

elcometer®
inspection equipment



Pinhole & Porosity
Detection



Premature corrosion of a substrate is usually due to a coating failure. A major cause is the presence of flaws in the finished coating.

Collectively referred to as porosity, the main types of flaws are:

Runs & Sags: Coatings move under gravity leaving a thin dry film.

Cissing: When a coating does not re-flow to cover the voids generated by air bubbles being released from the surface of a coating.

Cratering: If the substrate is wet or the coating has poor flow characteristics, voids are created in the coating.

Pinholes: Caused by air entrapment which is then released from the surface, or by the entrapment of particulates (dust, sand etc.) which do not stay in place.

Over Coating: If too much coating is applied, as it cures internal stresses of the coating can cause it to crack.

Under Coating: Uncoated areas, or where the coating flows away from edges or corners of a substrate or welds. Insufficient coating over a rough surface profile may also leave the peaks of the profile exposed.

There are essentially, three flaw detection methods in our range:

Wet Sponge Technique: A low voltage is applied to a moist sponge. When the sponge moves over a coating flaw, liquid penetrates to the substrate and completes an electrical circuit, setting off the alarm. The wet sponge technique is suitable for measuring insulating coatings less than 500µm (20mils) on conductive substrates, and is ideal for powder coatings and other coatings where the user does not wish to damage the coating.

High Voltage Technique: The high voltage, or porosity technique, can be used to test coatings up to 25mm (1") thick and is ideal for inspecting pipelines and other protective coatings. Coatings on concrete can also be tested using this method.

A power supply generates a high voltage DC or pulsed DC to a probe. As the probe passes over a flaw, a spark at the contact point sets off the alarm. This technique is suitable for locating the types of flaws described above, although care is required on thin coatings.

UV Pinhole Detection: UV light can be used as a low cost, quick method of detecting pinholes in coatings. A base coat containing a UV fluorescing additive is applied. When the UV flashlight shines on the coating, areas where the base coat is not covered fluoresce, identifying the location of the pinhole.



Pinhole & Porosity

Elcometer 270

Pinhole Detector

The **Elcometer 270** sets the standard for wet sponge, high quality, low voltage detectors which are supplied with a wide range of accessories to meet your requirements.



A wide range of wand accessories available

Visual and audible alarms indicate a pinhole

User selectable voltages: 9V, 67.5V or 90V

Easy release, snag proof cables - available in 4m (13'2") & 10m (32'10") lengths

Automatic internal voltage check ensures that the selected voltage can be achieved

Each unit can be converted into a separate wand with a base unit using the separate wand adaptor

etv video available
elcometer.tv

STANDARDS:

AS 3894.2, ASTM D 5162-A, ASTM G6, ASTM G62-A, BS 7793-2, ISO 8289-A, ISO 14654, JIS K 6766, NACE RP 0188, NACE SP 0188, NACE TM0384

Elcometer 270

Pinhole Detector

Accessories

**Standard wand**

A universal flat sponge to suit almost all applications

**Spare flat sponge set
Pack of 3 sponges;**

150 x 60 x 25mm (6 x 2.3 x 1")

T27016867

**Roller sponge wand**

Ideal for large flat surface inspection

Spare roller sponge

T27016960

T27018051

**Telescopic wand adaptor**

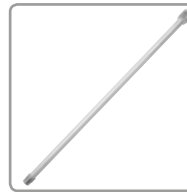
with belt clip - extends to 1m(39"), ideal for floors or high areas

Separate wand adaptor

with belt clip - converts the gauge into a separate pinhole detector

T27016998

T27016999

**Extension piece**

420mm (16.5") extensions to expand operators reach. Additional extension pieces can be connected to each other

T27016965

**Pinhole Inspector's Kit**

The complete pinhole detection kit.

Each kit is supplied with:

- 1 x separate wand handle & lead
 - 1 x roller wand
 - 1 x 10m (32') signal return cable
 - 2 x extension pieces
 - 1 x telescopic extension
 - 1 x belt clip
 - 1 x bottle of wetting agent
 - 3 x AA batteries
 - 1 x spare flat sponge
 - 1 x spare roller sponge
- The kit does not include the main instrument; just add the model number to the order

T27018191

**Return cable - 4m (13')**

supplied as standard, complete with crocodile clip and connection plug

T99916954

Return cable - 10m (32')

supplied on a drum, complete with clip and connection plug

T99916996

**Wetting agent**

50ml (1.7floz) bottle - helps aid the fast detection of pinholes. Just add to the water used to dampen the sponge

T27018024

Technical Specification

| Model | Elcometer 270/3 | Elcometer 270/4 | Certificate |
|-------------------------------|--|--|-------------|
| Part Number | D270----3 | D270----4 | |
| Part Number with Certificate | D270----3C | D270----4C | ● |
| Voltage | 9V and 90V | 9V, 67.5V and 90V | |
| Coating Range (Max) | 500µm (20mils) | 500µm (20mils) | |
| Sensitivity | 9V: 90kΩ ±5% 90V: 400kΩ ±5% | 9V: 90kΩ ±5% 67.5V: 125kΩ ±5% 90V: 400kΩ ±5% | |
| Battery Life (continuous use) | 9V: up to 200 hours 90V: up to 80 hours | 9V: up to 200 hours 67.5V: up to 100 hours 90V: up to 80 hours | |
| Battery Type | 3 x AA batteries (rechargeable batteries can also be used, but battery life will be reduced by up to 75%) | | |
| Accuracy of Setting | ±5% | | |
| Dimensions | Without wand 210 x 42 x 37mm (8.3 x 1.7 x 1.5") Standard wand 175mm (6.9") long (including sponge) | | |
| Weight | 610g (21oz) including wand, cable and batteries | | |
| Packing List | Pinhole Detector, standard wand and flat sponge, 4m (13' 2") return lead with crocodile clip, 3 x AA (LR1600) batteries and operating instructions | | |

● Calibration Certificate supplied as standard.

Elcometer 280

Pulsed DC Holiday Detector

The **Elcometer 280** is a 'stick type' holiday detector which has been designed to make pulsed DC high voltage holiday detection safer, easier and more reliable than ever before.



Ideal for testing clean, damp, dirty or slightly conductive coatings

Flashing display, bright LED and a user adjustable volume alarm indicates detection of a holiday

0.5 - 35kV range (user selectable) for detecting porosity in coatings up to 25mm (1") thick

Safety trigger integrated inside the handle cuts power if released

Voltage calculator automatically sets the correct voltage from your coating thickness value

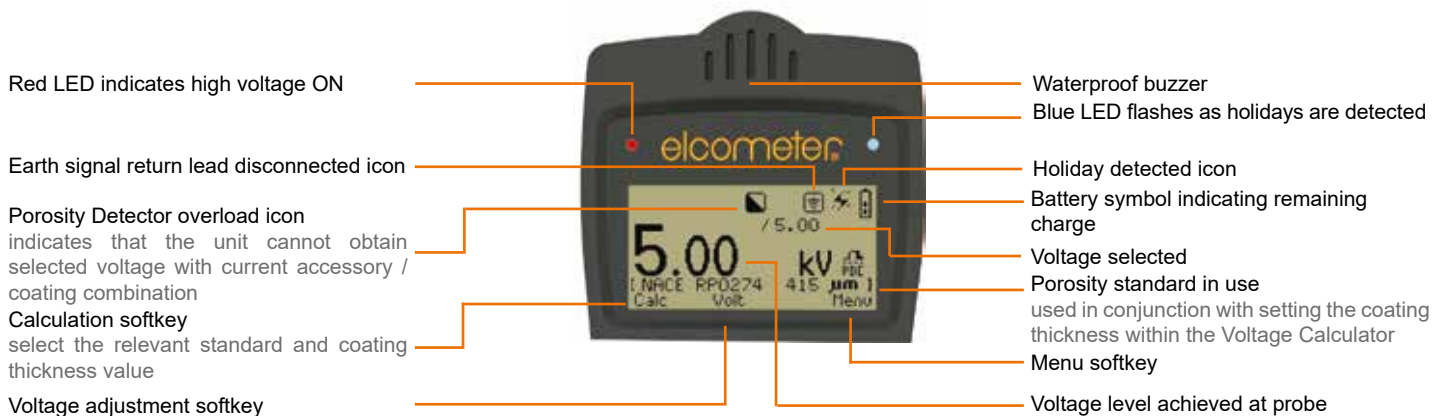
Internal jeep tester ensures that the selected voltage equals the test voltage



STANDARDS:
AS 3894.1, ANSI/AWWA C203, ANSI/AWWA C214, ASTM D4787, ASTM D5162, ISO 2746, ISO 29601, JIS G 3491, JIS G 3492, NACE RP0274, NACE SP0188, NACE SP0490, NACE TM0186, NACE TM0384

Elcometer 280

Pulsed DC Holiday Detector



* the battery life is dependant on selected voltage and load applied - see Technical Specification for more information

Elcometer 280



Right angled wire brush probe



Internal circular wire pipe brush probe



Band brush probes



External 'C-type' wire brush



Right angled rubber probe



Rolling Springs

Pulsed DC Holiday Detector

Powerful

The high voltage pulsed DC technique is used to detect holidays in coatings - even if the coating is damp, dirty or slightly conductive.

Safe

Featuring a two stage safety switch, bright LED's and screen icons which signify when the high voltage is on. It is designed with extended ribbing to protect the user from spark creep.

User Friendly

Balanced, ergonomic design, complete with shoulder strap allows long periods of continuous use.

Versatile

Using the wide range of probe accessories, users can detect porosity/holidays in coatings up to 25mm (1") thick.

Tough

Rugged, shockproof and water resistant, each unit is designed for use even in the harshest of environments.



Elcometer 280

Pulsed DC Holiday Detector

Technical Specification

| Description | Model S | Model T | Certificate |
|---|--|------------|-------------|
| Elcometer 280 Pulsed DC Holiday Detector Inspection Kit | D280-S-KIT | D280-T-KIT | ○ |
| Elcometer 280 Pulsed DC Holiday Detector | D280-S---- | D280-T---- | ○ |
| Rugged, Shockproof & Water Resistant | ■ | ■ | |
| Integrated Safety Trigger Switch | ■ | ■ | |
| Quick Release Battery Pack | ■ | ■ | |
| Internal Jeep Tester | ■ | ■ | |
| Integrated Voltage Calculator | | ■ | |
| Pulsed DC High Voltage Range | 0.5kV - 35kV | | |
| Voltage Adjustment | User adjustable: 0.5 - 1kV: 10 Volt steps, 1 - 35kV: 100V steps | | |
| High Voltage Output Accuracy | ±5% or ±50V below 1000 Volts | | |
| Pulse Repetition Rate | ~30Hz | | |
| Operating Temperature | 0°C to 50°C (32°F to 120°F) | | |
| Power Supply | Rechargeable Battery pack; battery fully charged within 4 hours | | |
| Typical Battery Life | Battery life is dependent upon selected voltage and load applied; 12" (DN305) Rolling Spring: 30 hours at 10kV; 12 hours at 35kV 40" (DN1016) Rolling Spring: 22 hours at 10kV; 8 hours at 35kV | | |
| Instrument Case Dimensions | PC ABS case; (l x w x h): 603 x 219 x 193mm (23.7 x 8.6 x 7.6") | | |
| Weight (no probes attached) | 3.0kg (6.6lb) - including battery pack | | |
| Packing List | Elcometer 280 Pulsed DC Holiday Detector Gauge (Model S or T), 5m (16') trailing signal return lead, battery pack, battery charger with UK, EUR, US and AUS plugs, shoulder strap and operating instructions Elcometer 280 Pulsed DC Holiday Detector Inspection Kit Gauge (Model S or T), 5m (16') trailing signal return lead, battery pack (2 supplied with Model T), battery charger with UK, EUR, US and AUS plugs, stainless steel rolling spring holder (supplied with Model T only), 250mm (9.8") probe extension shaft, shoulder strap and operating instructions - packed in a light weight, rugged, wheeled transit case - ideal for transportation | | |

Accessories

| | |
|---|-------------|
| Lightweight, rugged, wheeled transit case - ideal for gauge transportation, with additional space to house up to 20m (66') of phosphor bronze or 6m (30') of stainless steel rolling spring | T28022769 |
| Grounding mats are ideal for testing on ungrounded pipes. The conductive rubber mat is wrapped around the coated pipe and connected to both the grounding pin (supplied separately) and the signal return lead. | |
| 750mm (29.5") long - for pipe diameters up to 9" (NPS)/ 229mm (DN) | T28022637-1 |
| 1500mm (59") long - for pipe diameters up to 18" (NPS)/ 457mm (DN) | T28022637-2 |
| 2500mm (98.5") long - for pipe diameters up to 30" (NPS)/ 762mm (DN) | T28022637-3 |
| 3500mm (137.5") long - for pipe diameters up to 42" (NPS)/ 1067mm (DN) | T28022637-4 |
| Grounding pin; 60cm (23.5") long x 0.2cm (0.75") diameter | T28022748 |
| Trailing signal return lead, 5m (16') | T28022622 |
| 10m (32') earth lead, clips each end (for use with the grounding mat) | T28022749 |
| 10m (32') earth lead, clip / Elcometer 280 connector (for use with the grounding mat) | T28022750 |

For a full range of rolling springs, rubber or wire brush probes and other accessories see page 9-24



○ Optional Calibration Certificate available.

Pinhole & Porosity

Elcometer 266

Holiday Detector

The **Elcometer 266** revolutionises High Voltage DC testing of coatings porosity detection making it safer, easier and more reliable than ever before.

A wide range of probe brushes and rolling springs available

Visual and audible alarms, Bright LEDs on the handle, as well as a loud buzzer, clearly indicate when a holiday is detected

Adjustable Voltage:
0.5kV - 1kV in 50V steps
1kV - 30kV in 100V steps

To change maximum voltage range, select a different handle; 5kV, 15kV or 30kV DC or 30kV DC continuous

Dual safety switch on handle to avoid accidental switch on (grey/orange probe handles only)

Internal Voltmeter/Jeep tester ensures that the test voltage equals the selected voltage

STANDARDS:

ANSI/AWWA C213, AS 3894.1, ASTM C 536, ASTM C 537, ASTM D 4787, ASTM D 5162-B, ASTM G 62-B, BS1344-11, DIN 55670, EN 14430, ISO 2746, ISO 29601, JIS K 6766, NACE RP0274, NACE RP0188, NACE RP0190, NACE RP0490, NACE SP0188, NACE SP0490

2 YEAR*
WARRANTY

etv video available
elcometer.tv

* The Elcometer 266 main instrument and the Elcometer 266 probe handles are supplied with a 1 year warranty against manufacturing defects. The warranty can be extended free of charge to 2 years within 60 days of purchase via www.elcometer.com.

Elcometer 266**Holiday Detector**

Right angled wire brush probe



Internal circular wire pipe brush probe



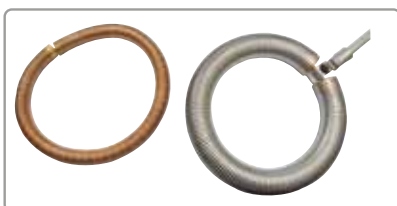
Band brush probes



External 'C-type' wire brush



Right angled rubber probe



Rolling Springs

Powerful

The Elcometer 266 can be used to test porosity on coatings up to 7.5mm (300mils) thick and is ideal for inspecting coatings on pipelines and other protective coatings.

Safe

Featuring a dual safety switch on the handle to avoid accidental switch on and specialised ribbing provides superior protection.

User Friendly

The voltage calculator automatically sets the correct voltage from your coating thickness value. No need to use look up tables.

Versatile

To change maximum voltage range, select a different handle; 5kV, 15kV or 30kV DC or 30kV DC continuous.

Easy to Use

Bright LEDs on the handle, as well as a loud audible alarm, clearly indicates if the gauge is on (Red) and when a spark is detected (Blue).

Elcometer 266

Holiday Detector



Interchangeable DC probe handles*

| Part Number | Description |
|-------------|--------------------|
| T26620033-1 | DC5 (0.5 - 5kV) |
| T26620033-2 | DC15 (0.5 - 15kV) |
| T26620033-3 | DC30 (0.5 - 30kV) |
| T26620033-4 | DC30S (0.5 - 30kV) |



Integrated voltage calculator

Enter the test standard & the coating thickness then the gauge will automatically programme the correct voltage



Testing has never been safer

Ribbing provides additional user protection - specifically designed to meet EN 61010



Second hand grip is available

Ideal for testing pipes and tank floors with 2 hands - without compromising safety

| Part Number | Description |
|-------------|------------------|
| T26620081 | Second Hand Grip |



Removable, quick charge batteries

Fully charge the battery pack in 4 hours, within the gauge or separately, for up to 40 hours of continuous testing

| Part Number | Description |
|-------------|---------------------------------------|
| T99923482 | Rechargeable lithium ion battery pack |



Universal probe adaptors

Enables the Elcometer 266 to work with all major holiday detector's accessories.

Technical Specification

| Description | Part Number | Certificate |
|---|--|-------------|
| Elcometer 266* | D266----4 | ○ |
| High Voltage Output Accuracy | ±5% or ±50V below 1000 Volts | |
| Operating Temperature | 0°C to 50°C (32°F to 120°F) | |
| Power Supply | Rechargeable Battery Pack; battery fully charged within 4 hours | |
| Measured Current Flow Accuracy | ±5% of full scale ; 0 - 100µA maximum Output Current | |
| Typical Battery Life - Backlight Off (On) | DC5: 40 (20) hours DC15: 20 (15) hours DC30: 10 (8) hours | |
| Instrument Case Dimensions | Waterproof, ABS case; 520 x 370 x 125mm (20.5 x 14.5 x 5") | |
| Weight | Base unit (including battery pack): 1.2kg (2.7lb) Handle: 0.6kg (1.3lb) | |
| Packing List | Elcometer 266 DC Holiday Detector, battery pack, curly connection cable for high voltage handle, 10m (32') signal return lead, battery charger with UK, EUR, US and AUS plugs, band brush, shoulder strap, tough plastic carry case and operating instructions | |

Probe Handles*

The Elcometer 266 does not include the probe handle; please select the required handle from the list below.

| Part Number | Description | Voltage Range | Certificate |
|--------------|---|--------------------|-------------|
| T26620033-1 | Elcometer 266 Probe Handle Voltage | DC5 (0.5 - 5kV) | ○ |
| T26620033-1C | Elcometer 266 Probe Handle Certified | DC5 (0.5 - 5kV) | |
| T26620033-2 | Elcometer 266 Probe Handle Voltage | DC15 (0.5 - 15kV) | ○ |
| T26620033-2C | Elcometer 266 Probe Handle Certified | DC15 (0.5 - 15kV) | |
| T26620033-3 | Elcometer 266 Probe Handle Voltage | DC30 (0.5 - 30kV) | ○ |
| T26620033-3C | Elcometer 266 Probe Handle Certified | DC30 (0.5 - 30kV) | |
| T26620033-4 | Elcometer 266 Probe Handle Voltage (Continuous Voltage) | DC30S (0.5 - 30kV) | ○ |
| T26620033-4C | Elcometer 266 Probe Handle Certified (Continuous Voltage) | DC30S (0.5 - 30kV) | |
| T26620081 | Second Hand Grip | | |

* The Elcometer 266 main instrument and the Elcometer 266 probe handles are supplied with a 1 year warranty against manufacturing defects. The warranty can be extended free of charge to 2 years within 60 days of purchase via www.elcometer.com.

○ Optional Calibration Certificate available.

Elcometer 236

Holiday Detector

The **Elcometer 236** Holiday Detector provides high voltage porosity testing to detect pits, flaws, holes, etc., in a wide variety of non-metallic coatings.



Standard and telescopic handles available for hard to reach areas

Available in 2 versions; 15 and 30kV; fully adjustable in 100 Volt steps

Integrated neon bulb in the handle, together with buzzer indicate when a holiday has been located

A wide range of probe brushes and springs available



- STANDARDS:**
- ANSI/AWWA C213, AS 3894.1,
 - ASTM C 536, ASTM C 537,
 - ASTM D 4787, ASTM D 5162-B,
 - ASTM G 62-B, BS1344-11,
 - DIN 55670, EN 14430, ISO 2746,
 - ISO 29601, JIS K 6766,
 - NACE RP0274, NACE RP0188,
 - NACE RP0190, NACE RP0490,
 - NACE SP0188, NACE SP0490

Elcometer 236

Holiday Detector



The Elcometer 236 provides the user with complete control of voltage and sensitivity settings and is available in 2 versions, 15kV and 30kV.

Each unit is supplied in a convenient carry case which also holds the probe handle and an additional (optional) external rechargeable battery pack which doubles the testing time available.

Due to its unique design, the probe handle can be replaced with a telescopic probe handle - extending the measurement reach up to almost 4m (13'), ideal for testing on large/high structures.

Technical Specification

| | Elcometer 236 15kV | Elcometer 236 30kV | Certificate |
|------------------------------|--|--------------------------|-------------|
| Part Number | D236--15KV | D236--30KV | ○ |
| Part Number with Certificate | D236--15KVC | D236--30KVC | ● |
| Voltage Output | 0.5 - 15kV in 100V steps | 0.5 - 30kV in 100V steps | |
| Display Resolution | 0.01kV | 0.1kV | |
| Approximate Thickness Range | 0 - 3.75mm (0 - 150mils) | 0 - 7.5mm (0 - 300mils) | |
| Alarms | Audible & Visual | | |
| Operating Temperature | 0°C to 50°C (32°F to 120°F) | | |
| Power Supply | 12V internal rechargeable battery | | |
| Battery Life (approximate) | 10/12 hours continuous use, 20/24 hours with the optional external battery pack | | |
| Dimensions | 200 x 170 x 70mm (6 x 7 x 3") | | |
| Weight | 2.8kg (6lb 3oz) | | |
| Packing List | Elcometer 236, probe handle and lead, band brush probe, 2m (79") & 10m (394") signal return/earth leads, battery charger with 3 mains cables (UK, EUR and US), carry case, transit case and operating instructions | | |

Accessories

| | |
|-------------|--|
| T23622790-1 | Telescopic probe handle, 600 - 1200mm (24 - 47") |
| T23622790-2 | Telescopic probe handle, 1800 - 3600mm (71 - 142") |
| T236139031 | 2m (6.5') earth signal return lead |
| T236139032 | 10m (32') earth signal return lead |
| T23615550 | Additional external battery pack (doubles operational use between charges) |





For a full range of rolling springs, rubber or wire brush probes and other accessories see page 9-24

● Calibration Certificate supplied as standard.

○ Optional Calibration Certificate available.

Elcometer 236, 266 & 280 High Voltage Holiday Detector Accessories

Wire Brush Probes, flat brush, internal and external pipe brush probes

| Part Number | Description | | | Compatible with | | | |
|--|-------------------------------------|---|-------|-------------------------------------|-------------------------------------|-------------------------------------|-------------------------------------|
| | | | | Elcometer 236 | Elcometer 266 | Elcometer 280 | |
| | | | | Width | | | |
|  | T99920022-1 | Right angled wire brush probe | 0.25m | 9.8" | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> |
| | T99920022-2 | Right angled wire brush probe | 0.50m | 19.7" | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> |
| | T99920022-3 | Right angled wire brush probe | 1.00m | 39" | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> |
| | T99926621 | Spare wire brush electrode | 0.25m | 9.8" | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> |
| | T99926622 | Spare wire brush electrode | 0.50m | 19.7" | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> |
| | T99926623 | Spare wire brush electrode | 1.00m | 39" | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> |
| | | | | Diameter | | | |
|  | T99920071-1 | Internal circular wire pipe brush probe | 38mm | 1.5" | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> |
| | T99920071-2 | Internal circular wire pipe brush probe | 51mm | 2.0" | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> |
| | T99920071-3 | Internal circular wire pipe brush probe | 64mm | 2.5" | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> |
| | T99920071-4 | Internal circular wire pipe brush probe | 76mm | 3.0" | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> |
| | T99920071-5 | Internal circular wire pipe brush probe | 89mm | 3.5" | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> |
| | T99920071-6 | Internal circular wire pipe brush probe | 102mm | 4.0" | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> |
| | T99920071-7 | Internal circular wire pipe brush probe | 114mm | 4.5" | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> |
| | T99920071-8 | Internal circular wire pipe brush probe | 127mm | 5.0" | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> |
| | T99920071-9 | Internal circular wire pipe brush probe | 152mm | 6.0" | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> |
| | T99920071-10 | Internal circular wire pipe brush probe | 203mm | 8.0" | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> |
| | T99920071-11 | Internal circular wire pipe brush probe | 254mm | 10" | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> |
| | T99920071-12 | Internal circular wire pipe brush probe | 305mm | 12" | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> |
| | T99920071-13 | Internal circular wire pipe brush probe | 356mm | 14" | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> |
| | T99920071-14 | Internal circular wire pipe brush probe | 406mm | 16" | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> |
| | T99920071-15 | Internal circular wire pipe brush probe | 508mm | 20" | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> |
| | T99920071-16 | Internal circular wire pipe brush probe | 610mm | 24" | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> |
| T9993766- | Spare circular wire brush electrode | 38mm | 1.5" | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | |
| T9993767- | Spare circular wire brush electrode | 51mm | 2.0" | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | |
| T9993768- | Spare circular wire brush electrode | 64mm | 2.5" | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | |
| T9993769- | Spare circular wire brush electrode | 76mm | 3.0" | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | |
| T9993770- | Spare circular wire brush electrode | 89mm | 3.5" | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | |
| T9993771- | Spare circular wire brush electrode | 102mm | 4.0" | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | |
| T9993772- | Spare circular wire brush electrode | 114mm | 4.5" | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | |
| T9993773- | Spare circular wire brush electrode | 127mm | 5.0" | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | |
| T9993774- | Spare circular wire brush electrode | 152mm | 6.0" | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | |
| T9993775- | Spare circular wire brush electrode | 203mm | 8.0" | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | |
| T9993776- | Spare circular wire brush electrode | 254mm | 10" | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | |
| T9993777- | Spare circular wire brush electrode | 305mm | 12" | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | |
| T9993778- | Spare circular wire brush electrode | 356mm | 14" | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | |
| T9993779- | Spare circular wire brush electrode | 406mm | 16" | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | |
| T9993780- | Spare circular wire brush electrode | 508mm | 20" | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | |
| T9993781- | Spare circular wire brush electrode | 610mm | 24" | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | |

Older Elcometer 236 models may require adaptor piece T99922768

Elcometer 236, 266 & 280 High Voltage Holiday Detector Accessories

Wire Brush Probes, band brush, flat brush, internal and external pipe brush probes



| Part Number | Description | Compatible with | | |
|-------------|---|--------------------------|-------------------------------------|-------------------------------------|
| | | Elcometer 236 | Elcometer 266 | Elcometer 280 |
| T99922752 | 'C-type' wire brush holder ¹ (order C-type brush from the list below) | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> |
| T99922907 | 'C-type' wire brush support handle ² | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> |



| | Description | Outside Diameter (OD) | | | | |
|--------------|------------------------------|-----------------------|----------|-------------------------------------|-------------------------------------|-------------------------------------|
| | | DN | NPS | | | |
| T99922745-1 | External 'C-type' wire brush | 150 - 250mm | 6 - 9" | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> |
| T99922745-2 | External 'C-type' wire brush | 250 - 350mm | 9 - 12" | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> |
| T99922745-3 | External 'C-type' wire brush | 350 - 450mm | 12 - 16" | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> |
| T99922745-4 | External 'C-type' wire brush | 450 - 550mm | 16 - 20" | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> |
| T99922745-5 | External 'C-type' wire brush | 550 - 650mm | 20 - 24" | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> |
| T99922745-6 | External 'C-type' wire brush | 650 - 750mm | 24 - 28" | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> |
| T99922745-7 | External 'C-type' wire brush | 750 - 850mm | 28 - 32" | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> |
| T99922745-8 | External 'C-type' wire brush | 850 - 950mm | 32 - 36" | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> |
| T99922745-9 | External 'C-type' wire brush | 950 - 1050mm | 36 - 40" | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> |
| T99922745-10 | External 'C-type' wire brush | 1050 - 1150mm | 40 - 44" | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> |

¹ Wire brush supplied separately

² Wire brush support handle ideal for two handed use or second person for large diameters

Conductive Rubber Probes



| | Description | Width | | | | |
|--------------|---------------------------|--------|-------|-------------------------------------|-------------------------------------|-------------------------------------|
| | | mm | in | | | |
| T99920022-11 | Right angled rubber probe | 250mm | 9.8" | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> |
| T99920022-12 | Right angled rubber probe | 500mm | 19.7" | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> |
| T99920022-13 | Right angled rubber probe | 1000mm | 39" | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> |
| T99920022-14 | Right angled rubber probe | 1400mm | 55" | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> |
| T99926731 | Spare rubber electrode | 250mm | 9.8" | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> |
| T99926732 | Spare rubber electrode | 500mm | 19.7" | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> |
| T99926733 | Spare rubber electrode | 1000mm | 39" | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> |
| T99926734 | Spare rubber electrode | 1400mm | 55" | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> |

Band brush probes



| | | | | |
|-----------|-----------------------------|--------------------------|-------------------------------------|-------------------------------------|
| T99919975 | Band brush probe | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> |
| T99922751 | Phosphor bronze brush probe | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> |

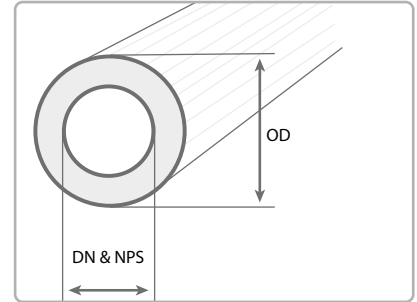
Older Elcometer 236 models may require adaptor piece T99922768

Elcometer 236, 266 & 280 High Voltage Holiday Detector Accessories

Rolling Springs Available in phosphor bronze or stainless steel

Each spring is supplied with an easy-release coupling piece, allowing users to quickly connect and disconnect the rolling spring from stanchions, pillars, etc.

Please note that rolling springs are not supplied with a spring holder. Please order the appropriate rolling spring holder separately.



Rolling springs are available in 2 versions, phosphor bronze round spring and 304 stainless steel box section spring. The 19mm (0.75") diameter phosphor bronze springs are almost 3 times lighter than the 34mm (1.33") diameter stainless steel springs.

Rolling Spring Dimensions

| Part Number | | Nominal Pipe Size | | Pipe Outside Diameter (OD) | | | |
|-----------------|-----------------|-------------------|----------|----------------------------|--------|------------|--------|
| | | DN | NPS | millimetres (mm) | | inches (") | |
| Phosphor Bronze | Stainless Steel | (mm) | (inches) | min OD | max OD | min OD | max OD |
| T99920438-15A | - | 40 | 1.5 | 48 | 54 | 1.9 | 2.1 |
| T99920438-15B | - | | | 54 | 60 | 2.1 | 2.4 |
| T99920438-20A | - | 50 | 2.0 | 60 | 66 | 2.4 | 2.6 |
| T99920438-20B | - | | | 66 | 73 | 2.6 | 2.9 |
| T99920438-25A | T99922744-25A | 65 | 2.5 | 73 | 80 | 2.9 | 3.1 |
| T99920438-25B | T99922744-25B | | | 80 | 88 | 3.1 | 3.5 |
| T99920438-30A | T99922744-30A | 80 | 3.0 | 88 | 95 | 3.5 | 3.7 |
| T99920438-30B | T99922744-30B | | | 95 | 100 | 3.7 | 3.9 |
| T99920438-35A | T99922744-35A | 90 | 3.5 | 100 | 108 | 3.9 | 4.3 |
| T99920438-35B | T99922744-35B | | | 108 | 114 | 4.3 | 4.5 |
| T99920438-40A | T99922744-40A | 100 | 4.0 | 114 | 125 | 4.5 | 4.9 |
| T99920438-45A | T99922744-45A | | | 114 | 4.5 | 125 | 136 |
| T99920438-45B | T99922744-45B | 136 | 141 | | | 5.4 | 5.6 |
| T99920438-50A | T99922744-50A | 125 | 5.0 | 141 | 155 | 5.6 | 6.1 |
| T99920438-50B | T99922744-50B | | | 155 | 168 | 6.1 | 6.6 |
| T99920438-60A | T99922744-60A | 152 | 6.0 | 168 | 180 | 6.6 | 7.1 |
| T99920438-60B | T99922744-60B | | | 180 | 193 | 7.1 | 7.6 |
| T99920438-70A | T99922744-70A | 178 | 7.0 | 193 | 213 | 7.6 | 8.4 |
| T99920438-70B | T99922744-70B | | | 213 | 219 | 8.4 | 8.6 |
| T99920438-80A | T99922744-80A | 203 | 8.0 | 219 | 240 | 8.6 | 9.4 |
| T99920438-90A | T99922744-90A | | | 229 | 9.0 | 240 | 264 |
| T99920438-100A | T99922744-100A | 254 | 10.0 | | | 264 | 290 |
| T99920438-110A | T99922744-110A | 279 | 11.0 | 290 | 320 | 11.4 | 12.6 |
| T99920438-120A | T99922744-120A | | | 305 | 12.0 | 320 | 350 |
| T99920438-140A | T99922744-140A | 356 | 14.0 | 350 | 375 | 13.8 | 14.8 |
| T99920438-140B | T99922744-140B | | | 375 | 400 | 14.8 | 15.7 |

□ Older Elcometer 236 models may require adaptor piece T99922768

Elcometer 236, 266 & 280 High Voltage Holiday Detector Accessories

Rolling Springs Available in phosphor bronze or stainless steel



Rolling springs are available in 2 versions, phosphor bronze round spring and 304 stainless steel box section spring. The 19mm (0.75") diameter phosphor bronze springs are almost 3 times lighter than the 34mm (1.33") diameter stainless steel springs.

Rolling Spring Dimensions

| Part Number | | Nominal Pipe Size | | Pipe Outside Diameter (OD) | | | |
|-----------------|-----------------|-------------------|----------|----------------------------|--------|------------|--------|
| | | DN | NPS | millimetres (mm) | | inches (") | |
| Phosphor Bronze | Stainless Steel | (mm) | (inches) | min OD | max OD | min OD | max OD |
| T99920438-160A | T99922744-160A | 406 | 16.0 | 400 | 435 | 15.7 | 17.1 |
| T99920438-160B | T99922744-160B | | | 435 | 450 | 17.1 | 17.7 |
| T99920438-180A | T99922744-180A | 457 | 18.0 | 450 | 500 | 17.7 | 19.7 |
| T99920438-200A | T99922744-200A | 508 | 20.0 | 500 | 550 | 19.7 | 21.7 |
| T99920438-220A | T99922744-220A | 559 | 22.0 | 550 | 600 | 21.7 | 23.6 |
| T99920438-240A | T99922744-240A | 610 | 24.0 | 600 | 650 | 23.6 | 25.6 |
| T99920438-260A | T99922744-260A | 660 | 26.0 | 650 | 700 | 25.6 | 27.6 |
| T99920438-280A | T99922744-280A | 711 | 28.0 | 700 | 750 | 27.6 | 29.5 |
| T99920438-300A | T99922744-300A | 762 | 30.0 | 750 | 810 | 29.5 | 31.9 |
| T99920438-320A | T99922744-320A | 813 | 32.0 | 810 | 860 | 31.9 | 33.9 |
| T99920438-340A | T99922744-340A | 864 | 34.0 | 860 | 910 | 33.9 | 35.8 |
| T99920438-360A | T99922744-360A | 914 | 36.0 | 910 | 960 | 35.8 | 37.8 |
| T99920438-380A | T99922744-380A | 965 | 38.0 | 960 | 1010 | 37.8 | 39.8 |
| T99920438-400A | T99922744-400A | 1016 | 40.0 | 1010 | 1060 | 39.8 | 41.7 |
| T99920438-420A | T99922744-420A | 1067 | 42.0 | 1060 | 1110 | 41.7 | 43.7 |
| T99920438-440A | T99922744-440A | 1118 | 44.0 | 1110 | 1160 | 43.7 | 45.7 |
| T99920438-460A | T99922744-460A | 1168 | 46.0 | 1160 | 1210 | 45.7 | 47.6 |
| T99920438-480A | T99922744-480A | 1219 | 48.0 | 1210 | 1270 | 47.6 | 50.0 |
| T99920438-500A | T99922744-500A | 1270 | 50.0 | 1270 | 1320 | 50.0 | 52.0 |
| T99920438-520A | T99922744-520A | 1321 | 52.0 | 1320 | 1370 | 52.0 | 53.9 |
| T99920438-540A | T99922744-540A | 1372 | 54.0 | 1370 | 1425 | 53.9 | 56.1 |

Other sizes are available upon request. Please contact your nearest distributor for more information.


Rolling Springs Holders

| Part Number | Description | Compatible with | | |
|-------------|---------------------------------------|--------------------------|-------------------------------------|-------------------------------------|
| T99920086 | Phosphor bronze rolling spring holder | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> |
| T99922746 | Stainless steel rolling spring holder | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> |


Older Elcometer 236 models may require adaptor piece T99922768

Elcometer 236, 266 & 280 High Voltage Holiday Detector Accessories


Batteries & Chargers

| | Part Number | Description | Compatible with | | |
|--|-------------|--|-----------------|---------------|---------------|
| | | | Elcometer 236 | Elcometer 266 | Elcometer 280 |
|  | T23615550 | External rechargeable battery pack | ■ | | |
| | T23613907 | Battery charger & mains lead (UK 240V) | ■ | | |
| | T23613908 | Battery charger & mains lead (EU 220V) | ■ | | |
| | T23613909 | Battery charger & mains lead (US 110V) | ■ | | |
| | T99923482 | Rechargeable battery pack | | ■ | ■ |
| | T99919999 | Battery Charger with UK, EUR, US and AUS plugs | | ■ | ■ |

Earth Signal Return Leads

| | | | | | |
|---|------------|--|---|---|---|
|  | T236139031 | Earth signal return lead, 2m (6.5') | ■ | | |
| | T236139032 | Earth signal return lead, 10m (32') | ■ | | |
| | T99916954 | Earth signal return lead, 4m (13') | | ■ | |
| | T99916996 | Earth signal return lead, 10m (32') | | ■ | |
| | T28022750 | 10m (32') earth lead, clip / Elcometer 280 connector | | | ■ |
| | T28022622 | Trailing signal return lead, 5m (16') | | | ■ |

Telescopic Probes, Probe Extension Rods

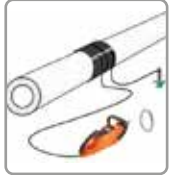
| | | | | | |
|--|-------------|--|---|---|---|
|  | T23622790-1 | Telescopic probe handle, 0.6 - 1.20m (24 - 47") | □ | | |
| | T23622790-2 | Telescopic probe handle, 1.8 - 3.60m (71 - 142") | □ | | |
| | T99919988-3 | Probe extension rod, 250mm (9.8") | □ | ■ | ■ |
| | T99919988-1 | Probe extension rod, 500mm (20") | □ | ■ | ■ |
| | T99919988-2 | Probe extension rod, 1000mm (39") | □ | ■ | ■ |

□ Older Elcometer 236 models may require adaptor piece T99922768

Elcometer 236, 266 & 280 High Voltage Holiday Detector Accessories

Grounding Mats

Grounding mats are ideal for testing on ungrounded pipes. The conductive rubber mat is wrapped around the coated pipe and connected to both the grounding pin (supplied separately) and the signal return lead.



| Part Number | Description | Outside Diameter (OD) | | Compatible with | | |
|-------------|--|-----------------------|-----------|-----------------|---------------|---------------|
| | | DN | NPS | Elcometer 236 | Elcometer 266 | Elcometer 280 |
| T28022637-1 | Grounding Mat | up to 229mm | up to 9" | | | ■ |
| T28022637-2 | Grounding Mat | up to 457mm | up to 18" | | | ■ |
| T28022637-3 | Grounding Mat | up to 762mm | up to 30" | | | ■ |
| T28022637-4 | Grounding Mat | up to 1067mm | up to 42" | | | ■ |
| T28022748 | Grounding pin; 60cm (23.5") long | | | | | ■ |
| T28022749 | 10m (32') earth lead, clips each end | | | | | ■ |
| T28022750 | 10m (32') earth lead, clip / Elcometer 280 connector | | | | | ■ |

Accessory Adaptors Allows other manufacturer's accessories to fit Elcometer models



| | | | | |
|-----------|---|---|---|---|
| T99920084 | Adaptor for models: AP, APS, AP/S1, AP/S2, AP/W, 10/20, 14/20, 10, 20 & 20S | □ | ■ | ■ |
| T99920083 | Adaptor for models: P20, P40, P60, 780, 785 & 790 | □ | ■ | ■ |
| T99920252 | Adaptor for models: PHD 1-20 & PHD 2-40 | □ | ■ | ■ |
| T99922747 | Adaptor for models: 4S, 4.0, 8.0, 35 | □ | ■ | ■ |
| T99920082 | Adaptor for current range to fit old accessories | ■ | ■ | ■ |
| T99922768 | Adaptor for Elcometer 136 and older 236 models | ■ | | |

□ Older Elcometer 236 models may require adaptor piece T99922768

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