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Responsible committee: B/504/-/14 Valves and fittings for buildings & devices to prevent pollution by backflow

Interested committees:

Title: BS EN 13828 Building valves - Manually operated copper alloy and stainless steel ball valves for potable water supply in buildings - Tests and requirements

Please notify the secretary if you are aware of any keywords that might assist in classifying or identifying the standard or if the content of this standard

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- iii) requires additional national guidance or information

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Introduction

This draft standard is based on national and international discussions. Your comments on this draft are invited and will assist in the preparation of the consequent standard.

For international standards, comments will be reviewed by the relevant UK national committee before sending the consensus UK vote and comments to the international committee, which will then decide appropriate action. If the international standard is approved, it is usual for the text to be published as a British Standard.

For national standards, comments will be reviewed by the relevant UK national committee and the resulting standards published as a British Standard.

UK Vote

Please indicate whether you consider the UK should submit a negative (with supporting technical reasons) or positive vote on this draft. Please indicate if you are aware of any reason why this draft standard should not be published as a British Standard.

Submission of Comments

- **Annotated drafts are not acceptable and will be rejected.**
- All comments should be submitted online at <https://standardsdevelopment.bsigroup.com/>. You will need to register in order to comment.

Template for comments and secretariat observations

Date: xx/xx/20xx	Document: ISO/DIS xxxx
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1	2	(3)	4	5	(6)	7
MB	Clause No./ Subclause No./Annex (e.g. 3.1)	Paragraph/Figure/ Table/Note	Type of comment	Commend (justification for change) by the MB	Proposed change by the MB	Secretariat observations on each comment submitted
	3.1	Definition 1	ed	Definition is ambiguous and needs clarifying.	Amend to read '...so that the mains connector to which no connection...'	
	6.4	Paragraph 2	te	The use of the UV photometer as an alternative cannot be supported as serious problems have been encountered in its use in the UK.	Delete reference to UV photometer.	

English Version

Building valves - Manually operated copper alloy and stainless steel ball valves for potable water supply in buildings - Tests and requirements

Robinetterie de bâtiment - Robinets d'arrêt à tournant sphérique actionnés à la main en alliage de cuivre et en acier inoxydable pour la distribution d'eau potable dans les bâtiments - Essais et exigences

Gebäudearmaturen - Handbetätigte Kugelhähne aus Kupferlegierungen und nicht rostenden Stählen für Trinkwasseranlagen in Gebäuden - Prüfungen und Anforderungen

This draft European Standard is submitted to CEN members for enquiry. It has been drawn up by the Technical Committee CEN/TC 164.

If this draft becomes a European Standard, 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.

This draft European Standard was established by CEN 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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Recipients of this draft are invited to submit, with their comments, notification of any relevant patent rights of which they are aware and to provide supporting documentation.

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

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European foreword

This document (prEN 13828:2023) has been prepared by Technical Committee CEN/TC 164 “Water supply”, the secretariat of which is held by AFNOR.

This document is currently submitted to the CEN Enquiry.

This document will supersede EN 13828:2003.

Introduction

With respect to potential adverse effects on the quality of water intended for human consumption, caused by the product covered by this document:

- This document provides no information as to whether the product may be used without restriction in any of the member states of the EU or EFTA;
- It should be noted that, while awaiting the adoption of the verifiable European criteria, existing national regulations concerning the use and/or the characteristics of this product remain in force.
- The requirements with regard to the drinking water quality are specified in national regulations.

1 Scope

This document applies primarily to copper alloy and stainless steel ball valves with dimensions DN 6 to DN 100, for installations in buildings for potable water supply up to PN16 and a maximum distribution temperature of 65 °C. Occasional excursions up to 90 °C are permitted for a period of 1 h maximum.

The ball valves are classified by their nominal pressure being either PN10 or PN16.

This document specifies:

- the requirements of the materials and the design of ball valves;
- the mechanical, hydraulic and acoustic requirements of ball valves;
- the test methods to verify the requirements of ball valves;
- the marking requirements of ball valves.

2 Normative references

The following documents are referred to in the text in such a way that some or all of their content constitutes requirements 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 248, *Sanitary tapware - General specification for electrodeposited coatings of Ni-Cr*

EN 1254 (all parts), *Copper and copper alloys - Plumbing fittings*

EN ISO 3822-1, *Acoustics - Laboratory tests on noise emission from appliances and equipment used in water supply installations - Part 1: Method of measurement (ISO 3822-1)*

EN ISO 3822-3, *Acoustics - Laboratory tests on noise emission from appliances and equipment used in water supply installations - Part 3: Mounting and operating conditions for in-line valves and appliances (ISO 3822-3)*

EN ISO 5211, *Industrial valves - Part-turn actuator attachments (ISO 5211)*

EN ISO 6509, *Corrosion of metals and alloys - Determination of dezincification resistance of brass (ISO 6509)*

EN ISO 9227, *Corrosion tests in artificial atmospheres - Salt spray tests (ISO 9227)*

ISO 65, *Carbon steel tubes suitable for screwing in accordance with ISO 7-1*

3 Terms and definitions

For the purposes of this document, the following terms and definitions apply.

ISO and IEC maintain terminological databases for use in standardization at the following addresses:

- IEC Electropedia: available at <https://www.electropedia.org/>
- ISO Online browsing platform: available at <https://www.iso.org/obp>

3.1

ball valves

valves in which a ball, operated manually or via an actuator, rotates around an axis perpendicular to at least one of the directions of flow; the ball has a hole where in open position the water will flow through, in a straight or angled line

Note 1 to entry: Ball valves have a normal operating position of either fully open or fully closed. Ball valves will be opened or closed by a single turn through 90°.

Note 2 to entry: The following types are covered:

- straight pattern ball valves;
- angle pattern ball valves;
- three way valves (1 inlet, 2 outlets).

3.2

nominal size

DN

nominal size of the ball valves is related to the size of the connection ends

Note 1 to entry: See Table 1.

Note 2 to entry: For valves provided with connection ends in different sizes, the nominal size (DN) of the smallest connection end is leading and determines the minimum bore of the ball (Table 2 and Table 3).

4 Designation

The designation of a ball valve comprises:

- Design of the body (straight, angled or three way);
- type and material;
- nominal size (DN);
- bore (full or reduced);
- nominal pressure (PN);
- end connections;
- acoustic group (if applicable);
- number of this document, i.e. prEN 13828.

EXAMPLE Straight pattern ball valve (S) of copper alloy, DN 25, PN 16, with threads Rp 1 on both sides, acoustic group 1, according to prEN 13828.