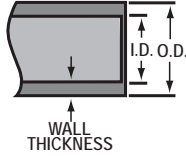


Schedule 80 CPVC Technical Information  
**Schedule 80 CPVC Fittings**



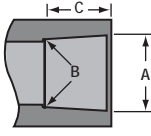
## ASTM STANDARD DIMENSIONS

**SCHEDULE 80 PIPE DIMENSIONS  
ASTM D 1785**



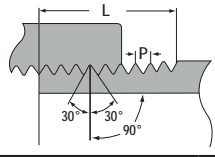
Nominal Pipe Size In.	Mean Outside Diameter In.	O. D. Tolerance In.	Minimum Wall Thickness In.
1/8	0.405	± 0.004	0.095
1/4	0.540	± 0.004	0.119
3/8	0.675	± 0.004	0.126
1/2	0.840	± 0.004	0.147
3/4	1.050	± 0.004	0.154
1	1.315	± 0.005	0.179
1-1/4	1.660	± 0.005	0.191
1-1/2	1.900	± 0.006	0.200
2	2.375	± 0.006	0.218
2-1/2	2.875	± 0.007	0.276
3	3.500	± 0.008	0.300
4	4.500	± 0.009	0.337
5	5.563	± 0.010	0.375
6	6.625	± 0.011	0.432
8	8.625	± 0.015	0.500
10	10.750	± 0.015	0.593
12	12.750	± 0.015	0.687

**SCHEDULE 80 SOCKET DIMENSIONS  
ASTM D 2467**



Nominal Size In.	Diameter			Socket Length Minimum C
	Entrance A	Bottom B	Tolerance A	
1/8	0.417	0.401	± 0.004	0.500
1/4	0.552	0.536	± 0.004	0.625
3/8	0.687	0.671	± 0.004	0.750
1/2	0.848	0.836	± 0.004	0.875
3/4	1.058	1.046	± 0.004	1.000
1	1.325	1.310	± 0.005	1.125
1-1/4	1.670	1.655	± 0.005	1.250
1-1/2	1.912	1.894	± 0.006	1.375
2	2.387	2.369	± 0.006	1.500
2-1/2	2.889	2.868	± 0.007	1.750
3	3.516	3.492	± 0.008	1.875
4	4.518	4.491	± 0.009	2.250
5	5.583	5.553	± 0.010	2.625
6	6.647	6.614	± 0.011	3.000
8	8.655	8.610	± 0.015	4.000
10	10.780	10.735	± 0.015	5.000
12	12.780	12.735	± 0.015	6.000
14	14.030	13.985	± 0.015	7.000

**AMERICAN NATIONAL STANDARD  
TAPER PIPE THREADS (NPT) ANSI  
B1 .20.1 ASTM F 1498**



Nominal Size In.	Threads Per Inch	Effective Thread Length L	Pitch Of Thread P
1/8	27	0.2639	0.03704
1/4	18	0.4018	0.05556
3/8	18	0.4078	0.05556
1/2	14	0.5337	0.07143
3/4	14	0.5457	0.07143
1	11-1/2	0.6828	0.08696
1-1/4	11-1/2	0.7068	0.08696
1-1/2	11-1/2	0.7235	0.08696
2	11-1/2	0.7565	0.08696
2-1/2	8	1.1375	0.12500
3	8	1.2000	0.12500
4	8	1.3000	0.12500
5	8	1.4063	0.12500
6	8	1.5125	0.12500
8	8	1.7125	0.12500

## STANDARD COMPARISONS

SPEARS® IPS-to-Metric transition unions are listed by nominal size. The chart below compares nominal and actual\* pipe O.D. for each size according to the designated standard.

JIS K6741 (mm)		DIN 8062 (mm)		ASTM D1785 (in.)		NPT—ANSI B1.20.1** Tapered Thread		BSP—BS21, DIN 2999, ISO 7/1 Thread	
Nominal	Actual*	O.D.	Actual*	Nominal	Actual*	Designation	Threads/in.	Designation	Threads/25.4mm
16	22	15	20	1/2	.840	1/2	14	1/2	14
20	26	20	25	3/4	1.050	3/4	14	3/4	14
25	32	25	32	1	1.315	1	11.5	1	11
30	38	38	40	1-1/4	1.660	1-1/4	11.5	1-1/4	11
40	48	40	50	1-1/2	1.900	1-1/2	11.5	1-1/2	11
50	60	50	63	2	2.375	2	11.5	2	11
75	89	80	90	3	3.500	3	8	3	11
100	114	100	110	4	4.500	4	8	4	11

\*Specified dimension, certain tolerances apply

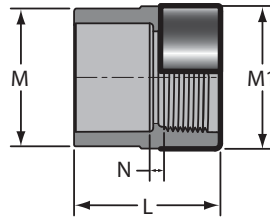
\*\*NPT and BSP have different thread angles and not compatible.



**Schedule 80 CPVC Technical Information**  
**Schedule 80 CPVC Fittings**

**ENCAPSULATED SPECIAL REINFORCED FEMALE ADAPTER**

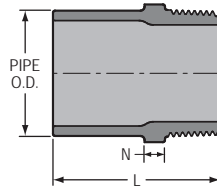
Socket x ESR Fipt



Part Number	Size	L	M	M1	N	Approx. Wt. (Lbs.)
835-002CESR	1/4	1-1/2	27/32	29/32	3/32	.05
835-003CESR	3/8	1-17/32	15/16	1-1/32	3/16	.04
835-005CESR	1/2	1-7/8	1-3/16	1-9/32	9/32	.07
835-007CESR	3/4	2	1-13/32	1-15/32	1/8	.11
835-010CESR	1	2-1/4	1-3/4	1-13/16	1/8	.15
835-012CESR	1-1/4	2-7/16	2-1/8	2-5/32	3/16	.22
835-015CESR	1-1/2	2-9/16	2-13/32	2-1/2	1/4	.31
835-020CESR	2	2-27/32	3	3-3/32	13/32	.49

**MALE ADAPTER**

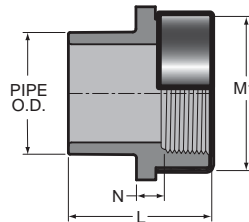
Spigot x Mipt



Part Number	Size	L	N	Approx. Wt. (Lbs.)
861-005C	1/2	1-13/16	5/16	.03
861-007C	3/4	1-31/32	5/16	.05
861-010C	1	2-3/32	1/4	.08
861-131C	1x3/4	2	1/4	.07
861-012C	1-1/4	2-9/32	9/32	.13
861-015C	1-1/2	2-5/8	11/32	.15
861-020C	2	2-13/16	13/32	.24

**SPECIAL REINFORCED SPIGOT FEMALE ADAPTER**

Spigot x SR Fipt



Part Number	Size	L	M1	N	Approx. Wt. (Lbs.)
878-005CSR	1/2	1-3/4	1-3/16	5/32	.06
878-007CSR	3/4	1-15/16	1-3/8	3/16	.08
878-010CSR	1	2-1/4	1-11/16	7/32	.13
878-012CSR	1-1/4	2-15/32	2-1/16	1/4	.19
878-015CSR	1-1/2	2-21/32	2-7/16	13/32	.26

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