EESTI STANDARD EVS-EN 1680:2000

Plasttorustikusüsteemid. Ventiilid polüetüleenist (PE) torustikusüsteemide jaoks. Tihkuse katsemeetod funktsioneerivale mehhanismile rakendatud painde ajal ja pärast seda

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

EESTI STANDARDIKESKUS

EESTI STANDARDI EESSÕNA

NATIONAL FOREWORD

Käesolev Eesti standard EVS-EN 1680:2000 sisaldab Euroopa standardi EN 1680:1997 ingliskeelset teksti. Käesolev dokument on jõustatud 11.01.2000 ja selle kohta on avaldatud teade Eesti standardiorganisatsiooni ametlikus väljaandes. Standard on kättesaadav Eesti standardiorganisatsioonist.	This Estonian standard EVS-EN 1680:2000 consists of the English text of the European standard EN 1680:1997. This document is endorsed on 11.01.2000 with the notification being published in the official publication of the Estonian national standardisation organisation. The standard is available from Estonian standardisation organisation.

Käsitlusala: Käesolev standard määrab kindlaks polüetüleenist gaasivarustustorustikus kasutamiseks ettenähtud ventiili testimise meetodi, et hoida seda survetpidavana ajal, mil täiturmehhanismile rakendatakse paindemomenti ja pärast seda.	**Scope:**

ICS 23.060.01

Võtmesõnad: gaasi torustikud, kinnitus, kraanid, lekketestid, liiklusega väljakud, paindeteimid, plasttorud, surveteimid

EUROPEAN STANDARD
NORME EUROPÉENNE
EUROPÄISCHE NORM

EN 1680

January 1997

ICS 23.060.01

Descriptors: Polyethylene, valves, leaktightness, bending, testing.

English version

Plastics piping systems

Valves for polyethylene (PE) piping systems

Test method for leaktightness under and after bending applied to the operating mechanism

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'entreînement

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

This European Standard was approved by CEN on 1996-11-07.

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.

The European Standards exist 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, Denmark, Finland, France, Germany, Greece, Iceland, Ireland, Italy, Luxembourg, Netherlands, Norway, Portugal, Spain, Sweden, Switzerland, and the United Kingdom.

CEN

European Committee for Standardization
Comité Européen de Normalisation
Europäisches Komitee für Normung

Central Secretariat: rue de Stassart 36, B-1050 Brussels

Ref. No. EN 1680:1997 E

Foreword

This European Standard has been prepared by Technical Committee CEN/TC 155 "Plastics piping systems and ducting systems", the secretariat of which is held by NNI.

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 July 1997, and conflicting national standards shall be withdrawn at the latest by July 1997.

This standard is based on the International Standard ISO/DIS 10933 "Polyethylene (PE) valves for gas distribution systems", published by the International Organization for Standardization (ISO). It is a modification of ISO/DIS 10933 for reasons of applicability to other plastics materials and/or other test conditions and alignment with texts of other standards on test methods.

The modifications are:

- test parameters are omitted;
- no material-dependent requirements are given;
- editorial changes have been introduced.

The material-dependent parameters and/or performance requirements are incorporated in the System Standard(s) concerned.

This standard is one of a series of standards on test methods which support System Standards for plastics piping systems and ducting systems.

According to the CEN/CENELEC Internal Regulations, the national standards organizations of the following countries are bound to implement this European Standard: Austria, Belgium, Denmark, Finland, France, Germany, Greece, Iceland, Ireland, Italy, Luxembourg, Netherlands, Norway, Portugal, Spain, Sweden, Switzerland and the United Kingdom.

1 Scope

This standard specifies a method for testing the ability of a valve, intended for use in polyethylene (PE) piping systems for gas supply, to maintain its pressure-retaining capabilities under and after being subject to a bending moment applied to the operating mechanism (cap).

2 Normative references

This 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 Standard only when incorporated in it by amendment or revision. For undated references the latest edition of the publication referred to applies.

EN 837-1:1994	*Pressure gauges - Part 1: Bourdon tube pressure gauges - Dimensions, metrology, requirements and testing*
ISO 4065	*Thermoplastics pipes - Universal wall thickness table*
ISO 11413	*Plastics pipes and fittings - Preparation of test piece assemblies between a polyethylene (PE) pipe and an electrofusion fitting*
ISO 11414	*Plastics pipes and fittings - Preparation of test piece assemblies between pipe/pipe or pipe/fitting in polyethylene (PE) by butt fusion*

3 Principle

A bending moment is applied to the operating mechanism of a valve in the plane of its operating stem and at the position of its operating cap. The valve, in a half-open pressurised condition in an assembly with PE pipes, is then tested for external leaktightness. Following removal of the bending moment the valve is tested for internal and external leaktightness when subjected to pressure testing.

NOTE: It is assumed that the following test parameters are set by the standard making reference to this standard:

a) the sampling requirements (see 5.1);

b) the number of test pieces (see 5.3).

4 Apparatus

4.1 Temperature-controlled tank

4.1.1 A watertight tank, capable of accommodating a valve test assembly (5.1) and loading apparatus (4.2).