

DATA SHEET E2 Silicon Rubber Electrodes

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Intermediate diameter internal pipework electrodes

A range of 5 electrodes for testing internal coatings on pipework sections with diameters of 32mm to 98mm.

Ideal for use with our range of DC holiday detectors and available with an M8 mounting thread as standard with options available for M12 or M20 thread attachment; this electrode system provides a highly-effective, reliable and gentle way of testing - without the risk of damaging coatings on the inner surface of pipework sections.

The two silicone-rubber electrode discs have cut-outs to aid flexibility without adverse distortion and are offset from each other to ensure contact is made with the entire circumference of the coating. The red spacers ensure the electrode discs do not stick together.

The silicone-rubber contact discs are precision-made and optimised to suit their stated test range. They are easy to replace and offer excellent contact and conductivity.

Nominal dia.	Min. dia.	Max. dia.	Part number
38mm	32mm	44mm	5700-0392
48mm	40mm	55mm	5700-0393
58mm	48mm	67mm	5700-0394
70mm	59mm	81mm	5700-0395
85mm	71mm	98mm	5700-0396



Silicone rubber electrodes for internal pipe inspection

Designed for use within an automated manufacturing process, these heavy-duty circular electrodes are designed to test the internal coatings on larger-diameter pipework sections using a high-voltage DC instrument.

Featuring two concentric, segmented electrode discs with locating holes to position each disc correctly on the electrode spindle, these electrodes ensure reliable contact with the entire coating during the test process.

Nominal dia.	Min. dia.	Max. dia.	Part number
100mm	92mm	110mm	5810-0001
120mm	108mm	132mm	5810-0002
150mm	131mm	164mm	5810-0003
190mm	163mm	208mm	5810-0004
245mm	206mm	268mm	5810-0005
320mm	265mm	350mm	5810-0006
425mm	348mm	465mm	5810-0007
575mm	466mm	629mm	5810-0008



Pipe Lance Connectors

The Pipe Lance Connector is designed to provide an insulated joint between lance sections (up to 20kV), and is provided with PTFE "wings" which centre the lance in the pipe to eliminate damage to the pipe lining and ensure that the test electrode is correctly aligned. Connector wings are available to suit the range of Intermediate Pipe Internal Electrodes from 55mm to 98mm. A plain connector is available for sizes from 34mm. to 55mm.

The Pipe Lance is a modular approach designed to provide an insulated lance (up to 20kV). Each lance section is 2.5m long, and features a fibreglass pultruded tube, aluminium threaded end bushes, and an internal HV cable. The sections simply screw into the connectors.

An Adaptor is available, allowing the lance to be connected directly to the HV output of a Buckleys PHD Pro, facilitating a simple and reliable approach to the inspection of internal pipe linings.

Item	Part number
50.46mm pipe bore Pipe Lance Connector	5700-0973
64.08mm pipe bore Pipe Lance Connector	5700-0976
87.98mm pipe bore Pipe Lance Connector	5700-0978
60mm pipe bore Pipe Lance Connector	5700-0733
73mm pipe bore Pipe Lance Connector	5700-0734
89mm nine hare Pine Lance Connector	5700-0741



Delta Series Circular Silicone Rubber **Electrode**

Nominal dia.	Min. dia.	Max. dia.	Part number
700mm	600mm	720mm	5700-0801
800mm	700mm	820mm	5700-0802
900mm	800mm	920mm	5700-0803
1000mm	900mm	1020mm	5700-0804
1100mm	1000mm	1120mm	5700-0805
1200mm	1100mm	1220mm	5700-0806
1300mm	1200mm	1320mm	5700-0807
1400mm	1300mm	1420mm	5700-0808



Additional Items

Pipe Lance Section	5700-0730
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The Pipe Lance is a modular approach designed to provide an insulated lance (up to 20kV). Each lance section is 2.5m long, and features a fibreglass pultruded tube, aluminium threaded end bushes, and an internal HV cable. The sections simply screw into the connectors.

Pipe Lance Adaptor	5700-0741
An Adaptor is available, allowing the lance to	be

connected directly to the HV output of a Buckleys PHD Pro, facilitating a simple and reliable approach to the inspection of internal pipe linings.

AFTER SALES SERVICE/TECHNICAL SUPPORT

All Buckleys products are manufactured under the controls established by a quality management system that meets the requirements of BS EN ISO 9001:2015 and are supplied with a one year 'back-to-base' warranty. The equipment is proven to be robust and reliable and will give years of service if maintained in accordance with our instructions. Buckleys provide full repair and calibration facilities; offering a fast tum-around service for customers' equipment. Advice on specific applications for all Buckleys products is available from our technical department. Contact us by phone or email using the contact details below.

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Our Thin Pipe Electrodes provide a simple and effective method of testing a wide range of internal pipework coatings in a variety of diameters and lengths.

Designed to easily and reliably inspect pipework linings of between 18mm and 40mm in diameter and with cable lengths from 1m to 12.5m; this electrode is made to suit the customer's requirements.

Attachment to the test instrument's output via an M8 thread makes connection to any Buckleys high-voltage test instrument — such as the PHD Pro' and DCCT ranges — a simple process.

The electrode's body is made from PVC — a material with well-proven electrical insulation properties — enabling the electrode to impart up to 30kV to the test area dependably and safely, while its double-insulated supply cable is firm enough to feed the electrode through pipework, yet flexible enough to negotiate and test curved sections with ease.

The pliable silicone-rubber contacts are replaceable and ensure the entire lining is tested without the risk of damage to the coating from abrasion.

This electrode system is manufactured to suit each individual application; please contact our sales team to discuss your requirements.





Straight silicone rubber electrodes

Straight silicone rubber electrodes are available in a wide range of lengths and at either a 180° or 45° angle.

Ideal for testing coatings which may be too delicate for phosphor-bronze brush electrodes.

Length	Angle	Part Number
50mm	45°	6005-0470
100mm	45°	6005-0471
100mm	180°	6005-0132
150mm	180°	6005-0134
150mm	45°	6005-0135
200mm	180°	6005-0136
250mm	180°	6005-0137
300mm	180°	6005-0139
350mm	180°	6005-0972
400mm	180°	6005-0141
450mm	180°	6005-0142
500mm	180°	6005-0143
600mm	180°	6005-0144
1200mm	180°	6005-0266

We are also able to design, engineer and manufacture bespoke electrode solutions for specific applications and environments. Contact our sales team to discuss your requirements.

NOTE: to ensure the stability of the output voltage, large electrodes should not be used with AC spark testers. The recommended maximum size is 150mm.

NOTE: Due to ongoing technical developments, all stated information is typical and is subject to change without notice or obligation.

Additional Items



Electrode Adaptor 6005-0

Connecting straight silicone rubber electrodes directly to the test probe handle.



Knurled thumbnut and backnut

6005-0465

Knurled thumb nut and backnut for metric extension rods
to be used with the PHD Pro', PST and Dry Roof Pro'
ranges.

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