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Modular manifold with bayonet connection R580M - R580T series





Description

The R580M and R580T modular manifolds with bayonet connection are purposely designed for use in hot and cold water (sanitary and heating) distribution systems, with a view to simplifying and speeding up installation. The resulting product offers high flexibility and practicality without neglecting aesthetic and ergonomic qualities. The innovative solution of the single module with bayonet connection allows the extremely quick creation (without the need for tools or interposed sealing elements) of manifolds with multiple connections to meet worksite requirements. The modular solution also limits warehouse stock to just two components.

Versions and product codes

Product code	Series	Dimensions
R580MY005	R580M	DN25x16
R580MY005		DN32x18
R580TY004	R580T	3/4"xDN25x16
R580TY005		1"xDN25x16
R580TY006		1"xDN32x18
R580TY007		1 1/4"xDN32x18

Main features

The modules with bayonet connection are made via the hot moulding method that guarantees excellent mechanical features - smaller dimensions and thicknesses with wide fluid transit sections and hence limited pressure loss and flow noise. The modules are assembled manually and the hydraulic seal is guaranteed by pre-assembled O-rings, without any need for interposed hemp, PTFE or adhesive agents.

The male and female connections on the manifolds have a bayonet profile for precise, stable assembly without any need for spanners, pipe wrenches or levers. The R580M modular manifolds with bayonet connection are connected to the existing components (valves, caps, pipes, etc.) by interposing the two R580T terminal modules with female thread (the available sizes are 3/4", 1", 1 1/4"). The R580T terminal modules have a male or female bayonet connection on one side and, on the threaded part, two surfaces where they can be gripped with spanners and coupled with the components without any strain on the manifold modules. The R580M and R580T modules are fitted with base 16 or 18 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 hot stamped brass
- · Nickel coated surface
- EP sealing rings
- Transit section DN25 or DN32
- Threaded terminals available in 3/4", 1", 1 1/4" sizes
- \bullet Centre distance of assembled module connections:
- 35 mm (DN25) / 50 mm (DN32)
- Connection for base 16 or 18 adaptors R178, R179, R179AM

Installation

The R580M modules with bayonet connection are manually assembled to produce manifolds with the necessary number of connections. The operation is extremely simple and doesn't require any tools, but it's important to check that the end parts 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.

To make the bayonet connection of the individual modules, position them side by side with their vertical axes rotated by 90°. Push lightly in the axial direction until they reach their end stop, then rotate the two modules by 90° so that the male and female parts of the bayonet connection are in line with each other.

To put together a distribution manifold you will need a pair of R580T terminals and the right number of R580M modules for the number of connections you want to make. To produce a 5-connection modular manifold for example, you will need a pair of R580T terminals plus three

R580M modules. For a manifold with just two connections, the pair of R580T terminals is sufficient.

The modules with bayonet connection are coupled with the accessory components via the R580T threaded terminals. The grip with spanners (needed to tighten the male threads to the terminals) should be made using the special flat seats on the modules. Under no circumstances should you use tongs or other tools to apply a torsion or crushing strain on the modules, to avoid creating deformations that could make them unsuitable for assembly or jeopardise the hydraulic seal.

After assembling the manifolds with the number of connections required, fit them in the cabinet. The bracket (shaped to follow the manifold profile) should be positioned on the cylindrical part so it can be fixed to the cabinet with the screw supplied. When assembling on the wall or in a niche, you can use the R583 1" supports. Once the manifolds have been fixed and the supply lines have been hooked up, connect the circuits using base 16 or 18 adaptors of a type compatible with the pipe material.

The final stage is to identify the various connections by using the red and blue R523 adhesive labels.





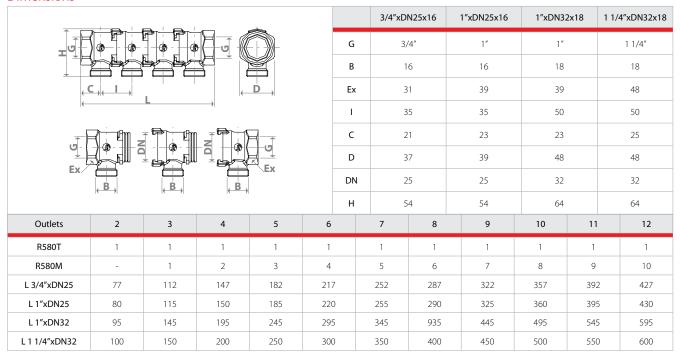


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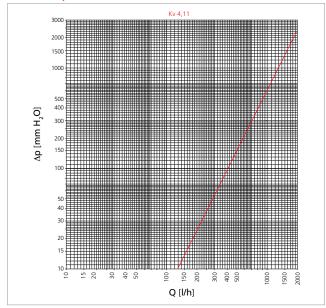
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Dimensions



Losses of pressure



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 R580M 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

R580M

Modular manifold with bayonet connection - made of brass. Coupling centre distance 35 mm (DN25) or 50 mm (DN32). Temperature range $5\div90\,^{\circ}\text{C}$. Max. working pressure 10 bar. Available with connection for R178, R179, R179AM adaptors (base 16 or 18).

R580T

Pair of modular manifold terminals with bayonet connection - made of brass. Coupling centre distance 35 mm (DN25) or 50 mm (DN32). Temperature range $5 \div 90$ °C. Max. working pressure 10 bar. Available with connection for R178, R179, R179AM adaptors (base 16 or 18).

Additional information