

■ SPRING LOADED 10 A TEST PROBES



ENGLISH

User manual



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Thank you for purchasing our **spring loaded 10A test probes**. These test probes are designed for use with AEMC® Micro-ohmmeters Model 6240 and 6250 or equivalent.

For best results from your instrument:

- **read** these operating instructions carefully,
- **comply with** the precautions for use.



WARNING, risk of DANGER! The operator must refer to these instructions whenever this danger symbol appears.



The CE marking indicates conformity with the European LVD and EMC directives.



In the European Union, this product is subject to a separate collection system for recycling electrical and electronic components in accordance with directive WEEE 2002/96/EC

## Definition of measurement categories:

- Measurement category IV corresponds to measurements taken at the source of low-voltage installations.  
Example: power feeders, counters and protection devices.
- Measurement category III corresponds to measurements on building installations.  
Example: distribution panel, circuit-breakers, machines or fixed industrial devices.
- Measurement category II corresponds to measurements taken on circuits directly connected to low-voltage installations.  
Example: power supply to electro-domestic devices and portable tools.

## PRECAUTIONS FOR USE

The protection of this accessory can be compromised if it is used in a way that is not recommended by the manufacturer.

- Observe the maximum voltage, intensity and measurement category. Do not use the accessory on networks where the voltage or category exceeds those stated in this manual.
- Observe the conditions of use (e.g. temperature, humidity, altitude, degree of pollution and location of use).
- Do not use the accessory if it is open, damaged or incorrectly reassembled.
- Any repairs must be carried out by skilled and approved personnel.

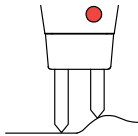
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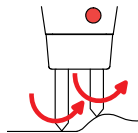
## 1. INTRODUCTION

The straight and pistol-grip spring loaded 10A test probes can be used to measure a low resistance very accurately with micro-ohmmeters that have binding posts from 4mm to 6mm in diameter or safety terminals 4mm in diameter.

- The pistol-grip spring loaded test probes ensure a good contact at the measurement point even if the surface is uneven.



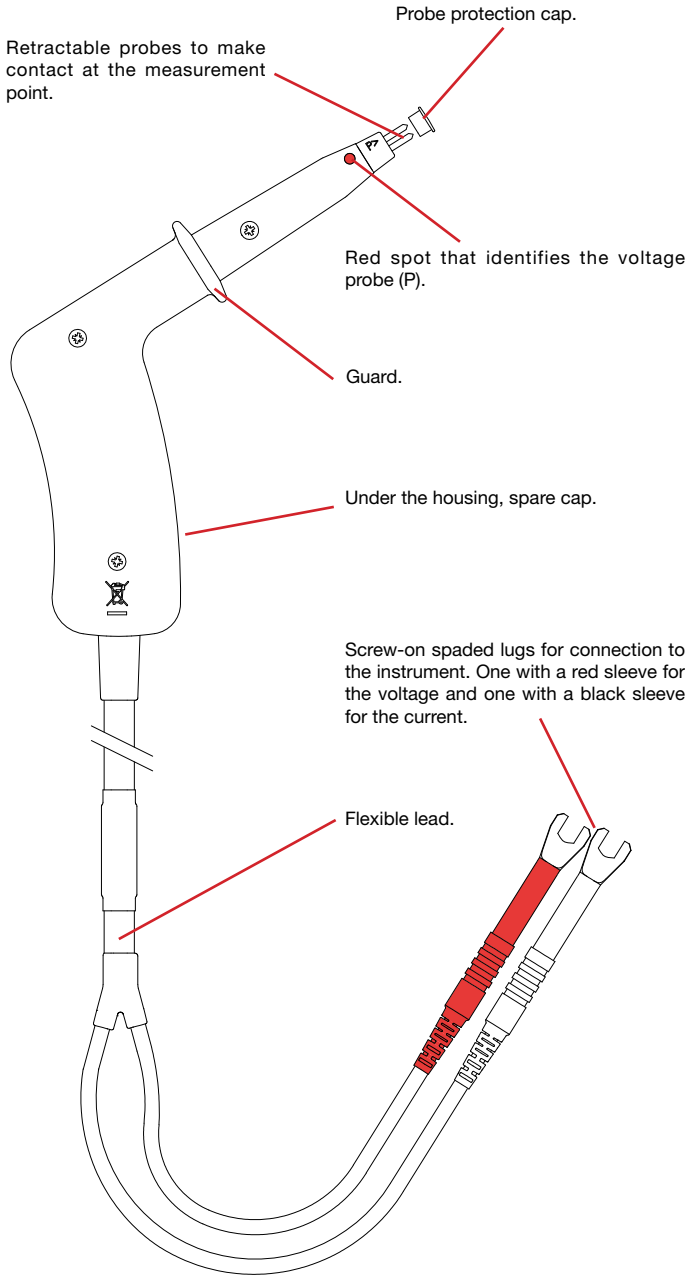
- The straight spring loaded test probes can, in addition, improve the contact by removing a thin layer of rust, paint, or dirt. When the user presses on the probes, they rotate as they retract.



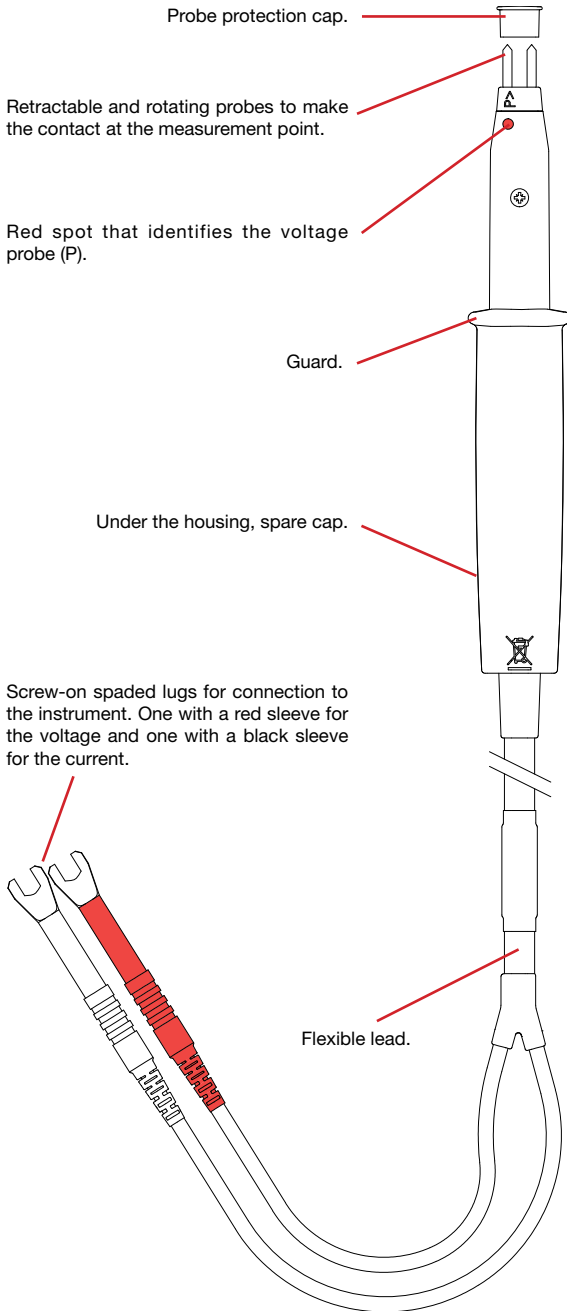
- The resistance of each 10A test probe is very low.
- The measurement is made in 4-wire mode, therefore lead resistance compensation is not necessary.
- The straight spring loaded test probe, which is thicker, allows a more “rugged” use. The pistol-grip test probe is used for applications in more confined spaces.

**NOTE:** At the other end of the leads there are safety terminals 4mm in diameter onto which spaded lugs (6mm in diameter) are screwed into. **These probes can therefore be used with micro-ohmmeters having either binding posts from 4mm to 6mm in diameter or safety terminals 4mm in diameter.**

## 1.1. PISTOL TEST PROBE

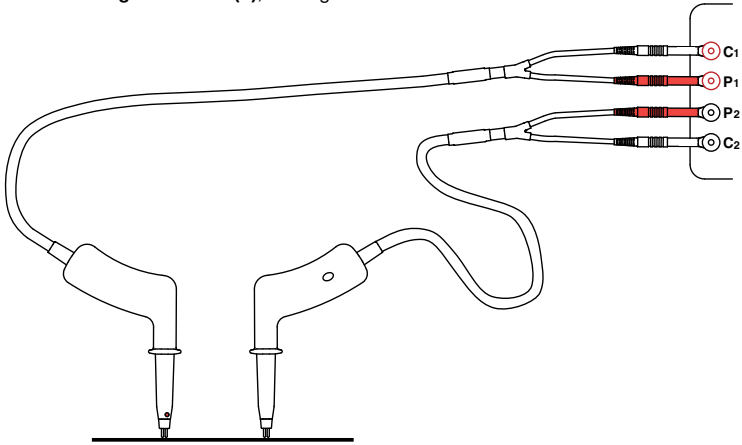


## 1.2. SPRING LOADED TEST PROBE

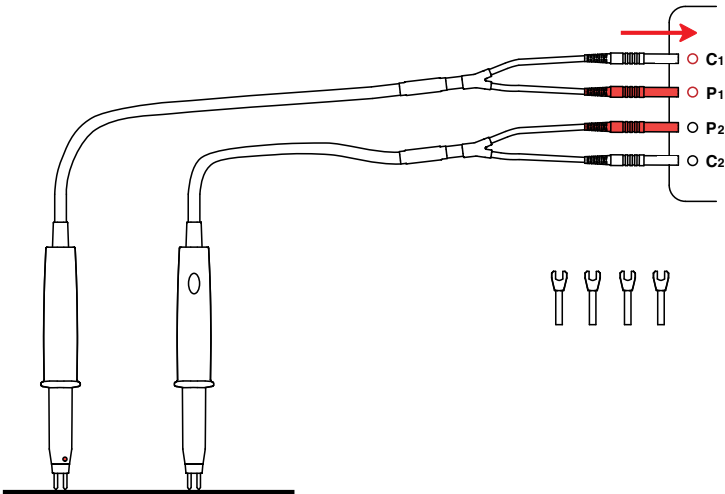


## 2. USE

- Connect the two spring loaded 10A test probes to the four terminals of the instrument.
- Loosen the nuts on the binding posts, insert the spaded lugs, being very careful to **connect the red leads to the voltage terminals (P)**, then tighten the nut.



- If the instrument has safety terminals, unscrew the spaded lugs to make the connection.



- Place the voltage probes (identified by red spots) as close as possible to one another.
- During the measurement, hold the test probes firmly in contact with the object being measured.

For details of the measurement configuration, technical specifications and error messages, refer to the user manuals of the 6240 or 6250.

# 3. SPECIFICATIONS

## 3.1. ENVIRONMENTAL CONDITIONS

Indoor use.

Operating range	-10 °C to +55 °C and 10 % to 85% RH
Storage range	-40 °C to +70 °C and 10 % to 90% RH
Degree of pollution	2
Altitude	< 3000 m

## 3.2. MECHANICAL SPECIFICATIONS

### Pistol-grip Kelvin probe

■ Dimensions	grip	108 x 40 mm
	probe	154 x 30 mm
	thickness	28 mm
■ Diameter of the probes		2 mm
■ Center-to-center distance between the probes		3.5 mm
■ Travel of the probes		7 mm
■ Lead		3.15 m long
■ Spaded lugs		for diameters from 4 to 6 mm
■ Safety terminals		diameter of 4 mm
■ Mass		approximately 2 x 420 g
■ Resistance		approximately 2 x 40 mΩ

### Straight Kelvin probe with rotation

■ Dimensions (L x W x H)		207 x 34 x 30 mm
■ Diameter of the probes		3 mm
■ Center-to-center distance between the probes		8 mm
■ Travel of the probes		10 mm
■ Lead		3.15 m long
■ Spade lugs		for diameters from 4 to 6 mm
■ Safety terminals		diameter of 4 mm
■ Mass		approximately 2 x 400 g
■ Resistance		approximately 2 x 35 mΩ

Protection index IP 40 according to IEC 60 529  
IK 04 according to IEC 50102

Drop test According to IEC 61010-1

## 3.3. ELECTRICAL SAFETY

Electrical safety according to IEC 61010-031

Maximum current: 10A  
Maximum voltage: 30V

## 4. MAINTENANCE

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The manufacturer cannot be held liable for any accident that occurs following a repair not performed by its repair center.

### 4.1. CLEANING

Disconnect the accessory completely.

Use a soft cloth, dampened with soapy water. Rinse with a damp cloth and dry rapidly with a dry cloth or forced air. Do not use alcohol, solvents, or hydrocarbons.

## 5. WARRANTY

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Except as otherwise stated, our warranty is valid for **twelve months** starting from the date on which the equipment was sold. Refer to our website for detailed warranty information and product registration.

The warranty does not apply in the following cases:

- Inappropriate use of the equipment or use with incompatible equipment
- Modifications made to the equipment without the explicit permission of the manufacturer
- Work done on the device by a person not approved by the manufacturer
- Adaptation to a particular application not anticipated in the definition of the equipment or not indicated in the user manual
- Damage caused by shocks, falls, or floods

## 6. TO ORDER

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Kelvin Probes Pistol Grip, 10 ft 10A Spring Loaded .....	<b>Cat. #2118.75</b>
Kelvin Probes Pistol Grip, 20 ft 10A Spring Loaded .....	<b>Cat. #2118.76</b>
Kelvin Probes 10 ft 10A Spring Loaded .....	<b>Cat. #2118.77</b>
Kelvin Probes 20 ft 10A Spring Loaded .....	<b>Cat. #2118.78</b>