

Elcometer 270 Pinhole Detector

Can be used in accordance with:
**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**



The Elcometer 270 Range utilises the 'wet sponge' method of holiday detection and has been designed to set a new standard for wet sponge detectors namely, a quality low voltage detector with similar accessories to a high voltage spark tester. Used by consultants on the Jahre Viking, one of the largest ships in the world at 648 tons. 30 000 sq metres were tested and the batteries lasted 140 hrs. The 270 was superior to other instruments tested.

Features

- Automatic sensitivity calibration and voltage checks
- Low battery indicator
- Visual and audible alarms
- Integral and separate wand functionality
- A wide range of fully interchangeable wand accessories
- Three model variants - single, dual or triple voltages
- Easy release snag proof cables
- Large standard sponge
- An inspection kit for all your requirements is available (see image with the unit included)



Technical Specifications

Model	Elcometer 270/3 Pinhole Detector	Elcometer 270/4 Pinhole Detector	Certificate
Part Number	D270----3	D270----4	
Part Number with Certificate	D270----3C	D270----4C	•
Voltage	9V and 90V	9V, 67.5V and 90V	
Maximum Measurement Range	500µm	500µm	
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 (LR1600) 1.5V alkaline (NiMH rechargeable batteries can also be used, battery life will be reduced by up to 75%)		
Accuracy of Setting	±5%		
Dimensions	Without Wand: 210 x 42 x 37mm Standard Wand: 175mm long (including sponge) Flat Sponge: 175mm long (including sponge)		
Weight	610g including wand, cable and batteries		

• Calibration Certificate supplied as standard







* Standards not in bold have been superseded but are still recognised in some industries

Packing List

Pinhole Detector
 Standard wand and flat sponge
 4m return lead with crocodile clip
 3 x LR1600 (AA) batteries
 Operating instructions



Accessories

	Part Number	Description
Standard Wand		
	T27016867	Standard Wand A universal flat sponge to suit almost all applications
	T27018050	Spare flat sponge set pack of 3 sponges 150 x 60 x 25mm
Telescopic wand adaptor with Belt clip		
	T27016998	Telescopic wand adaptor with belt clip extends to 1m for floors or high areas
	T27016999	Separate wand adaptor with belt clip converts the gauge into a separate pinhole detector
Roller Sponge Wand		
	T27016960	Roller sponge wand for large flat surface inspection
	T27018051	Spare roller sponge
Extension piece		
	T27016965	Extension piece 420mm extensions to expand operators reach. Additional extension pieces can be connected to each other
Return Cable		
	T99916954	Return cable 4m supplied as standard complete with crocodile clip and connection plug.
	T99916996	Return cable 10m supplied on a drum complete with clip and connection plug.
Wetting Agent		
	T27018024	Wetting agent 50ml bottle helps aid the fast detection of pinholes. Just add to the water used to dampen the sponge.

Video



YouTube Video - An Introduction to Pinholes and Holidays – Porosity Detection
 (Click on the image to the left to view the video)

Corrosion is caused by two things – a steel substrate and oxygen, while contaminants such as water can accelerate the process. The coating is there to protect the steel from oxygen and contaminants. A flaw in the coating can leave the substrate poorly protected, or in some cases completely exposed.