SLOVENSKI STANDARD
SIST EN 1680:2025

01-maj-2025

Cevni sistemi iz polimernih materialov - Ventili za cevne sisteme iz polietilena (PE) - Metoda za preskus neprepustnosti med upogibanjem zaradi uporabe zapiralnih mehanizmov in po njem

Plastics piping systems - Valves for polyethylene (PE) piping systems - Test method for leaktightness under and after bending applied to the operating mechanisms

Kunststoff-Rohrleitungssysteme - Armaturen für Systeme aus Polyethylen (PE) - Prüfverfahren für die Dichtheit während und nach der Aufbringung eines Biegemoments auf den Betätigungsmechanismus

Systèmes de canalisations en plastique - Robinets pour les systèmes de canalisations en polyéthylène (PE) - Méthode d'essai d'étanchéité sous et après une flexion appliquée au mécanisme d'entraînement

Ta slovenski standard je istoveten z: **EN 1680:2025**

ICS:

23.060.01	Ventili na splošno	Valves in general
83.140.30	Polimerne cevi in fitingi za snovi, ki niso tekočine	Plastics pipes and fittings for non fluid use

SIST EN 1680:2025 **en,fr,de**

EUROPEAN STANDARD

NORME EUROPÉENNE

EUROPÄISCHE NORM

EN 1680

March 2025

ICS 23.060.01

Supersedes EN 1680:1997

English Version

Plastics piping systems - Valves for polyethylene (PE) piping systems - Test method for leaktightness under and after bending applied to the operating mechanisms

Systèmes de canalisations en plastique - Robinets pour les systèmes de canalisations en polyéthylène (PE) - Méthode d'essai d'étanchéité sous et après une flexion appliquée au mécanisme d'entraînement

Kunststoff-Rohrleitungssysteme - Armaturen für Rohrleitungssysteme aus Polyethylen (PE) - Prüfverfahren für die Dichtheit während und nach der Aufbringung eines Biegemoments auf das Betätigungsorgan

This European Standard was approved by CEN on 27 January 2025.

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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.

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

Contents

Page

European foreword

This document (EN 1680:2025) has been prepared by Technical Committee CEN/TC 155“Plastics piping systems and ducting systems”, the secretariat of which is held by NEN.

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 2025, and conflicting national standards shall be withdrawn at the latest by September 2025.

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 1680:1997.

EN 1680:2025 includes the following significant technical changes with respect to EN 1680:1997:

— the title and scope of application have been extended to include use in pipework systems for the transport of liquids;

— Clause 2 “Normative references” have been updated to the use in the clauses of the text;

— Clause 3 “Terms and definitions” added and numbering of the following sections adapted accordingly;

— Clause 4 “Brief description” has been adapted in accordance with the amended scope;

— Clause 5 “Apparatus” has been adapted in accordance with the test frame used;

— updated the specification of the test group under consideration in 6.2 “Preparation of test assemblies”;

— in Clause 7 “Procedure” has been added Table 1 — “Test procedure” with the list of the corresponding steps to be done;

— 7.2 “Application of the bending force” 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.

1 Scope

This document specifies a test method for PE valves to maintain tightness during and after being subjected to a force, applied as a bending moment to the operating mechanism.

Valves according to these standards are intended for use in polyethylene (PE) piping systems for the transport of fluids.

When specified in the product standard, this document can be applied to valves of material other than PE.

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 837-1, *Pressure gauges — Part 1: Bourdon tube pressure gauges — Dimensions, metrology, requirements and testing*

EN 1555-2, *Plastics piping systems for the supply of gaseous fuels — Polyethylene (PE) — Part 2: Pipes*

EN 12201-2, *Plastics piping systems for water supply, and for drainage and sewerage under pressure — Polyethylene (PE) — Part 2: Pipes*

3 Terms and definitions

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

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

— ISO Online browsing platform: available at https://www.iso.org/obp/

— IEC Electropedia: available at https://www.electropedia.org/

3.1
operating device
part of a valve for connection with the operating key which allows the opening and the closing of the valve

[SOURCE: EN 1555-4:2021, 3.1.5]

3.2
operating mechanism
mechanism which translates the motion of the operating device to the motion of the obturator

[SOURCE: EN 736-2:2016, 3.2.2]

3.3
obturator
movable component of the valve whose position in the fluid flow path permits, restricts or obstructs the fluid flow

[SOURCE: EN 736-2:2016, 3.2.1]