

LPT-230

Hall Effect Probe

High Sensitivity without temperature compensation
(Max. calibrated field 0.3T or 3000 Gauss)

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

Low thermal drift at -600ppm/°C max.*

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

Calibration tables at 0, 25 and 50°C supplied

Specifications

The LPT-230 Hall Effect Probe is most suitable to be used with a DTM-133 Digital Teslameter.

Probe is calibrated up to 0.3 Tesla, bipolar. Transverse orientation, reads (+) when field vector enters the top metal surface.



* Contribution of probe only

Accuracy at 25°C:

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

Operating Range:

4- Range Operation.

0.03, 0.06, 0.12, 0.30 Tesla Full Scale

300, 600, 1200, 3000 Gauss Full Scale

Temperature Stability:

Calibration: -620ppm of reading/°C max.

- 3ppm/°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

ORDER CODE:

LPT-230-2S 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-230-03-2S

Probe Accessories:

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

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

Temperature Range:

0 to 50°C operating to spec, -20 to +60°C max.

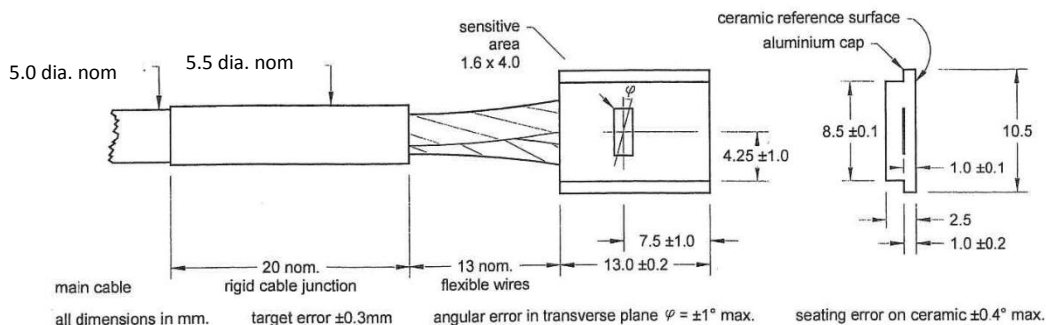
Dimensions:

Probe Head Size: 13 x 10.5 x 2.5 mm

Sensitive Area: 4 x 1.6 mm

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

Shielded Cable: $\varnothing 7.2 \pm 0.2$ mm



Resolution using DTM-133 Digital Teslameter:

TABLE -1 DC Mode with Digital Filtering ON

Range	Display resolution	
	Gauss	Tesla
0.03	0.05	0.000005
0.06	0.1	0.00001
0.12	0.2	0.00002
0.3	0.5	0.00005