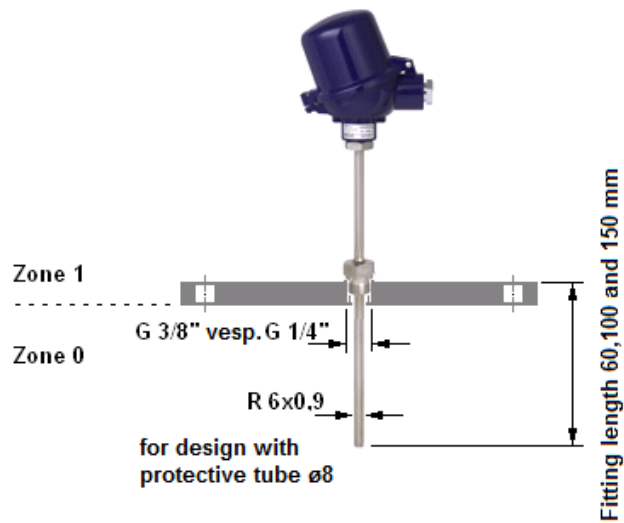


Temperature Sensor (Resistance Thermometer) with screw-in protection tube:



Protection : Ex-i (ATEX) Gas, according to guideline 94/9/EC

TÜV 10 ATEX 555793X

Model : **TR10-C [TR 201]**

Sensor : 1xPt100, class B (IEC 60751)

Wiring configuration : 4-wire circuit

Connection head : BSZ-H, aluminum, high hinged cover

Options : - protection tube, optional stainless steel (1.4571)
or Hastelloy C22 (2.4602)

- Process connection: Thread G ¼" B

- Connection head material stainless steel or polyamide (PA)

- Test report 2.2 for metal wetted parts

- Digital Temperatur-Transmitter T32 with HART®-Protocol,
Output signal 4 - 20 mA, 2-wire, intrinsically safe,
Suitable for SIL-applications, measuring range 0...+ 300 °C,
Configurable via software

Standard design

The mentioned thermometers are explosion protected resistance thermometers with a 1xPt100 sensor, threaded into the housing of the flame arrester. The thermometers had been tested during the type approval tests in means of reaction time, position, number and length, which depends on the flame arrester model and size. Temperature sensors are only suitable for flame arrester which provide protection against stabilized burning, either short-time or endurance.

The approved thermometer shall not be changed or replaced by different devices without our approval.

Application

For monitoring the temperature on the flame arrester element on the unprotected side (side of ignition source), mainly where a flow of flammable mixture is present for longer time. This could be e.g. in pipes to flares, ovens, fans, recuperation or thermal recovery units. In case of a temperature rise a stabilized burn situation could be present. Then the thermometer has to give a signal which must be used to start emergency safety reactions (e.g. inerting, stoppage of flow etc.). The triggering temperature should be as low as possible, < 80 °C according to a former PTB advice. Additional protective measurements as per TRbF 20 shall be installed.