

## Fluke i3000s Flex AC Current Clamp

### Technical Data



The i3000s Flex is an ac current clamp utilizing the Rogowski principle. It can be used to measure currents up to 3000 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 specifications

**Current ranges:** 30 A, 300 A, 3000 A ac rms

**Output sensitivity (ac-coupled):** 100 mV, 10 mV, 1 mV per A

**Load impedance:** 100 k $\Omega$  minimum

**Accuracy (at +25 °C):**  $\pm 1$  % of range (45 Hz to 65 Hz)

**Linearity (10 % to 100 % of range):**  $\pm 0.2$  % of reading

**Noise:** 8 mV ac rms (30 A), 2 mV ac rms (300 A, 3000 A)

**Frequency range:** 10 Hz to 50 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):**  $\pm 2$  % of range

**External field (with cable > 200 mm from the head):**  $\pm 1$  % of range

**Power supply:** 2 x AA MN 1500 LR6 alkaline, 400 hours, low battery indicator

**Temperature coefficient:**  $\pm 0.08$  % 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) i3000s Flex-24

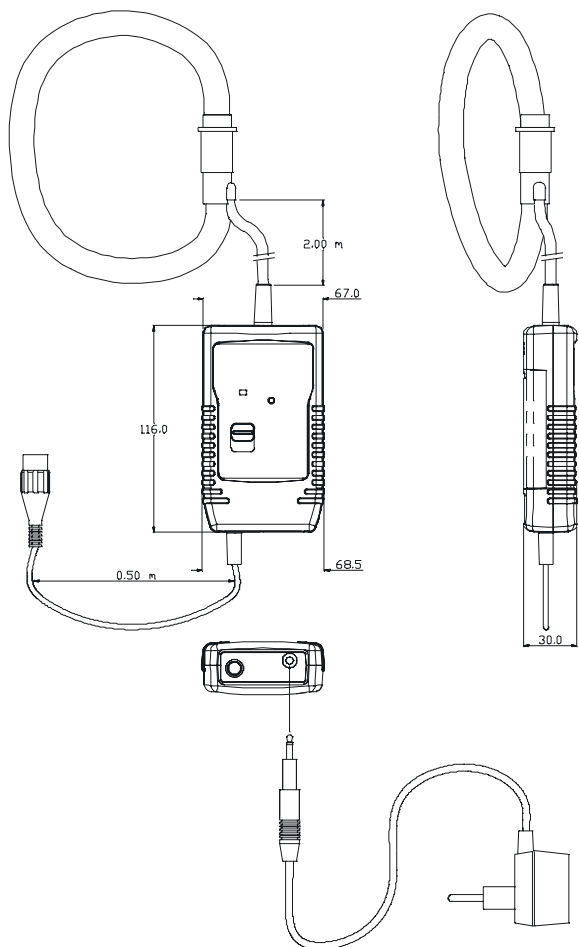
915 mm (36 in) i3000s Flex-36

**Head cable diameter:** 14.3 mm

**Head bend radius:** 38.1 mm

**Cable length (head to electronics):** 2 meters

**Output connection:** 0.5 m cable terminated with safety BNC connector. Supplied with BNC to Banana safety plug adapter.



**Operating temperature range:**

-20 °C to +90 °C (-4 °F to 190 °F) (head),  
 -20 °C to +85 °C (-4 °F to 185 °F) (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 (0.396 lb) (head),  
 190 g (0.419 lb) (electronics)

**Safety standards**

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

i3000s FLEX-24 AC Current Probe, 24-inch circumference  
 i3000s FLEX-36 AC Current Probe, 36-inch circumference  
 i3000 FLEX-4PK, AC Current Probe, 4-pack of i3000s FLEX-24

**Optional Accessories**

FLEX PSU-EU Power supply unit for Europe  
 FLEX PSU-UK Power supply unit for the United Kingdom

Note: Power supply units only available for Europe and the United Kingdom.



i3000s Flex connected to a Fluke 434 Power Quality Analyzer (The i430 FLEX-4PK can be used with the Fluke 434 and 435, without the need for the control box).



i3000s Flex connected to a Fluke 199C ScopeMeter.

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