

■ Applications

The **DC Compact electric porosity detector** is ideal for the detection of pores and faults in dielectric (electrically insulating) coatings such as paint, enamel and plastic coatings on all metals, also on concrete.

The material-friendly **DC Compact** detector has proved itself indispensable on the production line and in the field, for instance in the production of pipelines, storage tanks, pipelines, enameled construction parts for the chemical industry, etc.

■ Equipment

The portable detector basically consists of a fully insulated plastic case and a high-voltage probe with brush. A special harness enables you to keep both hands free to operate the detector and support yourself.

■ Porosity detection

While testing, the **DC Compact** delivers a low-energy, high DC voltage. Applied voltage is continuously adjustable from 0-15kV or 0-30kV, according to model. The voltage level depends entirely on test sample coating thickness, which should be measured beforehand to avoid high-voltage damage. The correct applied voltage can then be read off from the coating thickness/voltage table in the DC Compact handbook delivered with every detector. To test for porosity, simply pass the brush slowly-approx. 30 cm/s-over the test surface. Any fault will produce a spark and also a visual and audible alarm. For optimal pore detection, we supply a selection of brushes, including flat brushes and also round brushes for internal and external pore detection on pipes.

Porosity Detector



Porosity Detector
DC Compact
Safe detection of
pinholes and flaws

DC COMPACT

porosity detector



Specifications

porosity detector DC15
porosity detector DC30

Test voltage DC15:	0 ... 15kV
Test voltage DC30:	0 ... 30kV
LCD	3 1/2 digits
Resolution DC15:	10 Volt
Resolution DC30:	100 Volt
Battery life:	>8 h
Unit weight:	2.2 kg
Packed weight:	6 kg
Short circuit, applied voltage	max 0.5mA
Length of high-voltage silicone connection lead:	2m
Dimensions:	260 mm x 160 mm x 70 mm

Technical features

- Dry porosity detection
- rechargeable battery – independent of mains
- very lightweight and compact
- continuously adjustable applied voltage from 0 to Max
- digital applied voltage indicator
- optical and audible alarm
- charge connector - allows operation while battery is charging
- removable battery pack for separate battery charging
- overcharge protection
- Battery condition indicator on LCD

Accessories & Spare parts

- power pack (slip-out gel cells)
- battery charger (110V/220V/240V)
- fan brush
- insulated extension (450 mm) with connector for spiral electrodes
- earth lead - 7 m long with clamp
- air-operated earphones
- fuse holder with fuse
- high-voltage cable with plug, 2 m long
- complete replacement high-voltage probe with cable and neon light holder
- replacement light for high-voltage probe
- DC high voltage detector with 7 m earth lead and clamp
- high voltage detector certification
- Surfex® coating thickness gauge, measuring range 0 - 1.500µm

Optional extras

- **flat straight brush** (brass electrodes 50 mm long)
Available in widths from 50 mm to 600 mm.
- **internal pipe brush** (brass electrodes 50 mm long)
available for internal pipe diameter 50 mm - 510 mm;
brushes Ø approx. 25 mm larger than pipe Ø; internal pipe brushes
for pipe Ø 50 mm - 75 mm are spiral-shaped; for pipe Ø over
100 mm, brushes are plate-shaped. When ordering, please state
exact internal pipe Ø.
- **External brush electrodes** (50 mm brass brushes)
available for external pipe diameter 33 mm - 510 mm:
internal brush Ø are approx. 10 mm smaller than the external pipe
diameter. Brushes have 2 or 4 guide rollers, according to size.
When ordering, please state exact external pipe Ø.
- **Spiral electrodes for external pipe** (with ball-headed
connector) available for external pipe diameter 50 mm - 1.210 mm.
The 450 mm connector with coil joiner is required for use with spiral
electrodes (standard kit in Pipeline version).
When ordering, please state exact external pipe Ø.

Controls and monitoring features

- LCD for high-voltage display
- 10-turn high voltage control
- ON/OFF switch
- alarm sensitivity control
- neon light alarm on detector and probe
- alarm via air-operated earphones
- separate applied voltage gauge

Delivery schedule

■ Industrial version:

Detector with probe, 7 m earth lead with clamp, fan brush, 250 mm flat brass wire brush, 450 mm extension, air-operated earphones, harness, voltage tester, battery charger, carry case.

■ Pipeline version:

Instead of the flat brass wire brush and extension, this model includes a spare power pack and 450 mm extension for round/spiral brushes

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