

Fluke i2000 Flex AC Current Clamp

Technical Data



The i2000 is an ac current probe Utilizing the Rogowski principle. It can be used to measure currents up to 2000 A when used in conjunction with multimeters, recorders or data loggers. The flexible and lightweight measuring head allows quick and easy installation in hard to reach areas.

Electrical specifications

Current ranges: 20 A, 200 A, 2000 A ACRMS
Output sensitivity (ac-coupled): 100 mV, 10 mV, 1 mV per A
Load impedance: 100 k Ω minimum
Accuracy (at +25 °C): ± 1 % of range (45 Hz to 65 Hz)
Linearity (10 % to 100 % of range): ± 0.2 % of reading
Noise: 8 mV ac rms (30 A), 2 mV ac rms (300 A, 3000 A)
Frequency range: 10 Hz to 20 kHz (-3 dB)
Phase error: $< \pm 1^\circ$ (45 Hz to 65 Hz), $\pm 10^\circ$ (at 20 kHz)
Position sensitivity (with cable > 25 mm from the coupling): ± 2 % of range
External field (with cable > 200 mm from the head): ± 1 % of range

Power supply: 2 x AA/MN 1500/LR6 Alkaline, 200 hours, low battery indicator
Temperature coefficient: ± 0.08 % of reading per °C
Working voltage (see Safety standards section): 600 V ac rms or dc

General specifications

Head cable length (double insulated): 610 mm (24 in)
Head cable diameter: 14.3 mm (0.56 in)
Head bend radius: 38.1 mm (1.5 in)
Cable length (head to electronics): 2 m (6.56 ft)
Output connection: BNC with BNC to Banana adapter included
Operating temperature range: 0 °C to +70 °C (32 °F to 158 °F) (head and electronics)

Storage temperature range: -40 °C to +105 °C (-40 °F to 221 °F) (head), -20 °C to +85 °C (-4 °F to 185 °F) (electronics)

Operating humidity: 15 % to 85 % (non-condensing)

Weight: 180 g (6.34 oz) (head), 190 g (6.70 oz) (electronics)

Safety standards

EN 61010-1: 2001

EN 61010-2-032: 2002

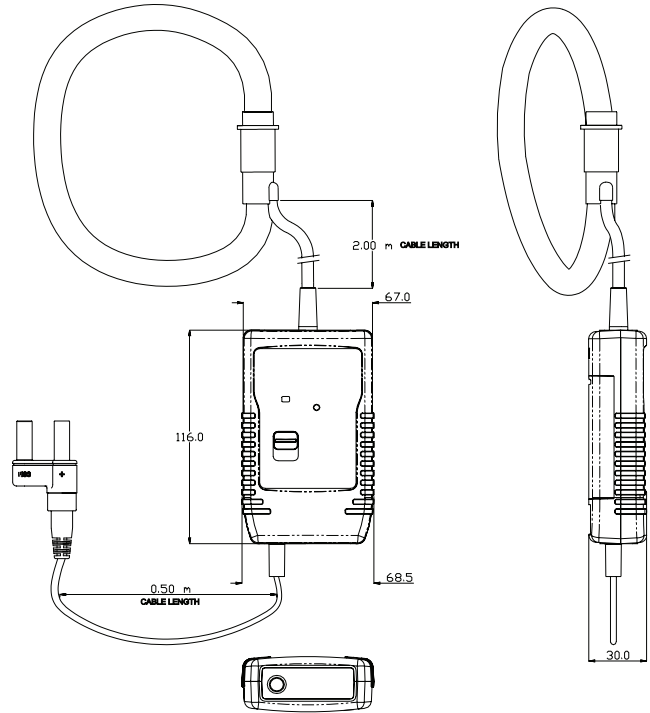
EN 61010-031: 2002

600 Vrms, Category III, Pollution Degree 2

Use of the probe on uninsulated conductors is limited to 600 V acrms or dc and frequencies below 1 kHz.

EMC Standards

EN 61326: 1998 +A1, A2, & A3



Ordering information
i2000 Flex AC Current Clamp



i2000 Flex connected to a Fluke 87V Digital Multimeter.