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# CYLINDER PROBES Installation, Operation and Maintenance





Figure 1. 222009 Probe Kit.

# Description

The Cylindrical Probe is to be used in conjunction with a resistance meter to measure point-to-point resistance, volume resistance, and resistance to ground in accordance with EN 61340-5. The probe has non-marking highly conductive pads. A cap is supplied with the probes that protects the pad when not in use. The insulating jacket and shape aid grip - insulation resistance is approximately  $10^{6}\Omega$ .

# Inspection

Remove the test unit from the carton and inspect for shipping damages.

Each 222008 unit includes the following:

1 Cylinder Probe, item #222008

Each 222009 unit includes the following:

2 Cylinder Probes, item #222008 1 Carry Case

# Instructions for Use

## Resistance to ground

Test resistance to ground to ensure that the conductive surfaces in the EPA are correctly grounded.

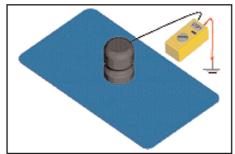


Figure 2. Resistance to ground test.

- 1. One cylindrical probe is required for this measurement.
- 2. Connect the probe to a megohm meter and place it on the surface to test.
- Connect the other ohmmeter lead to earth or to an ESD ground point.
- 4. Measure the resistance at 100V test voltage.

### Point to point resistance

Measure point to point resistance to check material properties.

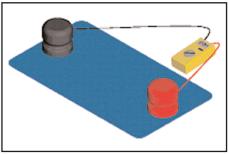


Figure 3. Resistance to point test.

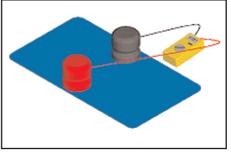


Figure 4. Resistance to point test.

- 1. Two cylindrical probes are required for this measurement
- 2. Connect the probes to a megohm meter.
- 3. Place the material to be tested on an insulative surface such as clean glass and place the probes on the material.
- 4. Measure the resistance at 100V test voltage.
- 5. Move the probes so as to measure in a cross direction and repeat the test.

#### Volume resistance

Measure volume resistance to check material properties

- 1. Two cylindrical probes are required for this measurement
- 2. Connect the probes to an ohmmeter.
- 3. Sandwich the test material between the two probes; the lower probe should be up side down so that its conductive rubber surface contacts the material to test. The two probes should be placed in line as precisely as possible.
- Measure the resistance at 100V test voltage.

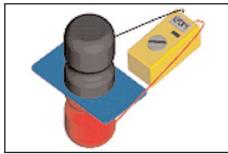


Figure 5. Volume resistance test.

# **Specifications**

Weight	2.3kg
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**Dimensions** 67 x 87 +/- 4mm

#### Diameter of contact surface 63mm

#### Probe internal resistance < 200Ω at low test voltage

#### Limited Warranty

Vermason expressly warrants that for a period of one (1) year from the date of purchase, Vermason Cylinder Probes will be free of defects in material (parts) and workmanship (labour). Within the warranty period, a unit will be tested, repaired or replaced at Vermason's option, free of charge. Call Customer Service at 0044 (0) 1462 672005 for a Return Material Authorisation (RMA) and for proper shipping instructions and address. Any unit under warranty should be shipped prepaid to the Vermason factory. You should include a copy of your original packing slip, invoice, or other proof of purchase date. Warranty repairs will take approximately two weeks.

If your unit is out of warranty, Vermason will quote repair charges necessary to bring your unit to factory standards. Call Customer Service at 0044 (0) 1462 672005 for a Return Material Authorisation (RMA) and proper shipping instructions and address.

#### Warranty Exclusions

THE FOREGOING EXPRESS WARRANTY IS MADE IN LIEU OF ALL OTHER PRODUCT WARRANTIES, EXPRESSED AND IMPLIED, INCLUDING MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE WHICH ARE SPECIFICALLY DISCLAIMED. The express warranty will not apply to defects or damage due to accidents, neglect, misuse, alterations, operator error, or failure to properly maintain, clean or repair products.

#### Limit of liability

In no event will Vermason or any seller be responsible or liable for any injury, loss or damage, direct or consequential, arising out of the use of or the inability to use the product. Before using, users shall determine the suitability of the product for their intended use, and users assume all risk and liability whatsoever in connection therewith.