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BSI Standards Publication

**Devices to prevent pollution by backflow of potable water — Controllable backflow preventer with reduced pressure zone — Family B — Type A**

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## National foreword

This British Standard is the UK implementation of EN 12729:2023. It supersedes BS EN 12729:2002, which is withdrawn.

The UK participation in its preparation was entrusted to Technical Committee B/504, Water supply.

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

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## EUROPÄISCHE NORM

March 2023

ICS 13.060.20; 91.140.60

Supersedes EN 12729:2002

English Version

## Devices to prevent pollution by backflow of potable water - Controllable backflow preventer with reduced pressure zone - Family B - Type A

Dispositifs de protection contre la pollution de l'eau  
potable - Disconnecteur à zone de pression réduite  
contrôlable - Famille B - Type A

Sicherungseinrichtungen zum Schutz des Trinkwassers  
gegen Verschmutzung durch Rückfließen -  
Systemtrenner mit kontrollierbarer druckreduzierter  
Zone - Familie B - Typ A

This European Standard was approved by CEN on 30 January 2023.

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, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, Netherlands, Norway, Poland, Portugal, Republic of North Macedonia, Romania, Serbia, Slovakia, Slovenia, Spain, Sweden, Switzerland, Türkiye and United Kingdom.



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

**CEN-CENELEC Management Centre: Rue de la Science 23, B-1040 Brussels**

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## Contents

Page

European foreword.....	4
Introduction .....	5
1 Scope.....	6
2 Normative references.....	6
3 Terms and definitions .....	8
4 Denomination.....	9
5 Designation.....	9
6 Symbolization.....	10
7 Physico-chemical characteristics .....	10
7.1 General.....	10
7.2 Materials.....	10
7.2.1 General.....	10
7.2.2 Dezincification resistant copper alloy.....	10
7.3 Surface coating.....	11
7.3.1 General.....	11
7.3.2 Epoxy coating.....	11
7.3.3 Polyamide powder based coating .....	11
8 Design.....	11
8.1 General.....	11
8.2 Relief valve .....	12
9 Characteristics and tests .....	13
9.1 General.....	13
9.2 General tolerances.....	13
9.2.1 Tolerance of set parameters .....	13
9.2.2 Accuracy of measuring instruments .....	13
9.3 Dimensional characteristics.....	13
9.3.1 Connections.....	13
9.3.2 Pressure taps .....	13
9.4 Mechanical characteristics .....	14
9.4.1 General.....	14
9.4.2 Mechanical resistance of the body under pressure .....	14
9.4.3 Endurance.....	14
9.4.4 Torque test of captive rotating nuts and bending strength – tightness of the body .....	16
9.4.5 Reliability of stop valves fitted to test ports.....	17
9.5 Tightness characteristics .....	18
9.5.1 Verification of the tightness of the downstream check valve (in the closing direction)....	18
9.5.2 Verification of the closing pressure of the downstream check valve and its tightness (opening direction) .....	18
9.5.3 Verification of the tightness of the upstream check valve at low pressure .....	19
9.5.4 Verification of the tightness of the upstream check-valve under vacuum.....	20
9.6 Hydraulic characteristics .....	21
9.6.1 Test rig – General circuit .....	21
9.6.2 Verification of the pressure loss as a function of the flow rate .....	22

This is a preview of "BS EN 12729:2023". [Click here to purchase the full version from the ANSI store.](#)

9.6.3	Verification of the pressure difference between the upstream and the intermediate zones.....	22
9.6.4	Verification of venting to atmospheric pressure of the intermediate zone when the upstream pressure drops .....	23
9.6.5	Verification of opening start of the relief valve and of its closing.....	23
9.6.6	Verification of the relief valve tightness in case of fluctuation of the upstream pressure .....	24
9.6.7	Verification of the intermediate zone pressure for a given relief flow rate under inverse feed .....	24
9.7	Compatibility with the products used for shock disinfection of the networks .....	25
9.7.1	Requirement.....	25
9.7.2	Test method.....	25
9.8	Acoustic tests.....	25
9.8.1	General .....	25
9.8.2	Procedure .....	26
10	Marking and technical documents .....	26
10.1	Marking .....	26
10.2	Technical documents .....	27
11	Presentation at delivery.....	27
Annex A (normative) General information for coating definition .....		28
A.1	Organic coating (paint).....	28
A.2	Pre-treatment before coating.....	28
A.3	Application techniques.....	28
Annex B (normative) Evaluation of the degree of polymerization .....		30
B.1	Solvent resistance test.....	30
Bibliography .....		32

This is a preview of "BS EN 12729:2023". [Click here to purchase the full version from the ANSI store.](#)

## European foreword

This document (EN 12729:2023) 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 September 2023, and conflicting national standards shall be withdrawn at the latest by September 2023.

Attention is drawn to the possibility that some of the elements of this document may be the subject of patent rights. CEN shall not be held responsible for identifying any or all such patent rights.

This document supersedes EN 12729:2002.

The main changes compared to the previous edition are listed below:

- hydraulic and mechanical requirements have been revised;
- the Scope has been updated;
- all tests have been described in more detail and optimized;
- acoustics have been updated;
- endurance tests have been revised;
- section coatings have been added;
- solvent resistance test section has been added.

Any feedback and questions on this document should be directed to the users' national standards body. A complete listing of these bodies can be found on the CEN website.

According to the CEN-CENELEC Internal Regulations, the national standards organisations 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, Republic of North Macedonia, Romania, Serbia, Slovakia, Slovenia, Spain, Sweden, Switzerland, Türkiye and the United Kingdom.

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## **Introduction**

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

- a) 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;
- b) it should be noted that, while awaiting the adoption of verifiable European criteria, existing national regulations concerning the use and/or the characteristics of this product remain in force.

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## 1 Scope

This document specifies the field of application, the dimensional, the physico-chemical, the design, the hydraulic, the mechanical, and the acoustic characteristics of controllable backflow preventers with reduced pressure zone, Family B, Type A.

This document covers controllable backflow preventers of Family B, Type A, with reduced pressure zones, intended to prevent pollution of potable water by backflow, caused by backsiphonage or by backpressure.

It is applicable to controllable backflow preventers in denominations DN 6 up to DN 250.

It covers controllable backflow preventers of PN 10 that are capable of working without modification or adjustment:

- at any pressure, up to 1 MPa (10 bar);
- with any pressure variation, up to 1 MPa (10 bar);
- in permanent duty at a limited temperature of 65 °C and for maximum 1 h at 90 °C.

It specifies also the test methods and requirements for verifying their characteristics, the marking and the presentation at delivery.

## 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 806-1, *Specifications for installations inside buildings conveying water for human consumption - Part 1: General*

EN 1267, *Industrial valves - Test of flow resistance using water as test fluid*

EN 1329-1, *Plastics piping systems for soil and waste discharge (low and high temperature) within the building structure - Unplasticized poly(vinyl chloride) (PVC-U) - Part 1: Specifications for pipes, fittings and the system*

EN 1453-1, *Plastics piping systems with structured-wall pipes for soil and waste discharge (low and high temperature) inside buildings - Unplasticized poly(vinyl chloride) (PVC-U) - Part 1: Specifications for pipes and the system*

EN 1717, *Protection against pollution of potable water in water installations and general requirements of devices to prevent pollution by backflow*

EN 10310:2003, *Steel tubes and fittings for onshore and offshore pipelines - Internal and external polyamide powder based coatings*

EN 13959, *Anti-pollution check valves - DN 6 to DN 250 inclusive family E, type A, B, C and D*

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

EN 14901-1, *Ductile iron pipes, fittings and accessories - Requirements and test methods for organic coatings of ductile iron fittings and accessories - Part 1: Epoxy coating (heavy duty)*