Irish Standard
I.S. EN 12261:2002

Gas meters - Turbine gas meters

I.S. EN 12261:2002

Incorporating amendments/corrigenda/National Annexes issued since publication:

EN 12261:2002/AC:2003
EN 12261:2002/A1:2006

The National Standards Authority of Ireland (NSAI) produces the following categories of formal documents:

I.S. xxx: Irish Standard – national specification based on the consensus of an expert panel and subject to public consultation.

S.R. xxx: Standard Recommendation - recommendation based on the consensus of an expert panel and subject to public consultation.

SWiFT xxx: A rapidly developed recommendatory document based on the consensus of the participants of an NSAI workshop.

This document replaces:	*This document is based on:* EN 12261:2002	*Published:* 2 August, 2002

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I.S. EN 12261:2002

EUROPEAN STANDARD

NORME EUROPÉENNE

EUROPÄISCHE NORM

EN 12261:2002/AC

September 2003
Septembre 2003
September 2003

ICS

English version
Version Française
Deutsche Fassung

Gas meters - Turbine gas meters

Compteurs de gaz - Compteurs de gaz à turbine

Gaszähler - Turbinenradgaszähler

This corrigendum becomes effective on 25 September 2003 for incorporation in the official English and French versions of the EN.

Ce corrigendum prendra effet le 25 septembre 2003 pour incorporation dans les versions officielles anglaise et française de la EN.

Die Berichtigung tritt am 25.September 2003 zur Einarbeitung in die offizielle Englische und Französische Fassung der EN in Kraft.

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

Management Centre: rue de Stassart, 36 B-1050 Brussels

Ref. No.:EN 12261:2002/AC:2003 E/F

EN 12261:2002/AC:2003 (E/F/D)

English version

In 5.2.7.1, the second paragraph shall read as follows:

This temperature range shall be at least from -10 °C to +40 °C.

In Annex E.2.1, b), 1), second sentence, the working pressure range shall read as follows:

'0,5 · p_{test} to 2,0 · p_{test}'

Annex E.2.1, b), 2), second sentence, the working pressure range shall read as follows:

'0,5 · $p_{test, min}$ to 2,0 · $p_{test, max}$'

Version française

En E.2.1, b), 1), deuxième phrase, la plage de pression de service doit être modifiée comme suit:

'0,5 · p_{essai} à 2,0 · p_{essai}'

En E.2.1, b), 2), deuxième phrase, la plage de pression de service doit être modifiée comme suit:

'0,5 · $p_{essai, min}$ à 2,0 · $p_{essai, max}$'

I.S. EN 12261:2002

EUROPEAN STANDARD

NORME EUROPÉENNE

EUROPÄISCHE NORM

EN 12261:2002/A1

May 2006

ICS 17.120.10

English Version

Gas meters - Turbine gas meters

Compteurs à gaz - Compteurs à gaz à turbine

Gaszähler - Turbinenradgaszähler

This amendment A1 modifies the European Standard EN 12261:2002; it was approved by CEN on 20 March 2006.

CEN members are bound to comply with the CEN/CENELEC Internal Regulations which stipulate the conditions for inclusion of this amendment into the relevant national standard without any alteration. Up-to-date lists and bibliographical references concerning such national standards may be obtained on application to the Central Secretariat or to any CEN member.

This amendment 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 Central Secretariat has the same status as the official versions.

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

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

Management Centre: rue de Stassart, 36 B-1050 Brussels

Ref. No. EN 12261:2002/A1:2006: E

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Foreword

This document (EN 12261:2002/A1:2006) has been prepared by Technical Committee CEN/TC 237 “Gas meters”, the secretariat of which is held by BSI.

This Amendment to the European Standard EN 12261:2002 shall be given the status of a national standard, either by publication of an identical text or by endorsement, at the latest by November 2006, and conflicting national standards shall be withdrawn at the latest by November 2006.

This document has been prepared under a mandate given to CEN by the European Commission and the European Free Trade Association, and supports essential requirements of EU Directive 2004/22, Measuring Instruments Directive (MID).

For relationship with EU Directive, see informative Annex ZA, which is an integral part of this document.

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

Final paragraph:

Delete.

1 Clause 1 Scope

Delete the first paragraph and replace with the following:

"This European Standard specifies the measuring conditions, requirements and tests for the construction, performance and safety of class 1,0 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."

Delete second paragraph and replace with the following:

"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 m^3/h over a gas temperature range of at least 40 K and for a climatic environmental temperature range of at least 50 K."

Delete third paragraph and replace with the following:

"This standard applies to meters that are installed in locations with vibration and shocks of low significance 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."

Insert the following as a new fourth paragraph:

"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."

2 Clause 3 Terms, definitions and symbols

3.1.1 turbine gas meter

Include the following as the final sentence:

"It is designed to measure, memorize and display the volume of a fuel gas that has passed through it"

3.1.7.4 working temperature range

Delete title and replace with the following:

"**operating temperature range**"

I.S. EN 12261:2002

EUROPEAN STANDARD

NORME EUROPÉENNE

EUROPÄISCHE NORM

EN 12261

April 2002

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.

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Ref. No. EN 12261:2002 E

Contents

Foreword

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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.

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 m^3/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.

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*