

Fluke i6000s Flex AC Current Probe

Technical Data



The i6000s Flex is an ac current probe utilizing the Rogowski principle. It can be used to measure currents up to 6000 A when used in conjunction with oscilloscopes, recorders or data loggers. The flexible and lightweight measuring head allows quick and easy installation in hard to reach areas.

The i6000s Flex is available in 2 models, i6000s Flex-24 with a 24 inch measuring head and i6000s Flex-36 with a 36 inch measuring head to allow use on larger diameter conductors.

Electrical specifications

Current ranges: 60 A/600 A/6000 A ac rms

Output sensitivity (ac-coupled): 50 mV/5 mV/0.5 mV per A

Load impedance: 100 kOhm 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 (60 A), 2 mV ac rms (600 A/6000 A)

Frequency range: 10 Hz to 50 kHz (-3 dB)

Phase error: < ± 1° (45 Hz to 65 Hz), ± 10° (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, 400 hours, low battery indicator or dedicated ext power supply (power supply only available in Europe and UK)

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) RR6030, 915 mm (36 in) RR6030/36

Head cable diameter: 14.3 mm (0.563 in)

Head bend radius: 38.1 mm (1.5 in)

Cable length (head to electronics): 2 meters

Output connection: 0.5 m cable terminated with safety BNC connector and supplied with 4 mm safety plug adapter

Operating temperature range:

Head: -20 °C to +90 °C (-4 °F to 194 °F)

Electronics: -20 °C to +90 °C (-4 °F to 194 °F)

Storage temperature range:

Head: -40 °C to +105 °C (-40 °F to 221 °F)

Electronics: -20 °C to +85 °C (-4 °F to 185 °F)

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

Weight:

Head: 180 g (0.397 lb)
 Electronics: 190 g (0.419 lb)

Safety standards

BS EN 61010-1: 2001
 BS EN 61010-2-032: 2002
 BS EN 61010-031: 2002

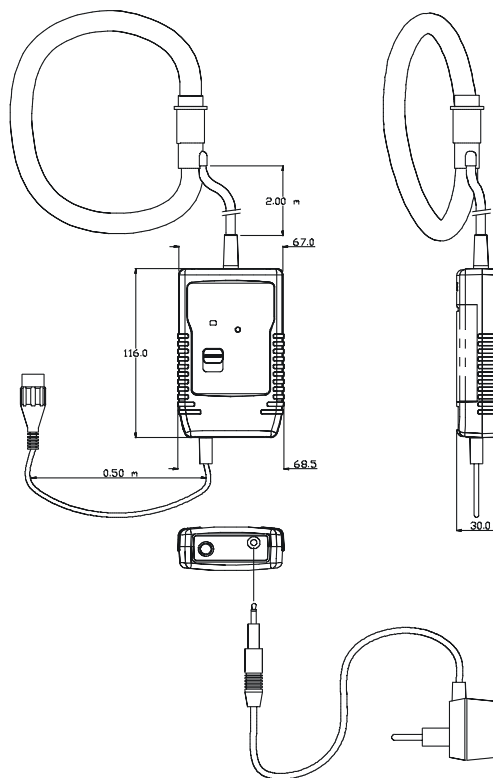
600 V rms, Category III, Pollution Degree 2

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

EMC standards

BS EN 61326: 1998 +A1, A2, and A3

Dimensions (in mm)



Ordering information

i6000s Flex AC Current Probe 24 in
 i6000s Flex AC Current Probe 36 in



i6000s connected to a Fluke 199C ScopeMeter.

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 Printed in U.S.A. 5/2007 3039138 D-EN-N Rev A