

SLOVENSKI STANDARD
SIST EN ISO 22391-5:2010/oprA1:2020
01-april-2020

Cevni sistemi iz polimernih materialov za napeljave z vročo in hladno vodo - Polietilen s povišano temperaturno odpornostjo (PE-RT) - 5. del: Ustrežanje zahtevam za uporabnost sistema - Dopolnilo A1 (ISO 22391-5:2009/DAM 1:2020)

Plastics piping systems for hot and cold water installations - Polyethylene of raised temperature resistance (PE-RT) - Part 5: Fitness for purpose of the system - Amendment 1 (ISO 22391-5:2009/DAM 1:2020)

Kunststoff-Rohrleitungssysteme für die Warm- und Kaltwasserinstallation - Polyethylen erhöhter Temperaturbeständigkeit (PE-RT) - Teil 5: Gebrauchstauglichkeit des Systems - ÄNDERUNG 1 (ISO 22391-5:2009/DAM 1:2020)

Systèmes de canalisations en plastique pour les installations d'eau chaude et froide - Polyéthylène de meilleure résistance à la température (PE-RT) - Partie 5: Aptitude à l'emploi du système - Amendement 1 (ISO 22391-5:2009/DAM 1:2020)

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ICS:

23.040.01	Deli cevovodov in cevovodi na splošno	Pipeline components and pipelines in general
91.140.60	Sistemi za oskrbo z vodo	Water supply systems

SIST EN ISO 22391-5:2010/oprA1:2020 en

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<https://standards.iteh.ai/catalog/standards/sist/1fad6e98-e855-4755-9ac2-f35509667053/sist-en-iso-22391-5-2010-oprA1-2020>

DRAFT AMENDMENT

ISO 22391-5:2009/DAM 1

ISO/TC 138/SC 2

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

Part 5: Fitness for purpose of the system

AMENDMENT 1

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

Partie 5: Aptitude à l'emploi du système

AMENDEMENT 1

ICS: 23.040.01; 91.140.60; 93.025

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This document was prepared by the European Committee for Standardization (CEN) Technical Committee CEN/TC 155, Plastics piping systems and ducting systems, in collaboration with ISO 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 accordance with the Agreement on technical cooperation between ISO and CEN (Vienna Agreement).

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

Part 5: Fitness for purpose of the system

AMENDMENT 1

Page 2, Clause 2

Replace the normative reference:

EN 712, *Thermoplastics piping systems — End-load bearing mechanical joints between pressure pipes and fittings — Test method for resistance to pull-out under constant longitudinal force*

with

ISO 3501, *Plastics piping systems — Mechanical joints between fittings and pressure pipes — Test method for resistance to pull-out under constant longitudinal force*

Replace the normative reference:

EN 713, *Plastics piping systems — Mechanical joints between fittings and polyolefin pressure pipes — Test method for leak tightness under internal pressure of assemblies subjected to bending.*

with

ISO 3503, *Plastics piping systems — Mechanical joints between fittings and pressure pipes — Test method for leaktightness under internal pressure of assemblies subjected to bending.*

Replace the normative reference:

EN 12293, *Plastics piping systems — Systems for hot and cold water — Test method for leak tightness under vacuum*

with

ISO 19893, *Plastics piping systems — Thermoplastics pipes and fittings for hot and cold water — Test method for the resistance of mounted assemblies to temperature cycling*

Replace the normative reference:

EN 12294, *Plastics piping systems — Systems for hot and cold water — Test method for leak tightness under vacuum*

with

ISO 13056, *Plastics piping systems — Pressure systems for hot and cold water — Test method for leaktightness under vacuum.*

Replace the normative reference:

EN 12295, *Plastics piping systems — Thermoplastics pipes and associated fittings for hot and cold water —*

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Test method for resistance of joints to pressure cycling

with

ISO 19892, *Plastics piping systems — Thermoplastics pipes and fittings for hot and cold water — Test method for the resistance of joints to pressure cycling*

Page 2, Table 1

In row 3 (Bending test), replace the test method "EN 713" with "ISO 3503".

In row 4 (Pull-out test), replace the test method "EN 712" with "ISO 3501".

In row 5 (Thermal cycling test), replace the test method "EN 12293" with "ISO 19893".

In row 6 (Pressure cycling test), replace the test method "EN 12295" with "ISO 19892".

In row 7 (Vacuum test), replace the test method "EN 12294" with "ISO 13056".

Page 4, 4.3, first sentence

Replace "EN 713" with "ISO 3503".

Page 4, 4.3, second paragraph

Replace "of nominal diameter greater than or equal to 32 mm" with "that are declared as being bendable by the system supplier."

Page 5, 4.4, first sentence

Replace "EN 712" with "ISO 3501".

Page 6, Table 7

Replace Table 11 with the new Table 11 below.

Page 6, Table 7

Table 1 — Test parameters for thermal cycling test

	Application class			
	Class 1	Class 2	Class 4	Class 5
Maximum design temperature, T_{max} , in °C	80	80	70	90
Highest test temperature, in °C	90	90	80	95
Lowest test temperature, in °C	20	20	20	20
Test pressure, in bars	p_D	p_D	p_D	p_D
Number of cycles for $d_n \leq 160$ mm ^a	5 000	5 000	5 000	5 000
Number of cycles for $d_n > 160$ mm ^b	500	500	500	500
<p>^a Each cycle shall comprise 150^{+1}_0 min at the highest test temperature and 150^{+1}_0 min at the lowest (i.e. the duration of one cycle is 30^{+2}_0 min).</p> <p>^b Each cycle shall comprise 150^{+5}_0 min at the highest test temperature and 150^{+5}_0 min at the lowest (i.e. the duration of one cycle is 300^{+10}_0 min).</p> <p>^c The test arrangement consists of min. 4 pipe connectors or min. 6 pipe connections for $d_n > 160$ mm. The free pipe length between the joints shall not be less than 150 mm. A representative set of fittings shall be used in the assembly.</p>				