

# T90/T110/T130/T150 Voltage and Continuity Testers

# Rugged, high-quality testers for fast test results the way you need them

All electricians need a two-pole tester. Experienced professionals know that they can—and should trust their job, their reputation and even their personal safety to Fluke electrical test tools. Our new family of two-pole voltage and continuity testers is no exception. Built with state-of-the-art measurement and safety technology, these testers offer everything you expect from Fluke, and a little bit more.

# **Technical Data**

#### Listening to customers. Making better tools.

The new Fluke two-pole voltage and continuity testers are now more rugged and easier to use than ever before.

- Fast test results the way you need them, with large, easy-to-use buttons, bright backlights, and clear audible and physical indicators designed for any work situation.
- Rugged, high-quality construction is built to last. This includes a heavy duty molded case, a thicker cord with wear indicator, sturdy battery case, and well-fitting and durable probe protector.
- Enhanced ergonomic design feels good in your hand, is easy to use (even with gloves) and quick, secure probe docking.
- A complete family of testers with the features, functions, and price/performance to fit your applications and preferences.

# 

## Built to work the way you work

Fluke's new two-pole testers are built with you in mind. They give you the best combination of safety, ease-of-use and fast answers available anywhere.

- CAT IV 600 V, CAT III 690 V safety rating. Fluke's new family of two-pole testers comply with both regulation HSE GS 38 (tip caps) and IEC EN 61243-3: 2010, the most recent and applicable standards for this type of test equipment.
- 4 ways to detect ac/dc voltage. Fluke two-pole testers make answers easy to understand, indicating voltage four ways: A clear, instantly visible LED indicator, a bright digital display of the measurement value, an audible continuity test. and vibration



to give tactile feedback (vibration indicator on T110, T130, T150). It's your preference. Use the most effective method for each situation.

- Backlit graduated scale and backlit indicators. Bright backlights ensure that the buttons and the indicators are visible under any lighting conditions—and you can easily see and understand the answers.
- Vibration provides tactile feedback (T110, T130, T150). Even when viewing the display or hearing the beeper is difficult, you'll know voltage is present. This is especially useful in noisy environments, or when you can't take your eyes off the probes.
- Audio on/off for testing in quiet areas. If you're working in quiet surroundings, such as a medical or office setting, you don't want to disturb people in the vicinity with noises. The tester's acoustic alert switches on or off to fit your environment.
- Never guess whether your batteries are in good working order. The low battery indicator gives you advance warning when they fall below proper working voltage.

- Detects voltage even with discharged batteries. The tester can still detect the presence of voltage (>50 V ac, >120 V dc) even with dead batteries, an important safety feature. You should always use your two-pole tester with working batteries, but for that rare time when your batteries fail in the field, it's nice to know you still have this one indication of live voltage.
- **Improved probe docking for secure storage**.When the probes are docked, the two-pole tester is ready to use, with proper spacing for instant testing on standard outlets. If you've ever been frustrated with wobbly probes that slowed you down, you'll appreciate Fluke's rugged design.
- Phase rotation indicator for 3-phase systems. Where three-phase power supplies feed motors, drives and electrical systems, use Fluke's innovative three-phase rotation detection system to quickly determine phase sequence. Ensure the system is wired correctly, without reaching for another tool.
- **RCD functionality.** Convenient two-button controls allow you to draw more current from the circuit under test and intentionally trip Residual-Current Devices (RCDs) remotely and determine if they are wired correctly. A Quick Start Guide covering the basics of RCD testing is included with the product.
- **Display hold (T130, T150).** Focus on placing your probes, take the measurement, then read the LC display.
- Built in electric torch (T110, T130, T150). Light up dim testing environments at the touch of a button for faster, safer probing.





- Single-phase voltage offers fast identification of live conductors. Need to verify that a row of "hot" conductors are indeed connected to power? The two-pole tester can tell with you a single touch of the main probe. Simply touch a live conductor and the probe instantly give an audible and visual signal if the power is on. A great timesaver before you begin actual testing.
- Probe tip protection adapts to your changing environment. Push-on probe tips reduce metal exposure from 19 mm to 4 mm, reducing the change of

chance of accidentally touching the wrong conductor when probing in tight spaces. The probe tips of the two-pole tester are threaded, taking optional screw-on 4 mm diameter tips for applications where more sturdy probing may be required.

- **Probe tip protector and storage accessory.** Never lose the push-on caps and 4 mm diameter tips again. As a bonus, the tool's storage serves as an extra hand when opening UK electrical safety outlets.
- **Resistance testing (T150)**. Testers measure and display resistance up to 1999 ohms, adding more power and versatility to this essential tester.
- WearGuard<sup>™</sup> insulation shows damage to test leads. The two-pole tester's rugged, durable test leads have two layers of insulation for added durability. But if the inner, contrasting-colored layer is showing, that's a sign that the test leads have been damaged and replacement is in order.

#### **Selection table**

| Features                                  | <b>T90</b> | T110             | T130             | T150             |
|---|------------|------------------|------------------|------------------|
| Backlit LED indicator                     | •          | •                | •                | •                |
| Backlit LCD digital display               |            |                  | LCD              | LCD              |
| Continuity test—visual results            | •          | •                | •                | •                |
| Continuity test—audible results           | •          | •<br>with on/off | •<br>with on/off | •<br>with on/off |
| Vibratory indicator<br>under load         |            | •                | •                | •                |
| Display hold                              |            |                  | •                | •                |
| Voltage test                              | •          | •                | •                | •                |
| Indication of polarity                    | •          | •                | •                | •                |
| Resistance measurement                    |            |                  |                  | •                |
| Switchable load                           |            | •                | •                | •                |
| Single pole test for phase detection      | •          | •                | •                | •                |
| Rotary field indicator                    |            | •                | •                | •                |
| Probe tip protection                      | •          | •                | •                | •                |
| Voltage display with discharged batteries | •          | •                | •                | •                |
| Electrical torch function                 |            | •                | •                | •                |
| Wear indicator test lead wire             | ٠          | •                | •                | •                |



## **Specifications**

|   | <b>T90</b>  | T110                        | T130         | T150         |  |
|---|---|-----------------------------|--------------|--------------|--|
| Voltage ac/dc   | 12 V to 690 V   | 12 V to 690 V               | 6 V to 690 V | 6 V to 690 V |  |
| Continuity  | 0 to 400 kΩ   |                             |              |              |  |
| Frequency   | 0 / 40 to 400 Hz  |                             |              |              |  |
| Phase rotation  | – 100 V to 690 V  |                             |              |              |  |
| Resistance measurement                                      | —   | -                           | -            | Up to 1999 Ω |  |
| Response time (LED indicator)                               | < 0.5 s   |                             |              |              |  |
| 200 kΩ input impedance                                      | Current draw 3.5 mA @ 690 V, Current draw 1.15 mA @ 230 V |                             |              |              |  |
| 7 k $\Omega$ input impedance<br>(with load buttons pressed) | - Current draw 30 mA @ 230 V                              |                             |              | 30 V         |  |
| Safety rating   | CAT II 690 V<br>CAT III 600 V                             | CAT III 690 V, CAT IV 600 V |              |              |  |
| IP rating   | IP54  | IP64                        | IP64         | IP64         |  |

### **General specifications**

| Power requirement | 2-AAA batteries   |
|-------------------|---|
| Net weight        | 180 g (6.4 oz) (T90)<br>280 g (9.9 oz) (T110. T130, T150)                 |
| Size (LxWxH)      | 23 cm x 6.5 cm x 3.8 cm (T90)<br>26 cm x 7 cm x 3.8 cm (T110. T130, T150) |
| Warranty          | 2 years   |
| Country of origin | Romania   |

## **Ordering information**

FLUKE-T90Voltage/Continuity TesterFLUKE-T110Voltage/Continuity Tester With Switchable LoadFLUKE-T130Voltage/Continuity Tester With LCD, Switchable LoadFLUKE-T150Voltage/Continuity Tester With LCD, Ohms, Switchable Load

#### Fluke. Keeping your world up and running.®

#### Fluke Europe B.V.

P.O. Box 1186 5602 BD Eindhoven The Netherlands Web: www.fluke.com

For more information call: In Europe/M-East/Africa +31 (0)40 2 675 200 or Fax +31 (0)40 2 675 222

#### Fluke (UK) Ltd.

52 Hurricane Way Norwich, Norfolk NR6 6JB United Kingdom Tel.: +44 (0)20 7942 0700 Fax: +44 (0)20 7942 0700 E-mail: industrial@uk.fluke.nl Web: www.fluke.co.uk

©2011 Fluke Corporation. Specifications subject to change without notice. Printed in U.S.A. 11/2011 4115552A D-EE

Pub\_ID: 11842-eng

Modification of this document is not permitted without written permission from Fluke Corporation.