

MPT-230

Hall Effect Probe

High Sensitivity without temperature compensation

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

Low thermal drift at $-800\text{ppm}/^\circ\text{C}$ 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 MPT-230 Hall Effect Probe is most suitable to be use with a DTM-133 or DTM-333 Digital Teslameter.

Probe is calibrated up to 0.3 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.

0.03, 0.06, 0.12, 0.30 Tesla Full Scale

300, 600, 1200, 3000 Gauss Full Scale

ORDER CODE:

MPT-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. MPT-230-03-2S

Probe Accessories:

MPT Transverse Probe Holder – Part No. 17000081

MPT Axial Probe Holder – Part No. 17000100

Temperature Stability:

Calibration: -820ppm of reading/ $^\circ\text{C}$ max.

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

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

$\pm(12\mu\text{T} + 0.0003\%$ 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.

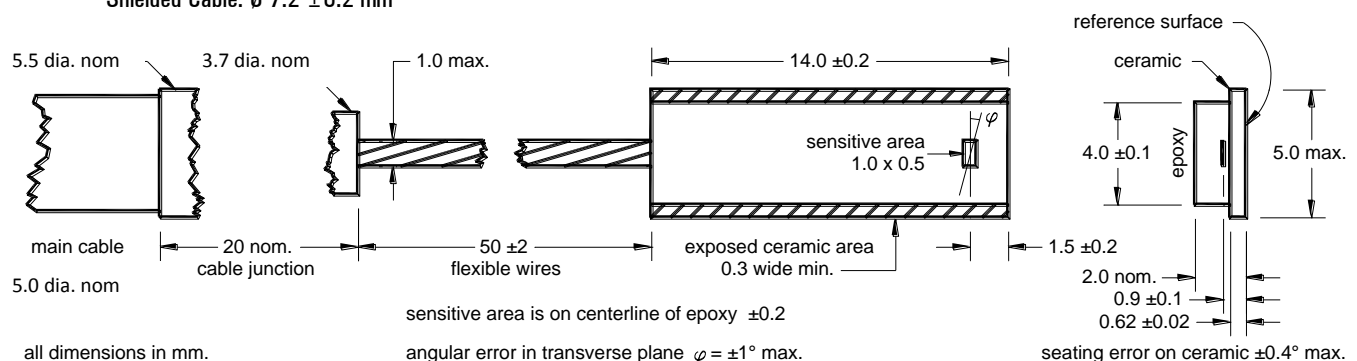
Dimensions:

Probe Head Size: $14 \times 5 \times 2$ mm

Sensitive Area: 1×0.5 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:

DC Mode with Digital Filtering ON

Range	Display resolution		Serial / GPIB Output Resolution	
	Gauss	Tesla	Gauss	Tesla
0.03	0.05	0.000005	0.001	0.0000001
0.06	0.1	0.00001	0.002	0.0000002
0.12	0.2	0.00002	0.004	0.0000004
0.3	0.5	0.00005	0.01	0.000001