

LPT-130

Hall Effect Probe

Standard Sensitivity without temperature compensation

High Accuracy: $\pm 0.03\%$ max. error at 25°C^*

Low thermal drift at $-60\text{ppm}/^\circ\text{C}$ max. *

Low Zero Drift of $\pm 0.12\text{G}/^\circ\text{C}$ max. *

Calibration tables at 0, 25 and 50°C supplied

* Contribution of probe only

Specifications

The LPT-130 Hall Effect Probe is most suitable to be used with a DTM-133 or DTM-333 Digital Teslameter.

Probe is calibrated up to 2.2 Tesla, bipolar. Transverse orientation, reads (+) when field vector enters the top epoxy surface.



Accuracy at 25°C :

$\pm 0.03\%$ of reading + 0.03% of full scale with DTM-133

$\pm 0.03\%$ of reading + 0.006% of full scale with DTM-150

Operating Range:

4- Range Operation.

0.3, 0.6, 1.2, 3.0 Tesla Full Scale

3, 6, 12, 30 Kilo Gauss Full Scale

ORDER CODE:

LPT-130-2S for probe with basic 2 meters shielded cable.

Special probe cable lengths may be ordered up to 30 meters.

For single range probes, add range suffix -03, -06, -12, -30 e.g. LPT-130-03-2S

Probe Accessories:

LPT 130/230 Transverse Probe Holder – Part No. 17000049

LPT 130/230 Axial Probe Holder – Part No. 17000091

Temperature Stability:

Calibration: -80ppm of reading/ $^\circ\text{C}$ max.

- $3\text{ppm}/^\circ\text{C}$ of reading per meter of probe cable

Zero Drift: $\pm (12\mu\text{T} + 0.0015\% \text{ of full scale})/^\circ\text{C}$ max. with DTM-133

$\pm (12\mu\text{T} + 0.0003\% \text{ of full scale})/^\circ\text{C}$ max. with DTM-150

Temperature Range:

0 to 50°C operating to spec, -20 to $+60^\circ\text{C}$ max.

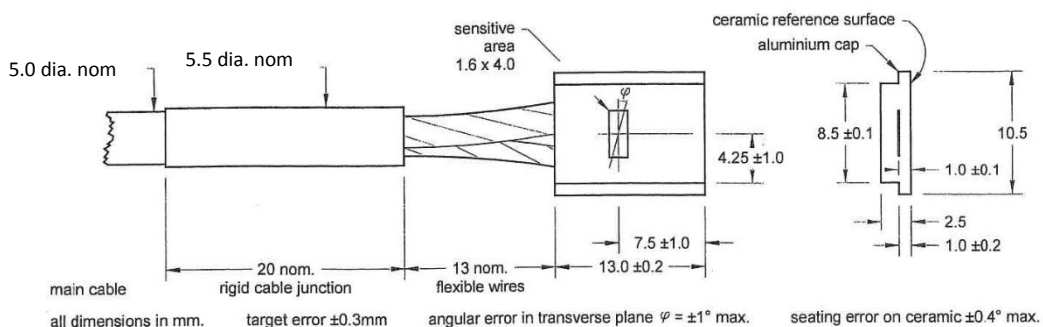
Dimensions:

Probe Head Size: $13 \times 10.5 \times 2.5 \text{ mm}$

Sensitive Area: $4 \times 1.6 \text{ mm}$

Unshielded part of cable at probe head: $\varnothing 5.0 \pm 0.2 \text{ mm}$, 300 mm nominal length

Shielded Cable: $\varnothing 7.2 \pm 0.2 \text{ mm}$



Resolution using DTM-133 Digital Teslameter:

TABLE 1 - DC Mode with Digital Filtering ON

Range	Display resolution		Serial / GPIB Output Resolution	
	Gauss	Tesla	Gauss	Tesla
0.3	0.5	0.00005	0.01	0.000001
0.6	1	0.0001	0.02	0.000002
1.2	2	0.0002	0.04	0.000004
3.0	5	0.0005	0.1	0.00001