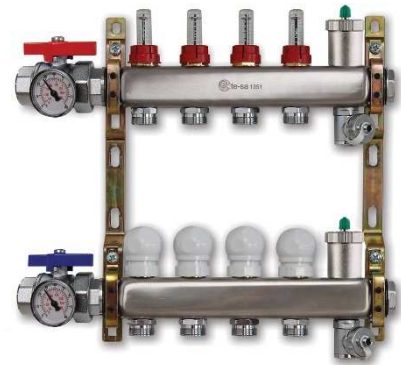


## STAINLESS STEEL DISTRIBUTION MANIFOLDS

### Application

The 220ATT2-I3 **te-sa** pre-assembled distribution manifolds are 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 loop connections with centre distance 50 mm, and it is composed by delivery manifold with flow regulators, return manifold with built-in interception valves, with maneuver handles, that are predisposed for assembly of electrothermal actuators. The barrels are completed with end plugs, orientable fill and drain valves with 3/4" hose connection, automatic air vent valve. At the manifold are combined full port ball valves with tailpiece flat seat that are equipped with thermometer for the prompt control of the water temperatures in supply and return. It is packaged in carton box with labels included to identify the circuits connected.

#### 1" inlet connection

220ATT2-06-02I3	2 Loops
220ATT2-06-03I3	3 Loops
220ATT2-06-04I3	4 Loops
220ATT2-06-05I3	5 Loops
220ATT2-06-06I3	6 Loops
220ATT2-06-07I3	7 Loops
220ATT2-06-08I3	8 Loops
220ATT2-06-09I3	9 Loops
220ATT2-06-10I3	10 Loops
220ATT2-06-11I3	11 Loops
220ATT2-06-12I3	12 Loops

#### 1-1/4" inlet connection

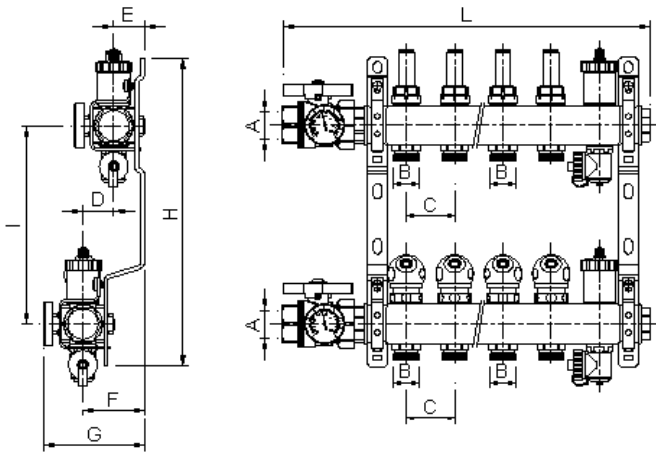
220ATT2-07-02I3	2 Loops
220ATT2-07-03I3	3 Loops
220ATT2-07-04I3	4 Loops
220ATT2-07-05I3	5 Loops
220ATT2-07-06I3	6 Loops
220ATT2-07-07I3	7 Loops
220ATT2-07-08I3	8 Loops
220ATT2-07-09I3	9 Loops
220ATT2-07-10I3	10 Loops
220ATT2-07-11I3	11 Loops
220ATT2-07-12I3	12 Loops



### Technical data

- Manifold barrel made of Stainless Steel EN 1.4301-AISI304 UNI-EN 10088
- Manifold components made of Brass Alloy UNI-EN12164 CW614N and UNI-EN12165 CW617N
- Automatic air vent valve and fill and drain valves assembled on the manifold barrels
- Full port ball valves 1" with self-sealing tailpiece flat seat and equipped with thermometer
- Supply manifold with micrometric 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
- Thermometers with range 0 ÷ 80°C
- 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
- Available KV factors of the flowmeter in function of the number of opening turns

## Dimensions



Art.	A	B	C	D	E	F	G	H	I	L
220ATT2-06-02I3	1"	3/4"	50	32	32	64	95	320	206	270
220ATT2-06-03I3	1"	3/4"	50	32	32	64	95	320	206	320
220ATT2-06-04I3	1"	3/4"	50	32	32	64	95	320	206	370
220ATT2-06-05I3	1"	3/4"	50	32	32	64	95	320	206	420
220ATT2-06-06I3	1"	3/4"	50	32	32	64	95	320	206	470
220ATT2-06-07I3	1"	3/4"	50	32	32	64	95	320	206	520
220ATT2-06-08I3	1"	3/4"	50	32	32	64	95	320	206	570
220ATT2-06-09I3	1"	3/4"	50	32	32	64	95	320	206	620
220ATT2-06-10I3	1"	3/4"	50	32	32	64	95	320	206	670
220ATT2-06-11I3	1"	3/4"	50	32	32	64	95	320	206	720
220ATT2-06-12I3	1"	3/4"	50	32	32	64	95	320	206	770

Art.	A	B	C	D	E	F	G	H	I	L
220ATT2-07-02I3	1 1/4"	3/4"	50	32	36	69	104	320	206	280
220ATT2-07-03I3	1 1/4"	3/4"	50	32	36	69	104	320	206	330
220ATT2-07-04I3	1 1/4"	3/4"	50	32	36	69	104	320	206	380
220ATT2-07-05I3	1 1/4"	3/4"	50	32	36	69	104	320	206	430
220ATT2-07-06I3	1 1/4"	3/4"	50	32	36	69	104	320	206	480
220ATT2-07-07I3	1 1/4"	3/4"	50	32	36	69	104	320	206	530
220ATT2-07-08I3	1 1/4"	3/4"	50	32	36	69	104	320	206	580
220ATT2-07-09I3	1 1/4"	3/4"	50	32	36	69	104	320	206	630
220ATT2-07-10I3	1 1/4"	3/4"	50	32	36	69	104	320	206	680
220ATT2-07-11I3	1 1/4"	3/4"	50	32	36	69	104	320	206	730
220ATT2-07-12I3	1 1/4"	3/4"	50	32	36	69	104	320	206	780

## Installation of the electrothermal actuators 116T

The installation of the electrothermal actuators 116T is very easy and quickly. After removing the maneuver handle, screw completely by hand the plastic adapter at the thread M30x1,5 of the bonnet. The actuator is connected to the adapter with slight pressure, and can be oriented a little by turning it. The electrothermal actuators are supplied with the stem in middle position. At starting, to totally close the interception valve of the manifold, it is necessary connect the actuator at the electrical power supply for some minutes to open it completely. When the electrical power is removed, the actuator totally closes. The actuators 116T series are Normally Closed type, then with electrical supply they open, while without electrical supply they close.



## Accessories



**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.



**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".



**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.



**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.