

Tööstusventiilid. Malmist siibrid

Industrial valves - Cast iron gate valves

EESTI STANDARDI EESSÕNA

NATIONAL FOREWORD

<p>Käesolev Eesti standard EVS-EN 1171:2003 sisaldab Euroopa standardi EN 1171:2002 ingliskeelset teksti.</p> <p>Käesolev dokument on jõustatud 18.02.2003 ja selle kohta on avaldatud teade Eesti standardiorganisatsiooni ametlikus väljaandes.</p> <p>Standard on kättesaadav Eesti standardiorganisatsioonist.</p>	<p>This Estonian standard EVS-EN 1171:2003 consists of the English text of the European standard EN 1171:2002.</p> <p>This document is endorsed on 18.02.2003 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: This European Standard specifies the requirements for cast iron gate valves with flanged ends, socket ends or spigot ends</p>	<p>Scope: This European Standard specifies the requirements for cast iron gate valves with flanged ends, socket ends or spigot ends</p>
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ICS 23.060.30

Võtmesõnad: cast iron, flange connections, measurement, pressure, sample surveys, slide valves, socket-joint, specification (approval), specifications, spigot ends, surveillance (approval), temperature, temperature limit, testing, tolerances, tolerances (measurement), valves

ICS 23.060.30

English version

Industrial valves - Cast iron gate valves

Robinetterie industrielle - Robinets-vannes en fonte

Industriearmaturen - Schieber aus Gusseisen

This European Standard was approved by CEN on 2 September 2002.

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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Foreword

This document (EN 1171:2002) 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 April 2003, and conflicting national standards shall be withdrawn at the latest by April 2003.

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(s).

For relationship with EU Directive(s), see informative annex ZA, which is an integral part of this document.

In this European Standard the annex A is informative and the annexes B and C are normative.

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 requirements for cast iron gate valves with flanged ends, socket ends or spigot ends.

This standard is applicable to cast iron gate valves mainly used for industrial and general-purpose applications. However, they can be used for other applications provided the requirements of the relevant performance standards are met.

The range of nominal sizes covered is:

DN 40 ; DN 50 ; DN 65 ; DN 80 ; DN 100 ; DN 125 ; DN 150 ; DN 200 ; DN 250 ; DN 300 ; DN 350 ; DN 400 ; DN 450 ; DN 500 ; DN 600 ; DN 700 ; DN 800 ; DN 900 ; DN 1 000.

The range of pressure designations covered is:

- isobaric PN 6; PN 10; PN 16; PN 25;
- isomorphic, PS 10 bar to PS 1 bar at room temperature.

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 545:2002, *Ductile iron pipes, fittings, accessories and their joints for water pipelines – Requirements and test methods.*

EN 558-1:1995, *Industrial valves – Face-to-face and centre-to-face dimensions of metal valves for use in flanged pipe systems – Part 1: PN-designated valves.*

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

EN 1561:1997, *Founding – Grey cast irons.*

EN 1562:1997, *Founding – Malleable cast irons.*

EN 1563:1997, *Founding – Spheroidal graphite cast irons.*

prEN 12266-1¹, *Industrial valves – Testing of valves - Part 1: Pressure tests, test procedures and acceptance criteria – Mandatory requirements.*

¹ To be published.

EN 12266-2, *Industrial valves – Testing of valves – Part 2: Tests, test procedures and acceptance criteria - Supplementary requirements.*

EN 12351, *Industrial valves – Protective caps for valves with flanged connections.*

EN 12516-3, *Valves – Shell design strength – Part 3: Experimental Method.*

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

EN ISO 5210, *Industrial valves – Multi-turn valve actuator attachments (ISO 5210:1991).*

ISO 185:1988, *Grey cast iron - Classification.*

ISO 1083:1987, *Spheroidal graphite cast iron - Classification.*

ISO 5922:1981, *Malleable cast iron.*

NOTE This European Standard supports some of the essential requirements of the Pressure Equipment Directive 97/23/EC. The essential requirements covered are listed in annex ZA. It should be noted that this standard is not self-sufficient and should be used with the normative references listed herein. Reference should also be made to annex ZA in the relevant normative reference.

3 Terms and definitions

For the purposes of this European Standard, the definitions of types of valves and components and the definitions of terms given in EN 736-1, EN 736-2 and EN 736-3 and the following terms and definitions apply.

NOTE The terms maximum allowable pressure, PS , and test pressure, PT , defined in EU Directive 97/23/EC (PED) are equivalent to the terms allowable pressure, p_s , and test pressure, p_t , defined in EN 736-3.

3.1

isomorphic series

series of cast iron gate valves of a specified type and design having maximum allowable pressures which tend to decrease as the nominal size increases (see Table 2) and having specific flanged end connections (see 4.1.3.2.1)

3.2

isobaric series

series of cast iron gate valves of a specified type and design having the same maximum allowable pressure for all nominal sizes

3.3

strength torque

torque applied directly to the operating mechanism or, when fitted, the operating device, which the valve is capable of withstanding