

Building valves — Water pressure reducing valves and combination water reducing valves — Requirements and tests

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National foreword

This British Standard is the UK implementation of EN 1567:1999. It supersedes BS 6283-4:1991, which is withdrawn.

The UK participation in its preparation was entrusted by Technical Committee B/504, Water supply, to subcommittee B/504/7, Control and safety devices.

A list of organizations represented on this subcommittee 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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English version

**Building valves — Water pressure reducing valves and
combination water pressure reducing valves — Requirements
and tests**

Robinetterie de bâtiment - Réducteurs de pression d'eau et
combinés avec réducteur - Exigences et essais

Gebäudearmaturen - Druckminderer und
Druckmindererkombinationen für Wasser - Anforderungen
und Prüfungen

This European Standard was approved by CEN on 5 September 1999.

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 Central Secretariat 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 Central Secretariat has the same status as the official versions.

CEN members are the national standards bodies of Austria, Belgium, Czech Republic, Denmark, Finland, France, Germany, Greece, Iceland, Ireland, Italy, Luxembourg, Netherlands, Norway, Portugal, Spain, Sweden, Switzerland and United Kingdom.



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

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Foreword

This European Standard has been prepared by Technical Committee CEN/TC 164 "Water supply", 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 2000, and conflicting national standards shall be withdrawn at the latest by April 2000.

This European Standard 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).

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, Netherlands, Norway, Portugal, Spain, Sweden, Switzerland and the United Kingdom.

Introduction

In respect of potential adverse effect on the quality of water intended for human consumption, caused by the product covered by this standard:

- 1) This standard provides no information as to whether the product may be used without restriction in any of the Member States of the EU or EFTA.
- 2) It should be noted that, while awaiting the adoption of the verifiable European criteria, existing national regulation concerning the use and or the characteristics of this product remain in force.

1 Scope

This European Standard specifies dimensions, materials and performance requirements (including methods of test) for Water Pressure Reducing Valves and Combination Pressure Reducing Valves, of nominal size from DN 8 to DN 100, for inlet pressures that do not exceed 1,6 MPa (16 bar) and a temperature that does not exceed 30 °C for cold water application and 80 °C for hot water application. Except when stated otherwise by the manufacturer, the valves can be mounted in any orientation.

NOTE: The use of the device specified in this standard does not override the need to use hydraulic safety devices to prevent over pressurisation.

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.

EN 1254-2

Copper and copper alloys – Plumbing fittings – Part 2: Fittings with compression ends for use with copper tubes

EN 1561

Founding – Grey cast irons

EN 1563

Founding – Spheroidal graphite cast irons

EN 1982

Copper and copper alloys – Ingots and castings

EN 10213-2

Technical delivery conditions for steel castings for pressure purposes - Part 2: Steel grades for use at room temperature and elevated temperatures

EN 12420

Copper and copper alloys – Forgings

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 : 1999)

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.

EN ISO 6509

Corrosion of metals and alloys – Determination of dezincification resistance of brass (ISO 6509 : 1981)

ISO 7-1

Pipe threads where pressure-tight joints are made on the threads – Part 1: Dimensions, tolerances and designation

ISO 228-1

Pipe threads where pressure-tight joints are not made on the threads – Part 1: Dimensions, tolerances and designation

ISO 7005-3 : 1988

Metallic flanges – Part 3: Copper alloy and composite flanges

3 Definitions

For the purposes of this standard the following definitions apply:

3.1 Water pressure reducing valve

A valve that reduces the pressure of a fluid at the outlet to an adjustable or preset value.

3.2 Combination water pressure reducing valve

A water pressure reducing valve with additional functions (e.g. stop valve and check valve) contained within the same body.

4 Classification of the water pressure reducing valves and combination water pressure reducing valves

A valve is classified by:

- valve form
- nominal size (DN)
- end connections
- adjustment
- range of temperature

4.1 Valve form

- Water pressure reducing valves
- Combination water pressure reducing valves

4.2 Nominal diameter (DN)

The nominal diameter (DN) is declared by the manufacturer. Each nominal diameter (DN) corresponds to the nominal flow rates in table 5.

The inlet connection of the valve is DN or one size larger or one size smaller than the nominal size (DN).

In the case of flange connections the nominal size (DN) shall be determined by the DN of the inlet connection.

4.3 End connections

Examples of end connections are shown in table 1. Combinations of two kinds of connections are possible.