

DC Pinhole/Holiday Detectors



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A high-voltage DC holiday detector is a quick and effective means of locating defects and faults in non-conductive coatings over conductive materials. The detector unit is used in conjunction with a suitable electrode and passed over the entire coating area. Weak spots, faults and pinholes are located by the completion of an electrical circuit through the defect to the conductive material beneath; triggering the detector unit's alarm.

DC pinhole/holiday detectors have a wide range of applications across numerous industries; from locating leaks in flat roofs to integrity-testing corrosion resistant coatings on pipelines; from testing cable insulation to locating faults on waterproof bridge-deck coatings.

Buckleys manufacture a wide range of electrodes and accessories for our detectors; designed to make the testing process as effective and as quick as possible. In addition to this, we offer a range of kits which have been created with a specific purpose in mind and include a combination of accessories which are optimised for that application; such as our PHD Pro2 Basic, PHD Pro2 Standard/Pipeline and PHD Pro2 Coatings kits.

We also manufacture electrodes to customers' specifications as well as offering innovative solutions to unique testing situations or environments.



PHD Pro2 range

Buckleys PHD Pro2 pinhole/holiday detectors offer unsurpassed accuracy and reliability in a compact, battery-powered portable unit.

The highly versatile PHD Pro2 range is available in three outputs; the PHD Pro2 Max 6kV has an output voltage range of 500V to 6kV - ideal for testing thinner



coatings of between 4µm and 570µm, while the PHD Pro2 Max 30kV can test coatings thicknesses up to 14.4mm and the PHD Pro2 Max 40kV can test thicknesses up to 25.6mm.

The PHD Pro2 is available in three kit levels; Basic kit, Standard/Pipeline kit and Coatings kit.







The **Basic kit** (PHD Pro2 Max 6kV, Max 30kV and Max 40kV) offers an entry-level option; capable of performing basic coatings test procedures and is ideal for those who already have suitable accessories and electrodes.

Model	Part number
0.5-6kV	6002-0080
0.9-30kV	6002-0081
0.9-40kV	6002-0082

The **Standard/Pipeline kit** (PHD Pro2 Max 6kV, Max 30kV and Max 40kV) is configured to suit a range of test procedures; providing the ideal mobile pinhole/holiday detector kit for testing coatings outside of the factory/production environment.

Model	Part number
0.5-6kV	6002-0083
0.9-30kV	6002-0084
0.9-40kV	6002-0085

The **Coatings kit** (PHD Pro2 Max 6kV, Max 30kV and Max 40kV) includes an extensive range of accessories and electrodes, designed to handle a variety of test procedures. Supplied in a high-visibility transit case; the kit is ideal for on-site testing.

Model	Part number
0.5-6kV	6002-0086
0.9-30kV	6002-0087
0.9-40kV	6002-0088

Features

- Compact and portable
- Simple to use
- Multicolour display
- Menu available in EN, FR, DE, ES, IT, PT, PI, TR, RU, NL
- Visual and audible alarm with volume control
- Automatic output voltage selector via a range of standards
- Accurate sensitivity control
- IP65 ingress protection rating
- Compatible with PHD Pro' accessories
- Robust powder-coated, cast aluminium enclosure
- One year 'back to base' warranty
- UKCA and CE approved

Specifications

Specifications	DC voltage range	Sensitivity range	Testable thicknesses	Battery life*	Unit Weight	Dimensions
PHD Pro2 Max 6kV	0.5kV-6kV	10-450µA	Up to 576µm	16 hours*	1.64kg	172mm x 85mm x 235mm
PHD Pro2 Max 30kV	0.9kV-30kV	10-450µA	Up to 14.4mm	10 hours*	1.64kg	172mm x 85mm x 235mm
PHD Pro2 Max 40kV	0.9kV-40kV	10-450μΑ	Up to 25.6mm	8 hours*	1.64kg	172mm x 85mm x 235mm

^{*}Observed average battery life. Test voltage formula: NACE SP 0274.

Working altitude: <2000m

Temperature range: 0°C - +40°C

Accessories



Knurled Thumb-Nut & Back-Nut 6005-0465



PHD Pro2 High-Visibility Transit Case 6005-0457



Gold-plated Stackable 4mm Banana Plugs 2009-0037



45° Gauze Mesh Electrodes 6005-0235



PHD Pro2 Coiled Interconnecting Lead 6005-0519



Phosphor-Bronze Brush Electrodes (See Data Sheet F1)



Insulated Extension Rod End-Section 6005-0460



Insulated Extension Rod Mid-Section 6005-0459



5m Earth Lead 6005-0073



Drum Brush Electrode 6005-0237



Rolling Spring Electrode Attachment 6005-0547



Flexible Probe Electrode 6005-0239



Rechargeable D-Cell Battery 6005-0002



PHD Pro2 Carrying Bag 6005-0456



Anti-static Wristband 6005-0531



Trailing Earth Lead 6005-0079



Curved Phosphor-Bronze Brush Electrodes 6005-0146

Also available

We are able to make a wide variety of electrodes to suit our clients' requirements and we can offer innovative solutions to simplify the testing process.

We designed and manufactured this bespoke electrode system to test internal coatings on large-diameter sections of pipework. The electrode system is connected to a DC pinhole/holiday detector and drawn through pipework. Its double-leaf silicone-rubber electrode design ensures excellent contact is made with the coating.

For more information on Buckleys products, call our sales team on +44 (0)1303 278888, email sales@buckleys.co.uk or visit: www.buckleysinternational.com

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