# INTERNATIONAL STANDARD

ISO 17885

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# Plastics piping systems — Mechanical fittings for pressure piping systems — Specifications

## **AMENDMENT 1**

Systèmes de canalisations en plastiques — Raccords mécaniques pour les canalisations sous pression — Spécifications

AMENDEMENT 1



ISO 17885:2015/Amd.1:2016(E)



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Amendment 1 to ISO 17885:2015 was prepared by Technical Committee ISO/TC 138, *Plastics pipes, fittings and valves for the transport of fluids*, Subcommittee SC 4, *Plastics pipes and fittings for the supply of gaseous fuels*.

## Plastics piping systems — Mechanical fittings for pressure piping systems — Specifications

### **AMENDMENT 1**

Page 30-31, Annex C, <u>Table C.1</u>

Replace the existing table with the following:

Table C.1 — Test pressure of materials and fittings bodies

Material	Test temperature	Test duration			$\sigma_{\rm s}$
	°C	h	MPa	MPa	MPa
ADC	20	1	MPa MI  24,8 12  3,1 12  26,0 18  8,0 18  19,0 1  10,0 1  20,0 1  11,5 1  19,0 1  10,0 2  20,0 2  20,0 2  50,0 2  20,0 2  50,0 2  20,0 2  15,5 12  6,0 12  11,3 8  4,0 8  13,3 1  5,0 1  9,9 8  3,4 8  10,8 8  3,6 8  11,0 8	12,5	8,0
ABS	70	1 000		12,5	8,0
е <i>с</i> тее	20	40	26,0	18,4	14,3
ECTFE	80	170	8,0	18,4	14,3
DA 11 160	20	1 000	19,0	16	8,0
PA 11 160	80	165	MPa  24,8  3,1  26,0  8,0  19,0  10,0  20,0  11,5  19,0  10,0  20,0  11,5  50,0  20,0  50,0  20,0  15,5  6,0  11,3  4,0  13,3  5,0  9,9  3,4  10,8  3,6  11,0	16	8,0
DA 11 100	20	1 000	MPa 24,8 3,1 26,0 8,0 19,0 10,0 20,0 11,5 19,0 10,0 20,0 11,5 50,0 20,0 50,0 20,0 15,5 6,0 11,3 4,0 13,3 5,0 9,9 3,4 10,8 3,6 11,0	18	9,0
PA 11 180	80	165	11,5	18	9,0
DA 12 160	20	1 000	19,0	16	8,0
PA 12 160	80	165	10,0	16	8,0
DA 12 100	20	1 000	20,0	18	9,0
PA 12 180	80	165	10,0     16       10,0     16       10,0     18       15     11,5     18       10,0     20     20       10,0     20     20       10,0     20     20       10,0     20     20       10,0     20     20       10,0     20     20       10,0     20     20       10,0     20     20       10,0     20     20       10,0     20     20       10,0     20     20       10,0     20     20       10,0     20     20	18	9,0
PA 12-GF30	20	1	50,0	20	12,5
	60	1 000	20,0	20	12,5
PA 12-GF50	20	1	00         3,1         12,5           0         26,0         18,4           0         8,0         18,4           00         19,0         16           5         10,0         16           00         20,0         18           5         11,5         18           00         19,0         16           5         10,0         16           5         10,0         16           5         10,0         16           5         11,5         18           50,0         20         20           50,0         20         20           50,0         20         20           50,0         20         20           50,0         20         20           50,0         20         20           15,5         12,5           11,3         8           00         4,0         8           13,3         10           00         5,0         10           9,9         8           00         3,4         8           10,8         8           10,8         8	20	12,5
PA 12-GF50	60	1 000		20	12,5
DA 12 CE65	20	1	50,0	20	12,5
PA 12-GF65	60	1 000	20,0	20	12,5
PB	20	1	15,5	12,5	10,0
ГБ	95	1 000	6,0	12,5	10,0
DE OO	20	1	11,3	8	6,3
PE 80	80	1 000	00     20,0     20       50,0     20       00     20,0     20       15,5     12,5       00     6,0     12,5       11,3     8       00     4,0     8	6,3	
PE 100	20	1	13,3	10	8,0
	80	1 000	5,0	10	8,0
PE-RT – Type 1	20	1	9,9	8	6,3
	95	1 000	3,4	8	6,3
DE DT Two 2	20	1	10,8	8	6,3
PE-RT – Type 2	95	1 000	3,6	8	6,3
DE V	20	1	11,0	8	6,3
PE-X	95	1 000	4.4	8	6,3

Valid for design coefficient C = 1,6. For other design coefficients, a different design stress  $\sigma_s$  is used. See ISO 16422.[15]

Table C.1 (continued)

Material	Test temperature			MRS	$\sigma_{\rm s}$
	°C	h	MPa	MPa	MPa
DOM C	20	1	31,5	10	6,3
POM-C	60	1 000	MPa 31,5 5,985 39,69 9,45 15,75 2,52 20,79 3,465 15,75 3,465 15,0 3,8 57,1 21,3 66,0 9,7 43,0 16,5 30,0 9,0 40,8 19,2 46,0 22,0 52,0 25,0 60,0	10	6,3
DOM II	20	1	39,69	10	6,3
POM-H	60	1 39,69 1 000 9,45 1 15,75 1 000 2,52 1 20,79 1 000 3,465 1 15,75 1 000 3,465 1 15,0 1 000 3,8 1 57,1 1 000 21,3 1 66,0 1 000 9,7	10	6,3	
PP-B	20	1	15,75	8	6,3
РР-Б	95	h         MPa           1         31,5           1 000         5,985           1         39,69           1 000         9,45           1         15,75           1 000         2,52           1         20,79           1 000         3,465           1         15,75           1 000         3,465           1         15,0           1 000         3,8           1         57,1           1 000         21,3           1         66,0           1 000         9,7           1         43,0           1 000         16,5           1         30,0           1 000         16,5           1         30,0           1 000         9,0           10         40,8           1 000         19,2           10         46,0           1 000         25,0           10         60,0           1 000         29,0           10         65,0           1 000         32,0           1 000         32,0           1 42,0	8	6,3	
DD II	20	1	20,79	10	6,3
PP-H	95	1 000	3,465	10	6,3
PP-R	20	1	15,75	8	6,3
PP-R	95	1 000	3,465	8	6,3
PP-RCT	20	1	15,0	11,2	9,0
PP-RCI	95	1 000	3,8	11,2	9,0
PPSU	20	1	57,1	32	22,4
PPSU	95	1 000	21,3	32	22,4
PSU	20	1	66,0	16	11,2
	95	1 000	9,7	16	11,2
DVC C	20	1	43,0	20	10,0
PVC-C	60	1 000	16,5	20	10,0
DVC III	20	1	MPa MPa M 31,5 5,985 39,69 9,45 15,75 2,52 20,79 3,465 15,75 3,465 15,0 1 3,8 1 57,1 21,3 66,0 9,7 43,0 16,5 30,0 9,0 40,8 3 19,2 3 46,0 3 22,0 3 52,0 4 25,0 4 25,0 4 25,0 4 25,0 4 25,0 4 25,0 5 32,0 5 42,0 10,0 32,6 5 5 32,6 5 32,6 5 5 32,6 5 5 32,6 5 32,6 5 5 5 32,6 5 5 5 32,6 5 5 5 32,6 5 5 5 32,6 5 5 5 32,6 5 5 5 32,6 5 5 5 32,6 5 5 5 5 32,6 5 5 5 5 32,6 5 5 5 5 5 32,6 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5	25	10,0
PVC-HI	60	1 000		25	10,0
DVC 0 245	20	10	MPa 31,5 5,985 39,69 9,45 15,75 2,52 20,79 3,465 15,75 3,465 15,0 3,8 57,1 21,3 66,0 9,7 43,0 16,5 30,0 9,0 40,8 19,2 46,0 22,0 52,0 60,0 25,0 60,0 29,0 65,0 32,0 42,0 10,0 32,6	31,5	20,0a
PVC-0 315	60	1 000       9,45         1       15,75         1 000       2,52         1       20,79         1 000       3,465         1       15,75         1 000       3,465         1       15,0         1 000       3,8         1       57,1         1 000       21,3         1       66,0         1 000       9,7         1       43,0         1 000       16,5         1       30,0         1 000       9,0         10       40,8         1 000       19,2         10       46,0         1 000       22,0         10       52,0         1 000       25,0         10       60,0         1 000       29,0         10       65,0         1 000       32,0         1 000       10,0         1 000       10,0         1 000       10,0         1 000       10,0         1 000       10,0         1 000       10,0         1 000       10,0         1 000 <td< td=""><td>31,5</td><td>20,0a</td></td<>	31,5	20,0a	
DVC O 255	20	10	46,0	35,5	22,0a
PVC-0 355	60	1 000	1 000     9,7     16     11,2       1     43,0     20     10,0       1 000     16,5     20     10,0       1 30,0     25     10,0       1 000     9,0     25     10,0       10     40,8     31,5     20,0       1 000     19,2     31,5     20,0       1 000     46,0     35,5     22,0       1 000     22,0     35,5     22,0       10     52,0     40,0     25,0	22,0a	
DVC 0 400	20	10	1       39,69       10         100       9,45       10         1       15,75       8         100       2,52       8         1       20,79       10         100       3,465       10         1       15,75       8         100       3,465       8         1       15,0       11,3         100       3,8       11,3         1       57,1       32         1       66,0       16         100       9,7       16         1       43,0       20         1       30,0       25         1       30,0       25         1       30,0       25         1       40,8       31,5         1       40,0       35,5         1       40,0       35,5         1       40,0       25,0         1       40,0       25,0         1       40,0       45,0         1       42,0       25         1       42,0       25         1       10,0       25,0         1       42,0       25 <t< td=""><td>40,0</td><td>25,0a</td></t<>	40,0	25,0a
PVC-O 400	60	1 000		40,0	25,0a
PVC-O 450	20	10	60,0	45,0	28,0a
	60	1 000	29,0	45,0	28,0a
PVC-O 500	20	10	65,0	50,0	32,0a
	60	1 000	32,0	50,0	32,0a
DVC II	20	1	42,0	25	10,0
PVC-U	60	1 000	10,0	25	10,0
DVDE	20	1	32,6	25	16,0
PVDF	95	1 000	11,5	25	16,0

<sup>&</sup>lt;sup>a</sup> Valid for design coefficient C = 1,6. For other design coefficients, a different design stress  $σ_s$  is used. See ISO 16422.[15]

