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Irish Standard
I.S. EN 593:2009+A1:2011

Industrial valves - Metallic butterfly valves

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EUROPEAN STANDARD

NORME EUROPÉENNE

EUROPÄISCHE NORM

EN 593:2009+A1

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English Version

Industrial valves - Metallic butterfly valves

Robinetterie industrielle - Robinets métalliques à papillon

Industriearmaturen - Metallische Klappen

This European Standard was approved by CEN on 7 May 2009 and includes Amendment 1 approved by CEN on 17 January 2011.

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Foreword

This document (EN 593:2009+A1:2011) 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of an identical text or by endorsement, at the latest by September 2011 and conflicting national standards shall be withdrawn at the latest by September 2011.

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.

[A1] This document supersedes EN 593:2009. [A1]

This document includes Amendment 1, approved by CEN on 2011-01-17.

The start and finish of text introduced or altered by amendment is indicated in the text by tags [A1] [A1].

Informative Annexes A, B and C can be used for the practical application of this European Standard.

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 [A1] EU Directive 97/23/EC [A1].

For relationship with [A1] EU Directive 97/23/EC [A1], see informative Annex ZA, which is an integral part of this document.

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, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, Netherlands, Norway, Poland, Portugal, Romania, Slovakia, Slovenia, Spain, Sweden, Switzerland and the United Kingdom.

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1 Scope

This European Standard specifies requirements for butterfly valves having metallic bodies for use in flanged or butt welding piping systems and used for isolating, regulating or control applications.

The PN and Class ranges are:

PN 2,5 ; PN 6 ; PN 10 ; PN 16 ; PN 25 ; PN 40 ; Class 150 ; Class 300.

The DN range is:

— DN 20 ; DN 25 ; DN 32 ; 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 750 ; DN 800 ; DN 900 ; DN 1000 ; DN 1200 ; DN 1400 ; DN 1600 ; DN 1800 ; DN 2000 ; DN 2200 ; DN 2400.

DN 750 is used only for Class 150 and Class 300.

For special application as industrial process control valves, see EN 1349 and EN 60534-2-1.

2 Normative references

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

EN 19:2002, *Industrial valves — Marking of metallic valves*

EN 287-1, *Qualification test of welders — Fusion welding — Part 1: Steels*

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 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*

EN 736-3:2008, *Valves — Terminology — Part 3: Definition of terms*

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

EN 1092-2:1997, *Flanges and their joints — Circular flanges for pipes, valves, fittings and accessories, PN designated — Part 2: Cast iron flanges*

EN 1092-3:2003, *Flanges and their joints — Circular flanges for pipes, valves, fittings and accessories, PN designated — Part 3: Copper alloy flanges*

EN 1092-4:2002, *Flanges and their joints — Circular flanges for pipes, valves, fittings and accessories, PN designated — Part 4: Aluminium alloy flanges*

EN 1267, *Valves — Test of flow resistance using water as test fluid*

EN 1418, *Welding personnel — Approval testing of welding operators for fusion welding and resistance weld setters for fully mechanized and automatic welding of metallic materials*

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