## HV temperature sensor type K
### HV 4-channel thermocouple with FEP insulated thermo channels

scoop-proof area

cable length

channel length

measuring tip bare

measuring tip insulated

outer sheath and HV identification

inner sheath (double insulation and wear indicator)

thermocouple type K

type K identification
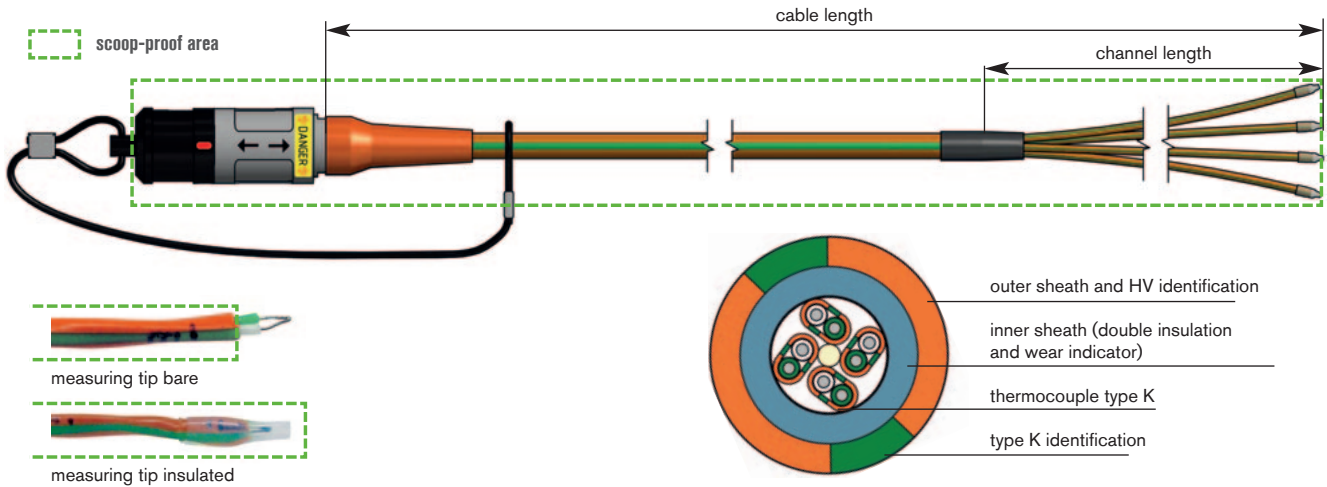
## Application range:

**Safe HV temperature measurement in HV environments**

## Connector:

Lemo Redel male connector with orange kink protection sleeve and black protecting cap, 8-pin, B-coded 1000 V AC voltage-stable – IP 67 when connected

## Sensor:

| | |
|---|---|
| Thermocouple: | 4 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. 6,1 mm |
| Dielectric strength: | 1000 V AC over single channel |
| Temperature range fixed laying: flexible application: | -50°C / +150°C -40°C / +150°C |
| Special characteristics: | contact protection of individual channels ✓ mechanically rugged ✓ |

## Tests:

▶ **Cable test**
over single channel 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 cable length [mm] | single channel length [mm] | | | | type of measuring tip |
|---|---|---|---|---|---|---|
| | | channel 1 | channel 2 | channel 3 | channel 4 | measuring tip |
| T141-056-330 | 2400 | 400 | 400 | 400 | 400 | insulated |
| T141-051-650 | 2400 | 400 | 400 | 400 | 400 | bare |
| T141-061-909 | 3000 | 580 | 560 | 575 | 355 | insulated |

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

## SAB identification:

item number, batch number

SPECIAL CABLES
SAB BRÖCKSKES

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