



EN ISO 1452-2 : Plastics piping systems for water supply and for buried and above-ground drainage and sewerage under pressure - Unplasticized poly(vinyl chloride) (PVC-U)

Dimension In Millimeter

Nominal (minimum) Wall Thickness														
Nominal Outside Diameter	Pipe Series S													
	S 20		S 16		S 12.5		S 10		S 8		S 6.3		S 5	
	SDR 41		SDR 33		SDR 26		SDR 21		SDR 17		SDR 13.6		SDR 11	
Nominal Pressure PN based on design coefficient C = 2.5														
PN	-		PN 6		PN 8		PN 10		PN 12.5		PN 16		PN 20	
mm	Thickness (mm)	Mass (kg/m)	Thickness (mm)	Mass (kg/m)	Thickness (mm)	Mass (kg/m)	Thickness (mm)	Mass (kg/m)	Thickness (mm)	Mass (kg/m)	Thickness (mm)	Mass (kg/m)	Thickness (mm)	Mass (kg/m)
12	-	-	-	-	-	-	-	-	-	-	-	-	1.5	0.08
16	-	-	-	-	-	-	-	-	-	-	-	-	1.5	0.10
20	-	-	-	-	-	-	-	-	-	-	1.5	0.13	1.9	0.16
25	-	-	-	-	-	-	-	-	1.5	0.17	1.9	0.21	2.3	0.25
32	-	-	-	-	1.5	0.22	1.6	0.23	1.9	0.27	2.4	0.34	2.9	0.40
40	-	-	1.5	0.28	1.6	0.29	1.9	0.35	2.4	0.43	3.0	0.53	3.7	0.64
50	-	-	1.6	0.37	2.0	0.46	2.4	0.55	3.0	0.67	3.7	0.82	4.6	1.00
63	-	-	2.0	0.58	2.5	0.72	3.0	0.86	3.8	1.07	4.7	1.31	5.8	1.58
75	-	-	2.3	0.80	2.9	1.00	3.6	1.23	4.5	1.51	5.6	1.85	6.8	2.21
90	-	-	2.8	1.17	3.5	1.44	4.3	1.76	5.4	2.18	6.7	2.66	8.2	3.20
DN	Nominal Pressure PN based on design coefficient C = 2.0 ^a													
PN	PN 6		PN 8		PN 10		PN 12.5		PN 16		PN 20		PN 25	
mm	Thickness (mm)	Mass (kg/m)	Thickness (mm)	Mass (kg/m)	Thickness (mm)	Mass (kg/m)	Thickness (mm)	Mass (kg/m)	Thickness (mm)	Mass (kg/m)	Thickness (mm)	Mass (kg/m)	Thickness (mm)	Mass (kg/m)
110	2.7	1.38	3.4	1.73	4.2	2.12	5.3	2.65	6.6	3.26	8.1	3.94	10.0	4.77
125	3.1	1.80	3.9	2.25	4.8	2.75	6.0	3.41	7.4	4.15	9.2	5.08	11.4	6.18
140	3.5	2.28	4.3	2.78	5.4	3.47	6.7	4.26	8.3	5.22	10.3	6.38	12.7	7.72
160	4.0	2.98	4.9	3.63	6.2	4.55	7.7	5.60	9.5	6.82	11.8	8.35	14.6	10.13
180	4.4	3.69	5.5	4.58	6.9	5.70	8.6	7.04	10.7	8.65	13.3	10.58	16.4	12.81
200	4.9	4.56	6.2	5.73	7.7	7.07	9.6	8.72	11.9	10.68	14.7	13.00	18.2	15.79
225	5.5	5.76	6.9	7.18	8.6	8.88	10.8	11.04	13.4	13.53	16.6	16.51	-	-
250	6.2	7.21	7.7	8.90	9.6	11.01	11.9	13.52	14.8	16.61	18.4	20.34	-	-
280	6.9	8.99	8.6	11.14	10.7	13.75	13.4	17.05	16.6	20.87	20.6	25.50	-	-
315	7.7	11.29	9.7	14.13	12.1	17.49	15.0	21.48	18.7	26.45	23.2	32.31	-	-
355	8.7	14.38	10.9	17.90	13.6	22.16	16.9	27.27	21.1	33.63	26.1	40.97	-	-
400	9.8	18.25	12.3	22.76	15.3	28.09	19.1	34.72	23.7	42.57	29.4	52.00	-	-
450	11.0	23.05	13.8	28.73	17.2	35.53	21.5	43.97	26.7	53.94	33.1	65.86	-	-
500	12.3	28.63	15.3	35.39	19.1	43.84	23.9	54.31	29.7	66.67	36.8	81.36	-	-
560	13.7	35.72	17.2	44.56	21.4	55.01	26.7	67.96	-	-	-	-	-	-
630	15.4	45.17	19.3	56.25	24.1	69.69	30.0	85.91	-	-	-	-	-	-
710	17.4	57.52	21.8	71.61	27.2	88.64	-	-	-	-	-	-	-	-
800	19.6	73.00	24.5	90.68	30.6	112.37	-	-	-	-	-	-	-	-
900	22.0	92.19	27.6	114.92	-	-	-	-	-	-	-	-	-	-
1000	24.5	114.07	30.6	141.58	-	-	-	-	-	-	-	-	-	-

^a To apply a design coefficient of 2.5 (instead of 2.0) for pipes with normal diameters above 90mm, the next higher pressure rating, PN , shall be chosen.

The nominal wall thickness conform to ISO 4065.

The PN6 values for S 20 and S 16 are calculated with the preferred number 6.3.



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Dimension In Millimeter

Nominal Size	Outside Diameter (mm)		Wall Thickness (mm)									
			Class C			Class D			Class E			
			9 bar			12 bar			15 bar			
inch	Min (mm)	Max (mm)	Min (mm)	Max (mm)	Weight (kg/m)	Min (mm)	Max (mm)	Weight (kg/m)	Min (mm)	Max (mm)	Weight (kg/m)	
0.5	21.2	21.5	-	-	-	-	-	-	-	1.7	2.1	0.158
0.8	26.6	26.9	-	-	-	-	-	-	-	1.9	2.5	0.224
1.0	33.4	33.7	-	-	-	-	-	-	-	2.2	2.7	0.328
1.3	42.1	42.4	-	-	-	2.2	2.7	-	-	2.7	3.2	0.508
1.5	48.1	48.4	-	-	-	2.5	3.0	-	-	3.1	3.7	0.666
2.0	60.2	60.5	2.5	3.0	0.688	3.1	3.7	0.845	-	3.9	4.5	1.048
3.0	88.7	89.1	3.5	4.1	1.423	4.6	5.3	1.846	-	5.7	6.6	2.258
4.0	114.1	114.5	4.5	5.2	2.354	6.0	6.9	3.096	-	7.3	8.4	3.721
6.0	168.0	168.5	6.6	7.6	5.084	8.8	10.2	6.687	-	10.8	12.5	8.103
8.0	218.8	219.4	7.8	9.0	7.855	10.3	11.9	10.250	-	12.6	14.5	12.400
10.0	272.6	273.4	9.7	11.2	12.171	12.8	14.8	15.872	-	15.7	18.1	19.250
12.0	323.4	324.3	11.5	13.3	17.119	15.2	17.5	22.359	-	18.7	21.6	27.195
16.0	405.9	406.9	14.5	16.7	27.087	19.0	21.9	35.085	-	23.4	27.0	42.719
18.0	456.7	457.7	16.3	18.8	34.262	21.4	24.7	44.461	-	-	-	-
20.0	507.5	508.5	18.1	20.9	42.278	-	-	-	-	-	-	-
24.0	609.1	610.1	21.7	25.0	60.837	-	-	-	-	-	-	-

*Suitable for water supply, sewerage and ducting applications