

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.

Using state of the art electronics, the Elcometer 280 allows users to inspect coatings - without connecting the earth return lead to the component substrate - ideal for inspecting large surfaces and pipelines.

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

Rugged, shock proof and water resistant design to ensure long life - even in harsh environments

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



A wide range of interchangeable probe accessories available - compatible with all Elcometer holiday detectors



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

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

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

Can be used in accordance with:
(see Standards Explained inside back cover)

- | | | |
|----------------|-------------|-------------|
| AS 3894.1 | ISO 29601 | NACE SP0188 |
| ANSI/AWWA C203 | JIS G 3491 | NACE SP0490 |
| ANSI/AWWA C214 | JIS G 3492 | NACE TM0186 |
| ASTM D4787 | NACE RP0274 | NACE TM0384 |
| ASTM D5162 | | |

The Elcometer 280 uses the high voltage pulsed DC technique to detect holidays in coatings - even if the coating is damp, dirty or slightly conductive.

From the two stage safety switch, bright LED's and screen icons signifying when the high voltage is on, to the extended ribbing to protect the user from spark

creep, the Elcometer 280 sets the standard for high voltage measurement safety.

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

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

Elcometer 280 Features

Red LED indicates high voltage ON

Earth signal return lead disconnected icon

Porosity Detector overload icon indicates that the unit cannot obtain selected voltage with current accessory / coating combination

Calculation softkey select relevant standard & coating thickness value

Voltage adjustment softkey

Waterproof buzzer

Blue LED flashes as holidays are detected

Holiday detected icon

Battery symbol indicating remaining charge

Voltage selected

Porosity standard in use used in conjunction with setting the coating thickness within the Voltage Calculator

Menu softkey

Voltage level achieved at probe



Specialised extended ribbing designed to standard EN61010, ribs provide additional protection to the user during use

Integrated safety trigger switch switches off the high voltage if released

Quick release battery pack fully charged in 4 hours, provides up to 30+ hours of continuous use*

Earth return lead socket including ¼ turn lock/release to ensure connection during testing

Rubberised second hand grip provides greater control and balance during testing

Large, waterproof buttons ideal for use - even in gloves

Shoulder harness point strap can be quickly clipped on as required

Clear, backlit LCD display shows all relevant information, even in dark environments

High Voltage ON/OFF separate button minimises risk of accidental switch on

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

Technical Specification

C certificate available

Description	Model S	Model T
Elcometer 280 Pulsed DC Holiday Detector	D280-S----	D280-T----
Elcometer 280 Pulsed DC Holiday Detector Inspection Kit	D280-S-KIT	D280-T-KIT
Rugged, Shock Proof & 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 lithium ion battery, fully charged within 4 hours	
Typical Battery Life	Battery life is dependant on 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	<p>Elcometer 280 Pulsed DC Holiday Detector Gauge (Model S or T), 5m (16') trailing signal return lead, battery pack, battery charger with mains cables (UK, EUR and US), shoulder strap and operating instructions</p> <p>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 mains cables (UK, EUR & US), 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</p>	

Accessories

Light weight, 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 un-grounded 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 rolling springs, rubber or wire brush probes and other accessories see pages 14 - 18