

Thermocouple Probes with Terminal Head

ET601



Push-in thermocouple probes with terminal head are intended for industrial measurement of high temperatures of hot gases and fluids at pressure ~1 bar. The main applications are combustion control, metal, cement, ceramic and glass industries.

Depending on the needs of application, single or double thermocouple of most common type, protection tube of specific size and material, various terminal heads, process connection fittings and outputs can be supplied.

Thermocouple according to EN 60584:

- types: K (NiCr-Ni), up to +1200 °C - standard version
- N (NiCrSi-NiSi), up to +1300 °C
- S (Pt10Rh-Pt), up to +1600 °C

ET601 series mineral-insulated thermocouples have an advantage of thinner and flexible protection tube, providing faster response and convenient bending to desired shape. Thermocouple is insulated with dense magnesium oxide powder which decreases corrosion of thermocouple wires and extends lifespan.

Protection tube

- ET601-K: Inconel 600 (<1150°C), Ø6 mm, L = 300...2000 mm
- ET601-N: Pyrosil C (<1250°C), Ø6 mm, L = 300...2000 mm

Terminal head

- types: B: standard, DIN 43729, aluminium
- N: spherical, hinged cover, DIN 43729, aluminium
- S: for aggressive environment, DIN 43729, stainless steel

Output

- ceramic terminal block (-C)
- E2060 series transmitters mountable into terminal heads (see: sheet 1.51) — to provide 4-20 mA analog output or digital RS485 Modbus RTU interface

G0xx series thermocouple probes with straight protection tube, made of heat-resistant steel alloy or ceramics, qualify for extreme conditions. Thermocouple inserts and protection tubes are exchangeable. Special W00xx series angled thermocouples are intended for measuring temperatures of molten metals in foundries.

Protection tube

- G/W00xx: 1.4762/1.4841 steel (<1150°C), Ø15/22, L300..1500 mm
- G01xx: ceramic 610 (<1200 °C) or 710 (<1600 °C), Ø10/15, L100...150 mm, 1.4541 steel supporting tube Ø15/Ø22 mm

Accessories

- flanges AFxx ja MB2, weldable fittings MB1
- compression fittings with outer thread FSxx

- For measuring temperatures from -200 to +1600 °C
- K, J, N, S or B type thermocouple
- Mineral insulated or thick-wall protection tube made of heat-resistant alloy or ceramics
- Variety of terminal heads and connection fittings
- Head-mountable transmitters available — to provide 0-10 V / 4-20 mA or RS485 Modbus RTU communication

