

1" STAINLESS STEEL MANIFOLD FOR UNDERFLOOR HEATING

- USE HANDBOOK -

1. PRELIMINARY

Before starting to use the products, please read this handbook.

2. MATERIALS

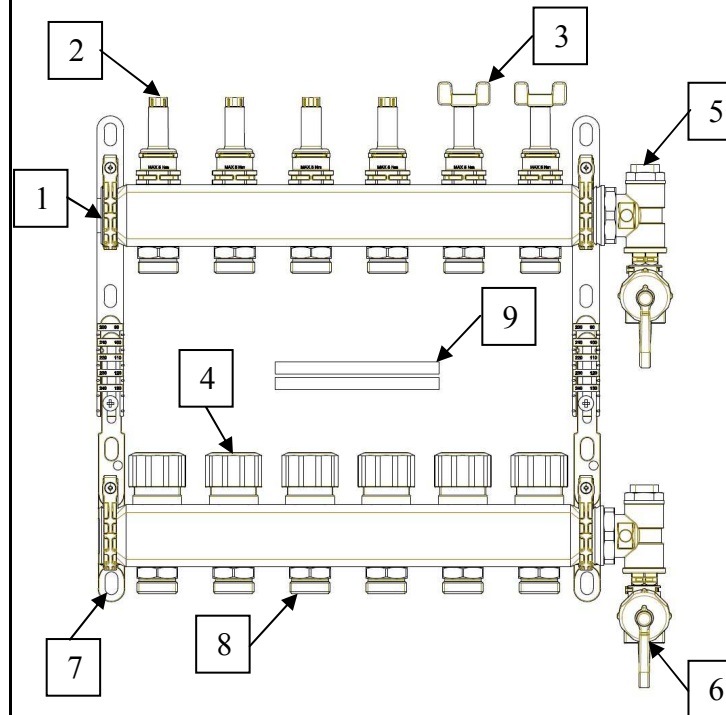
The materials used to manufacture the manifold are:

- AISI;
- PPS;
- PA6,6 / PA6,6 GF30;
- PA12 / PA12 GF30;
- POM;
- PP;
- Grivory;
- peroxidic EPDM.

3. COMPONENTS

The manifold is supplied with following components:

1. 1" female threaded inlet;
2. flowmeters on supply manifold, with Max 5 l/min flow rate;
3. Key for flowmeters;
4. lockshields c/w plastic cap on return manifold, for thermo-actuator;
5. manual air bleed valve (automatic version upon request);
6. fill/drain valve c/w safety cap;
7. couple of adjustable brackets;
8. Pipe connectors M $\frac{1}{4}$ " Euroconus or quick tube fittings connectors;
9. temperature digital gauge (upon request).



4. TECHNICAL SPECS.

Fluids accepted = water / glycol solutions

% glycol max = 50%

Working temperature = 5 ÷ 55 °C

Working pressure = 0 ÷ 6 bar

Max pressure = 10 bar

Burst pressure at room temperature > 22 bar

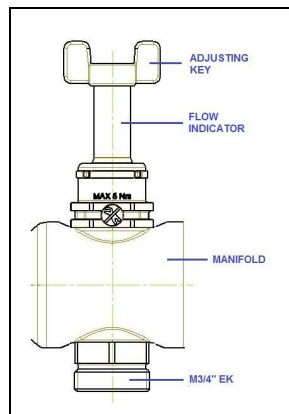
Burst pressure at 50 °C > 15 bar

Distance between each port = 50 mm.

Adjustable brackets 210-273 mm.

Box depth > 76 mm.

5. FLOWMETER WITH 5 L/MIN FLOW RATE



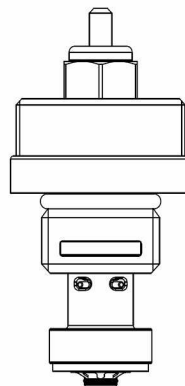
Flow-rate range = 0÷5 l/min
 Deviation percentage = +15%
 Max torque to adjust the flow-rate = 1 N•m
 (please use the proper adjusting key)

Regulated at	Kv flow coefficient
1 l/min	0,06 m ³ /h
2 l/min	0,12 m ³ /h
3 l/min	0,18 m ³ /h
4 l/min	0,24 m ³ /h
5 l/min	0,30 m ³ /h
Fully open	0,78 m ³ /h

ATTENTION:

The flowmeter is supplied with flow rate adjusting key. For a correct reading and setting of the system, please rotate anticlockwise the adjusting key, up to the maximum flow rate, when the indicator marks 5 l/min. To close the flowmeter, please rotate clockwise the adjusting key, up to the minimum flow rate, when the indicator marks 0 l/min. Please use only the keys supplied to adjust the flowmeters, do not use other keys to avoid any possible breakage.

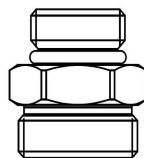
6. LOCKSHIELD FOR THERMO-ACTUATOR



Kv flow coefficient = 1,92 m³/h
 Stroke of pin = 3,8 mm.

7. PIPE CONNECTORS

M³/₄" Euroconus connector:



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

Quick tube fittings connector :

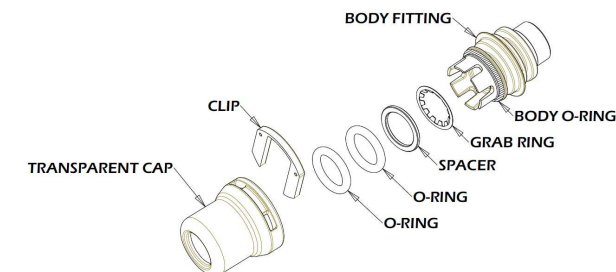


- Cut perpendicularly the pipe by using a pipe cutter;
- by making a chamfer on the outer diameter of the pipe, by using a countersink tool, in order to make easier pushing the pipe into the connector and to prevent any o-ring damage during the connections;
- push the pipe into the quick fitting connector until it's stop and the metal clamp is hooked.

8. DISCONNECT OF THE PIPE

Please perform the following operations:

- Remove the lock clip with a screwdriver
- Disconnect the transparent cap;
- Take the grab ring out from the pipe by a cutting nippers;
- Remove the two O-ring and the spacer;
- Place the spare part into the fitting following this order:
 1. grab ring, with the teeth bent upward in the body of the fitting;
 2. spacer;
 3. Two O-ring, lubricated with silicone grease.



- Close the transparent cap, insert the lock clip and check the presence of the body O-ring.

9. GENERAL NOTES

ATTENTION:

Please do not use any adjustable spanner to mount the flowmeter and the lockshield, into the manifold, and apply a torque ≤ 5 Nm.

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 completed.

Operate on the product only when the system is not under pressure and using proper tools.

10. MAINTENANCE

Once a year a visual check of the manifold is suggested with particular reference to:

- accidental damage;
- tightness.

During repair use only the original parts.

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