

## BRASS CHROME PLATED DISTRIBUTION MANIFOLD

### Impiego

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

Made of certified brass alloy material, they are ideally suited to radiator heating systems, underfloor heating systems and fan coil units distribution systems, with condensing boilers, traditional boiler, or heating district distributions. The manifold when completed with 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 the eyes, it is strong, reliable and corrosion resistant in the ordinary applications.



### Configuration and available sizes

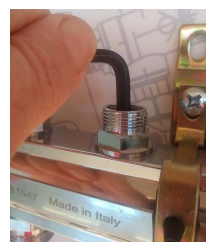
Pre-assembled on brackets, it is a distribution manifold with 3/4" M Eurocone loop connections with centre distance 50 mm, and it is composed by supply manifold with micrometric regulating lockshield valves, return manifold with built-in interception valves, with maneuver handles, that are predisposed for assembly of electrothermal actuators. The barrels can be completed on the heads with end plugs, ball valves, orientable fill and drain valves with 3/4" hose connection, and orientable manual air vents. It is packaged in carton box with labels included to identify the circuits connected.

#### 1" inlet connection

220-06-02	2 Loops
220-06-03	3 Loops
220-06-04	4 Loops
220-06-05	5 Loops
220-06-06	6 Loops
220-06-07	7 Loops
220-06-08	8 Loops
220-06-09	9 Loops
220-06-10	10 Loops
220-06-11	11 Loops
220-06-12	12 Loops
220-06-13	13 Loops

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

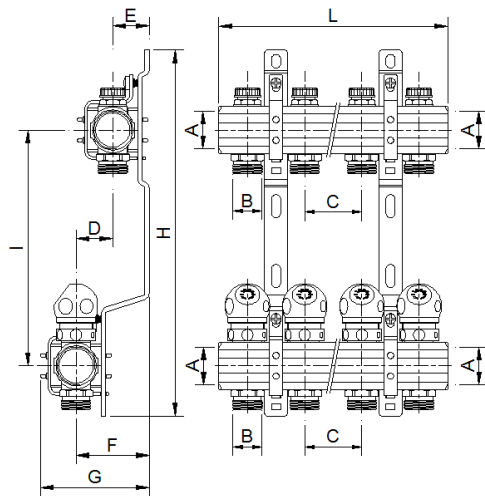
220-07-02	2 Loops
220-07-03	3 Loops
220-07-04	4 Loops
220-07-05	5 Loops
220-07-06	6 Loops
220-07-07	7 Loops
220-07-08	8 Loops
220-07-09	9 Loops
220-07-10	10 Loops
220-07-11	11 Loops
220-07-12	12 Loops
220-07-13	13 Loops



### Technical data

- Manifold barrel made of brass alloy UNI-EN 12168 CW612N chrome plated
- Manifold components made of brass alloy UNI-EN 12164 CW614N and UNI-EN 12165 CW617N
- Manifold bars sizes: 1" ed 1-1/4"
- Supply manifold with micrometric lockshields to be set with 5 mm Allen key, equipped with protection cap, in order to avoid dust and limescale to enter them and cause in time blockage in the mechanisms
- Return manifold equipped with intercepting valves with ABS handles, suitable for the installation of electrothermal actuators with M30x1,5 swivel nut connection
- Maximum Operating Pressure 10 bar
- Operating Temperature 0 ÷ 100°C
- Maximum Test Pressure 16 bar
- Maximum glycol percentage 30%
- KV factors in full open conditions: Supply manifold 1" KV=4,80 ; Return manifold 1" KV=3 ; Supply manifold 1-1/4" KV=5,10 ; Return manifold 1-1/4" KV=3,60 ; Supply + Return 1" KV=2,54 ; Supply + Return 1-1/4" KV=2,94
- Available KV factors of the regulating lockshield according to the number of opening turns

### Dimensions

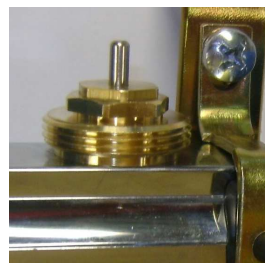


Art.	A	B	C	D	E	F	G	H	I	L
220-06-02	1"	3/4"	50	32	32	64	95	320	206	100
220-06-03	1"	3/4"	50	32	32	64	95	320	206	150
220-06-04	1"	3/4"	50	32	32	64	95	320	206	200
220-06-05	1"	3/4"	50	32	32	64	95	320	206	250
220-06-06	1"	3/4"	50	32	32	64	95	320	206	300
220-06-07	1"	3/4"	50	32	32	64	95	320	206	350
220-06-08	1"	3/4"	50	32	32	64	95	320	206	400
220-06-09	1"	3/4"	50	32	32	64	95	320	206	450
220-06-10	1"	3/4"	50	32	32	64	95	320	206	500
220-06-11	1"	3/4"	50	32	32	64	95	320	206	550
220-06-12	1"	3/4"	50	32	32	64	95	320	206	600
220-06-13	1"	3/4"	50	32	32	64	95	320	206	650

Art.	A	B	C	D	E	F	G	H	I	L
220-07-02	1 1/4"	3/4"	50	32	37	69	105	320	206	106
220-07-03	1 1/4"	3/4"	50	32	37	69	105	320	206	156
220-07-04	1 1/4"	3/4"	50	32	37	69	105	320	206	206
220-07-05	1 1/4"	3/4"	50	32	37	69	105	320	206	256
220-07-06	1 1/4"	3/4"	50	32	37	69	105	320	206	306
220-07-07	1 1/4"	3/4"	50	32	37	69	105	320	206	356
220-07-08	1 1/4"	3/4"	50	32	37	69	105	320	206	406
220-07-09	1 1/4"	3/4"	50	32	37	69	105	320	206	456
220-07-10	1 1/4"	3/4"	50	32	37	69	105	320	206	506
220-07-11	1 1/4"	3/4"	50	32	37	69	105	320	206	556
220-07-12	1 1/4"	3/4"	50	32	37	69	105	320	206	606
220-07-13	1 1/4"	3/4"	50	32	37	69	105	320	206	656

### 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



**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".



**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".



**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.