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**AMENDMENT 1**  
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**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*



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CH-1214 Vernier, Geneva  
Phone: +41 22 749 01 11  
Email: [copyright@iso.org](mailto:copyright@iso.org)  
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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).

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# 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".

5.2, Table 3

Replace Table 3 with the following table:

**Table 3 — Socket dimensions for electrofusion fittings**

Dimensions in millimetres

Nominal diameter of the fitting $d_n$	Minimum mean inside diameter <sup>a</sup> of fusion zone $D_{1,min}$	Nominal length of fusion zone $L_{2,min}$	Depth of penetration	
			$L_{1,min}$	$L_{1,max}$
16	16,1	10	20	35
20	20,1	10	20	37
25	25,1	10	20	40
32	32,1	10	20	44
40	40,1	10	20	49
50	50,1	10	20	55
63	63,2	11	23	63
75	75,2	12	25	70
90	90,2	13	28	79
110	110,3	15	32	85
125	125,3	16	35	90
140	140,3	18	38	95
160	160,4	20	42	101
180	180,4	21	46	105
200	200,4	23	50	112
225	225,5	26	55	120
250	250,5	30	73	129

<sup>a</sup> In piping systems that involve spigot trimming, smaller values for  $D_1$  are permitted if in conformance to the manufacturer's specification.

Clause 8

Replace the reference to "EN 579" with "ISO 10147".

Clause 8, Table 5

Replace Table 5 with the following table:

**Table 5 — Degree of crosslinking**

Crosslinking process	Degree of crosslinking
peroxide PE-Xa	≥ 70 %
silane PE-Xb	≥ 65 %
electron beam PE-Xc	≥ 60 %
azo PE-Xd	≥ 60 %
UV-light initiated PE-Xe	≥ 70 %