

IGEM/GM/PRS/33
Communication 1792

***Meter regulators of nominal diameter
32 mm (1¼ inch) and not exceeding
150 mm (6 inch) and for inlet pressures
not exceeding 75 mbar***



*Founded 1863
Royal Charter 1929
Patron: Her Majesty the Queen*



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SECTION 1 : INTRODUCTION

- 1.1 This Specification is part of a series of Institution of Gas Engineers and Managers (IGEM) publications, providing a specification for selecting low pressure meter regulators.
- 1.2 British Gas and latterly, National Grid Metering (NGM) developed a series of specifications for key metering components based on its own suite of product requirements. These documents were made available to meter installers and purchasers under the title of Product Requirement Specification PRS 'e' documents. Originally, these Specifications were made available through Advantica, as they were known at the time.
- NGM has transferred the ownership of these documents to IGEM to make them available to the wider industry. It is some years since the original 'e' documents were updated and these have been withdrawn.
- 1.3 This Specification has been drafted by an IGEM Working Group, appointed and subsequently approved by IGEM's Gas Measurement Committee, and has been approved by IGEM's Technical Coordinating Committee on behalf of the Council of IGEM.
- 1.4 Manufacturers supplying low pressure (LP) meter regulators of nominal diameter (DN) from 32 mm (nominal bore (NB) 1¼ inch) not exceeding DN 150 mm (6 inch NB) and for inlet pressures not exceeding 75 mbar are to conform to the requirements of this Specification and to any other relevant documents to which reference is made herein.
- 1.5 Details on the installation of domestic-sized gas meters and associated components are given in BS 6400-1.
- 1.6 Terms such as "maximum operating pressure" (MOP), "maximum incidental pressure" (MIP) and "operating pressure" (OP) are used to reflect gas pressure terminology used in European standards. These terms will arise in all relevant IGEM Standards and, possibly, in other standards. Other new terms have been introduced to assist in recognition of design information to be transferred between interested parties.
- 1.7 This Specification makes use of the terms "must", "shall" and "should" when prescribing particular requirements.
- the term "must" identifies a requirement by law in Great Britain (GB) at the time of publication
 - the term "shall" prescribes a requirement which, it is intended, will be complied with in full and without deviation
 - the term "should" prescribes a requirement which, it is intended, will be complied with unless, after prior consideration, deviation is considered to be acceptable.
- Such terms may have different meanings when used in legislation, or Health and Safety Executive (HSE) Approved Codes of Practice (ACoPs) or guidance, and reference needs to be made to such statutory legislation or official guidance for information on legal obligations.
- 1.8 New and improved products, materials or production methods may be adopted prior to this Specification being updated. Amendments to this Specification will be issued when necessary and their publication will be announced in the Journal of IGEM and elsewhere as appropriate.

- 1.9 Requests for interpretation of this Specification in relation to matters within its scope, but not precisely covered by the current text, should be addressed to Technical Services, IGEM, IGEM House, High Street, Kegworth, Derbyshire, DE74 2DA or by e-mail to technical@igem.org.uk. Such requests will be submitted to the relevant Committee. Any advice given by or on behalf of IGEM does not imply acceptance of any liability, and does not relieve any party of their obligations.
- 1.10 This Specification was published in September 2016.

SECTION 2 : SCOPE

- 2.1 This Specification provides requirements for meter regulators for use with:
- 2nd family gas (see BS EN 437)
 - low pressure distribution Networks (with pressures as defined in GDN/PM/GT/1, see A2.5 in Appendix 2 and Appendix 5 of IGEM/GM/8)
 - meter installations complying with IGEM/GM/6 and IGEM/GM/8
 - a nominal outlet pressure of 21 mbar and
 - nominal diameter DN32 (1¼ inch NB) and not greater than DN150 (6 inch NB).

Note: GDN/PM/GT/1 defines the following pressures at the inlet to the meter installation:

- maximum incidental pressure – upstream (MIP_u) = 200 mbar
- maximum operating pressure – upstream (MOP_u) = 75 mbar
- lowest operating pressure – upstream (LOP_u) = 25 mbar
- design minimum pressure – upstream (DmP_u) = 19 mbar.

- 2.2 This Specification sets out the requirements for product type and production testing.
- 2.3 This Specification requires consideration of the life cycle of the product and its potential effect on the environment.
- 2.4 All pressures quoted in this Specification are gauge pressures unless otherwise stated.
- 2.5 Italicised text is informative and does not represent formal requirements.
- 2.6 Appendices are informative and do not represent formal requirements unless specifically referenced in the main sections via the prescriptive terms “must”, “shall” or “should”.