

Fluke i6000sFlex AC Current Probe



Overview:

The i6000sflex is an AC current probe utilising 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.

Electrical Characteristics:

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 – 65 Hz)
Linearity (10% to 100% of range)	±0.2% of reading
Noise	8 mV AC rms (60 A) 2 mV AC rms (600/6000 A)
Frequency range	10 Hz to 50 kHz (-3 dB)
Phase error	< ±1° (45 – 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
Temperature coefficient	±0.08% of reading per ° C

Working voltage (see Safety Standards section)	600 V AC rms or DC
General Characteristics	
Head cable length (double insulated)	610 mm (24 in) I6000s Flex-24 915 mm (36 in) I6000s Flex-36
Head cable diameter	14.3 mm
Head bend radius	38.1 mm
Cable length (head to electronics)	2 m
Output connection	0.5 m cable terminated with safety BNC connector Supplied with 4 mm safety plug adaptor
Operating temperature range	-20 to +90°C (head) -20 to +85°C (electronics)
Storage temperature range	-40 to +105°C (head) -20 to +85°C (electronics)
Operating humidity	15% to 85% (non condensing)
Weight	180 g (head), 190 g (electronics)
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	
EMC standards	BS EN 61326: 1998 +A1, A2, and A3
Use of the probe on uninsulated conductors is limited to 600 V AC rms or DC and frequencies below 1 kHz	

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