Capillary thermometer

TCS 48

Overview

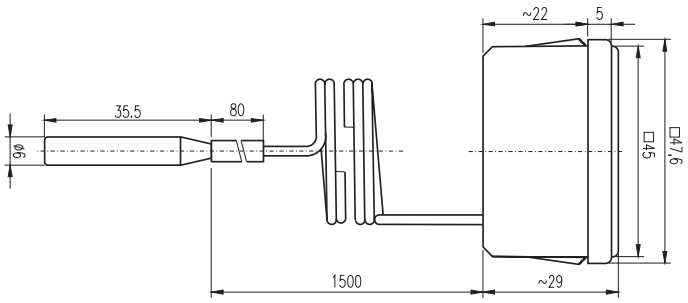
- Universal application over the entire measurement range
- Installation in any orientation
- Maintenance-free
- The temperature sensor unit needs to be placed in a liquid or gas medium (to prevent the failure of the copper or its alloy); otherwise, install the sensor unit in a thermometer sheath
- Install the dial head in an environment with a max. temp. of 40°C.

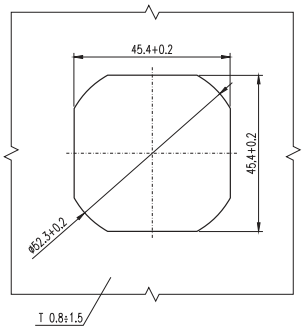
Application

The TCS 48 is a capillary pressure thermometer intended for temperature measurements in applications where the measurement readout is remote from the sensing location. The thermometer comprises a capillary system and a dial head. The dial head comprises a housing and a plastic cover, which protects the dial face and pointer, and a flexible pickup. The thermometer sensing element is an Archimedes spiral tube. The internal pressure from the thermal expansion of the liquid medium in the sensing element causes the spiral to unwind. The unwinding motion is rotary and proportional to the pressure, which the flexible pickup translates to the pointer to provide the reading on the scale. The sensing element and the spiral are connected by a capillary tube.

Specifications

Model	TCS 48
Scale range	0 - 120°C
Scale	20 - 100°C
Graduation	2 K
Measurement accuracy	±4% of scale range
Sensing element dimensions	6x35.5 mm
Time constant	15 s
Capillary tube length	1450 mm
Min. capillary tube bending radius	R_{min} = 5 mm





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2023.141.EN