

ISO/TC 138/SC 2

Secretariat: **SNV**

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**Plastics piping systems for hot and cold
water installations —
Polypropylene (PP) —**

**Part 3:
Fittings**

iTeh **STANDARDS** REVIEW
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*Systèmes de canalisations en plastique pour les installations d'eau
chaude et froide — Polypropylène (PP) —*

Partie 3: Raccords

<https://standards.iteh.ai/catalog/standards/sist/462aa084-42e5-464f-94a1-416ab7fb82ff/iso-15874-3-2003-fdam-1>
AMENDEMENT 1

Please see the administrative notes on page iii

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Reference number
ISO 15874-3:2003/FDAM 1:2009(E)

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ISO/CEN PARALLEL PROCESSING

This final draft has been developed within the European Committee for Standardization (CEN), and processed under the **CEN-lead** mode of collaboration as defined in the Vienna Agreement. The final draft was established on the basis of comments received during a parallel enquiry on the draft.

This final draft is hereby submitted to the ISO member bodies and to the CEN member bodies for a parallel two-month approval vote in ISO and two-month formal vote in CEN.

Positive votes shall not be accompanied by comments.

Negative votes shall be accompanied by the relevant technical reasons.

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Foreword

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International Standards are drafted in accordance with the rules given in the ISO/IEC Directives, Part 2.

The main task of technical committees is to prepare International Standards. Draft International Standards adopted by the technical committees are circulated to the member bodies for voting. Publication as an International Standard requires approval by at least 75 % of the member bodies casting a vote.

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Amendment 1 to ISO 15874-3:2003 was prepared by the European Committee for Standardization (CEN) Technical Committee CEN/TC 155, *Plastics piping and ducting systems*, in collaboration with 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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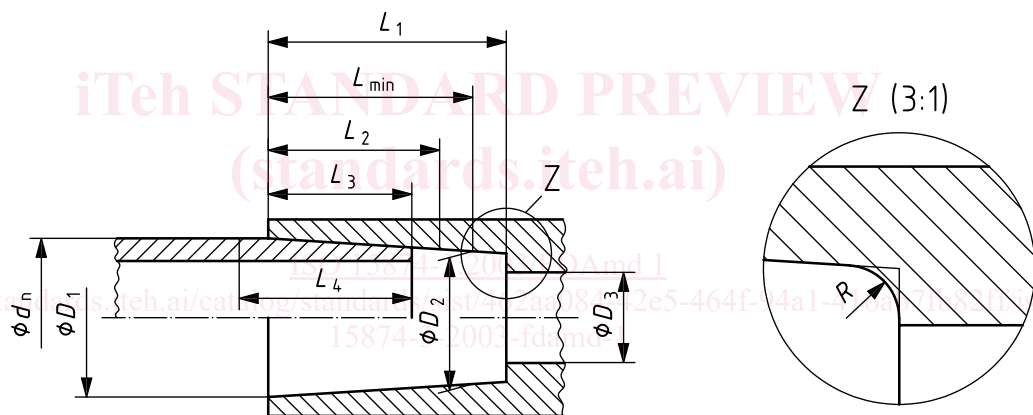
Plastics piping systems for hot and cold water installations — Polypropylene (PP) —

Part 3: Fittings

AMENDMENT 1

Page 6, Figure 1

Replace Figure 1 with the following:



Key

d_n is the nominal outside diameter

D_1 is the mean inside mouth diameter of the socket, which comprises the mean diameter of the circle at the inner section of the extension of the socket with the plane of the socket mouth

D_2 is the mean inside root diameter of the socket, which comprises the mean diameter of the circle in a plane parallel to the plane of the mouth and separated from it by a distance of L_{min} (the reference socket length)

D_3 is the minimum bore, which comprises the minimum diameter of the flow channel through the body of a fitting

L_{min} is the reference socket length, which comprises the theoretical minimum socket length used for the purpose of calculations. The minimum value of L_{min} is as given in the note in Table 3

L_1 is the actual length of the socket, which comprises the distance from the mouth to the shoulder (if any). The minimum value of L_1 is L_{min} , as given in the note in Table 3

L_2 is the heated length of the fitting, which comprises the length of penetration of the heated tool into the socket. The minimum value of L_2 is $(L_{min} - 2,5)$ mm. The maximum value of L_2 is L_{min} , as given in the note in Table 3

L_3 is the insertion length, which comprises the depth of penetration of the heated pipe end of a fitting into the socket. The minimum value of L_3 is $(L_{min} - 3,5)$ mm. The maximum value of L_3 is L_{min} , as given in the note in Table 3

L_4 is the heated length of pipe, which comprises the depth of penetration of the pipe end or spigot end of a fitting into the heated tool. The minimum value of L_4 is as given in the note in Table 3

R is the root radius

Figure 1 — Socket and spigot dimensions for socket fusion fittings and position of permitted radius

Replace Table 3 with the following:

Table 3 — Socket dimensions relative to length of socket fusion fittings

Dimensions in millimetres

Nominal diameter of the fitting d_n	Socket reference length, L L_{min}	Actual length of socket, L_1 $L_{1,min}$	Heated socket length, L_2		Penetration of pipe into socket, L_3		Heated length of pipe, L_4 $L_{4,min}$
			$L_{2,min}$	$L_{2,max}$	$L_{3,min}$	$L_{3,max}$	
16	13,3	13,3	10,8	13,3	9,8	13,3	9,8
20	14,5	14,5	12,0	14,5	11,0	14,5	11,0
25	16,0	16,0	13,5	16,0	12,5	16,0	12,5
32	18,1	18,1	15,6	18,1	14,6	18,1	14,6
40	20,5	20,5	18,0	20,5	17,0	20,5	17,0
50	23,5	23,5	21,0	23,5	20,0	23,5	20,0
63	27,4	27,4	24,9	27,4	23,9	27,4	23,9
75	30,0	30,0	27,5	30,0	26,5	30,0	26,5
90	33,0	33,0	31,5	33,0	29,5	33,0	29,5
110	37,0	37,0	35,5	37,0	33,5	37,0	33,5
125	40,0	40,0	37,5	40,0	36,5	40,0	36,5

NOTE For $d \leq 63$: $L_{min} = 0,3d_n + 8,5$; $L_{1,min} = L_{min}$; $L_{2,min} = L_{min} - 2,5$; $L_{2,max} = L_{min}$; $L_{3,min} = L_{min} - 3,5$; $L_{3,max} = L_{min}$; $L_{4,min} = L_{min} - 3,5$.

For $d \geq 75$: $L_{min} = 0,2d_n + 15$; $L_{1,min} = L_{min}$; $L_{2,min} = L_{min} - 2,5$; $L_{2,max} = L_{min}$; $L_{3,min} = L_{min} - 3,5$; $L_{3,max} = L_{min}$; $L_{4,min} = L_{min} - 3,5$.

Replace Table 4 with the following:

Table 4 — Socket dimensions of socket fusion fittings relative to diameter

Dimensions in millimetres

Nominal diameter of the fitting d_n	Mean inside diameter of socket				Maximum out-of-roundness ^a	Minimum bore ^b $D_{3,min}$	Maximum radius at socket root R_{max}
	Root D_1		Root D_2				
	$D_{1,min}$	$D_{1,max}$	$D_{2,min}$	$D_{2,max}$			
16	15,2	15,5	15,1	15,4	0,4	11,2	1,5
20	19,2	19,5	19,0	19,3	0,4	15,2	2,0
25	24,2	24,5	23,9	24,3	0,4	19,4	2,0
32	31,1	31,5	30,9	31,3	0,5	25,0	2,5
40	39,0	39,4	38,8	39,2	0,5	31,4	3,0
50	48,9	49,4	48,7	49,2	0,6	39,4	3,5
63	61,9	62,5	61,6	62,1	0,6	49,8	4,0
75	73,8	74,8	72,6	73,6	1,0	59,4	4,5
90	88,7	89,7	87,3	88,3	1,2	71,6	5,0
110	108,6	109,7	106,9	108,0	1,2	87,6	5,0
125	123,4	124,6	121,4	122,8	1,4	99,6	6,0

^a The out-of-roundness is the maximum inside diameter minus the minimum inside diameter of the socket measured in the same plane parallel to the plane of the socket mouth.

^b This measurement is only relevant if a shoulder exists.

