



**te-sa**  
heating passion



ISO 9001 Cert. n. 2325

140-EN00

## Distributors and Reverse Valves Series 140 - 141 - 142



Series 141 and 142 single and dual pipe distributors, in conjunction with Series 140 and 115TA reverse valves, are designed for installation on heating elements in single and dual pipe systems. Series 141 (single pipe) and Series 141T (dual pipe) components are used in systems with underfloor branch lines while Series 142 (single pipe) and 142T (dual pipe) are used in systems with wall branch lines. They come complete with fittings for sensors diameter 15mm and 3/4" Eurocone connections.

All models can be combined with manual or thermostatisable reverse valves.

The single pipe versions of the distributor deliver the fluid to the heating element proportionally at 50% (i.e. 50% of the fluid is delivered to the radiator and 50% is bypassed on to the successive radiators). These **te-sa** distributors are particular in that they are reversible and can be installed on either the right or left side of the radiator provided that the direction of circulation of the fluid, as indicated on the valve body, is respected.

Using **te-sa** thermostatic controls provides the additional possibility of automatically regulating room temperature to the set value thereby assuring comfort and **energy savings**.

### Technical specifications

#### Materials:

Body:	Brass UNI EN 12165 - CW617N
Insert valve:	Brass UNI EN 12164 - CW614N
Hydraulic seals:	EPDM Peroxide
Valve knob:	ABS
Lockshield cap:	ABS

#### Operation:

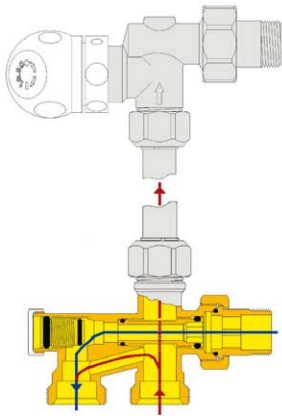
Useable fluids:	Water - Glycolated solutions
Maximum glycol percentage:	30%
Maximum operating pressure:	6 bar
Maximum operating temperature:	100°C

### Product range:

<b>Art. 140M-04-15</b>	Manual reverse valve with fitting	1/2" x 15
<b>Art. 140T-04-15</b>	Thermostatisable reverse valve with knob and fitting	1/2" x 15
<b>Art. 140C-04-15</b>	Thermostatisable reverse valve with cap and fitting	1/2" x 15
<b>Art. 140TS-04-15</b>	Thermostatisable reverse valve with knob, bleed and fitting	1/2" x 15
<b>Art. 115TA-04-15</b>	Thermostatisable straight valve with knob, 90° curve and fitting	1/2" x 15
<b>Art. 141-04-15</b>	Single pipe 4-way distributor, 50% flow delivery, 3/4" underfloor connections	1/2" x 15
<b>Art. 141T-04-15</b>	Dual pipe 4-way distributor, 100% flow delivery, 3/4" underfloor connections	1/2" x 15
<b>Art. 142-04-15</b>	Single pipe 4-way distributor, 50% flow delivery, 3/4" wall connections	1/2" x 15
<b>Art. 142T-04-15</b>	Dual pipe 4-way distributor, 100% flow delivery, 3/4" wall connections	1/2" x 15

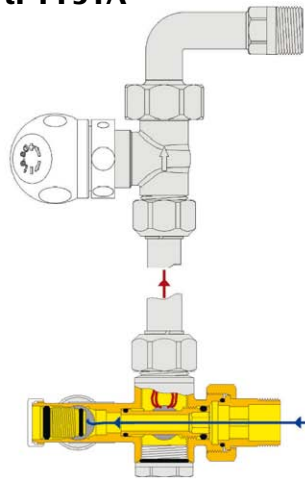
## Example combinations

Art. 140T



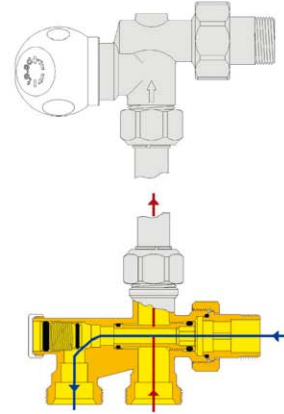
Art. 141

Art. 115TA



Art. 142

Art. 140M



Art. 141T

## Thermostatic control specifications

Conformity: EN 215  
 Thermostatic sensor: liquid type TWB-400  
 Rated pressure: PN 10  
 Temperature regulation range: 8-28°C  
 Hysteresis: 0.8 °K  
 Recommended installation position: horizontal

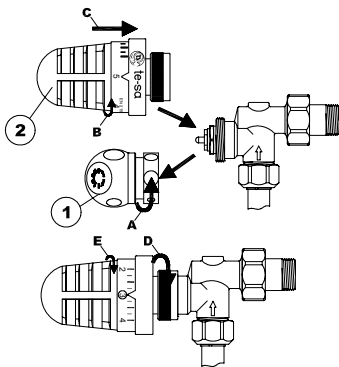
### Regulation scale

▲	❄	1	2	3	4	5
0°C	8°C	12°C	16°C	20°C	24°C	28°C

▲ = fully closed position

❄ = anti-freeze protection position

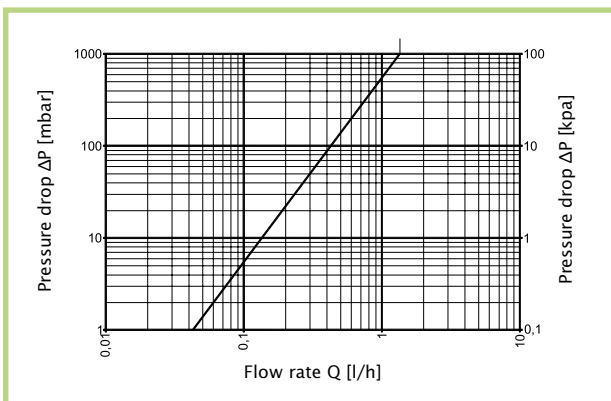
## Instructions for installation of thermostatic heads



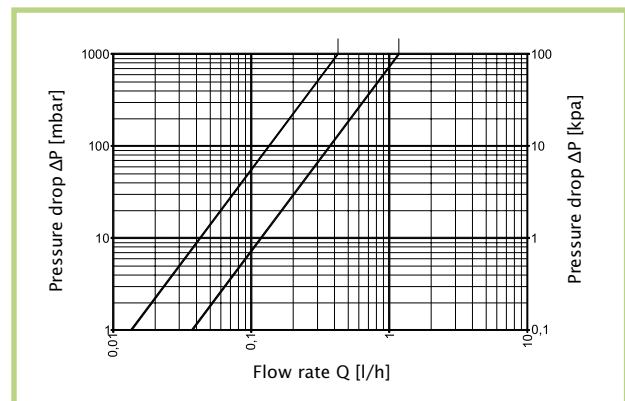
Follow the procedure below to fit the thermostatic head on the thermostatisable valve:

- Unscrew the locking nut on the manual control knob (1) and remove the knob;
- Position the thermostatic head (2) at the maximum value (pos. 5);
- Insert the head onto the valve body by fitting the insert valve hex stem into the recess in the head;
- Fully tighten the head locking nut;
- Turn the knob so that the arrow corresponds with the desired temperature value.

## Hydraulic specifications

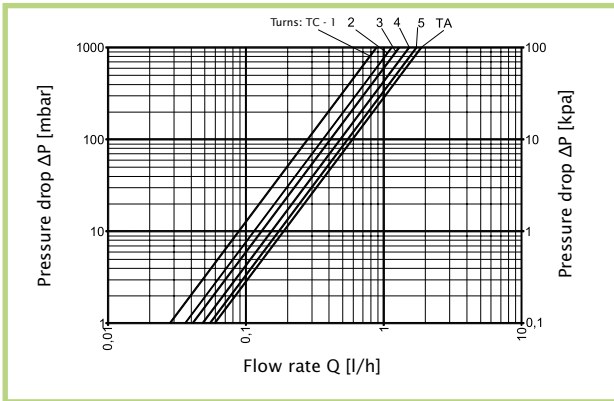


Series 140M

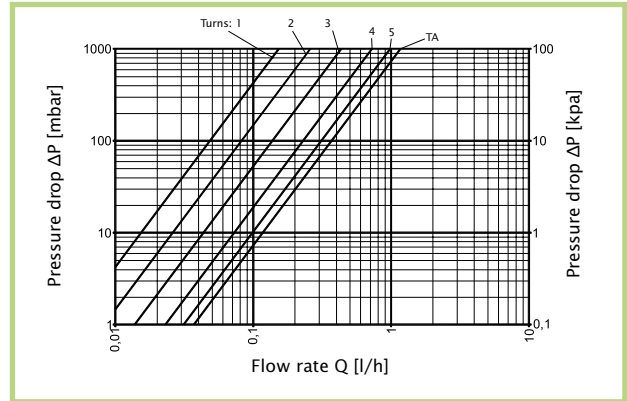


Series 140T - 140TS - 115TA

## Hydraulic specifications



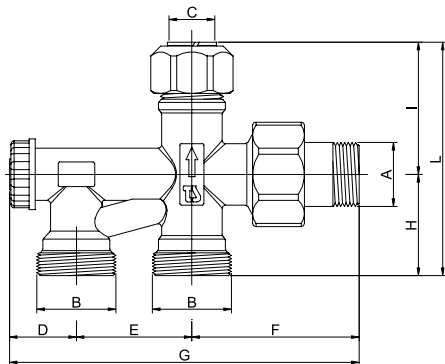
**Series 141 - 142**



**Series 141T - 142T**

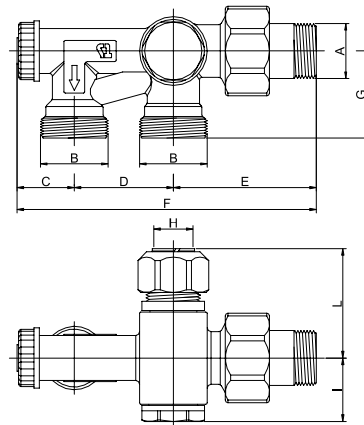
## Measurements and overall dimensions

**Art. 141** (single pipe) / **Art. 141T** (dual pipe)



Art.	A	B	C	D	E	F	G	H	I	L
141-04-15	1/2"	3/4"	15	22	38	55	115	33	43	76
141T-04-15	1/2"	3/4"	15	22	38	55	115	33	43	76

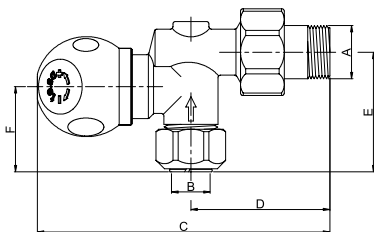
**Art. 142** (single pipe) / **Art. 142T** (dual pipe)



Art.	A	B	C	D	E	F	G	H	I	L
142-04-15	1/2"	3/4"	22	38	55	115	29	15	24	42
142T-04-15	1/2"	3/4"	22	38	55	115	29	15	24	42

**Art. 140M**

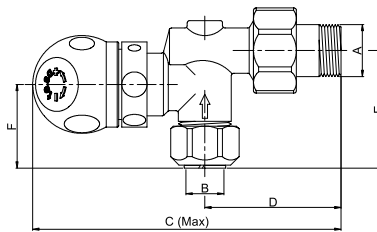
Manual reverse valve



Art.	A	B	C	D	E	F
140M-04-15	1/2"	15	114	54	50	34

**Art. 140T**

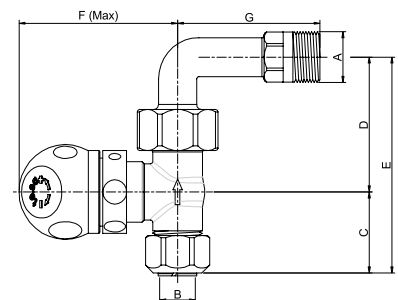
Thermostatisable reverse valve



Art.	A	B	C	D	E	F
140T-04-15	1/2"	15	124	54	50	34
140C-04-15	1/2"	15	99	54	50	34
140TS-04-15	1/2"	15	124	54	50	34

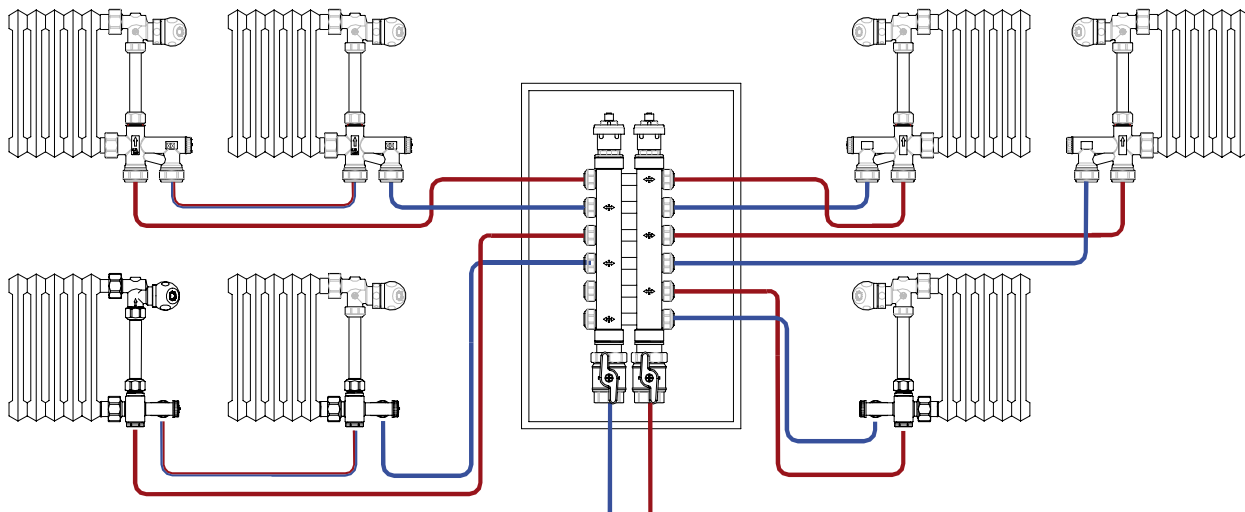
**Art. 115TA**

Thermostatisable straight valve with curve



Art.	A	B	C	D	E	F	G
115TA-04-15	1/2"	15	40	56	96	68	60

## Installation diagram



### Series 140 Reverse valve with fitting



**Art. 140M-04-15** - Manual reverse valve with monobloc compression fitting for copper pipe Ø15 Art. 208-04-15.



**Art. 140T-04-15** - Thermostatisable reverse valve with knob and monobloc compression fitting for copper pipe Ø15 Art. 208-04-15.

**Art. 140C-04-15** - Thermostatisable reverse valve with cap and monobloc compression fitting for copper pipe Ø15 Art. 208-04-15.



**Art. 140TS-04-15** - Thermostatisable reverse valve with knob, rotary bleed and monobloc compression fitting for copper pipe Ø15 Art. 208-04-15.

### Art. 115TA-04-15 Thermostatisable straight valve with knob, 90° curve and fitting



Thermostatisable straight valve with 90° curve, with knob and monobloc compression fitting for copper pipe Ø15 Art. 208-04-15.

### Series 141 Single/Dual 4-way distributor, 3/4" underfloor connections



**Art. 141-04-15** - SINGLE PIPE 4-way distributor, 50% flow, 3/4" M Eurocone underfloor connections and monobloc compression fitting for copper pipe Ø15 Art. 208-04-15.

**Art. 141T-04-15** - DUAL PIPE 4-way distributor, 100% flow, 3/4" M Eurocone underfloor connections and monobloc compression fitting for copper pipe Ø15 Art. 208-04-15.

### Series 142 Single/Dual 4-way distributor, 3/4" wall connections



**Art. 142-04-15** - SINGLE PIPE 4-way distributor, 50% flow, 3/4" M Eurocone wall connections and monobloc compression fitting for copper pipe Ø15 Art. 208-04-15.

**Art. 142T-04-15** - DUAL PIPE 4-way distributor, 100% flow, 3/4" M Eurocone wall connections and monobloc compression fitting for copper pipe Ø15 Art. 208-04-15.

### Art. 116 Thermostatic head



Thermostatic head with integrated liquid type sensor. Antifreeze protection and full shut-off. Regulation scale from 0 to 28°C.

### Art. 116S Thermostatic head with remote sensor



Thermostatic head for thermostatisable radiator valves. Remote sensor with liquid type sensing element. Antifreeze protection and full shut-off.