
**Plastics piping systems for hot
and cold water installations —
Polyethylene of raised temperature
resistance (PE-RT) —**

**Part 3:
Fittings**

AMENDMENT 2

*Systèmes de canalisations en plastique pour les installations d'eau
chaude et froide — Polyéthylène de meilleure résistance à la
température (PE-RT) —*

Partie 3: Raccords

AMENDEMENT 2



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Published in Switzerland

Foreword

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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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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 22391 series can be found on the ISO website.

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Plastics piping systems for hot and cold water installations — Polyethylene of raised temperature resistance (PE-RT) —

Part 3: Fittings

AMENDMENT 2

Normative references

Add the following normative references:

ISO 2768-1, *General tolerances — Part 1: Tolerances for linear and angular dimensions without individual tolerance indications*

ISO 6506-1, *Metallic materials — Brinell hardness test — Part 1: Test method*

ISO 6509-1, *Corrosion of metals and alloys — Determination of dezincification resistance of copper alloys with zinc — Part 1: Test method*

ISO 6957, *Copper alloys — Ammonia test for stress corrosion resistance*

ISO 22081, *Geometrical product specifications (GPS) — Geometrical tolerancing — General geometrical specifications and general size specifications*

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Delete the following normative reference:

EN 1254-3, *Copper and copper alloys — Plumbing fittings — Part 3: Fittings with compression ends for use with plastics pipes*

Terms and definitions

Replace the existing definition 3.2.1. with the following:

3.2.1 compression fitting

fitting with internal support in which the joint is made by screwing a union nut along a thread to compress a ring on the outside wall of the pipe and finally to cause a clamping of the pipe between the ring and the inner support of the fitting

Note 1 to entry: The fitting may be with or without sealing element

Replace the existing definition 3.2.2. with the following:

3.2.2

radial press fitting

fitting with internal support in which the joint is made by a radial compression of a ring with a pressing tool on the outside wall of the pipe to cause a clamping of the pipe between the ring and the inner support of the fitting

Note 1 to entry: The fitting may be with or without sealing element.

Add the following terms and definitions after 3.2.4.

3.2.5

axial press fitting

fitting with internal support in which the joint is made by an axial movement of a sleeve with a pressing tool to cause a clamping of the pipe between the sleeve and the inner support of the fitting

Note 1 to entry: The fitting may be with or without sealing element.

3.2.6

push-fit fitting

fitting which incorporates a sealing element, a gripping device and uses an internal support

Note 1 to entry: The joint is made by pushing the pipe into the fitting and a seal is achieved without the use of heat or tools.

Note 2 to entry: In some designs, this type of joint can be disconnected and re-connected or disconnected and the fitting re-used elsewhere.

Note 3 to entry: The internal support can be an integrated part of the fitting or a separate part (supporting sleeve).

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Replace the existing subclause 4.2 with the following:

4.2 Metallic fitting material

Metallic materials for fittings intended to be used with components conforming to ISO 22391 shall be either copper alloys or stainless steel alloys. The alloys shall be defined according to a standard or regulatory document.

NOTE Examples for such standards and regulatory documents are listed in the Bibliography.

For copper alloys, the fittings made thereof shall comply with the corrosion resistance requirements according to 8.2.

5.1

Replace the existing subclause 5.1 with the following:

5.1 Appearance

5.1.1 Appearance of plastic fittings

When viewed without magnification, the internal and external surfaces of fittings shall be smooth, clean and free from scoring, cavities and other surface defects to an extent that would prevent conformance