





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 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.



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

T27018050



Roller sponge wand

Ideal for large flat surface inspection

Spare roller sponge

T27018051

T27016960



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



T27016999

T27018191



Extension piece

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

T27016965

T99916954

T99916996

T27018024



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



Return cable - 4m (13')

supplied as standard, complete with crocodile clip and connection plug

Return cable - 10m (32')

supplied on a drum, complete with clip and connection plug





the fast detection of pinholes. Just add to the water used to dampen the sponge

Technical Specification

Model	Elcometer 270/3	Elcometer 270/4 Certificate					
Part Number	D2703	D2704					
Part Number with Certificate	D2703C	D2704C	•				
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						
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 (inclu	ding sponge)					
Weight	610g (21oz) including wand, cable and b	atteries					
Packing List	Pinhole Detector, standard wand and flat 3 x AA (LR1600) batteries and operating	,	crocodile clip,				

[•] Calibration Certificate supplied as standard.

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.



Pulsed DC Holiday Detector

Red LED indicates high voltage ON Waterproof buzzer Blue LED flashes as holidays are detected elcom Earth signal return lead disconnected icon Holiday detected icon Battery symbol indicating remaining Porosity Detector overload icon charge indicates that the unit cannot obtain Voltage selected selected voltage with current accessory / Porosity standard in use coating combination used in conjunction with setting the coating Calculation softkey thickness within the Voltage Calculator select the relevant standard and coating Menu softkey thickness value Voltage level achieved at probe Voltage adjustment softkey



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

Pinhole & Porosity

Elcometer 280

Pulsed DC Holiday Detector



Right angled wire brush probe

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.



Internal circular wire pipe brush probe

User Friendly

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



Band brush probes

Versatile

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



External 'C-type' wire brush



Right angled rubber probe

Tough

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



Rolling Springs

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	0			
Elcometer 280 Pulsed DC Holiday	y Detector	D280-S	D280-T	0			
Rugged, Shockproof & Water Res	sistant		•				
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 V	olts					
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	n 4 hours				
Typical Battery Life	ife 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; (I x w x h): 6	03 x 219 x 193mm (23.7 x 8	3.6 x 7.6")				
Weight (no probes attached)	3.0kg (6.6lb) - including ba	ttery 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

space to house up to 20m (66') of phosphor bronze or 6m (30') of stainless steel rolling spring

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.

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

Lightweight, rugged, wheeled transit case - ideal for gauge transportation, with additional



T28022769

Optional Calibration Certificate available.

Holiday Detector

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



Holiday Detector



Right angled wire brush probe

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.

Internal circular wire pipe brush probe

Safe

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



Band brush probes

User Friendly

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



External 'C-type' wire brush

Versatile

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



Right angled rubber probe

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).



Rolling Springs

Holiday Detector



Interchangeable DC probe handles*

Part Number Description T26620033-1 T26620033-2 T26620033-3 T26620033-4

DC5 (0.5 - 5kV) DC15 (0.5 - 15kV) DC30 (0.5 - 30kV) DC30S (0.5 - 30kV)

ASTM G62-87 1030 µm 24.3kV STANDARD

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 T26620081

Description 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 T99923482

Description 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*	D2664		0		
High Voltage Output Accuracy	±5% or ±50V below 1000 Volts				
Operating Temperature	0°C to 50°C (32°F to 12	0°F)			
Power Supply	Rechargeable Battery P	ack; 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 batt	ery 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)	0
T26620033-1C	Elcometer 266 Probe Handle Certified	DC5 (0.5 - 5kV)	
T26620033-2	Elcometer 266 Probe Handle Voltage	DC15 (0.5 - 15kV)	0
T26620033-2C	Elcometer 266 Probe Handle Certified	DC15 (0.5 - 15kV)	
T26620033-3	Elcometer 266 Probe Handle Voltage	DC30 (0.5 - 30kV)	0
T26620033-3C	Elcometer 266 Probe Handle Certified	DC30 (0.5 - 30kV)	
T26620033-4	Elcometer 266 Probe Handle Voltage (Continuous Voltage)	DC30S (0.5 - 30kV)	0
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.

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.







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	D23615KV	D23630KV	0			
Part Number with Certificate	D23615KVC	D23630KVC	•			
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 bat	12V internal rechargeable battery				
Battery Life (approximate)	10/12 hours continuous use,	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")	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 le	ad				
T236139032	10m (32') earth signal return le	ead				
T23615550	Additional external battery page	ck (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.





STANDARDS: ASTM E2501

UV Pinhole Flashlight

The Elcometer 260 UV Pinhole Flashlight is battery powered and housed in a rugged aluminium case providing a quick, low cost method of testing coatings for pinholes.

Featuring a 3-Watt purple light emitting diode, the Elcometer 260 UV flashlight has a beam wavelength of 405nm (±5nm), which the human eye perceives as a purple light.

Designed with a specialised diffuser lens that emits a smooth beam image (with no streaks, hot spots or dark spots) and used with National Surface Treatment Centre approved safety glasses for improved contrast, the Elcometer 260 UV flashlight provides optimum integrity and reliability of the visual inspection.

The Elcometer 260 UV flashlight can detect pinholes from both the base and top coats. A UV reflective additive is applied to the base coat. When inspecting the fluorescent base coat look for black spots or grey areas that indicate pinholes. When inspecting the non-fluorescent topcoat, look for glowing spots that indicate pinholes in the topcoat (shining through from the base coat).

- Low cost and easy to use: Use UV reflecting base coat and shine the purple light on to the surface. Any fluorescence identifies pinholes
- Rugged: Manufactured from aluminium alloy and O'ring sealed to protect it from moisture and dust
- Portable and secure: Battery powered and features a recessed click-on/push off button to prevent accidental activation during transport or storage



Technical Specification		
	ite a file a d	0 m

Part Number	D2602
Lens Type	Dual element diffuser
Power Output	3 Watt
Beam Wavelength	405nm ±5nm
Flashlight Casing	Hard anodised aluminium
Battery Type	2 x CR123A batteries
Battery Life	6 hours (continuous use)
Dimensions	150 x 35mm (6 x 1.4")
Weight	173g (6.1oz)
Packing List	Elcometer 260 UV Pinhole Flashlight, UV protective glasses, nylon belt holster, 2 x CR123A batteries, operating instructions
- auting List	

Accessories

T26020140	UV Protective Glasses
T26020141	2 x Replacement 123A batteries

re Brush P	robes, flat brus	h, internal and external pipe brush probes	;				
	Part Number	Description			Со	mpatible w	/ith
					Elcometer 236	Elcometer 266	Elcometer 280
			Widt	h			
	T99920022-1	Right angled wire brush probe	0.25m	9.8"			
<i>*</i>	T99920022-2	Right angled wire brush probe	0.50m	19.7"			
3	T99920022-3	Right angled wire brush probe	1.00m	39"			
	T99926621	Spare wire brush electrode	0.25m	9.8"			
	T99926622	Spare wire brush electrode	0.50m	19.7"			
	T99926623	Spare wire brush electrode	1.00m	39"			
			Diame	ter			
	T99920071-1	Internal circular wire pipe brush probe	38mm	1.5"			
730	T99920071-2	Internal circular wire pipe brush probe	51mm	2.0"			•
	T99920071-3	Internal circular wire pipe brush probe	64mm	2.5"			
	T99920071-4	Internal circular wire pipe brush probe	76mm	3.0"		•	
	T99920071-5	Internal circular wire pipe brush probe	89mm	3.5"			
	T99920071-6	Internal circular wire pipe brush probe	102mm	4.0"			
	T99920071-7	Internal circular wire pipe brush probe	114mm	4.5"			
	T99920071-8	Internal circular wire pipe brush probe	127mm	5.0"			
	T99920071-9	Internal circular wire pipe brush probe	152mm	6.0"			
	T99920071-10	Internal circular wire pipe brush probe	203mm	8.0"			
	T99920071-11	Internal circular wire pipe brush probe	254mm	10"			
	T99920071-12	Internal circular wire pipe brush probe	305mm	12"			
	T99920071-13	Internal circular wire pipe brush probe	356mm	14"			
	T99920071-14	Internal circular wire pipe brush probe	406mm	16"			
	T99920071-15	Internal circular wire pipe brush probe	508mm	20"			
	T99920071-16	Internal circular wire pipe brush probe	610mm	24"			
	T9993766-	Spare circular wire brush electrode	38mm	1.5"			
	T9993767-	Spare circular wire brush electrode	51mm	2.0"			
	T9993768-	Spare circular wire brush electrode	64mm	2.5"			
	T9993769-	Spare circular wire brush electrode	76mm	3.0"	-		
	T9993770-	Spare circular wire brush electrode	89mm	3.5"			
	T9993771-	Spare circular wire brush electrode	102mm	4.0"			
	T9993772-	Spare circular wire brush electrode	114mm	4.5"			
	T9993773-	Spare circular wire brush electrode	127mm	5.0"			



T9993774-

T9993775-

T9993776-

T9993777-

T9993778-

T9993779-

T9993780-

T9993781-



152mm

203mm

254mm

305mm

356mm

406mm

508mm

610mm

6.0"

8.0"

10"

12"

14"

16"

20"

24"

Spare circular wire brush electrode

Outside Diameter (OD)

Width

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



Part Number	Description	Со	mpatible v	vith
		Elcometer 236	Elcometer 266	Elcometer 280
T99922752	'C-type' wire brush holder ¹ (order C-type brush from the list below)		•	•
T99922907	'C-type' wire brush support handle ²			



		DN	NPS		
T99922745-1	External 'C-type' wire brush	150 - 250mm	6 - 9"		
T99922745-2	External 'C-type' wire brush	250 - 350mm	9 - 12"		
T99922745-3	External 'C-type' wire brush	350 - 450mm	12 - 16"		
T99922745-4	External 'C-type' wire brush	450 - 550mm	16 - 20"		
T99922745-5	External 'C-type' wire brush	550 - 650mm	20 - 24"		-
T99922745-6	External 'C-type' wire brush	650 - 750mm	24 - 28"		
T99922745-7	External 'C-type' wire brush	750 - 850mm	28 - 32"		
T99922745-8	External 'C-type' wire brush	850 - 950mm	32 - 36"		
T99922745-9	External 'C-type' wire brush	950 - 1050mm	36 - 40"		-
T99922745-10	External 'C-type' wire brush	1050 - 1150mm	40 - 44"		

¹ Wire brush supplied separately

Conductive Rubber Probes



		vvide				
T99920022-11	Right angled rubber probe	250mm	9.8"		-	-
T99920022-12	Right angled rubber probe	500mm	19.7"			
T99920022-13	Right angled rubber probe	1000mm	39"			
T99920022-14	Right angled rubber probe	1400mm	55"			-
T99926731	Spare rubber electrode	250mm	9.8"			
T99926732	Spare rubber electrode	500mm	19.7"			-
T99926733	Spare rubber electrode	1000mm	39"	-		
T99926734	Spare rubber electrode	1400mm	55"			

Band brush probes



T99919975	Band brush probe		
T99922751	Phosphor bronze brush probe	-	

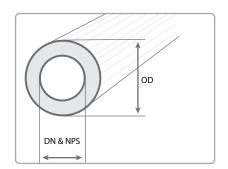
² Wire brush support handle ideal for two handed use or second person for large diameters

[□] Older Elcometer 236 models may require adaptor piece T99922768

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 Din	ng Spring Dimensions Nominal Pipe Size Pipe Outside Diameter (OD)						
Part Number		DN	NPS	millimetr	res (mm)	inche	es (")
Phosphor Bronze	Stainless Steel	(mm)	(inches)	min OD	max OD	min OD	max OD
T99920438-15A T99920438-15B	-	40	1.5	48 54	54 60	1.9 2.1	2.1 2.4
T99920438-20A T99920438-20B	- -	50	2.0	60 66	66 73	2.4 2.6	2.6 2.9
T99920438-25A T99920438-25B	T99922744-25A T99922744-25B	65	2.5	73 80	80 88	2.9 3.1	3.1 3.5
T99920438-30A T99920438-30B	T99922744-30A T99922744-30B	80	3.0	88 95	95 100	3.5 3.7	3.7 3.9
T99920438-35A T99920438-35B	T99922744-35A T99922744-35B	90	3.5	100 108	108 114	3.9 4.3	4.3 4.5
T99920438-40A	T99922744-40A	100	4.0	114	125	4.5	4.9
T99920438-45A T99920438-45B	T99922744-45A T99922744-45B	114	4.5	125 136	136 141	4.9 5.4	5.4 5.6
T99920438-50A T99920438-50B	T99922744-50A T99922744-50B	125	5.0	141 155	155 168	5.6 6.1	6.1 6.6
T99920438-60A T99920438-60B	T99922744-60A T99922744-60B	152	6.0	168 180	180 193	6.6 7.1	7.1 7.6
T99920438-70A T99920438-70B	T99922744-70A T99922744-70B	178	7.0	193 213	213 219	7.6 8.4	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	9.4	10.4
T99920438-100A	T99922744-100A	254	10.0	264	290	10.4	11.4
T99920438-110A	T99922744-110A	279	11.0	290	320	11.4	12.6
T99920438-120A	T99922744-120A	305	12.0	320	350	12.6	13.8
T99920438-140A T99920438-140B	T99922744-140A T99922744-140B	356	14.0	350 375	375 400	13.8 14.8	14.8 15.7

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 Din	Spring Dimensions Nominal Pipe Size Pipe Outside Diameter (OD)						
Part Number		DN	NPS	millimetr	res (mm)	inche	es (")
Phosphor Bronze	Stainless Steel	(mm)	(inches)	min OD	max OD	min OD	max OD
T99920438-160A T99920438-160B	T99922744-160A T99922744-160B	406	16.0	400 435	435 450	15.7 17.1	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	Co	mpatible w	√ith	
T99920086	Phosphor bronze rolling spring holder				
T99922746	Stainless steel rolling spring holder				

[□] Older Elcometer 236 models may require adaptor piece T99922768

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")		

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.



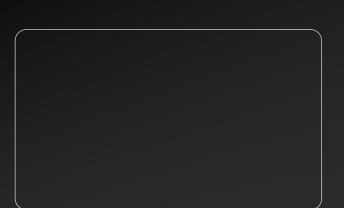
Part Number	Description	Outside Diam	eter (OD)	(Compatible with	١
		DN	NPS	Elcometer 236	Elcometer 266	Elcometer 280
T28022637-1	Grounding Mat	up to 229mm	up to 9"			
T28022637-2	Grounding Mat	up to 457mm	up to 18"			
T28022637-3	Grounding Mat	up to 762mm	up to 30"			
T28022637-4	Grounding Mat	up to 1067mm	up to 42"			
T28022748	Grounding pin; 60cm (23	3.5") long				
T28022749	10m (32') earth lead, clip	s 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			



ENGLAND, UK

Elcometer Limited +44 (0)161 371 6000 sales@elcometer.com www.elcometer.com

FRANCE

Elcometer Sarl +33 (0)2 38 86 33 44 fr_info@elcometer.com www.elcometer.fr

GERMANY

Elcometer Instruments GmbH AALEN: +49 (0) 7361 52806 0 LEER: +49 (0) 7361 528 06 60 de_info@elcometer.com www.elcometer.de

THE NETHERLANDS

Elcometer B.V. +31 (0)30 259 1818 nl_info@elcometer.com www.elcometer.nl

JAPAN

Elcometer KK +81 (0)3 6869 0770 jp_info@elcometer.com www.elcometer.co.jp

REPUBLIC OF SINGAPORE

Elcometer (Asia) Pte Ltd +65 6462 2822 asia@elcometer.com www.elcometer.com

UNITED ARAB EMIRATES

Elcometer LLC +971 4 295 0191 +971 4 280 3526 uae_sales@elcometer.com www.elcometer.ae

UNITED STATES OF AMERICA

Elcometer Inc WARREN, MI: +1 248 650 0500 HOUSTON, TX: +1 713 450 0631 Toll Free: 800 521 0635 inc@elcometer.com www.elcometer.com

