

Devices to prevent pollution by backflow of potable water - In-line anti-vacuum valves DN 10 to DN 50 inclusive - Family D, type A

EESTI STANDARDI EESSÕNA

NATIONAL FOREWORD

See Eesti standard EVS-EN 14451:2020 sisaldab Euroopa standardi EN 14451:2020 ingliskeelset teksti.	This Estonian standard EVS-EN 14451:2020 consists of the English text of the European standard EN 14451:2020.
Standard on jõustunud sellekohase teate avaldamisega EVS Teatajas.	This standard has been endorsed with a notification published in the official bulletin of the Estonian Centre for Standardisation.
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English Version

Devices to prevent pollution by backflow of potable water
- In-line anti-vacuum valves DN 10 to DN 50 inclusive -
Family D, type A

Dispositifs de protection contre la pollution de l'eau
potable par retour - Soupape anti-vide en ligne DN 10 à
DN 50 inclus - Famille D, type A

Sicherungseinrichtungen zur Verhütung von
Trinkwasserverunreinigung durch Rückfließen -
Rohrleitungsbelüfter DN 10 bis einschließlich DN 50 -
Familie D, Typ A

This European Standard was approved by CEN on 24 May 2020.

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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.

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

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Contents

Page

European foreword.....	4
Introduction	5
1 Scope.....	6
2 Normative references.....	6
3 Terms and definitions	7
4 Nominal size.....	7
5 Designation.....	7
6 Marking and technical documents.....	8
6.1 General.....	8
6.2 Marking.....	8
6.3 Technical documents.....	8
7 Symbolization.....	9
8 General design characteristics	9
8.1 Design principle.....	9
8.2 Connections.....	10
8.3 Air inlets	10
9 Materials and surface finishes.....	10
9.1 General.....	10
9.2 Materials.....	10
9.3 Corrosion resistance	10
10 Characteristics and tests	10
10.1 General.....	10
10.2 Test sequence	11
10.3 Visual verification (Stage 1)	11
10.4 Tightness test (Stage 2).....	11
10.4.1 Test equipment.....	11
10.4.2 Test.....	12
10.4.3 Requirement.....	12
10.5 Flow rate/pressure loss (Stage 3).....	13
10.5.1 Test equipment.....	13
10.5.2 Test.....	14
10.5.3 Requirement.....	14
10.6 Bending moment, mechanical strength of body and leak tightness (Stage 4)	14
10.6.1 General.....	14
10.6.2 Test equipment.....	15
10.6.3 Test.....	15
10.6.4 Requirements.....	16
10.7 Endurance test (Stage 6).....	16
10.7.1 Test procedure 1	16
10.7.2 Test procedure 2	17
10.7.3 Test procedure 3	19
10.8 Vacuum test (Stage 7)	20
10.8.1 Vacuum test equipment.....	20

10.8.2 Procedure	21
10.8.3 Requirement.....	21
11 Acoustic characteristics	21
11.1 General	21
11.2 Procedure	21
11.2.1 Mounting and operating conditions.....	21
11.2.2 Test methods.....	21
11.3 Test criteria	21
11.3.1 Expression of the results.....	21
11.3.2 Noise classification.....	21
Annex A (informative) Sampling and test sequence	22

European foreword

This document (EN 14451:2020) has been prepared by Technical Committee CEN/TC 164 “Water supply”, the secretariat of which is held by AFNOR.

This document shall be given the status of a national standard, either by publication of an identical text or by endorsement, at the latest by December 2020, and conflicting national standards shall be withdrawn at the latest by December 2020.

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 14451:2005.

In comparison with the previous edition, the following changes have been made:

- a) title changed;
- b) scope of application revised;
- c) Clause 2 updated;
- d) nominal size range in Clause 4 restricted;
- e) Clause 9 adapted.

This document has been developed with reference to EN 1717 “Protection against pollution of potable water in water installations and general requirements of devices to prevent pollution by backflow”.

According to the CEN-CENELEC Internal Regulations, the national standards organisations of the following countries are bound to implement this document: 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, Turkey and the United Kingdom.

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) note 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.

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 in-line anti vacuum valve family D Type A.

This document covers in-line anti vacuum valve family D Type A, intended to prevent pollution of potable water by backflow, caused by backsiphoning only.

It is applicable to in-line anti vacuum valve in denominations DN 10 up to DN 50.

It covers in-line anti vacuum valve 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 248, *Sanitary tapware - General specification for electrodeposited coatings of Ni-Cr*

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

EN 10226-1, *Pipe threads where pressure tight joints are made on the threads - Part 1: Taper external threads and parallel internal threads - Dimensions, tolerances and designation*

EN 10226-2, *Pipe threads where pressure tight joints are made on the threads - Part 2: Taper external threads and taper internal threads - Dimensions, tolerances and designation*

EN ISO 228-1, *Pipe threads where pressure-tight joints are not made on the threads - Part 1: Dimensions, tolerances and designation (ISO 228-1)*

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 5167-1, *Measurement of fluid flow by means of pressure differential devices inserted in circular cross-section conduits running full - Part 1: General principles and requirements (ISO 5167-1)*

EN ISO 6509-1, *Corrosion of metals and alloys - Determination of dezincification resistance of copper alloys with zinc - Part 1: Test method (ISO 6509-1)*