FLUKE®

Fluke i3000s Flex
AC Current Clamp

Technical Data

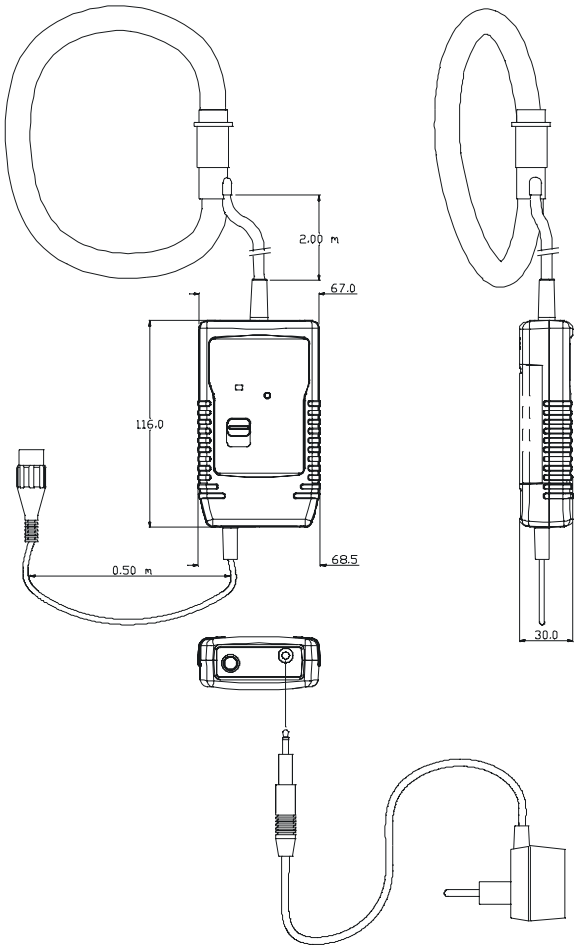
The i3000s Flex is an ac current clamp utilizing the Rogowski principle. It can be used to measure currents up to 3000 A when used in conjunction with oscilloscopes, recorders or data loggers. The flexible and lightweight measuring head allows quick and easy installation in hard to reach areas.

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 kΩ 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 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
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) 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.

Fluke. *Keeping your world up and running.™*

Fluke Corporation
PO Box 9090, Everett, WA USA 98206

Fluke Europe B.V.
PO Box 1186, 5602 BD
Eindhoven, The Netherlands

For more information call:
In the U.S.A. (800) 443-5853 or
Fax (425) 446-5116
In Europe/M-East/Africa +31 (0) 40 2675 200 or
Fax +31 (0) 40 2675 222
In Canada (800) 36-FLUKE or
Fax (905) 890-6866
From other countries +1 (425) 446-5500 or
Fax +1 (425) 446-5116
Web access: http://www.fluke.com

©2006 Fluke Corporation. All rights reserved.
Specifications subject to change without notice.
Printed in U.S.A. 12/2006 2747103 D-EN-N Rev C