RTD Sensors with Cable for Surface ET241



- For measuring temperatures from -50 to +500 °C
- Pt100, Pt500, Pt1000, PTC1000 or NTC resistance sensors
- · Double RTD sensing element option
- · Available in 2-, 3- or 4-wire circuit
- · PVC-, silicone,- teflon- or fiberglass-insulated cable
- · Quick and easy installation

ET24x series surface temperature sensors are intended for measuring temperatures on closed pipe systems or other round or flat surfaces. The sensor can be conveniently fixed with a hose clamp or M3 screw. Mounting with hose clamps avoids any mechanical preparation of the measurement site.

Indirect temperature measurement avoids disturbing flow of the medium and the measurement object is hardly affected by the low thermal mass of the sensor. On the other hand, lack of pressure and chemical effects ensures longer lifespan of the sensor.

It must be considered that large differences in temperature between the measurement medium and surroundings have a direct effect on the measurement result. In such cases, additional insulation around the sensor and the cable in at least 10 cm range is advisable. To improve heat transfer from surface to the sensor, heat-conductive paste can be supplied.

Sensing element

- Pt100, Pt500 or Pt1000 RTD sensor, class B, A, 1/3B or 1/10B aaccording to EN 60751, measurement range -50...+250 °C or -50...+500 °C
- PTC1000 thermistor (1000 Ohm @ 25 °C), range -30...+150 °C
- NTC10A thermistor (10 kOhm @ 25 °C), range -30...+150 °C

Protection tube

- 1.4404/AISI316L stainless steel, Ø4×L50 mm
- hole Ø3,2 mm for M3 screw

Connection cable

- 2-, or 3-wire, shielded or not
- maximum operation temperature (continuous/peak): silicone-insulated 180/230 °C, teflon-insulated 260/310 °C, fiberglass-insulated 480/530 °C
- transition options from cable to protection tube for strain relief: standard (IP55) or waterproof (IP68)

To provide 4-20 mA / 0-10 V analog output or digital RS485 Modbus RTU interface, E2060 series transmitters mountable onto wall and DIN-rail are available (see: sheet 1.51).





