

Valves for gas distribution systems with maximum operating pressure ≤ 16 bar - Performance requirements

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EESTI STANDARDI EESSÕNA

NATIONAL FOREWORD

Käesolev Eesti standard EVS-EN 13774:2003 sisaldab Euroopa standardi EN 13774:2003 ingliskeelset teksti.	This Estonian standard EVS-EN 13774:2003 consists of the English text of the European standard EN 13774:2003.
Käesolev dokument on jõustatud 16.05.2003 ja selle kohta on avaldatud teade Eesti standardiorganisatsiooni ametlikus väljaandes.	This document is endorsed on 16.05.2003 with the notification being published in the official publication of the Estonian national standardisation organisation.
Standard on kättesaadav Eesti standardiorganisatsioonist.	The standard is available from Estonian standardisation organisation.

Käsitlusala: 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 and the second family, in accordance with EN 437	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 and the second family, in accordance with EN 437
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ICS 23.060.01

Võtmesõnad: acceptance testing, gas supply system, gas valves, gases, inspection, inspection specification, marking, metals, operating requirements, shut-off valves, specification (approval), specifications, stop valves, testing, valves, water, water fittings, working pressures

ICS 23.060.01

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 égal à 16 bar - Exigences de performance

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

This European Standard was approved by CEN on 2 January 2003.

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, Hungary, Iceland, Ireland, Italy, Luxembourg, Malta, Netherlands, Norway, Portugal, Slovakia, 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 13774:2003) 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 October 2003, and conflicting national standards shall be withdrawn at the latest by October 2003.

Annexes A and B are normative.

Annexes C, D and E are informative.

This document 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, Hungary, Iceland, Ireland, Italy, Luxembourg, Malta, Netherlands, Norway, Portugal, Slovakia, Spain, Sweden, Switzerland 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 and the second family, in accordance with EN 437.

It applies to valves DN 25 and larger.

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 standard.

The valves covered in this standard operate in the temperature range : - 20 °C to + 60 °C.

This European Standard gives additional requirements to the relevant product standards.

In case of contradictions between the above mentioned standards, this standard will prevail.

2 Normative references

This European Standard incorporates by dated or undated reference, 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 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 437, *Test gases — Test pressures — Appliance categories.*

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

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

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

EN 736-3, *Valves — Terminology — Part 3: Definition of terms.*

EN 764, *Pressure equipment — Terminology and symbols — Pressure, temperature, volume.*

EN 1092-1, *Flanges and their joints — Circular flanges for pipes, valves, fittings and accessories, PN designated — Part 1 : Steel flanges.*

EN 1092-2, *Flanges and their joints — Circular flanges for pipes, valves, fittings and accessories, PN designated — Part 2 : Cast iron flanges.*

prEN 1092-3¹⁾, *Flanges and their joints — Circular flanges for pipes, valves, fittings and accessories, PN designated — Part 3 : Copper alloy flanges.*

EN 1503-1, *Valves — Materials for bodies, bonnets and covers — Part 1: Steels specified in European Standards.*

EN 1503-2, *Valves — Materials for bodies, bonnets and covers — Part 2: Steels other than those specified in European Standards.*

EN 1503-3, *Valves — Materials for bodies, bonnets and covers — Part 3: Cast irons specified in European Standards.*

EN 1503-4, *Valves — Materials for bodies, bonnets and covers — Part 4: Copper alloys specified in European Standards.*

EN 1555-2, *Plastics piping systems for the supply of gaseous fuels — Polyethylene (PE) — Part 2: Pipes.*

EN 1555-3, *Plastics piping systems for the supply of gaseous fuels — Polyethylene (PE) — Part 3 : Fittings.*

EN 1555-4, *Plastics piping systems for the supply of gaseous fuels — Polyethylene (PE) — Part 4 : Valves.*

prEN 1660¹⁾, *Mechanical fasteners — Hexagon products — Widths across flats.*

EN 12266-1:2003, *Industrial valves — Testing of valves — Part 1: Pressure tests, test procedures and acceptance criteria — Mandatory requirements.*

EN 12570, *Industrial valves — Method for sizing the operating element.*

EN 12627, *Industrial valves - Butt welding ends for steel valves.*

ISO 7-1, *Pipe threads where pressure-tight joints are made on the threads — Part 1: Dimensions, tolerances and designation.*

ISO 228-1, *Pipe threads where pressure-tight joints are not made on the threads — Part 1: Dimensions, tolerances and designation.*

3 Terms and definitions

For the purposes of this European Standard, the terms and definitions of EN 736-1, EN 736-2, EN 736-3 and EN 764 apply together with the following.

3.1

gas distribution system

pipeline system including piping above and below ground and all other equipment necessary to convey the gas to the consumers

3.2

external leak tightness

shell tightness

tightness of the gas-containing envelope with respect to the atmosphere

3.3

internal leak tightness

seat tightness

tightness ensured between the valve inlet and outlet by the obturator in the closed position