



# Rev 01 080721

### STAINLESS STEEL DISTRIBUTION MANIFOLD

### **Application**

The 220ATT **te-sa** pre-assembled distribution manifold is designed for the distribution and regulation of heat transfer fluid in heating and conditioning systems.

Made of Stainless Steel material, they are ideally suited to radiant panel heating systems, but also for traditional radiator heating systems with condensing boilers.

The manifold when completed with its preformed insulation is usable for conditioning systems. The particular design of the manifold features a great flow section with reduced pressure drops and consequently lower energy consumption in the circulator pumps.

The big flow section of these manifolds permits to the water to reduce its speed, with the result to have very low noises produced. Beautiful to see is strong, reliable and corrosion resistant in the ordinary applications.



### Configuration and available sizes

Pre-assembled on brackets, it is a distribution manifold with 3/4" M Eurocone connections with centre distance 50 mm, and it is composed by delivery manifold with flow regulators, return manifold with built-in interception valves, with handles, that are predisposed for assembly of electrothermal actuators. It is packed in carton box with labels included to identify the circuits connected.

| 1" inlet connection  |  | 1-1/4" inlet conr  | nection                                  |             |  |
|--|--|--|--|-------------|--|
| 220ATT-06-02<br>220ATT-06-03<br>220ATT-06-04<br>220ATT-06-05 | 2 Loops<br>3 Loops<br>4 Loops<br>5 Loops | 220ATT-07-02<br>220ATT-07-03<br>220ATT-07-04<br>220ATT-07-05 | 2 Loops<br>3 Loops<br>4 Loops<br>5 Loops | ©te-earsor  |  |
| 220ATT-06-06   | 6 Loops                                  | 220ATT-07-06   | 6 Loops                                  |             |  |
| 220ATT-06-07<br>220ATT-06-08                                 | 7 Loops<br>8 Loops                       | 220ATT-07-07<br>220ATT-07-08                                 | 7 Loops<br>8 Loops                       | T T         |  |
| 220ATT-06-09<br>220ATT-06-10                                 | 9 Loops<br>10 Loops                      | 220ATT-07-09<br>220ATT-07-10                                 | 9 Loops<br>10 Loops                      |             |  |
| 220ATT-06-11<br>220ATT-06-12                                 | 11 Loops<br>12 Loops                     | 220ATT-07-11<br>220ATT-07-12                                 | 11 Loops<br>12 Loops                     | @te-sa 1391 |  |
| 220ATT-06-13   | 13 Loops                                 | 220ATT-07-13   | 13 Loops                                 |             |  |

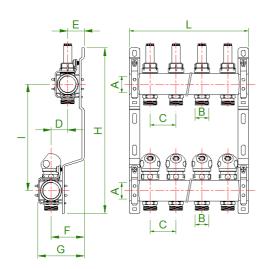
### **Technical data**

- Manifold barrel made of Stainless Steel AISI304
- Manifold components made of Brass UNI-EN12164 CW614N and UNI-EN12165 CW617N
- Manifold body size: 1" and 1-1/4"
- Supply manifold with adjustable flow meters setting range from 0 to 5 l/min, accuracy 10%
- Return manifold with interception valves equipped with ABS handles, suitable for installation of electrothermal actuators with M30x1,5 swivel nut connection
- Maximum Operating Pressure 6 bar
- Operating Temperature 0 ÷ 70°C
- Maximum Test Pressure 10 bar
- Maximum glycol percentage 30%
- KV factors in wide open conditions: Supply manifold 1" and 1-1/4" KV=1,2; Return manifold 1" KV=2,8; Return manifold 1-1/4" KV=3,55; Supply + Return 1" KV=1,10; Supply + Return 1-1/4" KV=1,14





## **Dimensions**



| Art.           | Α  | В    | С  | D  | E  | F  | G  | Н   | 1   | L   |
|----------------|----|------|----|----|----|----|----|-----|-----|-----|
| 220ATT -06- 02 | 1" | 3/4" | 50 | 32 | 32 | 64 | 95 | 320 | 206 | 130 |
| 220ATT -06- 03 | 1" | 3/4" | 50 | 32 | 32 | 64 | 95 | 320 | 206 | 180 |
| 220ATT -06- 04 | 1" | 3/4" | 50 | 32 | 32 | 64 | 95 | 320 | 206 | 230 |
| 220ATT -06- 05 | 1" | 3/4" | 50 | 32 | 32 | 64 | 95 | 320 | 206 | 280 |
| 220ATT -06- 06 | 1" | 3/4" | 50 | 32 | 32 | 64 | 95 | 320 | 206 | 330 |
| 220ATT -06- 07 | 1" | 3/4" | 50 | 32 | 32 | 64 | 95 | 320 | 206 | 380 |
| 220ATT -06- 08 | 1" | 3/4" | 50 | 32 | 32 | 64 | 95 | 320 | 206 | 430 |
| 220ATT -06- 09 | 1" | 3/4" | 50 | 32 | 32 | 64 | 95 | 320 | 206 | 480 |
| 220ATT -06-10  | 1" | 3/4" | 50 | 32 | 32 | 64 | 95 | 320 | 206 | 530 |
| 220ATT -06-11  | 1" | 3/4" | 50 | 32 | 32 | 64 | 95 | 320 | 206 | 580 |
| 220ATT -06-12  | 1" | 3/4" | 50 | 32 | 32 | 64 | 95 | 320 | 206 | 630 |
| 220ATT -06-13  | 1" | 3/4" | 50 | 32 | 32 | 64 | 95 | 320 | 206 | 680 |

| Art.           | Α     | В    | С  | D  | Е  | F  | G   | Н   | -1  | L   |
|----------------|-------|------|----|----|----|----|-----|-----|-----|-----|
| 220ATT -07- 02 | 11/4" | 3/4" | 50 | 32 | 36 | 69 | 104 | 320 | 206 | 130 |
| 220ATT -07- 03 | 11/4" | 3/4" | 50 | 32 | 36 | 69 | 104 | 320 | 206 | 180 |
| 220ATT -07- 04 | 11/4" | 3/4" | 50 | 32 | 36 | 69 | 104 | 320 | 206 | 230 |
| 220ATT -07- 05 | 11/4" | 3/4" | 50 | 32 | 36 | 69 | 104 | 320 | 206 | 280 |
| 220ATT -07- 06 | 11/4" | 3/4" | 50 | 32 | 36 | 69 | 104 | 320 | 206 | 330 |
| 220ATT -07- 07 | 11/4" | 3/4" | 50 | 32 | 36 | 69 | 104 | 320 | 206 | 380 |
| 220ATT -07- 08 | 11/4" | 3/4" | 50 | 32 | 36 | 69 | 104 | 320 | 206 | 430 |
| 220ATT -07- 09 | 11/4" | 3/4" | 50 | 32 | 36 | 69 | 104 | 320 | 206 | 480 |
| 220ATT -07-10  | 11/4" | 3/4" | 50 | 32 | 36 | 69 | 104 | 320 | 206 | 530 |
| 220ATT -07-11  | 11/4" | 3/4" | 50 | 32 | 36 | 69 | 104 | 320 | 206 | 580 |
| 220ATT-07-12   | 11/4" | 3/4" | 50 | 32 | 36 | 69 | 104 | 320 | 206 | 630 |
| 220ATT-07-13   | 11/4" | 3/4" | 50 | 32 | 36 | 69 | 104 | 320 | 206 | 680 |

### **Accessories**



**305NTK/1** Pair of straight full port ball valves, with union connection with O-Ring seal, completed with thermometer scale 0÷80°C. Available sizes 1" and 1-1/4".



**256** Intermediate unit for manifolds completed with automatic air vent, thermometer, and charge/discharge valve.

O-ring seal on connection with swivel nut. Available size 1".



**350TK/1** Pair of angle full port ball valves, with union connection with O-Ring seal, completed with thermometer scale 0÷80°C. Available size 1".



**213** Chrome plated brass end plug. O-ring seal on connection. Available sizes 1" and 1-1/4".



**650A** Pre-formed insulation shells for manifolds, consisting of two half-shells (front and back). Material: PE-X closed-cell foam. Available sizes 1" and 1-1/4".



208 – 216T – 217T Compression fittings with nut threaded 3/4" Eurocone, to connect copper pipes, polyethylene pipes and multilayer pipes at the manifolds. Available for the main commercial sizes of pipes.



**254CD** End piece for manifolds completed with automatic air vent valve and charge/discharge valve. O-ring seal on connection. Available size 1"



**116T** Electrothermal actuator normally closed with easy and fast connection. For bonnets M30x1,5. Available with and without end switch (two or four wires) in the voltages 230V and 24V.



**254GCD** End piece for manifolds completed with manual air vent valve and charge/discharge valve. O-ring seal on connection. Available size 1"



**211N11** Full painted metal cabinet with key on door for embedded installation.

Dimensions: 45 cm Height, 11÷15 cm Depth, 40-60-80-100-120 cm Width.