

# SLOVENSKI STANDARD

## SIST EN ISO 13259:2020

01-oktober-2020

Nadomešča:  
SIST EN ISO 13259:2018

---

**Plastomerni cevni sistemi, položeni v zemljo, ki delujejo po težnostnem principu - Metoda za preskus tesnjenja spojev z elastomernimi tesnilnimi obroči (ISO 13259:2020)**

Thermoplastics piping systems for underground non-pressure applications - Test method for leaktightness of elastomeric sealing ring type joints (ISO 13259:2020)

Erdverlegte Rohrleitungssysteme aus Thermoplasten für drucklose Anwendungen - Prüfverfahren für die Dichtheit von elastomeren Dichtingverbindungen (ISO 13259:2020)

https://standards.iteh.ai/catalog/standards/sist/8a0b5994-baf6-4a9b-8150-61600120037-01/ISO-13259-2020  
SIST EN ISO 13259:2020  
Systèmes de canalisations en thermoplastiques pour applications enterrées sans pression - Méthodes d'essai d'étanchéité des assemblages à bague d'étanchéité en élastomère (ISO 13259:2020)

**Ta slovenski standard je istoveten z: EN ISO 13259:2020**

---

**ICS:**

23.040.80	Tesnila za cevne zveze	Seals for pipe and hose assemblies
91.140.80	Drenažni sistemi	Drainage systems

**SIST EN ISO 13259:2020** en

**iTeh STANDARD PREVIEW**  
**(standards.iteh.ai)**

[SIST EN ISO 13259:2020](#)

<https://standards.iteh.ai/catalog/standards/sist/8a0b5994-baf6-4a9b-8150-0d268e67c3c0/sist-en-iso-13259-2020>

EUROPEAN STANDARD

EN ISO 13259

NORME EUROPÉENNE

EUROPÄISCHE NORM

July 2020

ICS 23.040.20; 91.140.80

Supersedes EN ISO 13259:2018

English Version

## Thermoplastics piping systems for underground non-pressure applications - Test method for leaktightness of elastomeric sealing ring type joints (ISO 13259:2020)

Systèmes de canalisations en thermoplastiques pour applications enterrées sans pression - Méthodes d'essai d'étanchéité des assemblages à bague d'étanchéité en élastomère (ISO 13259:2020)

Erdverlegte Rohrleitungssysteme aus Thermoplasten für drucklose Anwendungen - Prüfverfahren für die Dichtheit von elastomeren Dichtringverbindungen (ISO 13259:2020)

This European Standard was approved by CEN on 19 July 2020.

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 CEN-CENELEC Management Centre or to any CEN member.

This European Standard exists 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 CEN-CENELEC Management Centre has the same status as the official versions.

CEN members are the national standards bodies of 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 United Kingdom.



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

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

<b>Contents</b>	<b>Page</b>
<b>European foreword.....</b>	<b>3</b>

**iTeh STANDARD PREVIEW**  
**(standards.iteh.ai)**

[SIST EN ISO 13259:2020](https://standards.iteh.ai/catalog/standards/sist/8a0b5994-baf6-4a9b-8150-0d268e67c3c0/sist-en-iso-13259-2020)  
<https://standards.iteh.ai/catalog/standards/sist/8a0b5994-baf6-4a9b-8150-0d268e67c3c0/sist-en-iso-13259-2020>

## European foreword

This document (EN ISO 13259:2020) 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 January 2021, and conflicting national standards shall be withdrawn at the latest by January 2021.

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 13259:2018.

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.

**iTeh STANDARD PREVIEW**  
**Endorsement notice**  
**(standards.iteh.ai)**

The text of ISO 13259:2020 has been approved by CEN as EN ISO 13259:2020 without any modification.

<https://standards.iteh.ai/catalog/standards/sist/8a0b5994-baf6-4a9b-8150-0d268e67c3c0/sist-en-iso-13259-2020>

**iTeh STANDARD PREVIEW**  
**(standards.iteh.ai)**

[SIST EN ISO 13259:2020](#)

<https://standards.iteh.ai/catalog/standards/sist/8a0b5994-baf6-4a9b-8150-0d268e67c3c0/sist-en-iso-13259-2020>

INTERNATIONAL  
STANDARD

ISO  
13259

Third edition  
2020-07

---

---

**Thermoplastics piping systems  
for underground non-pressure  
applications — Test method for  
leaktightness of elastomeric sealing  
ring type joints**

*Systèmes de canalisations en thermoplastiques pour applications  
enterrées sans pression — Méthode d'essai d'étanchéité des  
assemblages à bague d'étanchéité en élastomère*

iTeh STANDARD PREVIEW  
(standards.iteh.ai)

[SIST EN ISO 13259:2020](https://standards.iteh.ai/catalog/standards/sist/8a0b5994-baf6-4a9b-8150-0d268e67c3c0/sist-en-iso-13259-2020)

<https://standards.iteh.ai/catalog/standards/sist/8a0b5994-baf6-4a9b-8150-0d268e67c3c0/sist-en-iso-13259-2020>



Reference number  
ISO 13259:2020(E)

© ISO 2020

## iTeh STANDARD PREVIEW (standards.iteh.ai)

[SIST EN ISO 13259:2020](https://standards.iteh.ai/catalog/standards/sist/8a0b5994-baf6-4a9b-8150-0d268e67c3c0/sist-en-iso-13259-2020)

<https://standards.iteh.ai/catalog/standards/sist/8a0b5994-baf6-4a9b-8150-0d268e67c3c0/sist-en-iso-13259-2020>



### **COPYRIGHT PROTECTED DOCUMENT**

© ISO 2020

All rights reserved. Unless otherwise specified, or required in the context of its implementation, no part of this publication may be reproduced or utilized otherwise in any form or by any means, electronic or mechanical, including photocopying, or posting on the internet or an intranet, without prior written permission. Permission can be requested from either ISO at the address below or ISO's member body in the country of the requester.

ISO copyright office  
CP 401 • Ch. de Blandonnet 8  
CH-1214 Vernier, Geneva  
Phone: +41 22 749 01 11  
Email: [copyright@iso.org](mailto:copyright@iso.org)  
Website: [www.iso.org](http://www.iso.org)

Published in Switzerland



# Contents

	Page
Foreword .....	iv
<b>1 Scope</b> .....	<b>1</b>
<b>2 Normative references</b> .....	<b>1</b>
<b>3 Terms and definitions</b> .....	<b>1</b>
<b>4 Principle</b> .....	<b>1</b>
<b>5 Apparatus</b> .....	<b>2</b>
5.1 General .....	2
5.2 Components of the apparatus .....	3
<b>6 Test pieces</b> .....	<b>5</b>
<b>7 Temperature of conditioning and testing</b> .....	<b>5</b>
<b>8 Procedure</b> .....	<b>5</b>
8.1 General procedure .....	5
8.2 Procedure for applying diametric deflection to spigot and socket .....	7
<b>9 Test report</b> .....	<b>10</b>

## iTeh STANDARD PREVIEW (standards.iteh.ai)

[SIST EN ISO 13259:2020](https://standards.iteh.ai/catalog/standards/sist/8a0b5994-baf6-4a9b-8150-0d268e67c3c0/sist-en-iso-13259-2020)

<https://standards.iteh.ai/catalog/standards/sist/8a0b5994-baf6-4a9b-8150-0d268e67c3c0/sist-en-iso-13259-2020>

## ISO 13259:2020(E)

## 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](http://www.iso.org/directives)).

Attention is drawn to the possibility that some of the elements of this document may be the subject of patent rights. ISO shall not be held responsible for identifying any or all such patent rights. Details of any patent rights identified during the development of the document will be in the Introduction and/or on the ISO list of patent declarations received (see [www.iso.org/patents](http://www.iso.org/patents)).

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](http://www.iso.org/iso/foreword.html).

This document was prepared by Technical Committee ISO/TC 138, *Plastic pipes, fittings and valves for the transport of fluids*, Subcommittee SC 1, *Plastics pipes and fittings for soil, waste and drainage (including land drainage)*, 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 13259:2018), of which it constitutes a minor revision.

The main changes compared to the previous edition are as follows:

- in [8.2](#), the text was clarified and a calculation error was corrected.

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](http://www.iso.org/members.html).

# Thermoplastics piping systems for underground non-pressure applications — Test method for leaktightness of elastomeric sealing ring type joints

## 1 Scope

This document specifies a test method for determining the leaktightness of elastomeric sealing ring type joints for buried thermoplastics non-pressure piping systems.

Unless otherwise specified in the referring standard, the tests are carried out at the following basic test pressures:

- $p_1$ : internal negative air pressure (partial vacuum);
- $p_2$ : a low internal hydrostatic pressure;
- $p_3$ : a higher internal hydrostatic pressure.

It also describes the following four test conditions under which the tests are performed:

- a) Condition A: without any additional diametric or angular deflection;
- b) Condition B: with diametric deflection;
- c) Condition C: with angular deflection;
- d) Condition D: with simultaneous angular and diametric deflection.

The applicable selection of the test pressure(s) and the test condition(s) is/are specified in the referring standard.

## 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 terminological databases for use in standardization at the following addresses:

- ISO Online browsing platform: available at <https://www.iso.org/obp>
- IEC Electropedia: available at <http://www.electropedia.org/>

## 4 Principle

A test piece assembled from pipes and/or fittings is subjected to a specific initial internal negative air pressure,  $p_1$ , followed by a low specific initial internal hydrostatic pressure,  $p_2$ , and a higher internal hydrostatic pressure,  $p_3$ .

During testing the joint may be subjected to diametric and/or angular deflection(s). The referring product standard shall specify which of the test pressures and deflection conditions have to be carried out.