection of the R585M modular manifold to the components (valves, plugs, pipes, etc.) is carried out by interposing the appropriate R585T terminal modules provided on one side with 3/4 "or 1" female threads. On the R585T fittings, the valve plans are displayed, with spanners to allow users to mount the connection components without exerting force on the manifold modules. The R585M and R585T modules are fitted with base 16 adaptor connections for connecting the distribution pipes.

Technical data

- Temperature range: 5÷90 °C
- · Max. working pressure: 10 bar
- Can be used for sanitary hot or cold water and for radiator heating systems
- · Body in stamped brass
- · Nickel coated surface
- Shut-off handwheel in high-resistance synthetic material
- EP sealing rings
- Transit section DN25
- •Threaded end pieces available in 3/4" and 1" sizes
- Centre distance of assembled module connections: 35 mm
- Connection for base 16 adaptors R178, R179, R179AM

Installation

The R585M modules are assembled manually, in order to allow for the creation of manifolds whit the desired number of connections. The operation is extremely simple and doesn't require any tools, but it's important to check that the parts to be connected are clean and free of impurities, and to lightly lubricate the O-ring with silicone grease if necessary. To prevent any material from entering and damaging the O-rings, it is a good idea to wait



until the moment of assembly before taking the modules out of their packaging. The connection of the modules to the ancillary components is performed by inserting the correct size of R585T terminal fittings (with special plans for the valve). The bayonet connection of single modules is carried out by lining up the male and female bayonet

parts with the vertical axis mutually rotated by 90°. Subsequently, a gentle push is required in the direction of the axis until it stops, followed by a slight rotation of the two modules, bringing them in line to match both male and female parts of the bayonet connection. The bayonet connection system does not require the use of tools, and as such, there is no need to place twisting or crushing force on the modules; this could deform or damage these parts,



thereby affecting their operation. In order to assemble a distribution manifold, a pair of R585T terminals with threaded connection of required size are necessary, along with a quantity of R585M intermediate modules, depending on the number of connections needed. A manifold with six connections to the pair of terminal R585T modules

must be combined with four R585M intermediate modules. In the series of bayonet connection manifolds, a particularly interesting solution has been adopted, providing a single central module with DN25 passage coupled with the terminal modules with threaded ends; these can be of two different sizes, depending on the connection requirements and the limitations of the components. After assembling the manifolds with the number of connections



required, proceed with mounting these in the cabinet. For wall mounting, recessed boxes or other types of cabinet, 1" R583 supports can be used. Following the mounting of the manifolds and the connection of the supply, proceed to the connection of pipes branching to different applications, using 16 base adaptors which

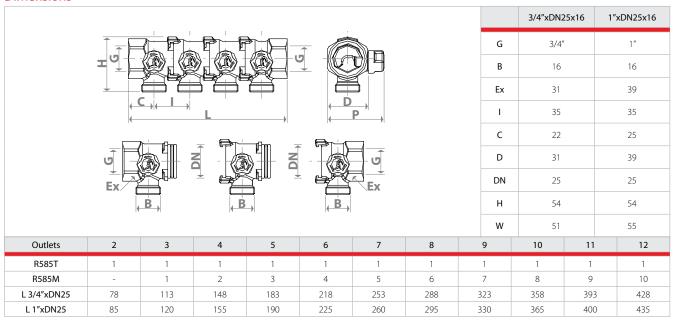
are compatible with the pipe material. The final stage is to identify the various connections by using the red and blue R523 adhesive labels.

1

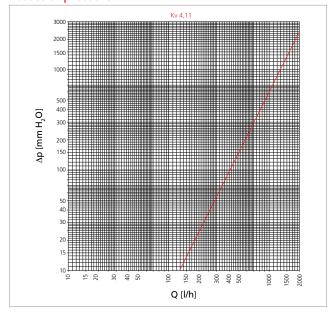
Modular manifold with balancing lockshield R585M, R585T series



Dimensions



Losses of pressure



In most applications, the assembly of various modules in a series brings negligible variations of pressure loss, allowing for the use of diagrams maintaining an excellent degree of approximation. The variation in water temperature and hence in its density implies pressure drop swings of about $\pm 1\%$ (for the same water flow rate); this figure is not significant for calculation purposes. The R585M bayonet connection manifold has no preferential water inlet direction, which means that losses in pressure do not vary according to whether they supply the male connection or female connection side manifolds. The pressure losses illustrated in the diagram refer to an individual connection system, typically used in sanitary applications. For heating systems, with a forward and a return manifold, the loss of pressure read on the diagram must be doubled.

Product specifications

R585N

Modular manifold with bayonet connection for sanitary systems - made of brass. Coupling centre distance 35 mm. Temperature range 5÷90 °C. Max. working pressure 10 bar. Available with connection for adaptors R178, R179, R179AM (base 16).

R585T

Pair of terminals for modular manifolds with bayonet connection for sanitary systems, made of brass. Coupling centre distance 35 mm. Temperature range $5 \div 90$ °C. Max. working pressure 10 bar. Available with connection for adaptors R178, R179, R179AM (base 16).

Additional information