

# Concentric Ring Probe Installation, Operation and Maintenance



Made in the  
United Kingdom



Figure 1. Desco Europe 222002 Concentric Ring Probe



Figure 2. Desco Europe 222003 Concentric Ring Probe Kit

## Description

The Desco Europe Concentric Ring Probe is an instrument to be used in conjunction with a resistance meter, such as the Desco [19290](#) Digital Surface Resistance Meter, to measure surface resistance per IEC 61340-2-3, the test method listed in Packaging Table 3 in EN 61340-5-1.

The Concentric Ring Probe can measure the volume resistance of planar materials using a flat conductive metal plate (not included).

The Concentric Ring Probe may be used for the resistance measurements of ESD packaging including static shielding and other bags.

The Desco Europe Concentric Ring Probe is compatible with the following Desco Europe Surface Resistance Meters:

Item	Description
<a href="#">19290</a>	Digital Surface Resistance Meter Kit
<a href="#">19291</a>	Digital Surface Resistance Meter
<a href="#">222637</a>	Analogue Surface Resistance Meter Kit
<a href="#">222638</a>	Analogue Surface Resistance Meter
<a href="#">225717</a>	Surface Resistance Checker
<a href="#">225718</a>	Surface Resistance Checker Kit

## Resistivity and Resistance

When it is appropriate to convert a resistance obtained by this test method to an equivalent resistivity, multiply the resistance measurements obtained by this method by ten. The conversion factor of ten is derived from the geometry of the electrode assembly. NOTE: Conversions to resistivity may not be valid for materials that are laminated, plated or metallised with conductive materials. This fact should be understood when users of this test procedure are required to satisfy specifications (sometimes given in "ohms/square").

## Packaging

### 222002 Concentric Ring Probe

- 1 Concentric Ring Probe
- 1 BNC / Banana Jack Adapter
- 1 Certificate of Calibration

### 222003 Concentric Ring Probe Kit

- 1 Concentric Ring Probe
- 1 BNC / Banana Jack Adapter
- 2 Test Leads
- 1 Carrying Case
- 1 Certificate of Calibration

## Operation

1. Connect the Concentric Ring Probe to a resistance meter using the included BNC / banana jack adapter and the meter's test leads.
2. Place the material to be tested on an insulative surface.
3. Place the Concentric Ring Probe on top of the material to be tested.
4. Take a resistance measurement using the resistance meter.

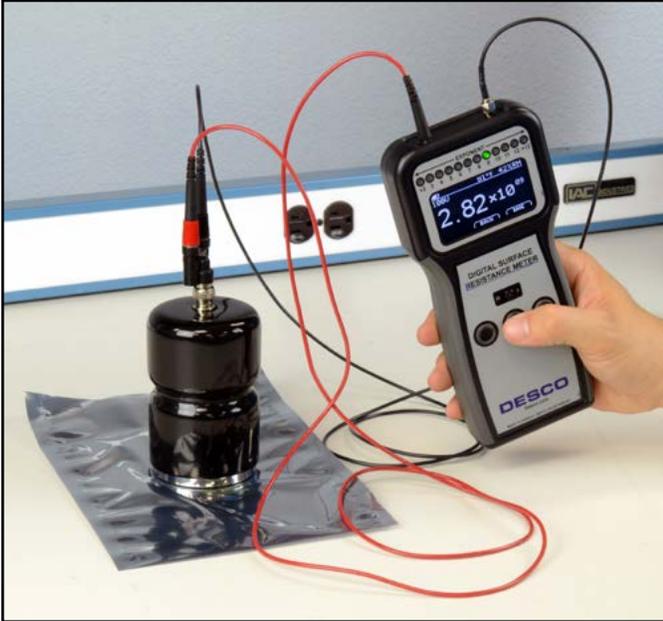


Figure 3. Using the Concentric Ring Probe with the Desco Digital Surface Resistance Meter



Figure 5. Using the Concentric Ring Probe with the Vermason Surface Resistance Checker



Figure 4. Using the Concentric Ring Probe with the Vermason Analogue Surface Resistance Meter

## Specifications

Dimensions (with BNC / banana jack adapter)	2.8" Dia. x 6.5" H (71 mm x 165 mm)
Outer Probe Diameter	2.5" (63 mm)
Inner Probe Diameter	1.2" (30 mm)
Weight	5.8 lbs. (2.6 kg)
Insulation Resistance Between Probes	>1 x 10 <sup>12</sup> ohms @ 500V
Probe Resistance of Carbon Pads	<100 ohms at low test voltage
Country of Origin	United Kingdom

### Limited Warranty, Warranty Exclusions, Limit of Liability and RMA Request Instructions

See the Desco Europe Warranty -

[DescoEurope.com/Limited-Warranty.aspx](http://DescoEurope.com/Limited-Warranty.aspx)