

**Plasttorustikusüsteemid.
Polüetüleenventiilid (PE).
Paindevastupidavuse katsemeetod, kui
ventiil on tugede vahel**

Plastics piping systems - Polyethylene (PE) valves -
Test method for resistance to bending between
supports

EESTI STANDARDI EESSÕNA

NATIONAL FOREWORD

<p>Käesolev Eesti standard EVS-EN 12100:1999 sisaldab Euroopa standardi EN 12100:1997 ingliskeelset teksti.</p> <p>Käesolev dokument on jõustatud 12.12.1999 ja selle kohta on avaldatud teade Eesti standardiorganisatsiooni ametlikus väljaandes.</p> <p>Standard on kättesaadav Eesti standardiorganisatsioonist.</p>	<p>This Estonian standard EVS-EN 12100:1999 consists of the English text of the European standard EN 12100:1997.</p> <p>This document is endorsed on 12.12.1999 with the notification being published in the official publication of the Estonian national standardisation organisation.</p> <p>The standard is available from Estonian standardisation organisation.</p>
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<p>Käsitlusala:</p> <p>Käesolev standard määrab kindlaks tugele vahele paigaldatud ventiili painutamisele vastupidavuse meetodi. Standard kehtib polüetüleenkorpuselise ventiilide suhtes, mis on ette nähtud kasutamiseks koos torudega, mille nimivälisläbimõõt on suurem kui 63 mm ja kuni 225 mm (kaasa arvatud) ning mis on ette nähtud vedelike teisaldamiseks.</p>	<p>Scope:</p>
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ICS 23.060.01

Võtmesõnad: kraanid, paindetugevus, plastid, plasttorud, polüetüleen, testimine, vedelikutorustikud

ICS 23.040.01

Descriptors: Plastics, polyethylene, valves, bending strength, testing.

English version

Plastics piping systems

Polyethylene (PE) valves

Test method for resistance to bending between supports

Systèmes de canalisations en plastiques – Robinets en polyéthylène (PE) – Méthode d'essai de résistance à la flexion entre supports

Kunststoff-Rohrleitungssysteme – Armaturen aus Polyethylen (PE) – Prüfverfahren für den Widerstand gegen Biegen bei Dreipunktbelastung

This European Standard was approved by CEN on 1997-07-05.

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, the Czech Republic, Denmark, Finland, France, Germany, Greece, Iceland, Ireland, Italy, Luxembourg, the 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

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.

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.

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 February 1998, and conflicting national standards shall be withdrawn at the latest by February 1998.

According to the CEN/CENELEC Internal Regulations, the national standards organizations of the following countries are bound to implement this European Standard: Austria, Belgium, Czech Republic, 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 test method for the resistance to bending of a valve installed between supports.

This standard is applicable to valves with a polyethylene (PE) body for use with pipes having a nominal outside diameter from greater than 63 mm up to and including 225 mm and intended for the transport of fluids.

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.

prEN 837-1:1994	<i>Pressure gauges - Part 1 : Bourdon tube pressure gauges - Dimensions, metrology, requirements and testing</i>
EN 28233:1991	<i>Thermoplastic valves - Torque - Test method (ISO 8233:1988)</i>
EN 45501:1992	<i>Metrological aspects of non-automatic weighing instruments</i>
ISO 5208:1993	<i>Industrial valves - Pressure testing of valves</i>

3 Principle

A valve body is subjected to a bending load, by applying a given constant force to the body connected to two pipe sections resting on two supports. The valve is pressurized with air. Tightness and actuation torque are respectively checked and measured before, during and after loading.

The test is carried out at an ambient temperature of $(23 \pm 2) ^\circ\text{C}$.

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

- a) the sampling procedure (see 5.1);
- b) the number of test pieces to be used (see 5.2);
- c) the bending force to be applied to the valve (see 6.3.1);
- d) any test conditions, e.g., test pressure, test duration, which differ from those given in ISO 5208:1993 (see 6.2).

4 Apparatus

4.1 Tensile testing machine or similar apparatus, with a device capable of applying a specified force constant to within 2 %.