

**SPECIFICATION
FOR
TESTING EQUIPMENT**

DIFFERENTIAL PRESSURE GAUGES

In accordance with the provisions of section 5(5) of the Weights and Measures Act 1985, the Secretary of State hereby approves the material and form of testing equipment of the following description for use by inspectors of weights and measures when testing cold-water meters.

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Department of Trade & Industry

SPECIFICATION FOR TESTING EQUIPMENT**DIFFERENTIAL PRESSURE GAUGES****MATERIAL**

1 Where the gauge is of the mechanical pointer type it shall be constructed of non-porous materials of adequate strength and stability which are resistant to corrosion and compatible with water. For electronic gauges only the sensing element(s) and housing(s) need comply with these criteria.

FORM

2 The readout may be of analogue or digital form with a full scale reading or deflection of not more than 150% of the specified maximum pressure loss for the meter under test. The scale resolution, as determined by the least significant digit on a digital display or one fifth of a marked scale division on an analogue display, shall be better than 1.5% of full scale deflection (fsd).

3 Where the gauge would suffer damage or loss of calibration if exposed to full line pressure on one side only, means shall be provided to prevent this situation occurring.

4 Any means of adjustment or components the alteration or removal of which could materially affect the metrological performance of gauge shall be sealed to prevent unauthorised adjustment or tampering.

INSCRIPTIONS

5 The following data shall be marked permanently, legibly and conspicuously on the main gauge:

- (a) the manufacturer's name
- (b) a serial number or other unique identification number;
- (c) where the gauge does not have an inscribed analogue display the fsd shall be indicated.

APPENDIX**NOTES FOR THE GUIDANCE OF TRADING STANDARDS OFFICERS**

6 The pressure loss across a cold-water meter shall be measured using a gauge as specified above and ancillary equipment, by the method as described in clause 7 of British Standard BS5728 Part 3.

7 Differential pressure gauges must carry a valid calibration certificate issued by a test house that can demonstrate traceability to national standards.

STD 4827

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