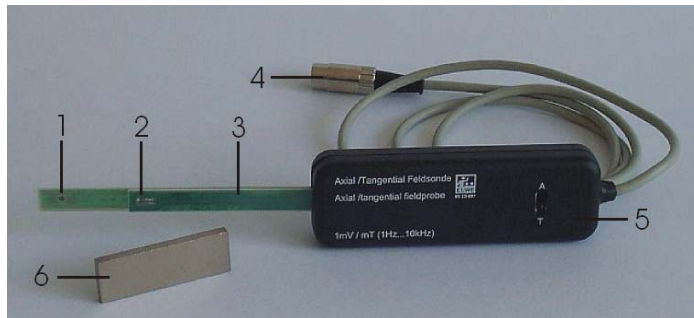


Axial/tangential field probe 3b1001040 (U8533997)

Instruction sheet

12/07 SP



- 1 Tangential probe
- 2 Axial probe
- 3 Support stem
- 4 Connector cable with 5-pin diode-protected plug
- 5 Slide switch
- 6 MU metal case (not included)

1. Description

The axial/tangential field probe measures magnetic fields produced by DC and AC currents as well as magnetic flux (B) and field strength (H).

The field probe works by means of the Hall principle and makes up a sensor unit in combination with the microvoltmeter (U8530501-230 resp. U8530501-115).

The support stem for the Hall probes emerges from the side of the plastic casing containing the electronic circuitry for both probes and also provides a handle when making measurements. Connection to the microvoltmeter is made via a 5-pin diode-protected plug. The requisite voltage is supplied by the microvoltmeter. The slide switch on the casing selects whether the axial or the tangential probe is activated.

A shielding case made from MU metal (U8530522) serves to set the field probe to zero.

2. Technical data

Hall sensor	InAs monocrystalline 1 mm ² approx.
Measurement range:	1 mT to 2 T
Electr. conversion:	1 mV is 1 mT
Frequency range:	1 Hz to 10 kHz
Casing:	130 x 44 x 22 mm ³
Stem:	125 x 11 x 4 mm ³

3. Sample experiments

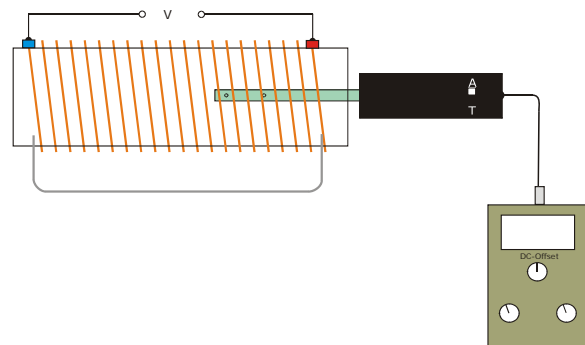


Fig.1 Field measurement inside a coil using axial field probe.

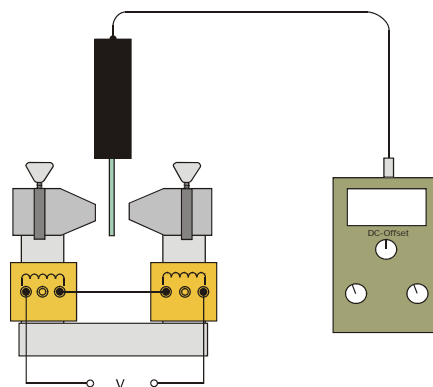


Fig. 2 Magnetic field measurement inside the air gap of a transformer using tangential field probe

