

## Temperature probes for electronic control units

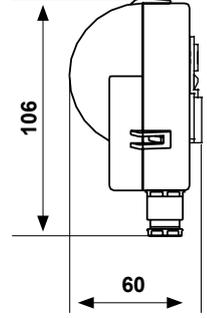
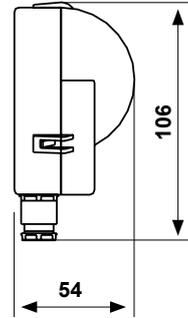
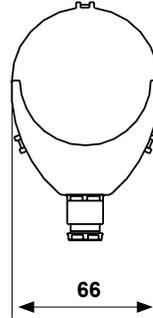
Temperature probes are used for receiving the necessary information for the electronic control units operation.



EC11-EC14



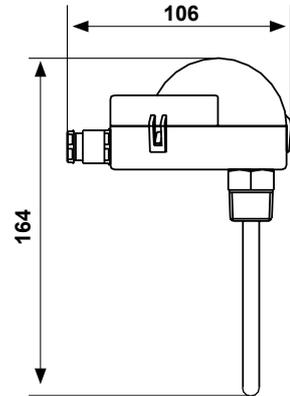
EC12-EC15



EC13-EC16



EC17



Dimensions (mm)

Description	Suitable for	Probe body admissible temperature °C	Controlled liquid maximum temperature °C	Protection degree
EC11 external probe	EV0..	-40 ÷ 80	-	IP55
EC12 contact delivery probe	EV0..	-40 ÷ 80	120	IP55
EC13A immersion delivery probe	EV0..	-40 ÷ 80	150	IP55
EC14 external probe	EV..	-40 ÷ 80	-	IP55
EC15 contact delivery probe	EV..	-40 ÷ 80	120	IP55
EC16A immersion delivery probe	EV..	-40 ÷ 80	150	IP55
EC17 well probe with tinned brass capsule	EV..	-50 ÷ 110	120	-
EC19 floor probe with nylon capsule	EV..	-30 ÷ 85	100	-
EC21 probe for solar panels	EV40	-40 ÷ 280	280	-

### OPERATION

The temperature probes are the detectors through which the control units receive the necessary information for their operation. The sensing element consists of NCT linearized thermistors, therefore no part is moving and isn't subjected to mechanical wear.

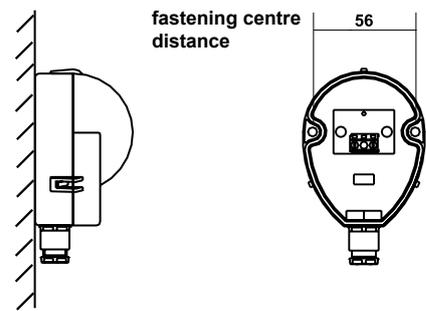
### STANDARDS AND HOMOLOGATIONS

In conformity with EN 60730-2-9 standard.

# INSTALLATION

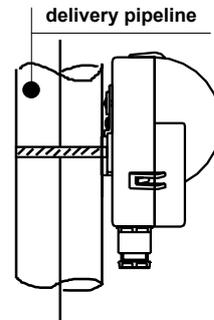
## EXTERNAL PROBES EC11-EC14

Install the external probe on the north or north-east side at the half-height of the building, away from protruding sections, windows, doors, ventilation grilles, etc.



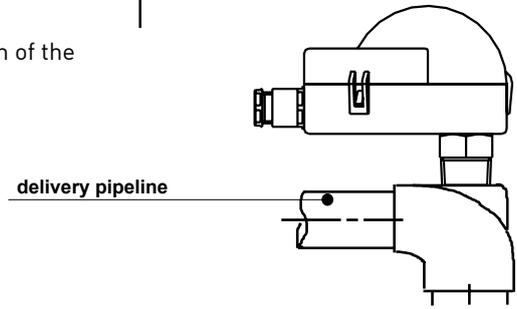
## CONTACT DELIVERY PROBES EC12-EC15

Install the contact probe on the water delivery pipe and downstream of the mixing valve, to a minimum distance of 1,50 meters from the valve and possibly after a pipe elbow. The contact probe should be mounted by interposing the heat conducting paste between the surfaces involved, while making sure adherence is good.



## IMMERSION DELIVERY PROBES EC13A-EC16A

Screw the probe into the curve provided on the water delivery pipe, downstream of the mixing valve with a minimum distance of 1,5 meters.



# FEATURES

## EXTERNAL PROBES EC11-EC14

Case in thermoplastic material.  
Linearized NTC thermistor heat-sensitive element.  
Bipolar terminal board.  
G1/4" cable gland.

## CONTACT DELIVERY PROBES EC12-EC15

Case in thermoplastic material.  
Linearized NTC thermistor heat-sensitive element.  
Bipolar terminal board.  
G1/4" cable gland.  
Plastic clamp that can be reused for fastening to the pipe.

## IMMERSION DELIVERY PROBES EC13-EC16

Case in thermoplastic material.  
Linearized NTC thermistor heat-sensitive element.  
Bipolar terminal board.  
G1/4" cable gland.  
Metal protection sheath with G1/2 conical connection for pressure seal.

## WELL PROBE EC17

NTC10K temperature probe.  
Brass capsule 6x35mm. Double insulation bipolar cable (white-red inside, grey outward) with 2x0,35mm<sup>2</sup> cable section, length=1,5 meters.  
Tinned terminals. Insulation: >100mohm @500vca.

## FLOOR PROBE EC19

NTC10K temperature probe.  
Nylon capsule 7x25mm.  
Double insulation PVC bipolar cable (white outward) with 2x0,50 mm<sup>2</sup> or 2x0,35 mm<sup>2</sup> cable sections, length=3 meters.  
Tinned terminals. Insulation: >100mohm @500vca.

## PROBE FOR SOLAR PANELS EC21

Stainless steel capsule 3x60mm.  
Bipolar cable in PTFE.  
2x0,15mm<sup>2</sup> cable section, length = 1,5 meters.  
Terminals: previously insulated leads. Insulation: >20Mohm @500Vac.