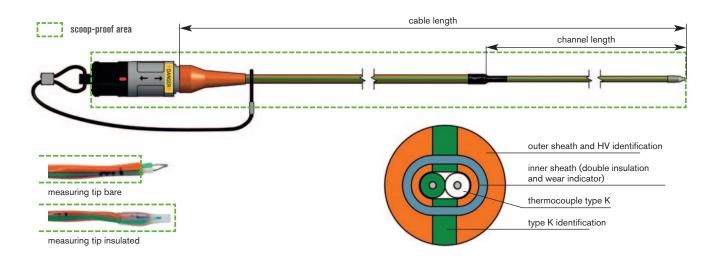
# HV temperature sensor type K

HV 1-channel thermocouple



## **Application range:**

Safe HV temperature measurement in HV environments

## **Connector:**

Lemo Redel male connector with orange kink protection sleeve and black protecting cap, 2-pin, C-coded 1000 V AC voltage-stable – IP 67 when connected

|                                   | Sensor:                                 |
|-----------------------------------|---|
| Thermocouple:                     | 1 x type K                              |
| Limit deviation:                  | class 1                                 |
| Measuring point:                  | bare or electrically insulated (1000 V) |
| Temperature range single channel: | -40°C / +180°C                          |
| Response time:                    | on request                              |
|                                   |   |
|                                   |   |

|   | Cable data:                                 |  |
|---|---|--|
| Connection cable:   | HV thermo cable type K                      |  |
| Insulation:   | FEP – green and white                       |  |
| Pair sheath:  | FEP - orange with green vertical stripes    |  |
| Inner sheath:   | FEP - blue acc. to RAL 5024                 |  |
| Outer sheath:   | PUR   |  |
| Sheath colour:  | orange with green vertical stripes          |  |
| Stranding:  | paired construction (for EMC)               |  |
| Outer diameter:   | approx. 3,4 mm                              |  |
| Dielectric strength:  | 1000 V AC over single channel               |  |
| Temperature range<br>fixed laying:<br>flexible application: | -50°C / +150°C<br>-40°C / +150°C            |  |
| Special characteristics:                                    | contact protection<br>over single channel ✓ |  |
|   |   |  |
|   |   |  |

### Tests:

#### **▶** Cable test

over pair sheath in water bath – 5000 V AC – 5 min – with reference to EN 50264-2-1

## **▶** Sensor test

routine test of harnessed connector with reference to standard 61010-1 for measuring devices as well as VDE indications in our in-house ball bath (released by VDE). Control of contact protection towards outside – 3000 V/1 min AC

Issue of HV test certificate with reference to batch number due to optimum traceability

Optional: Test and repair of already used sensors on request

## **CONFIGURATION EXAMPLES**

| item no.     | connection<br>cable length<br>[mm] | single channel length [mm] | type of measuring tip |
|--------------|------------------------------------|----------------------------|-----------------------|
|              |                                    | channel 1                  | measuring tip         |
| T141-059-052 | 2400                               | 400                        | insulated             |
| T141-058-124 | 3000                               | 400                        | bare                  |

Total cable and channel lengths can be realised on customer's request.

#### SAB identification:

item number, batch number



1.1.<u>5</u>