# Plasttorustikusüsteemid. Termoplastventiilid. Ventiilide kahjustamatuse katsemeetod pärast temperatuuri tsüklilist vaheldumist ja painutamist

Plastics piping systems - Thermoplastics valves - Test method for the integrity of a valve after temperature cycling under bending



# **EESTI STANDARDI EESSÕNA**

# **NATIONAL FOREWORD**

Käesolev Eesti standard EVS-EN	Т
1704:1999 sisaldab Euroopa standardi EN	1
1704:1997 ingliskeelset teksti.	t

Käesolev dokument on jõustatud 12.12.1999 ja selle kohta on avaldatud teade Eesti standardiorganisatsiooni ametlikus väljaandes.

Standard on kättesaadav Eesti standardiorganisatsioonist.

This Estonian standard EVS-EN 1704:1999 consists of the English text of the European standard EN 1704:1997.

This document is endorsed on 12.12.1999 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 esitab meetodi ventiili tihkuse ja funktsioneerimise kerguse kindlaksmääramiseks painutamise ajal, allutades ventiili tsükliliselt kõrge temperatuuri mõjudele. Standard kehtib nende termoplastventiilide suhtes, mille nimiläbimõõt on 63 või vähem.

# Scope:

ICS 23.060.01

**Võtmesõnad:** kinnitus, kraanid, lekketestid, paindeteimid, plasttorud, termoplastvaigud, termotsüklimistestid

# EUROPEAN STANDARD NORME EUROPÉENNE EUROPÄISCHE NORM

EN 1704

January 1997

ICS 23.060.00

Descriptors: Thermoplastics, valves, temperature cycling, testing.

# **English version**

Plastics piping systems

# Thermoplastics valves

Test method for the integrity of a valve after temperature cyling under bending

Systèmes de canalisations en plastique – Robinets thermoplastiques – Méthode d'essai pour la vérification d'un robinet après des cycles thermiques sous flexión

Kunststoff-Rohrleitungssysteme – Thermoplast-Armaturen – Prüfverfahren der Unversehrtheit einer Armatur nach Temperaturwechseln unter Biegung

This European Standard was approved by CEN on 1996-10-27.

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

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 July 1997, and conflicting national standards shall be withdrawn at the latest by July 1997.

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, mbou nited . Greece, Iceland, Ireland, Italy, Luxembourg, Netherlands, Norway, Portugal, Spain, Sweden, Switzerland and the United Kingdom.

#### 1 Scope

This standard specifies a method for determining the leaktightness and ease of operation of a valve under bending following the application of temperature cycling.

This standard is applicable to thermoplastics valves with DN 63 or smaller.

#### 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 Pressure gauges - Part 1: Bourdon tube pressure gauges Dimensions, metrology, requirements and testing

EN 28233 Thermoplastics valves - Torque - Test method

# 3 Principle

A valve assembly is exposed to a continuous temperature cycling between a low and a high temperature for a specified number of cycles. Unless otherwise specified in the referring standard, the lower and upper test temperatures are -20 °C and +40 °C respectively. During the test the assembly is held at a fixed bend radius. Following temperature cycling the valve is tested for ease of operation and leaktightness.

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

- a) the bending radius if other than 25  $d_n$  (see 5.1.2);
- b) the number of test pieces to be tested in each configuration (see clause 5);
- c) the lower and/or upper cycle temperatures, if not as given in 6.3;
- d) the number of cycles (see 6.4).