

Specifications

General Specifications

Cable length: 4 m (0.15 in)

Length of measuring head: 92 cm (36 in)

Flexible Current Probe Diameter: 8 mm (0.3 in)

Operating temperature range: -10 °C to +70 °C
(14 °F to 158 °F)

Storage temperature range: -20 °C to +80 °C
(-4 °F to 198 °F)

Operating humidity (non-condensing): 10 % to 80 % rh

Altitude: max. 2000 m (6,562 ft)

Weight: 1.2 kg (0.55 lb)

Reference Conditions

Environment temperature range: +18 °C to +26 °C

(64.4 °F to 78.8 °F)

Humidity: 20 to 75 % rh

Current: nominal value I_n , sinusoidal waveform, 48 Hz to 65 Hz, distortion factor: <1 %, no DC component, stray field <40 A/m, conductor centered within the Probe.

Safety Standards

IEC/EN61010-1:2001

IEC/EN61010-2-032:2002

EN/IEC 61010-031:2002+A1:2008

Safety Specifications

Category Rating: 1000 V CAT III, 600 V CAT IV, pollution degree 2. The application of the Probe on **uninsulated conductors** is limited to 1000 V ac rms or dc to ground and frequencies below 1 kHz.

EMC Standards: IEC/EN 61326-1:2006

LIMITED WARRANTY AND LIMITATION OF LIABILITY

This Fluke product will be free from defects in material and workmanship for one year from the date of purchase. This warranty does not cover fuses, disposable batteries, or damage from accident, neglect, misuse, alteration, contamination, or abnormal conditions of operation or handling. Resellers are not authorized to extend any other warranty on Fluke's behalf. To obtain service during the warranty period, contact your nearest Fluke authorized service center to obtain return authorization information, then send the product to that Service Center with a description of the problem.

THIS WARRANTY IS YOUR ONLY REMEDY. NO OTHER WARRANTIES, SUCH AS FITNESS FOR A PARTICULAR PURPOSE, ARE EXPRESSED OR IMPLIED. FLUKE IS NOT LIABLE FOR ANY SPECIAL, INDIRECT, INCIDENTAL OR CONSEQUENTIAL DAMAGES OR LOSSES, ARISING FROM ANY CAUSE OR THEORY. Since some states or countries do not allow the exclusion or limitation of an implied warranty or of incidental or consequential damages, this limitation of liability may not apply to you.

Fluke Corporation
P.O. Box 9090
Everett, WA 98206-9090
U.S.A.

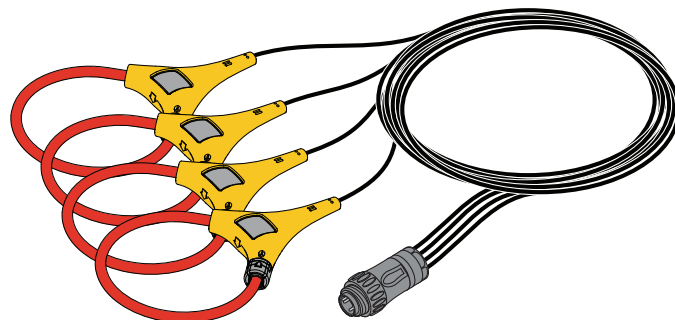
Fluke Europe B.V.
P.O. Box 1186
5602 BD Eindhoven
The Netherlands

11/99

3000/6000A-TF-4

Thin Flex AC Current Probes

Instruction Sheet



Introduction

The 3000/6000A-TF-4 Thin Flex AC Current Probe sets (the Probe or Product) have been designed for applications with Fluke 1735 and Fluke 1740 series products for accurate non-intrusive measurement of ac currents. Using the latest technologies (integrated memory for calibration data) provides current ranges from 0.8 A up to 6000 A in a frequency range of 40 Hz to 5 kHz.

Contacting Fluke

To contact Fluke, call one of the following telephone numbers:

- Technical Support USA: 1-800-44-FLUKE (1-800-443-5853)
- Calibration/Repair USA: 1-888-99-FLUKE (1-888-993-5853)
- Canada: 1-800-36-FLUKE (1-800-363-5853)
- Europe: +31 402-675-200
- Japan: +81-3-3434-0181
- Singapore: +65-738-5655
- Anywhere in the world: +1-425-446-5500

Or, visit Fluke's website at www.fluke.com.

To register your product, visit <http://register.fluke.com>.

To view, print, or download the latest manual supplement, visit <http://us.fluke.com/usen/support/manuals>.

Safety Instructions

Please read this section carefully. It will familiarize you with the most important safety instructions for handling the Probe. In this instruction sheet, a **Warning** identifies conditions and actions that pose hazard(s) to the user. A **Caution** identifies conditions and actions that may damage the Probe or the test instruments.

PN 3986171

April 2011

©2011 Fluke Corporation, All rights reserved. Specifications are subject to change without notice. All product names are trademarks of their respective companies.

⚠ ⚠ Warning

To prevent possible electrical shock, fire, or personal injury:

- The Probe is to only be used and handled by qualified personnel.
- Always connect to display device before it is installed around the conductor.
- Use the Product only as specified, or the protection supplied by the Product can be compromised.
- High voltages and currents can be in adjacent circuits under test.
- Before each use, examine the Product. Look for cracks or missing pieces of the clamp housing or output cable insulation. Also look for loose or weakened components. Carefully examine the insulation around the jaws.
- Do not use if the output cable wear indicator shows (contrasting color inner insulation).
- Do not use and disable the Product if it is damaged.
- Comply with local and national safety codes. Use personal protective equipment (approved rubber gloves, face protection, and flame-resistant clothes) to prevent shock and arc blast injury where hazardous live conductors are exposed.
- Do not work alone.
- Limit operation to the specified measurement category, voltage, or amperage ratings.
- De-energize the circuit or wear personal protective equipment in compliance with local requirements before you apply or remove the Flexible Current Probe.
- Do not touch voltages > 30 V ac rms, 42 V ac peak, or 60 V dc.
- Equipment is to be used in 600 V CAT IV and 1000 V CAT III environments.
- Do not use the Product around explosive gas, vapor, or in damp or wet environments.

Operating Instructions

1. Connect the Probe to the product current input jack.
2. Wear protective equipment or de-energize the circuit and place the Probe around the conductor under test. To lock the coil, see Figure 1.
3. Re-energize the circuit.
4. Observe and take measurements as required. Positive output indicates that the current flow is in the direction shown by the arrow on the Probe.
5. Wear protective gloves or de-energize the circuit before removal of the Probe.

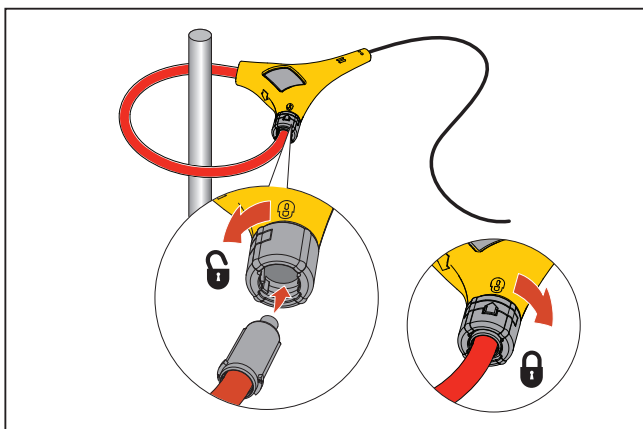


Figure 1. Locking the Coil

fig1.eps

Cleaning

Clean the Probe periodically by wiping it with a damp cloth and detergent. Do not use abrasive cleaners or solvents. Do not immerse the Probe in liquids.

Symbols

	Do not dispose of this product as unsorted municipal waste. Go to Fluke's website for recycling information.
	Do not apply to or remove from hazardous, live conductors, without using personal protective equipment.
	Product is protected by double insulation.
	Risk of Danger. Important information. See Instruction Sheet.
	Hazardous voltage. Risk of electric shock.
	Canadian Standards Association- Complies with relevant North American Safety Standards.
	Complies with the relevant European standards.
	Conforms to relevant Australian standards.
	German certifying body.
CAT III	Equipment is designed to protect against transients in equipment in fixed equipment installations, such as distribution panels, feeders and short branch circuits, and lighting systems in large buildings.
CAT IV	Equipment is designed to protect against transients from the primary supply level, such as an electricity meter or an overhead or underground utility service.

Electrical Characteristics

Input ranges I_L L1, L2, L3, N: 30 / 300 / 3000 / 6000 A AC

Measuring range: 0.8 A to 6000 A AC

Intrinsic error: <1 % of I_L

Position influence: max. ± 2 % of m.v. for a distance >30 mm (1.18 in) between conductor and measuring head

Stray field influence: External field (with cable >200 mm (7.87 in) from the head) ± 1 % of reading

Temperature coefficient: <0.05 % / K

Current transformer: ratio : ≤ 999 kA / $\leq I_L$

Ratio selection: by job programming for 174x series; by setup menu for 1735

Connection: 3-phase, 3-phase + N; 2-phase L1 and L3 (2W-meter-method); 7 pole connector