HV temperature sensor PT100/PT1000
HV 2 x PT100/PT1000 resistance thermometer

scoop-proof area | cable length | channel length
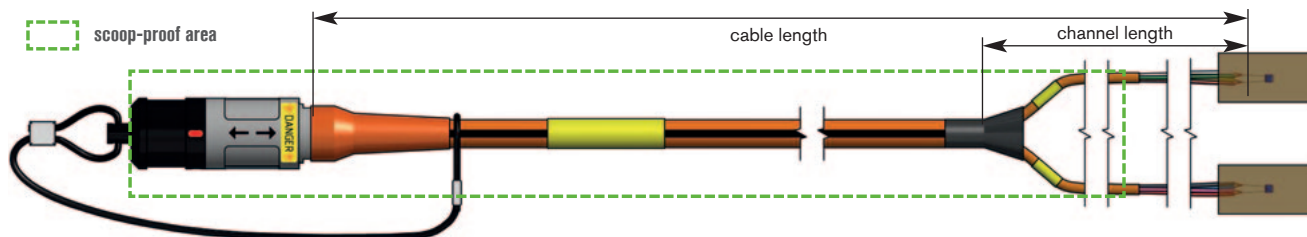
Application range:

Safe HV temperature measurement
in HV environments

Connector:

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

Sensor:

Type of sensor:	2 x PT100
Limit deviation:	class A
Wire circuit:	4-wire
Measuring point:	embedded in PI foil adhesive pad
Dimension of sensor:	for example 2,3 mm x 2,0 mm x 0,47 mm (appropriate for pouch cells) or 3,0 mm x 0,80 mm x 0,60 mm
Temperature range single channel:	-30°C / +180°C

Cable data:

	FEP	FEP
Designation:	HV measuring cable – 1 x 8 cores	HV measuring cable – 4 x 2 cores
Insulation:	FEP – acc. to DIN 47100 1-8 (core-Ø 0,45 mm)	FEP – acc. to DIN 47100 1-8
Outer sheath:	PUR	PUR
Stranding:	optimised in layers	optimised in layers
Outer diameter:	approx. 4,6 mm	approx. 7,3 mm
Dielectric strength:	1000 V AC over orange inner sheath	1000 V AC over orange bundle sheath
Temperature range fixed laying: flexible application:	-40°C / +150°C -40°C / +150°C	-40°C / +150°C -40°C / +150°C

Tests:

▶ **Cable test**
core/core – 2500 V AC - 5 min
over orange bundle sheath –
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

1.3.1

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CONFIGURATION EXAMPLES

item no.	connection cable length [mm]	single channel length [mm]	
		channel 1	channel 2
T641-060-817	2000	70	70
T641-060-870	5000	700	700

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

SAB identification:
item number, batch number