Irish Standard
I.S. EN 14382:2005+A1:2009

Safety devices for gas pressure regulating stations and installations - Gas safety shut-off devices for inlet pressures up to 100 bar

I.S. EN 14382:2005+A1:2009

Incorporating amendments/corrigenda issued since publication:

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Údarás um Chaighdeáin Náisiúnta na hÉireann

I.S. EN 14382:2005+A1/AC:2009

EUROPEAN STANDARD

NORME EUROPÉENNE

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English version
Version Française
Deutsche Fassung

Safety devices for gas pressure regulating stations and installations - Gas safety shut-off devices for inlet pressures up to 100 bar

Dispositifs de sécurité pour postes et installations de détente-régulation de pression de gaz - Clapets de sécurité pour pressions amont jusqu'à 100 bar

Sicherheitseinrichtungen für Gas-Druckregelanlagen und -einrichtungen - Gas-Sicherheitsabsperreinrichtungen für Eingangsdrücke bis 100 bar

This corrigendum becomes effective on 10 June 2009 for incorporation in the three official language versions of the EN.

Ce corrigendum prendra effet le 10 juin 2009 pour incorporation dans les trois versions linguistiques officielles de la EN.

Die Berichtigung tritt am 10.Juni 2009 zur Einarbeitung in die drei offiziellen Sprachfassungen der EN in Kraft.

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

Management Centre: Avenue Marnix 17, B-1000 Brussels

Ref. No.:EN 14382:2005+A1:2009/AC:2009 D/E/F

1 Modification to page 6 - Clause 1

In the last indent, replace "service lines" *with* "service lines[1)]" *to read as follows:*

"〈A1〉 SSDs incorporated into pressure-regulating devices used in service lines[1)] with volumetric flow rate ≤ 200 m^3/h at normal conditions and inlet pressure ≤ 5 bar. 〈A1〉",

add the following footnote to text:

"[1)] The service lines are those defined in EN 12279."

and renumber all footnotes to text throughout the standard.

2 Modification to pages 32, 33, 34 and 35

Delete:

"4.3.3.1 General" (title and numbering only).

Renumber:

"4.3.3.2 Integral strength safety shut-off devices"

into:

"4.3.4 Integral strength safety shut-off devices".

Renumber:

"4.3.3.3 Differential strength safety shut-off devices"

into:

"4.3.5 Differential strength safety shut-off devices".

Renumber:

"4.3.4 Inner metallic partition walls"

into:

"4.3.6 Inner metallic partition walls".

Renumber:

"4.3.5 Minimum values of safety factor"

into:

"4.3.7 Minimum values of safety factor".

Renumber:

"4.3.6 Welded joint coefficient"

into:

"4.3.8 Welded joint coefficient".

3 Modification to page 42 – 1st lines of the 1st paragraphs of 7.3.1, Strength calculation method and 7.3.2, Experimental design method

Replace "4.3.5" *twice with* "4.3.7".

4 Modification to page 68 - inspection document

Replace:

"CLASS OF: accuracy group AG _____ b_{pu} _____bar"

with the following:

"CLASS OF: AG for over-pressure_____ AG for under-pressure_____ b_{pu} _____bar".

5 Modification to page 90 - Table ZA.1, Correspondence between this European Standard and Directive 97/23/EC

In the 2nd box from the top of 1st column, replace:

"4.3.4, 4.3.5"

with:

"4.3.6, 4.3.7".

In the 3rd box from the top of 1st column, replace:

"4.3.4, 4.3.5, 4.3.6"

with:

"4.3.6, 4.3.7, 4.3.8".

In the 21st box from the top of 1st column, replace:

"4.3.5"

with:

"4.3.7.

In the 22nd box from the top of 1st column, replace:

"4.3.6"

with:

"4.3.8".

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Supersedes EN 14382:2005

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This European Standard was approved by CEN on 30 December 2004 and includes Amendment 1 approved by CEN on 12 January 2009.

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 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 Management Centre has the same status as the official versions.

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EUROPÄISCHES KOMITEE FÜR NORMUNG

Management Centre: Avenue Marnix 17, B-1000 Brussels

Ref. No. EN 14382:2005+A1:2009: E

Contents

Foreword

This document (EN 14382:2005+A1:2009) has been prepared by Technical Committee CEN/TC 235 “Gas pressure regulators and associated safety devices for use in gas transmission and distribution”, the secretariat of which is held by UNI.

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 September 2009, and conflicting national standards shall be withdrawn at the latest by September 2009.

This document includes Amendment 1, approved by CEN on 2009-01-12.

This document supersedes ⟦A1⟩ EN 14382:2005 ⟨A1⟧.

The start and finish of text introduced or altered by amendment is indicated in the text by tags ⟦A1⟩ ⟨A1⟧.

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 97/23/EC.

For relationship with EU Directive 97/23/EC, see informative Annex ZA, which is an integral part of this document.

Safety shut-off devices dealt with in this document are standard safety shut-off devices and, when used in pressure regulating stations complying with EN 12186 or EN 12279, they are considered as standard pressure equipment in accordance with Clause 3.1 of Art. 1 of Pressure Equipment Directive (PED).

For standard safety shut-off devices used in pressure regulating stations complying with EN 12186 or EN 12279, Table ZA.1 given in Annex ZA includes all applicable Essential Requirements given in Annex I of PED ⟦A1⟩ except the external corrosion resistance in case of environmental conditions where corrosion is likely to occur ⟨A1⟧.

The normative Annex J of this document lists some suitable materials for pressure containing parts, inner metallic partition walls, fasteners and connectors. Other materials may be used when complying with the restrictions given in Table 5.

⟦A1⟩ *deleted text* ⟨A1⟧

⟦A1⟩ Continued ⟨A1⟧ integrity of safety shut-off devices is assured by periodic functional checks. For periodic functional checks it is common to refer to national regulations/standards where existing or users/manufacturers practices.

According to the CEN/CENELEC Internal Regulations, the national standards organizations of the following countries are bound to implement this European Standard: Austria, Belgium, Bulgaria, 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.

1 Scope

[A1] This document specifies constructional, functional, testing and marking requirements, sizing and documentation of gas safety shut-off devices used in the pressure regulating stations in accordance with EN 12186 or EN 12279: [A1]

— for inlet pressures up to 100 bar and nominal diameters up to DN 400;

— for an operating temperature range from –20 °C to +60 °C,

which operate with fuel gases of the 1st and 2nd family in accordance with EN 437 in transmission and distribution networks and also in commercial and industrial installations.

"Gas safety shut-off devices" will hereafter be called "SSDs" except in titles.

[A1] For standard safety shut-off devices when used in pressure regulating stations complying with EN 12186 or EN 12279, Annex ZA lists all applicable Essential Requirements except the external corrosion resistance in case of environmental conditions where corrosion is likely to occur. [A1]

[A1] This document considers the following classes/types of SSDs: [A1]

temperature classes:

— class 1: operating temperature range from –10 °C to 60 °C;

— class 2: operating temperature range from –20 °C to 60 °C;

functional classes:

— [A1] class A: SSDs that close when damage to the pressure detector element occurs (applicable to overpressure SSDs only) or when external power fails and whose re-opening, after an intervention for overpressure, is possible only manually;

— class B: SSDs that do not close when damage to the pressure detector element occurs and whose re-opening, after an intervention for overpressure, is possible only manually;

SSDs types:

— type IS: (integral strength type);

— type DS: (differential strength type). [A1]

SSDs complying with the requirements of this document may be declared as “in conformity with EN 14382“ and bear the mark “EN 14382”.

The material and functional requirements specified in this document may be applied to SSDs which use thermal energy or the effects of electrical energy to trip the operation of the closing member. For these SSDs the operational parameters are not specified in this document.

This document does not apply to:

— SSDs upstream from/on/in domestic gas-consuming appliances which are installed downstream of domestic gas meters;

— [A1] SSDs incorporated into pressure-regulating devices used in service lines with volumetric flow rate ≤ 200 m^3/h at normal conditions and inlet pressure ≤ 5 bar. [A1]