



✓RoHS

- Precision Reference temperature probe
- Pt100 according IEC60751
- High stability
- For calibration Purposes
- Class B for TLH600 From -180°C to 600°C
- Class A for TLH100 From - 80°C to 350°C

DESCRIPTION

A special ceramic wire wound thermoresistor (MEAS exclusivity) is embedded into a unique internal design to provide stability, high temperature usage and suitable for rapid temperature profiling. Internal design is protected by a metal protective sheath with a stainless steel handle and extension cable. Each probe is identified with a unique Serial number and packed into protective wooden box specifically for transport.

FEATURES

- Nominal value =100 Ω at 0°C, tolerances according IEC 60751
- Temperature coefficient $\alpha = 3850$ ppm/K
- Advice measuring current : 0,5 to 1mA
- Self heating $\leq 0,01^\circ\text{C}$ at 1mA
- Inconel 600 external sheath $\varnothing 5\text{mm}$, length 500 mm.
- Handle $\varnothing 15\text{mm}$, Length 100mm, max. temperature +200°C
- Braided Cable, 4 wires, typical length =2m
- Drift after 10 cycles at full range: $\leq \pm 10$ m Ω ($\leq \pm 25$ mK)
- Drift after 500 hours at 350°C (TLH 100) or 600°C (TLH600) : $\leq \pm 10$ m Ω ($\leq \pm 25$ mK)
- Insulation resistance > 1000 M Ω , under 250Vdc at room temperature
- Response time $t_{0,5} = 19\text{s}$ in water at 0,2 m/s
- Standard calibration at 0°C and 100°C.
- Examples of calibration uncertainties :
TLH100 +/- 0,05°C at 0°C and +/-0.09°C at 100°C
TLH600 +/- 0,005°C at 0°C and +/- 0,015°C up to 420°C

APPLICATIONS

- Reference sensors for laboratories
- Metrological or calibration equipments

Recommendations:

Minimum immersion depth $\geq 150\text{mm}$ for a restricted temperature range -100 up to 150°C (Sensitive area on first 50 mm).

Recalibration each year is recommended. The Probe should not be bent or exposed to vibration and the handle should not be immersed in liquid.

Option for TLH 600:

Calibration and certificate accredited by a National Committee for Accreditation (COFRAC), at 7 temperature steps for a whole range of temperature and EIT90 coefficients with Resistance versus Temperature Table.

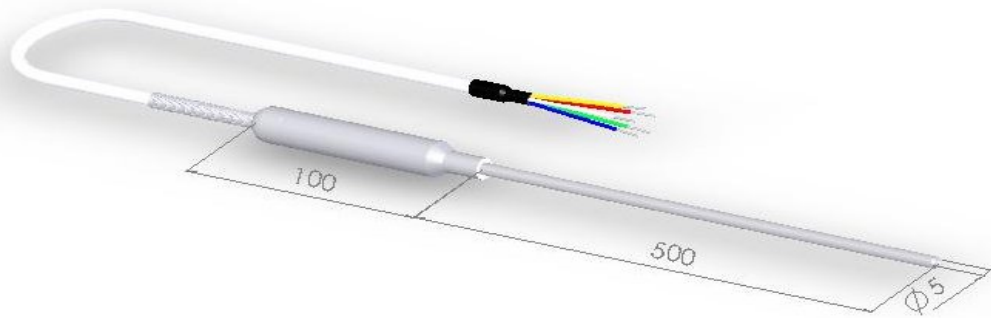
TLH reference probe

IEC 60751 SPECIFICATIONS

Tolerance class + Temperature range of the tolerance	Unit	Value
Class A : From -30°C to 300°C	°C	$\pm(0.15+0.002 \text{ tI})$
Class B : From -50°C to 500°C	°C	$\pm(0.3+0.005 \text{ tI})$

Values for Pt100								
°C	Ohms	Ohms/°C	°C	Ohms	Ohms/°C	°C	Ohms	Ohms/°C
-200	18.52	0.432	100	138.51	0.379	400	247.09	0.345
-150	39.72	0.417	150	157.33	0.374	450	264.18	0.339
-100	60.26	0.405	200	175.86	0.368	500	280.98	0.333
-50	80.31	0.397	250	194.10	0.362	550	297.49	0.327
0	100	0.391	300	212.05	0.356	600	313.71	0.322
50	119.40	0.385	350	229.72	0.350			

BLOCK DIAGRAM



联系方式



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