

Gas meters -Turbine gas meters

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EESTI STANDARDI EESSÕNA

NATIONAL FOREWORD

<p>Käesolev Eesti standard EVS-EN 12261:2002 sisaldab Euroopa standardi EN 12261:2002 + AC:2003 ingliskeelset teksti.</p> <p>Käesolev dokument on jõustatud 16.05.2002 ja selle kohta on avaldatud teade Eesti standardiorganisatsiooni ametlikus väljaandes.</p> <p>Standard on kättesaadav Eesti standardiorganisatsioonist.</p>	<p>This Estonian standard EVS-EN 12261:2002 consists of the English text of the European standard EN 12261:2002 + AC:2003.</p> <p>This document is endorsed on 16.05.2002 with the notification being published in the official publication of the Estonian national standardisation organisation.</p> <p>The standard is available from Estonian standardisation organisation.</p>
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<p>Käsitlusala:</p> <p>This European Standard specifies the measuring conditions, requirements and tests for the construction, performance and safety of axial and radial turbine gas meters with mechanical indicating devices, herein after referred to as a meter(s), having in-line pipe connections for gas flow measurement. This European Standard applies to turbine gas meters used to measure the volume of fuel gases of the 1st and 2nd gas families, the composition of which is specified in EN 437, at maximum working pressures up to 420 bar, actual flow rates up to 25 000 m³/h over a gas temperature range of at least 10 °C to +40 °C. Unless otherwise specified in this standard, all pressures used are gauge. Clauses 1 to 7 and annex B are for design and type testing only, with the exception of 6.2.2.3, 6.2.3.3, 6.6.1.1.2 and 6.6.2.2.2. Annex C may be used to provide guidance on periodic tests during use. Clause 8 and annexes D and E are for each meter prior to dispatch. Annex A shall be used for both type and individual testing.</p>	<p>Scope:</p> <p>This European Standard specifies the measuring conditions, requirements and tests for the construction, performance and safety of axial and radial turbine gas meters with mechanical indicating devices, herein after referred to as a meter(s), having in-line pipe connections for gas flow measurement. This European Standard applies to turbine gas meters used to measure the volume of fuel gases of the 1st and 2nd gas families, the composition of which is specified in EN 437, at maximum working pressures up to 420 bar, actual flow rates up to 25 000 m³/h over a gas temperature range of at least 10 °C to +40 °C. Unless otherwise specified in this standard, all pressures used are gauge. Clauses 1 to 7 and annex B are for design and type testing only, with the exception of 6.2.2.3, 6.2.3.3, 6.6.1.1.2 and 6.6.2.2.2. Annex C may be used to provide guidance on periodic tests during use. Clause 8 and annexes D and E are for each meter prior to dispatch. Annex A shall be used for both type and individual testing.</p>
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ICS 17.120.10

Võtmesõnad: definitions, design, electronic engineering, gas meters, gases, gas-

supply meters, materials specification, measurement conditions, metrology,
resistance, safety, specification (approval), specifications, testing, turbine flowmeters
for gas, volume flow rate

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ICS 17.120.10

English version

Gas meters - Turbine gas meters

Compteurs de gaz - Compteurs de gaz à turbine

Gaszähler - Turbinenradgaszähler

This European Standard was approved by CEN on 2 September 2001.

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 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 Management Centre has the same status as the official versions.

CEN members are the national standards bodies of Austria, Belgium, Czech Republic, Denmark, Finland, France, Germany, Greece, Iceland, Ireland, Italy, Luxembourg, Malta, Netherlands, Norway, Portugal, Spain, Sweden, Switzerland and United Kingdom.



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

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Foreword

This document (EN 12261:2002) 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 October 2002, and conflicting national standards shall be withdrawn at the latest by October 2002.

In the preparation of this European Standard, the content of ISO 9951, the content of OIML Publication, "International Recommendation 6" and "International Recommendation 32" and the content of member bodies national standards on turbine meters have been taken into account.

The metrological aspects of this European Standard may be subject to amendments to bring it into line with the proposed Measuring Instruments Directive (MID).

Electronic Indexes are not specifically covered by this Standard, however, work to produce a Standard covering these devices is in progress under CEN/TC 237.

Annexes A, B, D and E are normative. Annex C is informative.

This standard includes a Bibliography.

According to the CEN/CENELEC Internal Regulations, the national standards organizations of the following countries are bound to implement this European Standard: Austria, Belgium, Czech Republic, Denmark, Finland, France, Germany, Greece, Iceland, Ireland, Italy, Luxembourg, Malta, Netherlands, Norway, Portugal, Spain, Sweden, Switzerland and the United Kingdom.

1 Scope

This European Standard specifies the measuring conditions, requirements and tests for the construction, performance and safety of axial and radial turbine gas meters with mechanical indicating devices, herein after referred to as a meter(s), having in-line pipe connections for gas flow measurement.

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2 Normative references

This European Standard incorporates by dated or undated references provisions from other publications. These normative references are cited at the appropriate places in the text and the publications are listed hereafter. For dated references subsequent amendments to or revisions of any of these publications apply to this European standard only when incorporated in it by amendment or revision. For undated references the latest edition of the publication referred to applies (including amendments).

EN 437, *Test gases — Test pressures — Appliance categories*

EN 10204, *Metallic products — Types of inspection documents*

EN 50014, *Electrical apparatus for potentially explosive atmospheres — General requirements*

EN 50020, *Electrical apparatus for potentially explosive atmospheres — Intrinsic safety "I"*

EN 60529, *Degrees of protection provided by enclosures (IP code) (IEC 60529:1989)*

EN 60947-5-6, *Low-voltage switchgear and controlgear — Part 5-6: Control circuit devices and switching elements — DC interface for proximity sensors and switching amplifier (NAMUR) (IEC 60947-5-6:1999)*

EN ISO 5167-1:1995, *Measurement of fluid flow by means of pressure differential devices — Part 1: Orifice plates, nozzles and Venturi tubes inserted in circular cross-section conduits running full (ISO 5167-1:1991)*

EN ISO 9001, *Quality management systems — Requirements (ISO 9001:2000)*

ISO 3, *Preferred numbers — Series of preferred numbers*

ISO 2768-1:1989, *General tolerances — Part 1: Tolerances for linear and angular dimensions without individual tolerance indications*

ISO *guide to the expression of uncertainty in measurement*

EN 119000, *Generic specification — Dry and mercury wetted reed contact units*