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**BS EN 331:2015**



**BSI Standards Publication**

# **Manually operated ball valves and closed bottom taper plug valves for gas installations for buildings**

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This British Standard is the UK implementation of EN 331:2015. It supersedes BS EN 331:1998+A1:2010 which is withdrawn.

The UK participation in its preparation was entrusted to Technical Committee GSE/42, Gas fittings and connections including metal hose and hose assemblies.

A list of organizations represented on this committee can be obtained on request to its secretary.

This publication does not purport to include all the necessary provisions of a contract. Users are responsible for its correct application.

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## EUROPÄISCHE NORM

December 2015

ICS 23.060.20

Supersedes EN 331:1998

English Version

## Manually operated ball valves and closed bottom taper plug valves for gas installations for buildings

Robinets à tournant sphérique et robinets à tournant  
conique à fond plat destinés à être manoeuvrés  
manuellement et à être utilisés pour les installations de  
gaz dans les bâtiments

Handbetätigte Kugelhähne und Kegelhähne mit  
geschlossenem Boden für die Gas-Hausinstallation

This European Standard was approved by CEN on 24 October 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.

CEN members are the national standards bodies of 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 United Kingdom.



EUROPEAN COMMITTEE FOR STANDARDIZATION  
COMITÉ EUROPÉEN DE NORMALISATION  
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**CEN-CENELEC Management Centre: Avenue Marnix 17, B-1000 Brussels**

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## European foreword

This document (EN 331:2015) has been prepared by Technical Committee CEN/TC 236 "Non industrial manually operated shut-off valves for gas and particular combinations valves-other products", the secretariat of which is held by UNI.

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 September 2017.

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 331:1998.

The revised version:

- includes in one document the previous publications of 1998 and 2010 to allow an easier reading of the text;
- allocates the clauses and the annexes in line with the framework of the standards which support CPR;
- enlarges the field of application to the nominal sizes DN 65, 80 and 100;
- updates the technical content in line with the current edition of the referenced standards;
- considers the proposals coming from the experience of the application of the previous edition of EN 331;
- adds Annex ZA for the relationship between this European Standard and the Essential Requirements of EN Construction Products Regulation.

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.

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.

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## 1 Scope

**1.1** This European Standard specifies the characteristics for the construction, performance and safety of ball valves and closed bottom taper plug valves. It also details the test methods and marking provisions.

It applies to metallic valves not directly buried for domestic and commercial installations inside or outside of buildings, using gases of the first, second and third family (specified in EN 437) and working up to  $0,2 \times 10^5$  Pa,  $0,5 \times 10^5$  Pa,  $1 \times 10^5$  Pa,  $5 \times 10^5$  Pa and  $20 \times 10^5$  Pa and with temperature limits from  $-5$  °C or  $-20$  °C to  $+60$  °C.

NOTE "Not directly buried" within the context of this standard means that valves below ground are not in direct contact with earth or other materials e.g. that they are in a protected encasement.

**1.2** Valve nominal sizes (*DN*) covered by this European Standard are as follows: 6, 8, 10, 12, 15, 20, 25, 32, 40, 50, 65, 80, 100.

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

EN 437:2003+A1:2009, *Test gases - Test pressures - Appliance categories*

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

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

EN 751-1, *Sealing materials for metallic threaded joints in contact with 1st, 2nd and 3rd family gases and hot water - Part 1: Anaerobic jointing compounds*

EN 751-2, *Sealing materials for metallic threaded joints in contact with 1st, 2nd and 3rd family gases and hot water - Part 2: Non-hardening jointing compounds*

EN 751-3, *Sealing materials for metallic threaded joints in contact with 1st, 2nd and 3rd family gases and hot water - Part 3: Unsintered PTFE tapes*

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*

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

EN 1254-1, *Copper and copper alloys - Plumbing fittings - Part 1: Fittings with ends for capillary soldering or capillary brazing to copper tubes*

EN 1254-2, *Copper and copper alloys - Plumbing fittings - Part 2: Fittings with compression ends for use with copper tubes*