# Plasttorustikusüsteemid. Termoplastventiilid. Sisemisele survele vastupidavuse ja tihkuse katsemeetodid

Plastics piping systems - Thermoplastics valves - Test methods for resistance to internal pressure and leaktightness

## EESTI STANDARDI EESSÕNA

## NATIONAL FOREWORD

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| Käesolev Eesti standard EVS-EN 917:1999 sisaldab Euroopa standardi EN 917:1997 ingliskeelset teksti.<br><br>Käesolev dokument on jõustatud 23.11.1999 ja selle kohta on avaldatud teade Eesti standardiorganisatsiooni ametlikus väljaandes.<br><br>Standard on kättesaadav Eesti standardiorganisatsioonist. | This Estonian standard EVS-EN 917:1999 consists of the English text of the European standard EN 917:1997.<br><br>This document is endorsed on 23.11.1999 with the notification being published in the official publication of the Estonian national standardisation organisation.<br><br>The standard is available from Estonian standardisation organisation. |

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| **Käsitlusala:**<br>Käesolev standard määrab kindlaks meetodid termoplastventiilide sisesurvele vastupidavuse (meetod A) ja tihkuse (meetod B) testimiseks. Standard kehtib vedelike teisaldamiseks ettenähtud termoplastventiilide kohta. | **Scope:** |

**ICS** 23.060.01

**Võtmesõnad:** kraanid, plasttorud, surveteimid, termoplastvaigud, vastupidavus survele, vedelikutorustikud

# EUROPEAN STANDARD
# NORME EUROPÉENNE
# EUROPÄISCHE NORM

EN 917

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ICS 23.060.00

Descriptors: Thermoplastics, valves, testing, leaktightness.



**English version**

Plastics piping systems

## Thermoplastics valves

Test methods for resistance to internal pressure and leaktightness

Systèmes de canalisations en plastique – Robinets thermoplastiques – Méthodes d'essai de la résistance à la pression interne et de l'étanchéité

Kunststoff-Rohrleitungssysteme – Armaturen aus Thermoplasten – Prüfverfahren für die Widerstandsfähigkeit gegen Innendruck und die Dichtheit

This European Standard was approved by CEN on 1996-09-28.

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 917:1997 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 standard is based on the draft international standard ISO/DIS 9393-1 "Thermoplastics valves - Pressure test methods and requirements - Part 1: General" prepared by the International Organization for Standardization (ISO). It is a modification of ISO/DIS 9393-1 for reasons of alignment with texts of other standards on test methods.

The modifications are:

- no performance requirements are given;
- editorial changes have been introduced.

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

Annex A, which is informative, gives a bibliography.

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

# 1 Scope

This standard specifies test methods for the resistance to internal pressure (method A) and the leaktightness (method B) of thermoplastics valves.

This standard is applicable to thermoplastics valves intended for the transport of fluids.

# 2 Definitions

For the purposes of this standard, the following definitions apply:

**2.1 nominal pressure (PN)**: Alphanumerical designation of pressure, used for reference purposes, which is related to the mechanical strength of the valve. It corresponds to the maximum continuous operating pressure, in bars[1)] with water at 20 °C, for which the valve is designed.

**2.2 test pressure**: Internal pressure to which a valve is subjected during a test. It is usually expressed in bars.

**2.3 closing torque**: Torque required to close a valve to full tightness at the nominal pressure. It is usually expressed in newton metres.

# 3 Method A: Long-term pressure test

## 3.1 Principle

A complete valve assembly with its connections is subjected to constant internal pressure at a constant temperature for a period which has to be specified to verify that the design of the valve and its connections do not adversely affect the long-term behaviour performance of the valve.

NOTE 1: For component pressure testing on a valve body (shell test), ISO/DIS 12092 can be used.

The internal pressure is applied using water. The external environment can be air or water.

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1) 1 bar = 0,1 MPa = $10^5$ N/m$^2$