



NSAI
Standards

Irish Standard
I.S. EN ISO 15875-3:2003&A1:2020&LC:2021

Plastics piping systems for hot and cold water installations - Crosslinked polyethylene (PE-X) - Part 3: Fittings (ISO 15875-3:2003)

I.S. EN ISO 15875-3:2003&A1:2020&LC:2021

Incorporating amendments/corrigenda/National Annexes issued since publication:

EN ISO 15875-3:2003/A1:2020

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SWiFT xxx: A rapidly developed recommendatory document based on the consensus of the participants of an NSAI workshop.

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National Foreword

I.S. EN ISO 15875-3:2003&A1:2020&LC:2021 is the adopted Irish version of the European Document EN ISO 15875-3:2003, Plastics piping systems for hot and cold water installations - Crosslinked polyethylene (PE-X) - Part 3: Fittings (ISO 15875-3:2003)

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In line with international standards practice the decimal point is shown as a comma (,) throughout this document.

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Correction Notice

Reference: EN ISO 15875-3:2003/A1:2020

Title: Plastics piping systems for hot and cold water installations - Crosslinked polyethylene (PE-X) - Part 3: Fittings - Amendment 1 (ISO 15875-3:2003/Amd 1:2020)

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Please include the following minor editorial correction(s) in the document related to:

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- French
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for the following procedure :

- PQ/UQ
- Enquiry
- 2nd Enquiry
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- 2nd Parallel Formal Vote
- UAP
- TC Approval
- 2nd TC Approval
- Publication
- Parallel Publication

It has been brought to our attention that this document, issued on 2020-12-26, requires modification.

Incorrect reference in Foreword

Please find enclosed the updated English and French version.

We apologise for any inconvenience this may cause.

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EUROPEAN STANDARD

EN ISO 15875-3:2003/A1

NORME EUROPÉENNE

EUROPÄISCHE NORM

December 2020

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English Version

**Plastics piping systems for hot and cold water installations
- Crosslinked polyethylene (PE-X) - Part 3: Fittings -
Amendment 1 (ISO 15875-3:2003/Amd 1:2020)**

Systèmes de canalisations en plastique pour les
installations d'eau chaude et froide - Polyéthylène
réticulé (PE-X) - Partie 3: Raccords - Amendement 1
(ISO 15875-3:2003/Amd 1:2020)

Kunststoff-Rohrleitungssysteme für die Warm- und
Kaltwasserinstallation - Vernetztes Polyethylen (PE-X)
- Teil 3: Formstücke - Änderung 1 (ISO 15875-
3:2003/Amd 1:2020)

This amendment A1 modifies the European Standard EN ISO 15875-3:2003; it was approved by CEN on 12 October 2020.

CEN members are bound to comply with the CEN/CENELEC Internal Regulations which stipulate the conditions for inclusion of this amendment into the relevant 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 amendment 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.

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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

EN ISO 15875-3:2003/A1:2020 (E)

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European foreword

This document (EN ISO 15875-3:2003/A1:2020) 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 Amendment to the European Standard EN ISO 15875-3:2003 shall be given the status of a national standard, either by publication of an identical text or by endorsement, at the latest by June 2021, and conflicting national standards shall be withdrawn at the latest by June 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.

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 15875-3:2003/Amd 1:2020 has been approved by CEN as EN ISO 15875-3:2003/A1:2020 without any modification.

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INTERNATIONAL STANDARD

ISO 15875-3

First edition
2003-12-01
AMENDMENT 1
2020-12

Plastics piping systems for hot and cold water installations — Crosslinked polyethylene (PE-X) —

Part 3: Fittings

AMENDMENT 1

*Systèmes de canalisations en plastique pour les installations d'eau
chaude et froide — Polyéthylène réticulé (PE-X) —*

Partie 3: Raccords

AMENDEMENT 1



Reference number
ISO 15875-3:2003/Amd.1:2020(E)

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ISO 15875-3:2003/Amd.1:2020(E)



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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).

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).

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 2, *Plastics pipes and fittings for water supplies*, 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).

A list of all parts in the ISO 15875 series can be found on the ISO website.

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.

Plastics piping systems for hot and cold water installations — Crosslinked polyethylene (PE-X) —

Part 3: Fittings

AMENDMENT 1

Normative references

Replace the reference to "EN 578" with the following:

ISO 7686, *Plastics pipes and fittings — Determination of opacity*

Replace the reference to "EN 579" with the following:

ISO 10147, *Pipes and fittings made of crosslinked polyethylene (PE-X) — Estimation of the degree of crosslinking by determination of the gel content*

Replace the reference to "EN 921:1994" and to "EN 12107" with the following:

ISO 1167-1, *Thermoplastics pipes, fittings and assemblies for the conveyance of fluids — Determination of the resistance to internal pressure — Part 1: General method*

ISO 1167-3, *Thermoplastics pipes, fittings and assemblies for the conveyance of fluids — Determination of the resistance to internal pressure — Part 3: Preparation of components*

ISO 1167-4, *Thermoplastics pipes, fittings and assemblies for the conveyance of fluids — Determination of the resistance to internal pressure — Part 4: Preparation of assemblies*

4.1.1, Table 1

Replace the reference to "EN 921:1994 (together with EN 12107)" with "ISO 1167-1, ISO 1167-3 and ISO 1167-4".

4.1.2.1, first paragraph

Replace the reference to "EN 921:1994 (together with EN 12107)" with "ISO 1167-1, ISO 1167-3 and ISO 1167-4".

4.1.2.2, first paragraph

Replace the reference to "EN 921:1994" with "ISO 1167-1, ISO 1167-3 and ISO 1167-4".

5.2

Replace the reference to "EN 578" with "ISO 7686".

EUROPEAN STANDARD

EN ISO 15875-3

NORME EUROPÉENNE

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English version

Plastics piping systems for hot and cold water installations -
Crosslinked polyethylene (PE-X) - Part 3: Fittings (ISO 15875-
3:2003)

Systèmes de canalisations en plastique pour les
installations d'eau chaude et froide - Polyéthylène réticulé
(PE-X) - Partie 3: Raccords (ISO 15875-3:2003)

Kunststoff-Rohrleitungssysteme für die Warm- und
Kaltwasserinstallation - Vernetztes Polyethylen (PE-X) -
Teil 3: Formstücke (ISO 15875-3:2003)

This European Standard was approved by CEN on 14 March 2003.

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 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 Management Centre has the same status as the official versions.

CEN members are the national standards bodies of Austria, Belgium, Czech Republic, Denmark, Finland, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Luxembourg, Malta, Netherlands, Norway, Portugal, Slovakia, Spain, Sweden, Switzerland and United Kingdom.



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EN ISO 15875-3:2003 (E)

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Foreword

This document (EN ISO 15875-3:2003) has been prepared by Technical Committee CEN/TC 155 "Plastics piping systems and ducting systems", the secretariat of which is held by NEN, in collaboration with Technical Committee ISO/TC 138 "Plastics pipes, fittings and valves for the transport of fluids".

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 June 2004, and conflicting national standards shall be withdrawn at the latest by December 2005.

NOTE This draft was submitted for CEN enquiry as prEN 12318-3:1996.

This standard is part of a System Standard for plastics piping systems of a particular material for a specified application. There are a number of such System Standards.

System Standards are based on the results of the work being undertaken in ISO/TC 138 "Plastics pipes, fittings and valves for the transport of fluids", which is a Technical Committee of the International Organisation for Standardization (ISO).

They are supported by separate Standards on test methods to which references are made throughout the System Standard.

The System Standards are consistent with general standards on functional requirements and recommended practices for installation.

EN ISO 15875 consists of the following Parts ¹⁾, under the general title: *Plastics piping systems for hot and cold water installations — Crosslinked polyethylene (PE-X)*

- Part 1: *General*
- Part 2: *Pipes*
- Part 3: *Fittings* (the present standard)
- Part 5: *Fitness for purpose of the system*
- Part 7: *Guidance for the assessment of conformity* (published as CEN ISO/TS 15875-7).

This Part of EN ISO 15875 includes a Bibliography

At the date of publication of this standard, System Standards for piping systems of other plastics materials used for the same application include the following:

EN ISO 15874, *Plastics piping systems for hot and cold water installations — Polypropylene (PP)* (ISO 15874:2003)

EN ISO 15876, *Plastics piping systems for hot and cold water installations — Polybutylene (PB)* (ISO 15876:2003)

EN ISO 15877, *Plastics piping systems for hot and cold water installations — Chlorinated poly(vinyl chloride) (PVC-C)* (ISO 15877:2003)

For pipes and fittings which have conformed to the relevant national standard before 1st November 2003, as shown by the manufacturer or by a certification body, the national standard may continue to apply until 30th November 2005.

¹⁾ This System Standard does not incorporate a Part 4 *Ancillary equipment* or a Part 6 *Guidance for installation*. For ancillary equipment separate standards can apply. Guidance on installation of plastics piping systems made from different materials intended to be used for hot and cold water installations is given by ENV 12108 ^[1].

EN ISO 15875-3:2003 (E)

According to the CEN/CENELEC Internal Regulations, the national standards organizations of the following countries are bound to implement this European Standard: Austria, Belgium, Czech Republic, Denmark, Finland, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Luxembourg, Malta, Netherlands, Norway, Portugal, Slovakia, Spain, Sweden, Switzerland and the United Kingdom.

Introduction

The System Standard of which this is Part 3, specifies the requirements for a piping system when made from polypropylene (PE-X). The piping system is intended to be used for hot and cold water installations.

In respect of potential adverse effects on the quality of water intended for human consumption, caused by the product covered by this standard:

- This standard provides no information as to whether the product may be used without restriction in any of the Member States of the EU or EFTA;
- It should be noted that, while awaiting the adoption of verifiable European criteria, existing national regulations concerning the use and/or the characteristics of this product remain in force.

Requirements and test methods for materials and components, other than fittings, are specified in Part 1 and Part 2 of EN ISO 15875:2003. Characteristics for fitness for purpose (mainly for joints) are covered in Part 5. Part 7 (CEN ISO/TS 15875-7) gives guidance for the assessment of conformity.

This Part of EN ISO 15875 specifies the characteristics of the fittings.

1 Scope

This Part of EN ISO 15875 specifies the characteristics of fittings for crosslinked polyethylene (PE-X) piping systems intended to be used for hot and cold water installations within buildings for the conveyance of water, whether or not intended for human consumption, (domestic systems) and for heating systems, under design pressures and temperatures appropriate to the class of application (see Table 1 of EN ISO 15875-1:2003).

This standard covers a range of service conditions (application classes) and design pressure classes. For values of T_D , T_{max} and T_{mal} in excess of those in Table 1 of Part 1, this standard does not apply.

NOTE It is the responsibility of the purchaser or specifier to make the appropriate selections from these aspects, taking into account their particular requirements and any relevant national regulations and installation practices or codes.

It also specifies the test parameters for the test methods referred to in this standard.

In conjunction with the other Parts of EN ISO 15875:2003 (see Foreword) it is applicable to fittings made from crosslinked polyethylene (PE-X) and to fittings made from other materials which are intended to be fitted to pipes conforming to EN ISO 15875-2:2003 for hot and cold water installations and whereby the joints conform to the requirements of EN ISO 15875-5.

This standard is applicable to fittings of the following types:

- mechanical fittings;
- electrofusion fittings;
- fittings with incorporated inserts.

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 (including amendments).

EN 578, *Plastics piping systems — Plastics pipes and fittings — Determination of the opacity*

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