
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

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Ta slovenski standard je istoveten z: prEN 1680

ICS:

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

oSIST prEN 1680:2024

en,fr,de

EUROPEAN STANDARD
NORME EUROPÉENNE
EUROPÄISCHE NORM

DRAFT
prEN 1680

November 2023

ICS 23.060.01

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

This draft European Standard is submitted to CEN members for enquiry. It has been drawn up by the Technical Committee CEN/TC 155.

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 1680:2023) has been prepared by Technical Committee CEN/TC 155 “Plastics piping systems and ducting systems”, the secretariat of which is held by NEN.

This document is currently submitted to the CEN Enquiry.

This document will supersede EN 1680:1997.

prEN 1680:2023 includes the following significant technical changes with respect to EN 1680:1997:

- the title and the scope have been extended to the transport of fluids and not only to gas;
- normative references have been updated to the use in the clauses of the text;
- Clause 4 “Principle” has been modified in coherence with the scope;
- Clause 5 “Apparatus” has been modified according to the test frame used;
- specification added in 6.2 “Preparation of test assemblies” for the considered test assembly;
- in Clause 7 “Procedure” has been added Table 1 - “Test procedure” with the list of the corresponding steps to be done;
- added 7.2 “Application of bending force”.

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prEN 1680:2023 (E)

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 document, this document can be applied to valves and plastics pipes of material different 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 terminological 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]

3.2 operating mechanism

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

[SOURCE: EN 736-2:2016]

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]