TECHNICAL CATALOGUE

# THERMOSTATIC CONTROL HEADS

# ITAP AT A GLANCE

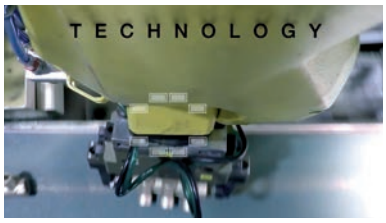
## THE COMPANY

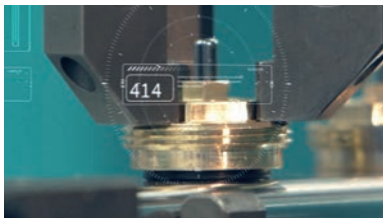
ITAP SpA, founded in Lumezzane (Brescia) in 1972, is currently one of the leading production companies in Italy of **valves, fittings and distribution manifolds** for plumbing and heating systems.

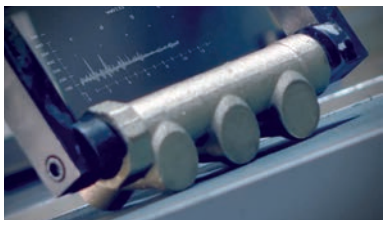
Thanks to a fully automated production process, with 85 transfer machines and 55 assembly lines, it is capable of producing 400,000 pieces per day.

Our innate pursuit for innovation and observance of technical regulations is supported by the company certification ISO 9001. The company has always considered its focus on quality as the main tool to obtain significant business results: today ITAP SpA is proud to offer products bearing the approval of numerous international certifying bodies.

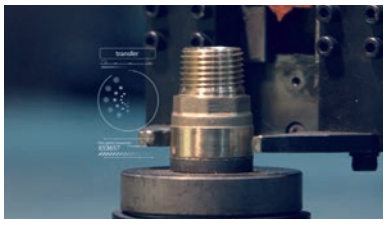


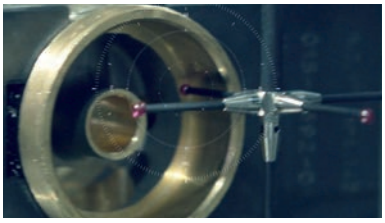









## ITAP products have obtained approvals by more than 30 certification bodies from all over the world.

## 891 Thermostatic control head with oil-filled element

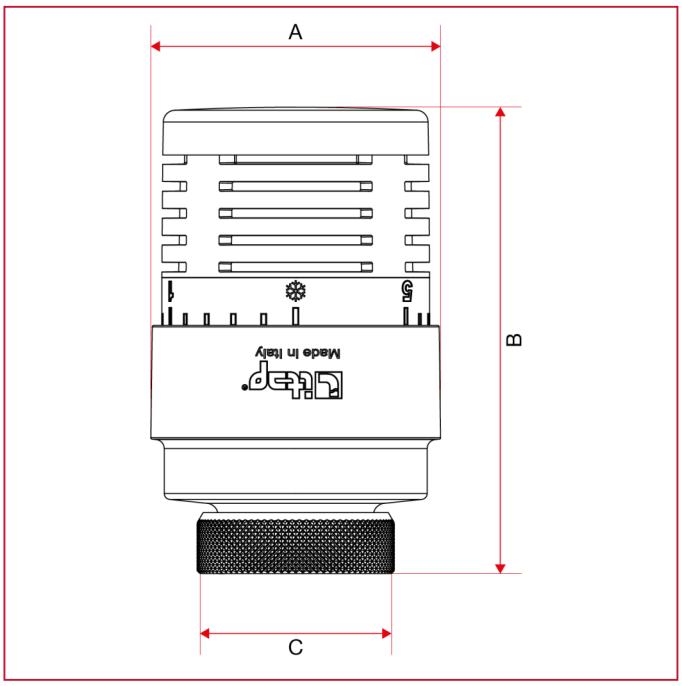

| CODE | PACKING |
|---|---|
| 891 | 1/84 |

### CERTIFICATIONS

### TECHNICAL SPECIFICATIONS

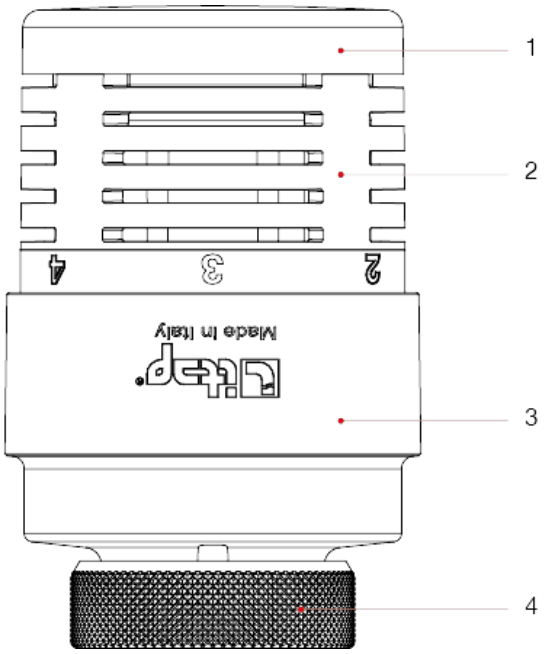
Scale values: * to 5.
Adjustable temperature range: 6,5°C, 28°C.
Antifreeze position set: 6,5°C.
Device to restrict or lock temperature setting included.
Hysteresis: 0,5K.
Water temperature effect (W): 0,75K.
Response time: (Z): 30min.
Maximum differential pressure: 1,5 bar.
Threads: M30 x 1,5.

## OVERALL DIMENSIONS




| | |
|---|---|
| A | 48,5 |
| B | 78 |
| C | M30x1,5 |

## MATERIALS

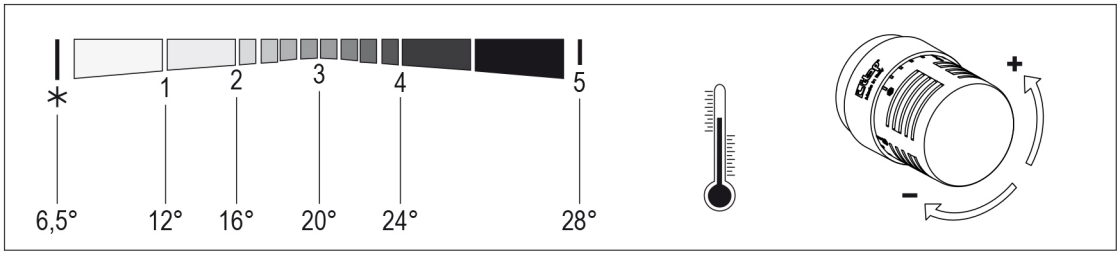



| POS. | DESCRIPTION | N. | MATERIAL |
|---|---|---|---|
| 1 | Cover | 1 | ABS |
| 2 | Handle | 1 | ABS |
| 3 | Body | 1 | ABS |
| 4 | Threaded ferrule | 1 | Nickel-plated brass CW617N |

# THERMOSTATIC CONTROL HEADS

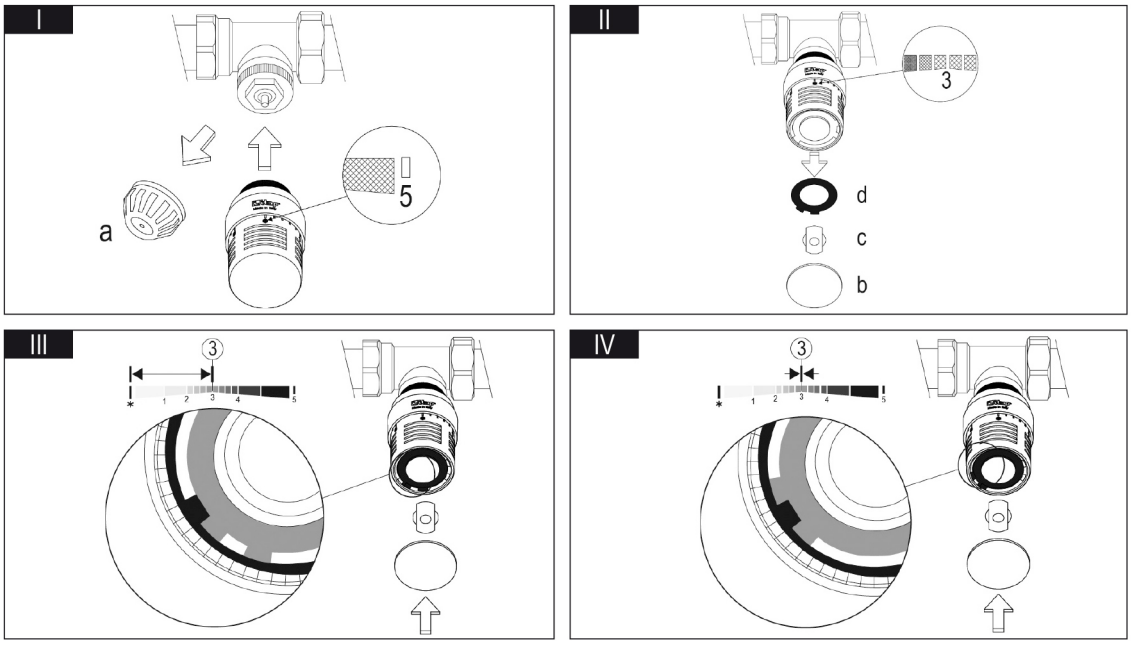
**INSTRUCTIONS**

OPERATING FEATURES:
Liquid expansion head.
Setting range: from 6,5°C (*) to 28°C (5).
Hysteresis: 0,5 K.
Response time (Z): 30 min.
Nominal flow rate: 210 l/h.
Water temperature effect (W): 0,75 K.
Heat element inalterability range: -15°C/ +60°C.
Possibility of limiting and blocking the setting.
The intermediate setting is “3”.



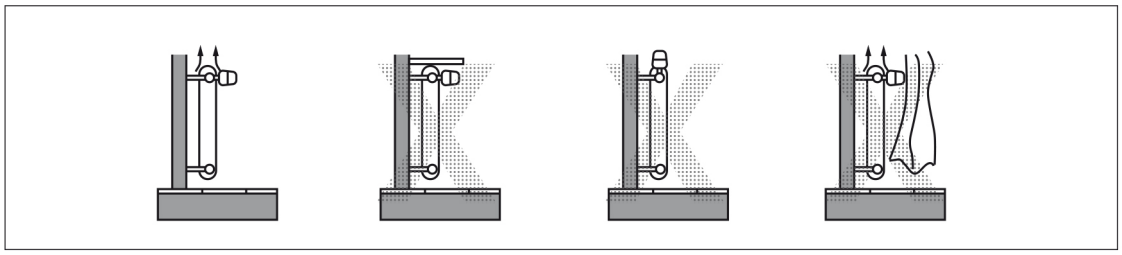

INSTALLATION (FIG.I):
Remove the manual adjustment cover (a).
Position setting on 5.
Fit the head to body screwing down manually the toothed ring.

LIMITING AND LOCKING THE SETTING:
Set the head in the required position ex.(3).
Use a screwdriver to disassemble the cover (b), the locking cap (c) and the first of the toothed washer (d) FIG. II.
Reassemble the washer (d) as in FIG. III if you want to limit the setting from * to 3.
Reassemble the washer (d) as in FIG IV if you want to block the setting at the value of 3.
Then reassemble the locking cap (c) and the cover (b).




NOTES:
For the circuit to work properly, we reccommend installing a differential pressure valve between supply and return.

To avoid excessive noisiness in the circuit, avoid thermostatic valves with Δp values greater than 0,2 - 0,25bar.



## 891SD Thermostatic control head with remote sensor

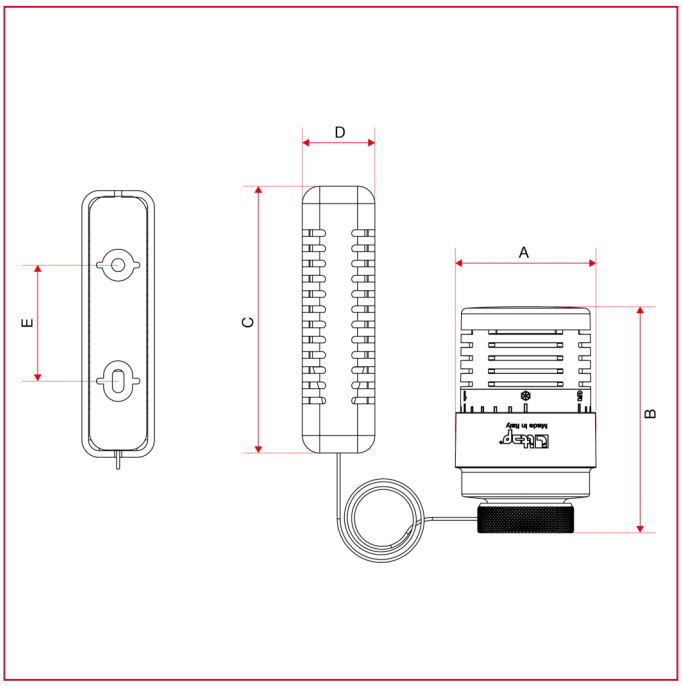
| CODE | PACKING |
|---|---|
| 891SD | 1/18 |

### CERTIFICATIONS

### TECHNICAL SPECIFICATIONS

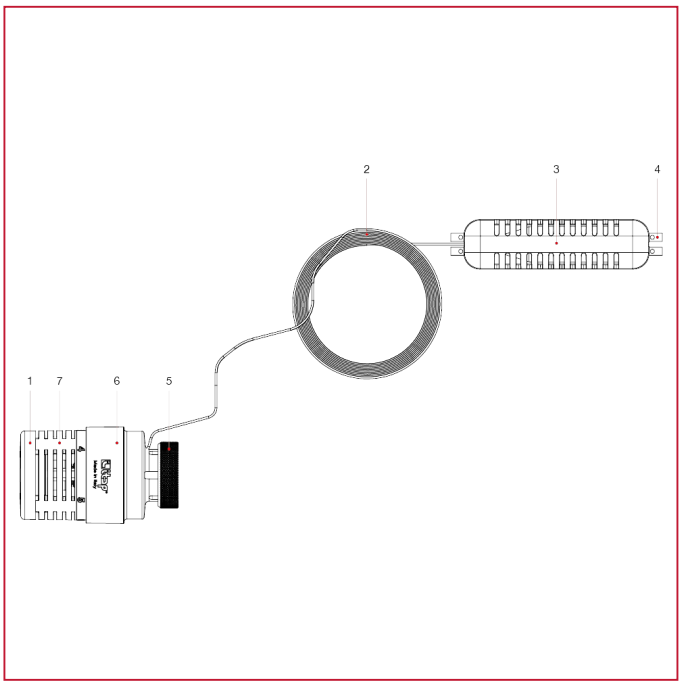
Scale values: * to 5.
Adjustable temperature range: 6,5°C, 28°C.
Antifreeze position set: 6,5°C.
Device to restrict or lock temperature setting included.
Hysteresis: 0,5K.
Maximum differential pressure: 1,5 bar.
Threads: M30 x 1,5.
Length of the capillary pipe: m. 2.

## OVERALL DIMENSIONS




| | |
|---|---|
| A | 48,5 |
| B | 78 |
| C | 92 |
| D | 25 |
| E | 40 |

## MATERIALS

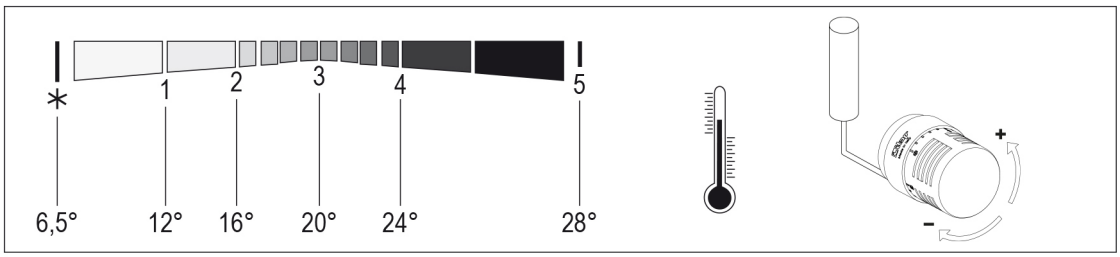



| POS. | DESCRIPTION | N. | MATERIAL |
|---|---|---|---|
| 1 | Cover | 1 | ABS |
| 2 | Capillary pipe | 1 | Nickel-plated copper |
| 3 | Cover | 1 | ABS |
| 4 | Support | 1 | ABS |
| 5 | Ring | 1 | Nickel-plated brass CW617N |
| 6 | Body | 1 | ABS |
| 7 | Handle | 1 | ABS |

# THERMOSTATIC CONTROL HEADS

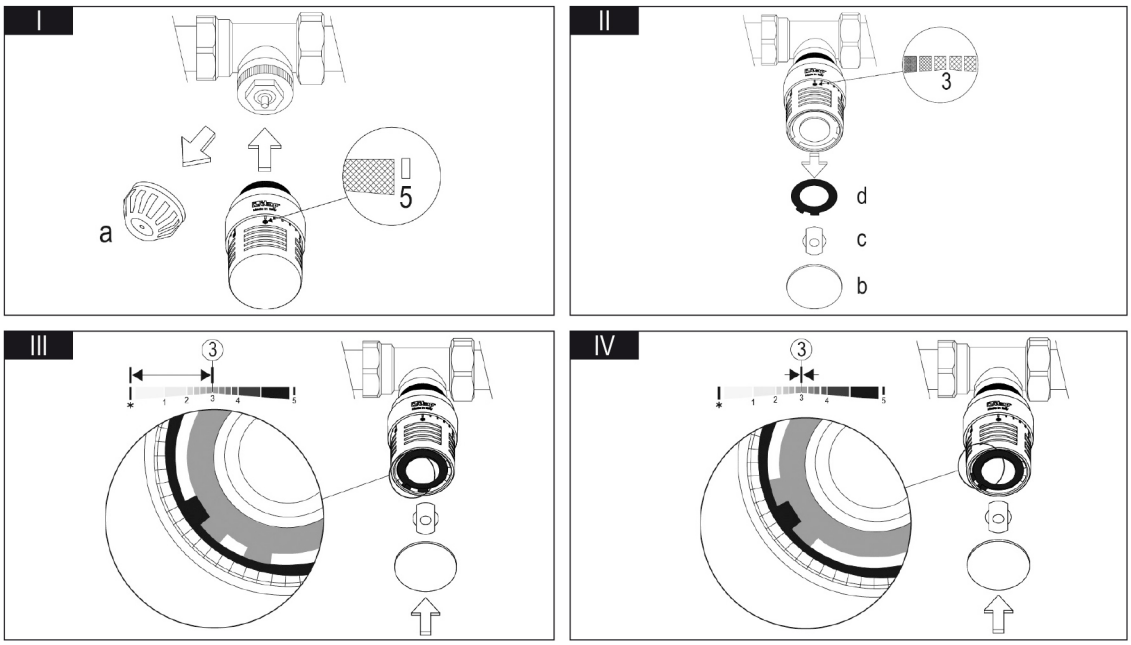
**INSTRUCTIONS**

OPERATING FEATURES:
Liquid expansion head.
Setting range: from 6,5°C (*) to 28°C (5).
Hysteresis: 0,5 K.
Response time (Z): 30 min.
Water temperature effect (W): 0,75 K.
Heat element inalterability range: -15°C/ +60°C.
Possibility of limiting and blocking the setting.
The intermediate setting is “3”.

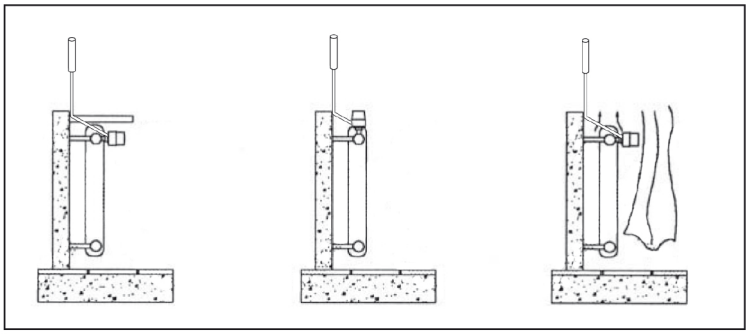



INSTALLATION (FIG.I):
Remove the manual adjustment cover (a).
Position setting on 5.
Fit the head to body screwing down manually the toothed ring.

LIMITING AND LOCKING THE SETTING:
Set the head in the required position ex.(3).
Use a screwdriver to disassemble the cover (b), the locking cap (c) and the first of the toothed washer (d) FIG. II.
Reassemble the washer (d) as in FIG. III if you want to limit the setting from * to 3.
Reassemble the washer (d) as in FIG IV if you want to block the setting at the value of 3.
Then reassemble the locking cap (c) and the cover (b).




NOTES:
For the circuit to work properly, we reccommend installing a differential pressure valve between supply and return.
To avoid excessive noisiness in the circuit, avoid thermostatic valves with Δp values greater than 0,2 - 0,25bar.



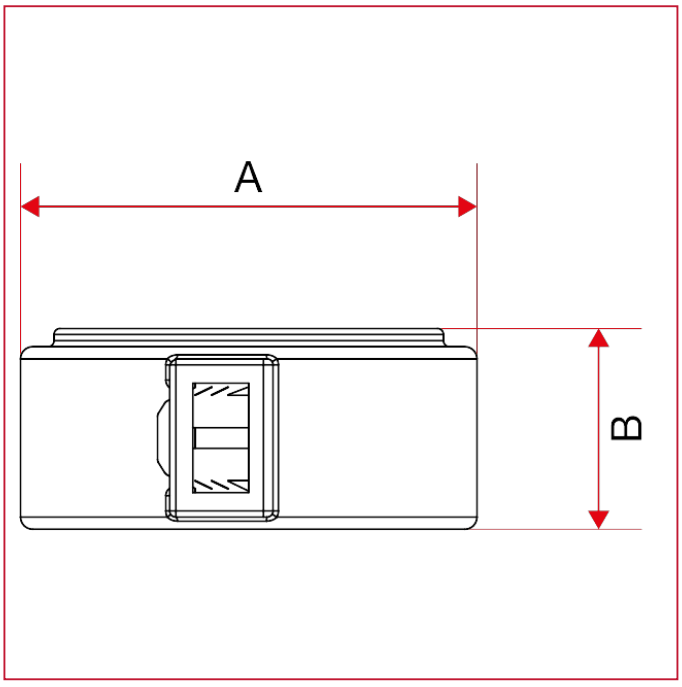
## 891GA Tamper-proof cap for thermostatic control heads

| CODE | PACKING |
|---|---|
| 891GA | 75/300 |

### CERTIFICATIONS

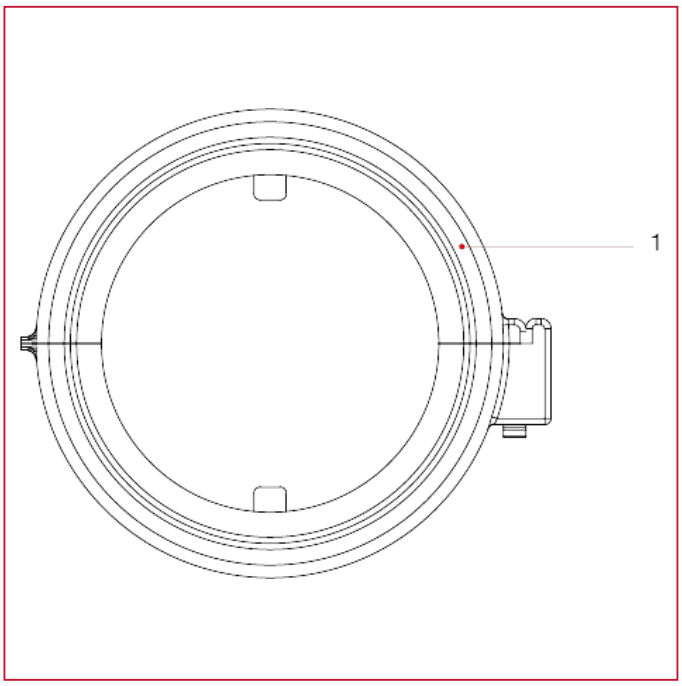
### TECHNICAL SPECIFICATIONS
Available for thermostatic control heads art. 891 and art. 891SD.

### OVERALL DIMENSIONS




| | |
|---|---|
| A | 37,5 |
| B | 16,5 |

## MATERIALS




| POS. | DESCRIPTION | N. | MATERIAL |
|---|---|---|---|
| 1 | Tamper-proof cap | 1 | Nylon PA6 |

# THERMOSTATIC CONTROL HEADS

## 891R Thermostatic control head with oil-filled element

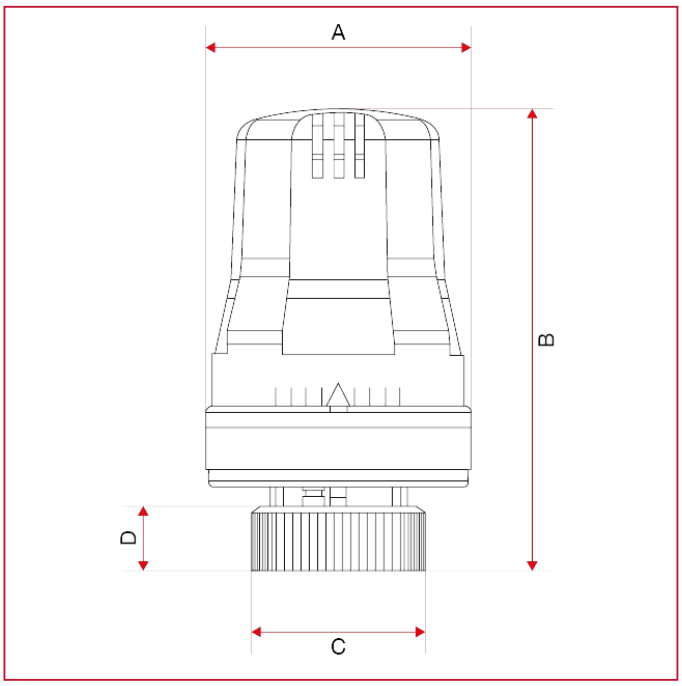
| CODE | PACKING |
|---|---|
| 891R | 1/62 |

### CERTIFICATIONS

### TECHNICAL SPECIFICATIONS

Scale values: 0 to 5.
Adjustable temperature range: 0°C, 28°C.
Antifreeze position set: 5 °C.
Device to restrict or lock temperature setting included.
Hysteresis: 0,80K.
Water temperature effect (W): 0,80K.
Response time: (Z): 30min.
Maximum differential pressure: 1,5 bar.
Threads: M30 x 1,5.
Energy efficiency class: A.

## OVERALL DIMENSIONS




| | |
|---|---|
| A | 50 |
| B | 82,5 |
| C | 33 |
| D | 12 |

# THERMOSTATIC CONTROL HEADS

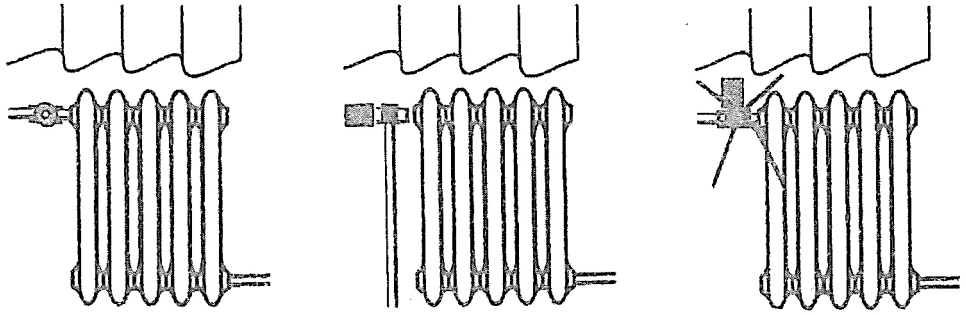
**INSTRUCTIONS**
Thermostatic control head - Angle valve 1/2"
Thermostatic control head - Straight valve 1/2"
acc. to EN 215 part 1

Rated pressure: PN10
Control range: 8 28°C
Standard temperature numeral 3: 20°C
Temperature to next numeral: 3K (°C)
Total shut-off position: >
Hysteresis 0,8 K (°C)
Influence of heating agent: 0,8 K

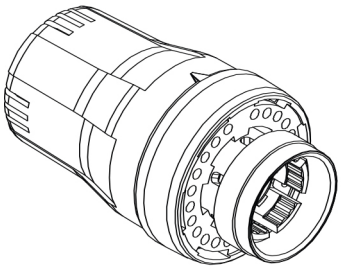
APPROX. SETTING POSITION:

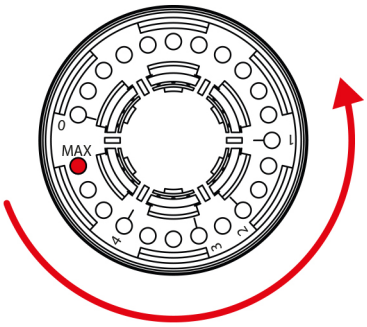

VALVE INSTALLATION:
If a fixed sensor is used the lower part of the valve should be installed horizontally.
- Note direction of flow -

THERMOSTATIC CONTROL HEAD INSTALLATION:
The thermostatic control head is not screwed on until all construction work has been completed.
Thermostatic control head with fixed sensor must be installed horizontally.
1 - Open thermostatic control head by turning anticlockwise.
2 - Place thermostatic control head , with marking at top, on valve and tighten the union nut. Position 3 corresponds to approx 20°C.



TEMPERATURE BLOCKING PROCEDURE:
Setting position 0-5:






The MAX temperature can be limited by setting the temperature limiting pin from MAX toward 1.

TEMPERATURE LIMITATION at MAX:
Accessories to be supplied: 1 pin mounted at position MAX
- Extract the pin from its position MAX
- Turn the head to the position antifreeze
- Insert the pin into the back hole marked with the appropriate number of temperature limitation (0-4).

ITAP S.p.A.
Via Ruca 19
25065 Lumezzane
Brescia (ITALY)
Tel 030 8927011
Fax 030 8921990
www.itap.it - info@itap.it



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