



# **Schedule 80 CPVC Pipe - Gray**



## **ENGINEERING GUIDE**

Contact Spears® for any Information not found.



Schedule 80 CPVC Technical  
**Schedule 80 CPVC Pipe Dimensions & Pressure Ratings**

**Schedule 80 CPVC Pipe**

Nom. Pipe Size (in)	Average O.D.	Average I.D.	Min. Wall	Nominal Wt./Ft.	Maximum W.P. PSI*
1/4	.540	.282	0.119	0.117	1130
3/8	.675	.403	0.126	0.163	920
1/2	.840	.526	0.147	0.225	850
3/4	1.050	.722	0.154	0.304	690
1	1.315	.936	0.179	0.449	630
1-1/4	1.660	1.255	0.191	0.617	520
1-1/2	1.900	1.476	0.200	0.751	470
2	2.375	1.913	0.218	1.040	400
2-1/2	2.875	2.290	0.276	1.582	420
3	3.500	2.864	0.300	2.121	370
3-1/2	4.000	3.326	0.318	2.735	350
4	4.500	3.786	0.337	3.2101	320
5	5.563	4.768	0.375	4.800	290
6	6.625	5.709	0.432	6.200	280
8	8.625	7.565	0.500	9.042	250
10	10.750	9.493	0.593	13.018	230
12	12.750	11.294	0.687	18.350	230
14	14.000	12.410	0.750	23.260	220
16	16.000	14.213	0.843	29.892	220
18	18.000	16.014	0.937	35.421	220
20	20.000	17.814	1.031	45.879	220
24	24.000	21.418	1.218	64.958	210

**Maximum CPVC Service Temperature 200°F**

**Pressure De-rating at Elevated Temperatures**

The pressure ratings given above are for water, non-shock, @ 73°F. The specified derating factors for CPVC are suitable for pipe conveying water at elevated temperatures. To determine elevated temperature rating, multiply 73°F [23°C] pressure rating by appropriate factor shown in the table for desired operating temperature. When working near maximum specified temperature, solvent cement joints are recommended in place of threaded connections. Where disassembly is required at elevated temperatures, use Spears® Special reinforced (SR) adapters, flanges, unions or grooved coupling connections. Spears® recommends that only Schedule 80 or heavier wall thickness pipe should be threaded.

**CPVC Pipe**

Operating Temp (°F)	De-Rating Factor
73	1.00
90	0.91
100	0.82
110	0.72
120	0.65
130	0.57
140	0.50
150	0.42
160	0.40
170	0.29
180	0.25
200	0.20

EX: 2" CPVC SCHEDULE 80 @  
 120°F = 400 psi x 0.65 = 260 psi max. @ 120°F

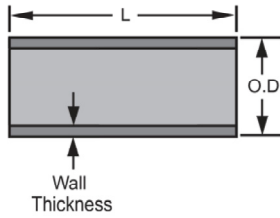
**See Plastic Pipe Engineering Guide for additional information**

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**Pipe - CPVC Schedule 40 Plain End**

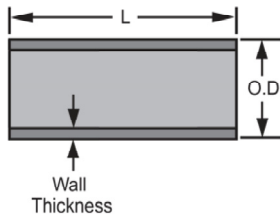
10' Lengths



Part Number	Size	L	AVG.O.D.	Minimum Wall	Approx. Wt. (Lbs./Ft)
PD-400-001C-10	1/8	10	.405	.068	.09
PD-400-002C-10	1/4	10	.540	.088	.09
PD-400-003C-10	3/8	10	.675	.091	.12
PD-400-005C-10	1/2	10	.840	.109	.18
PD-400-007C-10	3/4	10	1.050	.113	.23
PD-400-010C-10	1	10	1.315	.133	.35
PD-400-012C-10	1-1/4	10	1.660	.140	.47
PD-400-015C-10	1-1/2	10	1.900	.145	.56
PD-400-020C-10	2	10	2.375	.154	.77
PD-400-025C-10	2-1/2	10	2.875	.203	1.20
PD-400-030C-10	3	10	3.500	.216	1.57
PD-400-040C-10	4	10	4.500	.237	2.23
PD-400-050C-10	5	10	5.563	.258	2.87
PD-400-060C-10	6	10	6.625	.280	3.94
PD-400-080C-10	8	10	8.625	.322	5.95
PD-400-100C-10	10	10	10.750	.365	8.53
PD-400-120C-10	12	10	12.750	.406	10.83
PD-400-140C-10	14	10	14	.437	23.25
PD-400-160C-10	16	10	16	.500	18.16
PD-400-180C-10	18	10	18	.562	22.96
PD-400-200C-10	20	10	20	.593	29.97
PD-400-240C-10	24	10	24	.687	30.99

**Pipe - CPVC Schedule 40 Plain End**

20' Lengths



Part Number	Size	L	AVG.O.D.	Minimum Wall	Approx. Wt. (Lbs./Ft)
PD-400-001C	1/8	20	.405	.068	.09
PD-400-002C	1/4	20	.540	.088	.09
PD-400-003C	3/8	20	.675	.091	.12
PD-400-005C	1/2	20	.840	.109	.18
PD-400-007C	3/4	20	1.050	.113	.23
PD-400-010C	1	20	1.315	.133	.35
PD-400-012C	1-1/4	20	1.660	.140	.47
PD-400-015C	1-1/2	20	1.900	.145	.56
PD-400-020C	2	20	2.375	.154	.77

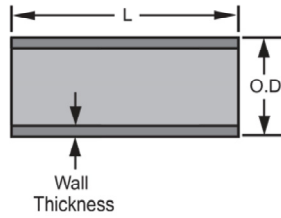


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**Schedule 80 CPVC Pipe Dimensions & Pressure Ratings**

**Pipe - CPVC Schedule 40 Plain End**

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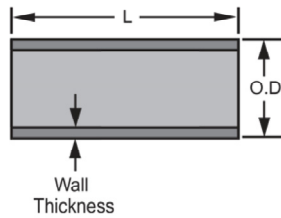
20' Lengths



Part Number	Size	L	AVG.O.D.	Minimum Wall	Approx. Wt. (Lbs./Ft)
PD-400-025C	2-1/2	20	2.875	.203	1.20
PD-400-030C	3	20	3.500	.216	1.57
PD-400-040C	4	20	4.500	.237	2.23
PD-400-050C	5	20	5.563	.258	2.87
PD-400-060C	6	20	6.625	.280	3.94
PD-400-080C	8	20	8.625	.322	5.95
PD-400-100C	10	20	10.750	.365	8.53
PD-400-120C	12	20	12.750	.406	10.83
PD-400-140C	14	20	14	.437	23.25
PD-400-160C	16	20	16	.500	18.16
PD-400-180C	18	20	18	.562	22.96
PD-400-200C	20	20	20	.593	29.97
PD-400-240C	24	20	24	.687	30.99

**Pipe - CPVC Schedule 80 Plain End**

10' Lengths



Part Number	Size	L	AVG.O.D.	Minimum Wall	Approx. Wt. (Lbs./Ft)
PD-800-001C-10	1/8	10	.405	.095	.10
PD-800-002C-10	1/4	10	.540	.119	.11
PD-800-003C-10	3/8	10	.675	.126	.16
PD-800-005C-10	1/2	10	.840	.147	.22
PD-800-007C-10	3/4	10	1.050	.154	.30
PD-800-010C-10	1	10	1.315	.179	.44
PD-800-012C-10	1-1/4	10	1.660	.191	.61
PD-800-015C-10	1-1/2	10	1.900	.200	.75
PD-800-020C-10	2	10	2.375	.218	1.03
PD-800-025C-10	2-1/2	10	2.875	.276	1.58
PD-800-030C-10	3	10	3.500	.300	2.12
PD-800-040C-10	4	10	4.500	.337	3.10
PD-800-060C-10	6	10	6.625	.280	5.92
PD-800-080C-10	8	10	8.625	.500	9.04
PD-800-100C-10	10	10	10.750	.593	13.01
PD-800-120C-10	12	10	12.750	.687	18.35
PD-800-140C-10	14	10	14	.750	23.25
PD-800-160C-10	16	10	16	.843	29.89

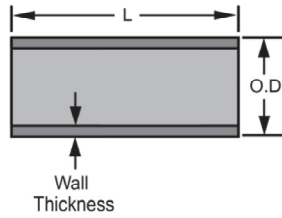
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**Pipe - CPVC Schedule 80 Plain End**

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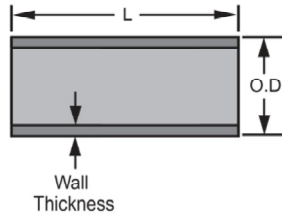
10' Lengths



Part Number	Size	L	AVG.O.D.	Minimum Wall	Approx. Wt. (Lbs./Ft)
PD-800-180C-10	18	10	18	.970	35.41
PD-800-200C-10	20	10	20	1.031	45.87
PD-800-240C-10	24	10	24	1.218	64.95

**Pipe - CPVC Schedule 80 Plain End**

20' Lengths



Part Number	Size	L	AVG.O.D.	Minimum Wall	Approx. Wt. (Lbs./Ft)
PD-800-001C	1/8	20	.405	.095	.10
PD-800-002C	1/4	20	.540	.119	.11
PD-800-003C	3/8	20	.675	.126	.16
PD-800-005C	1/2	20	.840	.147	.22
PD-800-007C	3/4	20	1.050	.154	.30
PD-800-010C	1	20	1.315	.179	.44
PD-800-012C	1-1/4	20	1.660	.191	.61
PD-800-015C	1-1/2	20	1.900	.200	.75
PD-800-020C	2	20	2.375	.218	1.03
PD-800-025C	2-1/2	20	2.875	.276	1.58
PD-800-030C	3	20	3.500	.300	2.12
PD-800-040C	4	20	4.500	.337	3.10
PD-800-050C	5	20	5.563	.375	4.55
PD-800-060C	6	20	6.625	.432	5.92
PD-800-080C	8	20	8.625	.500	9.04
PD-800-100C	10	20	10.750	.593	13.01
PD-800-120C	12	20	12.750	.687	18.35
PD-800-140C	14	20	14	.750	23.25
PD-800-160C	16	20	16	.843	29.89
PD-800-180C	18	20	18	.970	35.42
PD-800-200C	20	20	20	1.031	45.87
PD-800-240C	24	20	24	1.218	64.95