Plastics piping systems - Pressure systems for hot and cold water - Test method for leaktightness under vacuum (ISO 13056:2011)



EESTI STANDARDI EESSÕNA

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See Eesti standard EVS-EN ISO 13056:2018 sisaldab Euroopa standardi EN ISO 13056:2018 ingliskeelset teksti.	This Estonian standard EVS-EN ISO 13056:2018 consists of the English text of the European standard EN ISO 13056:2018.
Standard on jõustunud sellekohase teate avaldamisega EVS Teatajas	This standard has been endorsed with a notification published in the official bulletin of the Estonian Centre for Standardisation.
Euroopa standardimisorganisatsioonid on teinud Euroopa standardi rahvuslikele liikmetele kättesaadavaks 26.09.2018.	Date of Availability of the European standard is 26.09.2018.
Standard on kättesaadav Eesti Standardikeskusest.	The standard is available from the Estonian Centre for Standardisation.

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ICS 23.040.01, 91.140.60

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EUROPEAN STANDARD

EN ISO 13056

NORME EUROPÉENNE

EUROPÄISCHE NORM

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Supersedes EN 12294:1999

English Version

Plastics piping systems - Pressure systems for hot and cold water - Test method for leaktightness under vacuum (ISO 13056:2011)

Systèmes de canalisations en plastique - Systèmes pour installation d'eau chaude et froide sous pression - Méthode d'essai de l'étanchéité sous vide (ISO 13056:2011)

Kunststoff-Rohrleitungssysteme - Drucksysteme für Warm- und Kaltwasser - Prüfverfahren der Vakuumdichtheit (ISO 13056:2011)

This European Standard was approved by CEN on 1 October 2017.

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EUROPEAN COMMITTEE FOR STANDARDIZATION COMITÉ EUROPÉEN DE NORMALISATION EUROPÄISCHES KOMITEE FÜR NORMUNG

CEN-CENELEC Management Centre: Rue de la Science 23, B-1040 Brussels

European foreword

The text of ISO 13056:2011 has been prepared by Technical Committee ISO/TC 138 "Plastics pipes, fittings and valves for the transport of fluids" of the International Organization for Standardization (ISO) and has been taken over as EN ISO 13056:2018 by Technical Committee CEN/TC 155 "Plastics piping systems and ducting systems" the secretariat of which is held by NEN.

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 March 2019, and conflicting national standards shall be withdrawn at the latest by September 2021.

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Endorsement notice

The text of ISO 13056:2011 has been approved by CEN as EN ISO 13056:2018 without any modification.

Plastics piping systems — Pressure systems for hot and cold water — Test method for leaktightness under vacuum

1 Scope

This International Standard specifies a method for testing the leaktightness under vacuum of joints for thermoplastics piping systems.

It is applicable to piping systems based on thermoplastics pipes intended to be used in hot and cold water pressure applications.

2 Principle

An assembly of pipes and fittings is subjected to partial vacuum for a specific period during which the joints are inspected for airtightness.

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

- a) the number of test pieces (see 4.2)
- b) the test temperature (see 6.1);
- c) the test pressure (see 6.2);
- d) the duration of test (see 6.3);
- e) the pressure increase which indicates a failure (see 6.3).

3 Apparatus

- **3.1 Vacuum source (pump)**, capable of producing in the test piece the partial vacuum specified in the referring standard.
- **3.2** Vacuum pressure measurement device, capable of measuring the pressure in the test piece with an accuracy of ± 0.01 bar¹).
- **3.3 Shut-off valve**, to isolate the test piece from the vacuum source (3.1).
- **3.4** Thermometer(s), capable of checking conformity to the specified test temperature (see 6.1).
- **3.5 End-sealing device**, of appropriate size and sealing method for sealing the non-jointed end of the test piece. The device shall be restrained in a manner that does not exert longitudinal forces on the joints.

A typical test arrangement is shown in Figure 1.

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^{1) 1} bar = 100 kPa.