

1" AND 1" ¼ MANIFOLDS

USE AND MAINTENANCE HANDBOOK

1. PRELIMINARY

Before starting to use the products, please read this handbook, so the use and the maintenance are properly made on safety.

2. ACCESSORIES

The manifold is supplied with the following accessories:

- temperature gauge on supply;
- temperature gauge on return;
- air bleed valve on supply;
- air bleed valve on return;
- fill/drain system c/w safety plug on supply;
- fill/drain system c/w safety plug on return;
- brackets;
- connection from pipe to manifold;
- insulation (upon request).

3. PIPE SIZES

WARNING:

Here below the right dimension of pipes for a right and safe installation:

PEX Pipes

\varnothing_{ext} 14 $(-0,1 \div +0,15)$ mm. - thickness 2 $\pm 0,05$ mm.
 \varnothing_{ext} 16 $(-0,1 \div +0,15)$ mm. - thickness 2 $\pm 0,05$ mm.
 \varnothing_{ext} 17 $(-0,1 \div +0,15)$ mm. - thickness 2 $\pm 0,05$ mm.
 \varnothing_{ext} 20 $(-0,1 \div +0,2)$ mm. - thickness 2 $\pm 0,05$ mm.

Multilayer Pipes

\varnothing_{ext} 16 $^{+0,3}$ mm. - \varnothing_{int} = 12 $(-0,2 \div 0)$ mm.
 \varnothing_{ext} 17 $^{+0,3}$ mm. - \varnothing_{int} = 13 $(-0,2 \div 0)$ mm.
 \varnothing_{ext} 20 $^{+0,3}$ mm. - \varnothing_{int} = 16 $(-0,2 \div 0)$ mm.
 \varnothing_{ext} 20 $^{+0,3}$ mm. - \varnothing_{int} = 15 $(-0,2 \div 0)$ mm.
(\varnothing_{int} to obtain by calibrator use)

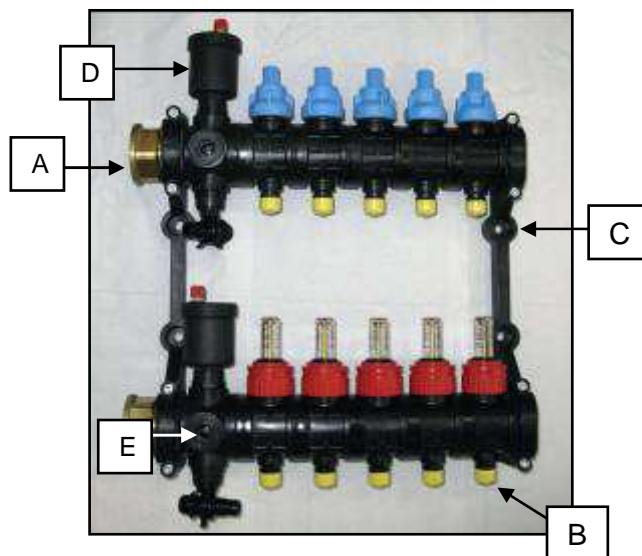
WARNING:

Please make a spot check of the pipe roughness and size, before starting the installation.

4. INSTALLATION

The product needs to be installed by skilled staff only and by complying with the following instruction.

4.1 CONNECTION TO SYSTEM AND COMPONENTS



A = 1" or 1" ¼ female swivel thread made of brass to connect the manifold to the control station or to the boiler.

B = connecting probe to button operated quick couplers or to Euroconus connectors made of brass.

C = fixing point.

D = air bleed valve (manual or automatic)

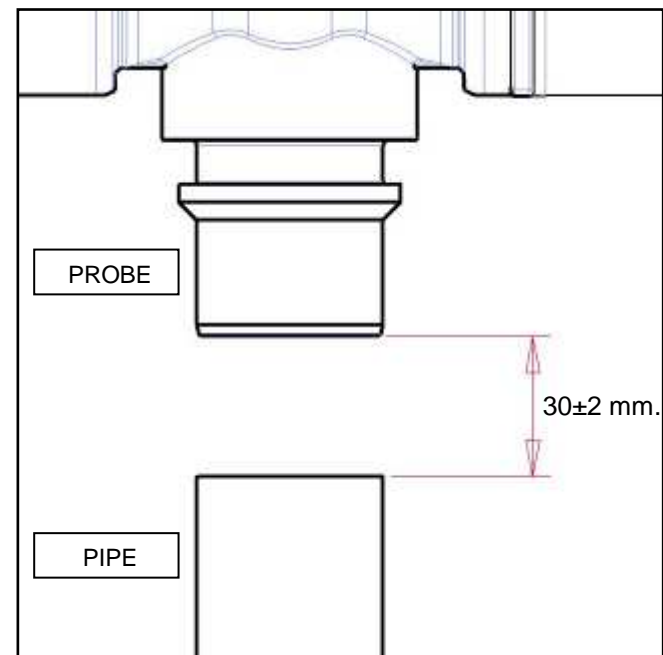
E = seat for temperature gauge (packaged separately).

4.2 CONNECTION TO PIPES

4.2.1 BUTTON OPERATED QUICK COUPLER WITH INTERNAL SLIDING SLEEVE

Please perform the following operations:

- take the yellow cap out the top of the probe;
- cut perpendicularly the pipe by using a pipe cutter, on keeping a distance of 30 ± 2 mm. from the probe:

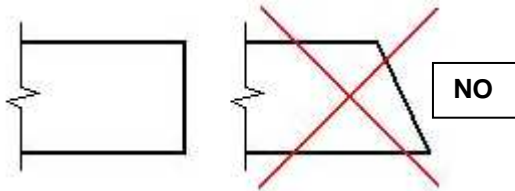


WARNING:

If the distance 30 ± 2 mm above requested is not kept, it is not granted the right connection between the manifold and the quick coupler.

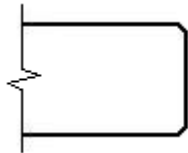
WARNING:

Cut perpendicularly the pipe by using a pipe cutter:

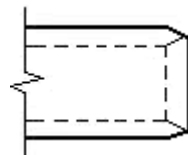


- prepare the edge of pipe:

in case of PEX pipe: by making a chamfer on the outer diameter of the pipe, by using a countersink tool, in order to make easier pushing the pipe into the connector and to prevent any o-ring damage during the connections:



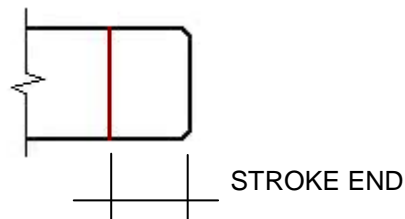
in case of multilayer pipe: by making a double chamfer on the outer and on the inner diameters of the pipe and by making a round inner diameter, using a countersink / calibrator tool:



- mark on the pipe the connection depth required:

stroke end of PEX pipe = 63 mm.

stroke end of multilayer pipe = 52 mm.



- push the pipe into the quick coupler up to the mark on the pipe diameter is on the edge of quick coupler:

**connecting strength = 6 ÷ 16 kg
(depending on pipe dimensions).**



- connect the quick coupler to the manifold probe: the pipe fitted can slide in the quick coupler housing.

ACCESSORIES FOR PIPES:



Cutter

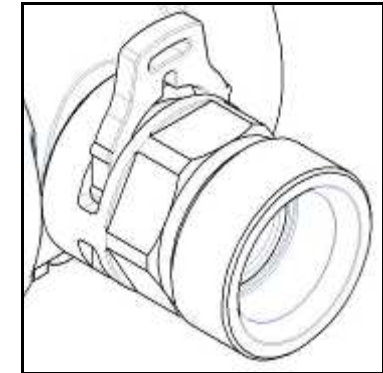


Countersink
Calibrator /

4.2.2 ADAPTER FOR EUROCONUS CONNECTOR M3/4" MADE OF BRASS

Please perform the following operations:

- take the yellow cap out the top of the probe;
- join the adapter to the manifold and then fix it by plastic clip supplied:



- join the pipe to Euroconus connector;
- connect the Euroconus connector to M3/4" adapter, by checking the tightness is granted.

4.3 GENERAL NOTES

WARNING:

A final pressure and leakage test of pipeline by compressed air at 6 bar for 24 hours and then by water at 6 bar for 3 days, is suggested, once the installation is ended.

WARNING:

The connectors and adapters can be dismantled for any inspection only by skilled and authorized staff.

5. MAINTENANCE

Once a year a visual check of the manifold is suggested.

During repair use only original parts.