

Gas meters —

Part 6: Specification for rotary displacement and turbine meters for gas pressures up to 100 bar

Committees responsible for this British Standard

The preparation of this British Standard was entrusted by the Gas Standards Committee (GSE/-) to Technical Committee GSE/25, upon which the following bodies were represented:

- British Gas plc
- British Non-ferrous Metals Federation
- Chief and Assistant Chief Fire Officers' Association
- Department of Energy (Gas and Oil Measurement Branch)
- Institution of Gas Engineers
- Society of British Gas Industries

This British Standard, having been prepared under the direction of the Gas Standards Committee, was published under the authority of the Board of BSI and comes into effect on 23 December 1987

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Foreword

This Part of BS 4161 has been prepared under the direction of the Gas Standards Committee. It is a revision of BS 4161-6:1979, which is withdrawn.

In the preparation of this standard account has been taken both of commercial factors associated with export and of European harmonization by incorporating relevant requirements of the following.

Statutory Instrument 1983: No. 684: The Gas Meter Regulations 1983

Statutory Instrument 1980: No. 1058: The Measuring Instruments (EEC Requirements) Regulations 1980, as amended by Statutory Instrument 1618:1984

Statutory Instrument 1983: No. 1246: The Measuring Instruments (EEC Requirements) (Gas Volume Meters) Regulations 1983, which implement EEC Council Directive 71/318/EEC and its subsequent technical progress amendments

This standard relates to meters for gaseous fuels which register the volume of gas passed. These meters may be used for measuring gases other than gaseous fuel, but the suitability of the meter for any other gas should be verified with the manufacturer. The standard covers indexes reading in either cubic metres or cubic feet. The pressures quoted are gauge pressures.

It should be noted that only existing designs of meter are permitted to register in cubic feet. Under the Weights and Measures Units of Measurement Regulations 1976, Statutory Instrument 1976: No. 1674, new meter designs are required to register in cubic metres.

These meters may be fitted with a volume corrector; such devices for the type of meter specified in this standard are generally interchangeable with, or additional to, the index.

The construction and performance requirements of mechanical volume correctors are given in Part 7. A new Part 8 giving performance requirements for electronic volume correctors is in preparation.

NOTE Where gas is supplied through a meter which is stamped under the Gas Act, the meter has to comply with the current meter regulations.

The other Parts of BS 4161 covering temperature and pressure compensating devices and other types of gas meter, are as follows.

- *Part 1: Meters of plate construction up to 1 000 cubic feet per hour rating (obsolescent);*
- *Part 2: Meters of plate construction above 1 000 cubic feet (28 cubic metres) per hour rating (obsolescent);*
- *Part 3: Unit construction meters of 6 cubic metres (or 212 cubic feet) per hour rating¹⁾;*
- *Part 4: Plate constructed positive displacement diaphragm meters for a pressure of 350 mbar (5 lbf/in²) and up to 170 cubic metres (6 000 cubic feet) per hour rating (obsolescent);*
- *Part 5: Positive displacement diaphragm meters for pressures up to 7 bar¹⁾;*
- *Part 7: Mechanical volume correctors;*
- *Part 8: Specification for electronic volume correctors.*

¹⁾ Under revision.

Installation of these meters is the subject of BS 6400 and, for above 75 mbar pressure, of “Recommendations on gas measurement practice IGE/GM/1 Installation of high-pressure gas meters”, published by the Institution of Gas Engineers.²⁾

A British Standard does not purport to include all the necessary provisions of a contract. Users of British Standards are responsible for their correct application.

Compliance with a British Standard does not of itself confer immunity from legal obligations.

Summary of pages

This document comprises a front cover, an inside front cover, pages i to iv, pages 1 to 12, an inside back cover and a back cover.

This standard has been updated (see copyright date) and may have had amendments incorporated. This will be indicated in the amendment table on the inside front cover.

²⁾ Available from the Institution of Gas Engineers, 17 Grosvenor Crescent, London SW1 7GSO.

