Belgian Standard

ISO 13844:2022
EN ISO 13844:2022
NBN EN ISO 13844:2022

Plastics piping systems - Elastomeric-sealing-ring-type socket joints for use with plastic pressure pipes - Test method for leak tightness under negative pressure, angular deflection and deformation (ISO 13844:2022)

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EUROPEAN STANDARD

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EUROPÄISCHE NORM

EN ISO 13844

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English Version

Plastics piping systems - Elastomeric-sealing-ring-type socket joints for use with plastic pressure pipes - Test method for leak tightness under negative pressure, angular deflection and deformation (ISO 13844:2022)

Systèmes de canalisations en plastiques - Assemblages par emboîture à bague d'étanchéité en élastomère pour les tubes en plastiques - Méthode d'essai pour l'étanchéité sous pression négative, déviation angulaire et déformation (ISO 13844:2022)

Kunststoff-Rohrleitungssysteme - Steckmuffenverbindungen mit elastomeren Dichtringen für Kunststoffdruckrohre - Prüfverfahren für die Dichtheit bei Unterdruck, Abwinkelung und Verformung (ISO 13844:2022)

This European Standard was approved by CEN on 3 February 2022.

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EUROPEAN COMMITTEE FOR STANDARDIZATION
COMITÉ EUROPÉEN DE NORMALISATION
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EN ISO 13844:2022 (E)

Contents

Page

European foreword

This document (EN ISO 13844:2022) has been prepared by Technical Committee ISO/TC 138 "Plastics pipes, fittings and valves for the transport of fluids" in collaboration with 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of an identical text or by endorsement, at the latest by August 2022, and conflicting national standards shall be withdrawn at the latest by August 2022.

Attention is drawn to the possibility that some of the elements of this document may be the subject of patent rights. CEN shall not be held responsible for identifying any or all such patent rights.

This document supersedes EN ISO 13844:2015.

Any feedback and questions on this document should be directed to the users’ national standards body/national committee. A complete listing of these bodies can be found on the CEN website.

According to the CEN-CENELEC Internal Regulations, the national standards organizations of the following countries are bound to implement this European Standard: Austria, Belgium, Bulgaria, Croatia, Cyprus, Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, Netherlands, Norway, Poland, Portugal, Republic of North Macedonia, Romania, Serbia, Slovakia, Slovenia, Spain, Sweden, Switzerland, Turkey and the United Kingdom.

Endorsement notice

The text of ISO 13844:2022 has been approved by CEN as EN ISO 13844:2022 without any modification.

INTERNATIONAL STANDARD

ISO 13844

Third edition
2022-02

Plastics piping systems — Elastomeric-sealing-ring-type socket joints for use with plastic pipes — Test method for leaktightness under negative pressure, angular deflection and deformation

Systèmes de canalisations en plastiques — Assemblages par emboîture à bague d'étanchéité en élastomère pour les tubes en plastiques — Méthode d'essai pour l'étanchéité sous pression négative, déviation angulaire et déformation

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Contents

Page

Foreword

ISO (the International Organization for Standardization) is a worldwide federation of national standards bodies (ISO member bodies). The work of preparing International Standards is normally carried out through ISO technical committees. Each member body interested in a subject for which a technical committee has been established has the right to be represented on that committee. International organizations, governmental and non-governmental, in liaison with ISO, also take part in the work. ISO collaborates closely with the International Electrotechnical Commission (IEC) on all matters of electrotechnical standardization.

The procedures used to develop this document and those intended for its further maintenance are described in the ISO/IEC Directives, Part 1. In particular, the different approval criteria needed for the different types of ISO documents should be noted. This document was drafted in accordance with the editorial rules of the ISO/IEC Directives, Part 2 (see www.iso.org/directives).

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Any trade name used in this document is information given for the convenience of users and does not constitute an endorsement.

For an explanation of the voluntary nature of standards, the meaning of ISO specific terms and expressions related to conformity assessment, as well as information about ISO's adherence to the World Trade Organization (WTO) principles in the Technical Barriers to Trade (TBT), see www.iso.org/iso/foreword.html.

This document was prepared by Technical Committee ISO/TC 138, *Plastics pipes, fittings and valves for the transport of fluids*, Subcommittee SC 5, *General properties of pipes, fittings and valves of plastic materials and their accessories — Test methods and basic specifications,* in collaboration with the European Committee for Standardization (CEN) Technical Committee CEN/TC 155, *Plastics piping systems and ducting systems,* in accordance with the Agreement on technical cooperation between ISO and CEN (Vienna Agreement).

This third edition cancels and replaces the second edition (ISO 13844:2015), which has been technically revised.

The main change is as follows:

— the shape of the beams used in the test method has been aligned with ISO 13259.

Any feedback or questions on this document should be directed to the user's national standards body. A complete listing of these bodies can be found at www.iso.org/members.html.

INTERNATIONAL STANDARD ISO 13844:2022(E)

Plastics piping systems — Elastomeric-sealing-ring-type socket joints for use with plastic pipes — Test method for leaktightness under negative pressure, angular deflection and deformation

WARNING — Persons using this document should be familiar with normal laboratory practice, if applicable. The use of this document can involve hazardous materials, operations and equipment. This document does not purport to address all of the safety concerns, if any, associated with its use. It is the responsibility of the user of this document to establish appropriate safety and health practices and determine the applicability of regulatory limitations prior to use.

1 Scope

This document specifies a method for testing the leak tightness under negative pressure, angular deflection and deformation of assembled joints between elastomeric-sealing-ring-type sockets made of plastic or metal and plastic pressure pipes.

2 Normative references

There are no normative references in this document.

3 Terms and definitions

No terms and definitions are listed in this document.

ISO and IEC maintain terminology databases for use in standardization at the following addresses:

— ISO Online browsing platform: available at https://www.iso.org/obp

— IEC Electropedia: available at https://www.electropedia.org/

4 Principle

A test piece consisting of a plastic pipe mounted into a socket is exposed within a specified temperature range to two specified negative internal pressures for a specified test period, while the pipe is being subjected to an angular deflection in the socket and to deformation. During the test, the test piece is monitored for signs of leakage.

5 Test parameters and requirements

The test parameters of the standard which refers to this document shall be used and the requirements shall be fulfilled. If one or more test parameters are not given in the referring standard, the ones given in Annex A shall apply.

The following test parameters should be given by the standard which refers to this document:

a) test medium;

b) test pressure (bar or MPa);

c) test duration (h);