

RM3545A, RM3546 Measurement Lead Selection Guide

RM3545A, RM3546 measurement leads

Hioki offers four types of measurement leads, two types of four-point array probes, and one probe kit to facilitate accurate measurement of an array of measurement targets. Please choose the best lead for your application after reviewing the shape of the measurement target and contact workability.

Pin Type Lead L2100

This lead facilitates 4-terminal measurement and need only be placed in contact with the measurement target. Pins with spring-loaded tips ensure stable contact. Since the SOURCE and SENSE pins are positioned at the optimal interval, this lead is ideal for low-resistance measurement.

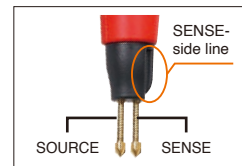
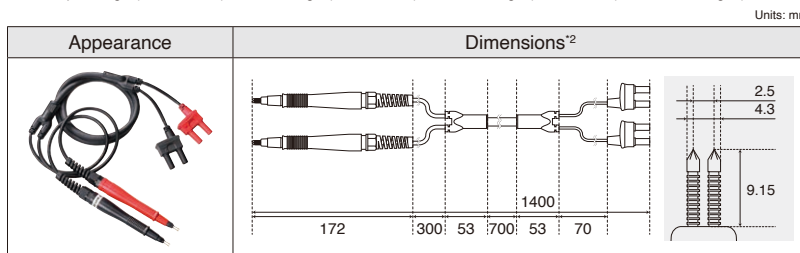


Please refer to the application note "Mastering Probing for Accurate Resistance Measurements" for probing techniques to minimize current density errors and improve repeatability.

For low-resistance measurement^{*1}

Pin interval: 2.5 mm

*1: Low resistance refers to the ranges listed below (current setting in parentheses), which use a measurement current of 100 mA or greater. Accuracy is not guaranteed when using other ranges. 1000 $\mu\Omega$ range (HIGH, LOW), 10 m Ω range (HIGH, LOW), 100 m Ω range (HIGH, LOW), 1000 m Ω range (HIGH only)



Tip Pin 9772-90
L2100 tip replacement

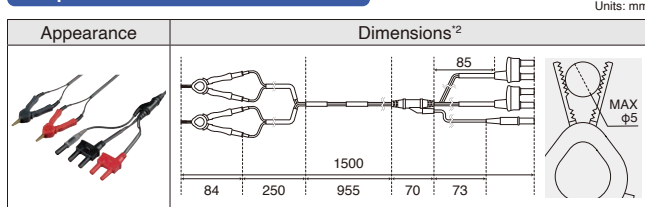
Exercise care to orient the measurement lead so that the SOURCE side is on the outside during measurement. The SENSE pin is indicated by a line on its base.

The L2100 lacks a guard plug. If you plan to measure high resistance values, please consider one of the following leads, which all have guard a plug.

Clip Type Lead L2101

This lead facilitates 4-terminal measurement and need only be clipped to the measurement target. Its convenient design frees the operator's hands for other tasks while measurement is ongoing. However, the L2100 is recommended for low-resistance ranges with a measurement current of 100 mA or greater.

Clipable diameter: 0.3 mm to 5 mm

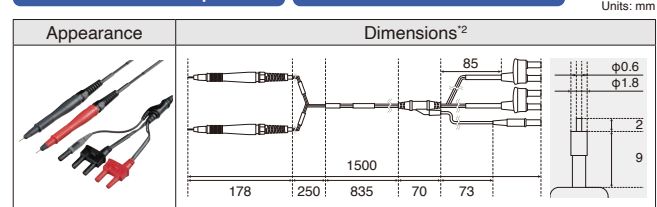


Pin Type Lead L2102

This lead facilitates 4-terminal measurement and need only be placed in contact with the measurement target. It's a convenient choice when testing flat terminals to which it's not practical to clip the leads or compact measurement targets with a small contact area.

Pin outer diameter: $\phi 1.8$ mm

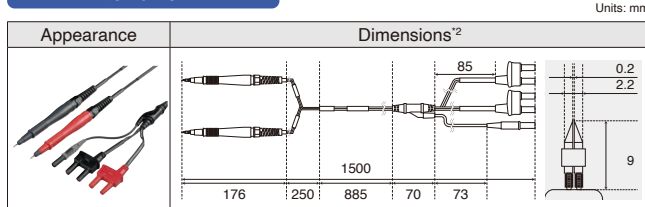
Pin interval: 0.6 mm



Pin Type Lead L2103

This lead facilitates 4-terminal measurement and need only be placed in contact with the measurement target. It's a convenient choice when testing compact measurement targets with a small contact area.

Pin interval: 0.2 mm



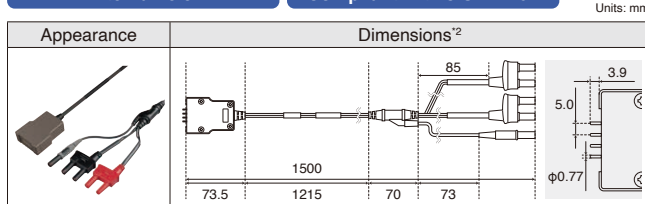
Four-Point Array Probe RM9010-01

RM3546 is not supported.

By using the dedicated PC application and simply pressing the probe against the measurement target, you can easily measure resistivity and conductivity using the four-point probe method. This is ideal for evaluating conductive sheet materials.

Pin interval: 5.0 mm

Compliant with JIS K 7194

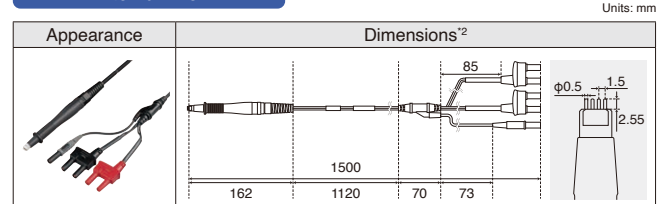


Four-Point Array Probe RM9010-02

RM3546 is not supported.

By using the dedicated PC application and simply pressing the probe against the measurement target, you can easily measure resistivity and conductivity using the four-point probe method. This is ideal for evaluating conductive sheet materials.

Pin interval: 1.5 mm






*2: dimensions other than total length are approximations.

PROBE KIT L9773

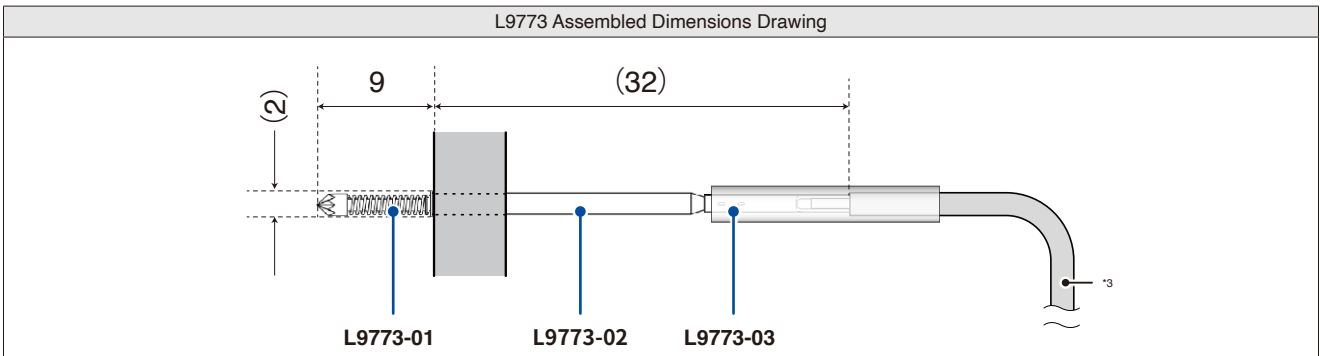
This can be used when building custom probe units.

- Wire diameter: AWG24-26
- Mounting hole diameter: 1.65 ± 0.02 mm (This is a reference value. Hioki recommends test drilling into an object of same material to double check the diameter.)
- Minimum mounting distance: 2.5 mm

Kit contents

PROBE TIPS × 10 (L9773-01)		PROBE TIP SOCKETS × 10 (L9773-02)	
PROBE TIP SOCKET ADAPTERS × 10 (L9773-03)			

Units: mm



*2: dimensions other than total length are approximations.
 *3: cables not included.