

## The sensor makes the difference!



# Thermocouple Sensor System for High-Voltage-Applications

Thermo Sensor has developed an unique thermocouple sensor system that meets the special requirements of high-voltage areas. It consists of a mounting jack and the corresponding connector with moulded thermocouple. Due to the special design of the system, all components offer the user protection against high-voltage up to 6 kV. Further more, all contacts and conductor materials are made of class 1 thermocouple material type K, which makes the system especially suitable for temperature measurement.

Inserted in the jack are two insulated thermocouple wires, which can be connected to the electronic control unit. The plug will be

delivered with a moulded temperature probe. Generally, this would be a wire probe or mineral-insulated thermocouple. Available are various diameters and insulations (e.g. Teflon or Kapton), dependent on the stipulated withstand voltage.

The correct polarity of the connection is assured by correspondent guidance bars in both plug and jack. A safety clip prevents accidental disconnection. Both parts, plug and jack, can be sealed with caps while disconnected, so the protection of IP65 is always guaranteed.

#### **Feature**

Thermocouple Withstand voltage

Length of connector (incl. bending protection) Diameter of connector Operating temperature Protection class Hole diameter needed for jack mounting

Mounting screw thread of jack

#### **Specification**

NiCr-Ni, type K acc. to DIN EN 60584, class 1 Operating voltage 1.5 kV, max. additional transient over-tension 4.5 kV 63.0 mm

11.5 mm

-50 °C to 150 °C

IP65

16.0 mm

M16x1





### Thermo Sensor GmbH

customer oriented • innovative • flexible

Please contact us. We will be happy to assist you!

For more than 25 years, our name has stood for high-quality products for all areas of temperature, measurement and control technology. At our location in Werne (NRW) we develop and produce temperature sensors in standard, special and explosion-proof designs as well as numerous accessories for temperature measurement, which come into operation worldwide on all continents.

Our wide product range, our extensive stock of raw parts and our efficient organisational structure have a great influence on our flexibility: short delivery times and demand-oriented, customer-specific production are not contradictory for us. A delivery within 5 days is not a rarity - it is our standard!

Since 1996 Thermo Sensor has been continuously certified according to the respective valid quality management standard; currently according to ISO 9001:2015. Since 2021 we are also certified according to ISO 14001:2015 (environmental management system).

State-of-the-art manufacturing processes, combined with the specialist knowledge of our employees, are the cornerstone for a product quality that meets the highest demands.

No matter how complex your measuring task seems - make your problem our challenge!

Thermo Sensor GmbH Carl-Zeiss-Straße 1 59368 Werne, Germany Tel.: +49 2389 40200-0 Fax: +49 2389 40200-99 www.thermo-sensor.de

info@thermo-sensor.de

