Irish Standard
I.S. EN 13774:2013

Valves for gas distribution systems with maximum operating pressure less than or equal to 16 bar - Performance requirements

I.S. EN 13774:2013

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English Version

Valves for gas distribution systems with maximum operating pressure less than or equal to 16 bar - Performance requirements

Appareils de robinetterie pour les systèmes de distribution du gaz avec une pression maximale de service inférieure ou égale à 16 bar - Exigences de performance

Armaturen für Gasverteilungssysteme mit zulässigen Betriebsdrücken kleiner oder gleich 16 bar - Anforderungen an die Gebrauchstauglichkeit

This European Standard was approved by CEN on 28 December 2012.

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.

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Foreword

This document (EN 13774:2013) has been prepared by Technical Committee CEN/TC 69 “Industrial valves”, the secretariat of which is held by AFNOR.

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of an identical text or by endorsement, at the latest by August 2013, and conflicting national standards shall be withdrawn at the latest by August 2013.

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

This document supersedes EN 13774:2003.

This document has been prepared under a mandate given to CEN by the European Commission and the European Free Trade Association.

The following is a list of the main changes compared to the previous edition:

a) the Scope has been modified;

b) the Normative References (Clause 2) have been updated;

c) requirements of type tests and production tests (Clause 5) have been completely revised, in particular:

   1) requirements for “strength design” (5.3.2), for “extended drain, vent and sealant lines” (5.3.8), for “end-to-end dimensions” (5.4.3), for “mechanical resistance against excessive actuating forces” (5.7) have been added;

   2) requirements for “resistance to wear” (5.12) and for “reference flow rate” (5.13) became optional;

   3) requirements for “bending resistance” and for “resistance to liquid agents” have been deleted;

d) the annex on analysis of the technical file and recording of the initial conditions has been deleted;

e) the annex on test methods for valves (Annex A) has been updated;

f) the annex on additional characteristics on request from the purchaser has been deleted;

g) the annex on resistance to bending moment applied via the stem or the shaft has been deleted;

h) the annex providing the European Standards for valves (Annex B) has been updated;

i) the annex giving a summary of tests on product and type tests (Annex C) has been added;

j) the Bibliography has been updated.

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, Slovakia, Slovenia, Spain, Sweden, Switzerland, Turkey and the United Kingdom.

1 Scope

This European Standard deals with metal isolating valves used for gas distribution systems with maximum operating pressure up to 16 bar, and which operate with fuel gases of the first, the second and the third family, in accordance with EN 437.

The types of isolating valves to be considered are: plug and ball valves, gate valves, globe valves and butterfly valves.

This standard does not apply to:

— valves for domestic installations;

— safety type pressure relief valves;

— wellhead valves.

In the case of power operated valves, the requirements for the power source are not covered by this European Standard.

The valves covered in this European Standard operate in the following classes of temperature:

— - 10 °C to 60 °C;

— - 20 °C to 60 °C;

— the range is stated by the purchaser for special design.

This European Standard gives additional requirements to the relevant products standards. (See Annex B.)

In case of contradictions between the standards mentioned in Annex B and this European Standard, EN 13774 prevails.

2 Normative references

The following documents, in whole or in part, are normatively referenced in this document and are indispensable for its application. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies.

EN 19, *Industrial valves — Marking of metallic valves*

EN 377, *Lubricants for applications in appliances and associated controls using combustible gases except those designed for use in industrial processes*

EN 549, *Rubber materials for seals and diaphragms for gas appliances and gas equipment*

EN 558, *Industrial valves — Face-to-face and centre-to-face dimensions of metal valves for use in flanged pipe systems — PN and Class designated valves*

EN 682, *Elastomeric Seals — Materials requirements for seals used in pipes and fittings carrying gas and hydrocarbon fluids*

EN 736-1:1995, *Valves — Terminology — Part 1: Definition of types of valves*

EN 736-2:1997, *Valves — Terminology — Part 2: Definition of components of valves*