NSAI
Standards

Irish Standard
I.S. EN 12480:2018

Gas meters - Rotary displacement gas meters

I.S. EN 12480:2018

Incorporating amendments/corrigenda/National Annexes issued since publication:

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NSAI	T +353 1 807 3800	Sales:
1 Swift Square,	F +353 1 807 3838	T +353 1 857 6730
Northwood, Santry	E standards@nsai.ie	F +353 1 857 6729
Dublin 9	W NSAI.ie	W standards.ie

Údarás um Chaighdeáin Náisiúnta na hÉireann

National Foreword

I.S. EN 12480:2018 is the adopted Irish version of the European Document EN 12480:2018, Gas meters - Rotary displacement gas meters

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EUROPEAN STANDARD

NORME EUROPÉENNE

EUROPÄISCHE NORM

EN 12480

February 2018

ICS 91.140.40

Supersedes EN 12480:2015

English Version

Gas meters - Rotary displacement gas meters

Compteurs de gaz - Compteurs de gaz à déplacement rotatif

Gaszähler - Drehkolbengaszähler

This European Standard was approved by CEN on 15 November 2017.

CEN members are bound to comply with the CEN/CENELEC Internal Regulations which stipulate the conditions for giving this European Standard the status of a national standard without any alteration. Up-to-date lists and bibliographical references concerning such national standards may be obtained on application to the CEN-CENELEC Management Centre or to any CEN member.

This European Standard exists in three official versions (English, French, German). A version in any other language made by translation under the responsibility of a CEN member into its own language and notified to the CEN-CENELEC Management Centre has the same status as the official versions.

CEN members are the national standards bodies of Austria, Belgium, Bulgaria, Croatia, Cyprus, Czech Republic, Denmark, Estonia, Finland, Former Yugoslav Republic of Macedonia, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, Netherlands, Norway, Poland, Portugal, Romania, Serbia, Slovakia, Slovenia, Spain, Sweden, Switzerland, Turkey and United Kingdom.

EUROPEAN COMMITTEE FOR STANDARDIZATION
COMITÉ EUROPÉEN DE NORMALISATION
EUROPÄISCHES KOMITEE FÜR NORMUNG

CEN-CENELEC Management Centre: Rue de la Science 23, B-1040 Brussels

Ref. No. EN 12480:2018 E

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European foreword

This document (EN 12480:2018) has been prepared by Technical Committee CEN/TC 237 “Gas meters”, the secretariat of which is held by BSI.

This European Standard shall be given the status of a national standard, either by publication of an identical text or by endorsement, at the latest by August 2018, and conflicting national standards shall be withdrawn at the latest by August 2018.

Attention is drawn to the possibility that some of the elements of this document may be the subject of patent rights. CEN shall not be held responsible for identifying any or all such patent rights.

This document supersedes EN 12480:2015.

The main goal of this revision was to be harmonized with 2014/32/EU (Measuring Instruments Directive) and 2014/68/EU Pressure Equipment Directive.

This document has been prepared under mandates M/541 and M/071 given to CEN by the European Commission and the European Free Trade Association, and supports essential requirements of EU Directives 2014/32/EU and 2014/68/EU.

For relationship with EU Directives 2014/32/EU and 2014/68/EU, see informative Annexes ZA and ZB, which are integral parts of this document.

EN 12480:2015 was published when no New Approach Consultant was available and could not be assessed and published in the OJEU.

According to the CEN-CENELEC Internal Regulations, the national standards organisations of the following countries are bound to implement this European Standard: Austria, Belgium, Bulgaria, Croatia, Cyprus, Czech Republic, Denmark, Estonia, Finland, Former Yugoslav Republic of Macedonia, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, Netherlands, Norway, Poland, Portugal, Romania, Serbia, Slovakia, Slovenia, Spain, Sweden, Switzerland, Turkey and the United Kingdom.

1 Scope

This European Standard specifies ranges, construction, performances, output characteristics and testing of rotary displacement gas meters (hereinafter referred to as RD meters or simply meters) for gas volume measurement.

This European Standard applies to rotary displacement gas meters used to measure the volume of fuel gases of at least the 1st, 2nd and 3rd gas families, the composition of which is specified in EN 437:2003+A1:2009, at a maximum working pressure up to and including 20 bar over an ambient and gas temperature range of at least −10 °C to +40 °C.

This European Standard applies to meters that are installed in locations with vibration and shocks of low significance (class M1) and in

— closed locations (indoor or outdoor with protection as specified by the manufacturer) with condensing or with non-condensing humidity

or, if specified by the manufacturer,

— open locations (outdoor without any covering) with condensing humidity or with non-condensing humidity,

and in locations with electromagnetic disturbances (class E1 and E2). The standards apply to mechanical meters with mechanical index, electronic devices are not covered by this standard.

Unless otherwise specified in this standard:

— all pressures used are gauge;

— all influence quantities, except the one under test, are kept relatively constant at their reference value.

This European Standard applies to meters with a maximum allowable pressure PS and the volume *V* of less than 6 000 bar · litres or with a product of PS and DN of less than 3 000 bar.

This European Standard can be used for both pattern approval and individual meter testing. Cross-reference tables are given in:

— Annex A for the tests that need to be undertaken for pattern approval;

— Annex B for individual meter testing.

Some parts of this standard cover meters with mechanical index only.

The risk philosophy adopted in this standard is based on the analysis of hazards including pressure. The standard applies principles to eliminate or reduce hazards. Where these hazards cannot be eliminated appropriate protection measures are specified.

2 Normative references

The following documents are referred to in the text in such a way that some or all of their content constitutes requirements of this document. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies.

EN 485-2:2013, *Aluminium and aluminium alloys — Sheet, strip and plate — Part 2: Mechanical properties*