

SVENSK STANDARD

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Industriventiler – Kulventiler av metalliska material för petroleum-, petrokemisk- och liknande industri (ISO 17292:2015)

Metal ball valves for petroleum, petrochemical and allied industries (ISO 17292:2015)



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Denna standard ersätter SS-EN ISO 17292:2004, utgåva 1.

The European Standard EN ISO 17292:2015 has the status of a Swedish Standard. This document contains the official English version of EN ISO 17292:2015.

This standard supersedes the Swedish Standard SS-EN ISO 17292:2004, edition 1.

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Denna standard är framtagen av kommittén för Stålrör, rördelar och rörlänsar, SIS/TK 118.

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EUROPEAN STANDARD

EN ISO 17292

NORME EUROPÉENNE

EUROPÄISCHE NORM

December 2015

ICS 23.060.20; 75.200

Supersedes EN ISO 17292:2004

English Version

Metal ball valves for petroleum, petrochemical and allied industries (ISO 17292:2015)

Robinets à tournant sphérique métalliques pour les industries du pétrole, de la pétrochimie et les industries connexes (ISO 17292:2015)

Kugelhähne aus Metall für Erdöl-, petrochemische und verwandte Industrien (ISO 17292:2015)

This European Standard was approved by CEN on 7 November 2015.

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

CEN-CENELEC Management Centre: Avenue Marnix 17, B-1000 Brussels

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European foreword

This document (EN ISO 17292:2015) has been prepared by Technical Committee ISO/TC 153 "Valves" in collaboration with the 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 June 2016, and conflicting national standards shall be withdrawn at the latest by June 2016.

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 ISO 17292:2004.

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, 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.

Endorsement notice

The text of ISO 17292:2015 has been approved by CEN as EN ISO 17292:2015 without any modification.

Introduction

The purpose of this International Standard is the establishment, in ISO format, of basic requirements and practices for flanged, butt-welding, socket welding, and threaded end steel ball valves having flow passageways identified as full bore, reduced bore, and double reduced bore seat openings suitable for petroleum, petrochemical, and allied industries applications.

It is not the purpose of this International Standard to replace ISO 7121 or any other International Standard that is not identified with petroleum refinery, petrochemical, or natural gas industry applications.

In this International Standard, flanged end Class-designated valves have flanges in accordance with ASME B16.5. Flanged end PN-designated valves have flanges in accordance with EN 1092-1. Valves with ends threaded may have threads to either ISO 7-1 or ASME B1.20.1.

Metal ball valves for petroleum, petrochemical and allied industries

1 Scope

This International Standard specifies the requirements for a series of metal ball valves suitable for petroleum, petrochemical, natural gas plants, and related industrial applications.

It covers valves of the nominal sizes DN:

— 8, 10, 15, 20, 25, 32, 40, 50, 65, 80, 100, 150, 200, 250, 300, 350, 400, 450, 500, 600;

corresponding to nominal pipe sizes NPS:

— $\frac{1}{4}$, $\frac{3}{8}$, $\frac{1}{2}$, $\frac{3}{4}$, 1, 1 $\frac{1}{4}$, 1 $\frac{1}{2}$, 2, 2 $\frac{1}{2}$, 3, 4, 6, 8, 10, 12, 14, 16, 18, 20, 24;

and applies for pressure designations:

— Class 150; 300; 600; 800 (Class 800 applies only for valves with threaded and socket welding end);

— PN 16, 25, 40, 63, 100.

It includes provisions for testing and inspection and for valve characteristics as follows:

— flanged and butt-welded ends, in sizes $15 \leq \text{DN} \leq 600$ ($\frac{1}{2} \leq \text{NPS} \leq 24$);

— socket welding and threaded ends, in sizes $8 \leq \text{DN} \leq 50$ ($\frac{1}{4} \leq \text{NPS} \leq 2$);

— body seat openings designated as full bore, reduced bore, and double reduced bore;

— materials.

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.

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

ISO 7-2, *Pipe threads where pressure-tight joints are made on the threads — Part 2: Verification by means of limit gauges*

ISO 261, *ISO general purpose metric screw threads — General plan*

ISO 965-2, *ISO general purpose metric screw threads — Tolerances — Part 2: Limits of sizes for general purpose external and internal screw threads — Medium quality*

ISO 4032, *Hexagon regular nuts (style 1) — Product grades A and B*

ISO 4033, *Hexagon high nuts (style 2) — Product grades A and B*

ISO 4034, *Hexagon regular nuts (style 1) — Product grade C*

ISO 5208, *Industrial valves — Pressure testing of metallic valves*

ISO 5209, *General purpose industrial valves — Marking*