

Metric Fittings Technical ASTM & Metric Dimensions & Standards Comparison



**SCHEDULE 40 & SCHEDULE 80 PIPE DIMENSIONS
ASTM STANDARD D 1785**

Nominal Pipe Size (inch)	Mean Outside Diameter (inch)	O.D Tolerance (inch)	Minimum Wall Thickness (inch)	
			Schedule 40	Schedule 80
1/2	0.840	±0.004	0.109	0.147
3/4	1.050	±0.004	0.113	0.154
1	1.315	±0.005	0.133	0.179
1-1/4	1.660	±0.005	0.140	0.191
1-1/2	1.900	±0.006	0.145	0.200
2	2.375	±0.006	0.154	0.218
2-1/2	2.875	±0.007	0.203	0.276
3	3.500	±0.008	0.216	0.300
4	4.500	±0.009	0.237	0.337
6	6.625	±0.011	0.280	0.420
8	8.625	±0.015	0.322	0.500
10	10.750	±0.015	0.365	0.593
12	12.750	±0.015	0.406	0.687

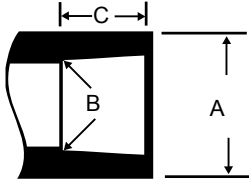
ASTM PIPE PRESSURE RATINGS

Inch	mm O.D.	Schedule 40		Schedule 80	
		psi	BAR	psi	BAR
1/2	21.34	600	41.3	850	58.6
3/4	26.67	480	33.1	690	47.5
1	33.40	450	31.0	630	43.4
1-1/4	42.16	370	25.5	520	35.8
1-1/2	48.26	330	22.7	470	32.4
2	60.32	280	19.3	400	27.5
2-1/2	73.02	300	20.6	420	28.9
3	88.90	260	17.9	370	25.5
4	114.30	220	15.1	320	22.0
6	168.28	180	12.4	280	19.3
8	219.08	160	11.0	250	17.2
10	273.05	140	9.7	230	15.8
12	323.85	130	8.9	230	15.8

**SCHEDULE 40 & SCHEDULE 80 BASIC SOCKET DIMENSIONS
ASTM STANDARDS D 2466 & D 2467**

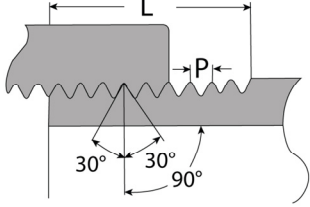
Nominal Size (inch)	Diameter			Schedule 40 Socket Length Minimum C	Schedule 80 Socket Length Minimum C
	Entrance A	Bottom B	Tolerance (inch)		
1/2	0.848	0.836	± 0.004	0.688	0.875
3/4	1.058	1.046	± 0.004	0.719	1.000
1	1.325	1.310	± 0.005	0.875	1.125
1-1/4	1.670	1.655	± 0.005	0.938	1.250
1-1/2	1.912	1.894	± 0.006	1.094	1.375
2	2.387	2.369	± 0.006	1.156	1.500
2-1/2	2.889	2.868	± 0.007	1.750	1.750
3	3.516	3.492	± 0.008	1.875	1.875
4	4.518	4.491	± 0.009	2.000	2.250
6	6.647	6.614	± 0.011	3.000	3.000
8	8.655	8.610	± 0.015	4.000	4.000
10	10.780	10.735	± 0.015	5.000	5.000
12	12.780	12.735	± 0.015	6.000	6.000

PVC METRIC FABRICATED FITTINGS BASIC SOCKET DIMENSIONS



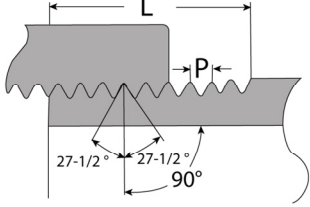
Size	Socket Entrance A		Tolerance ±		Socket Bottom B		Tolerance ±		C Socket Depth (Minimum)	
	inch	mm	inch	mm	inch	mm	inch	mm	inch	mm
110mm	4.346	110.39	0.015	0.38	4.316	109.63	0.015	0.38	2.5000	63.50
125mm	4.934	125.32	0.016	0.41	4.930	125.22	0.016	0.41	2.750	69.85
160mm	6.319	160.50	0.020	0.51	6.270	159.26	0.020	0.51	3.500	88.90
200mm	7.900	200.66	0.026	0.66	7.848	199.34	0.026	0.66	4.250	107.95
225mm	8.870	225.30	0.029	0.74	8.829	224.26	0.029	0.74	4.750	120.65
250mm	9.875	250.83	0.032	0.81	9.811	249.20	0.032	0.81	5.250	133.35
280mm	11.059	280.90	0.035	0.89	10.992	279.20	0.035	0.89	5.750	146.05
315mm	12.441	316.00	0.039	0.99	12.363	314.02	0.039	0.99	6.500	165.10

**AMERICAN NATIONAL STANDARD TAPER PIPE THREADS
(NPT)
ANSI STANDARD B1.20.1
ASTM STANDARD D 2464, F 437, F 1498**



Nominal Sizes (inch)	Threads per Inch	Effective Thread Length L inches	Pitch of Thread P inches
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

**BSP ISO 7/1
PARALLEL THREADS**



Nominal Size (inch)	Threads per Inch	Effective Thread Length L mm	Pitch of Thread P mm
1/2	14	13.152	1.8143
3/4	14	14.514	1.8143
1	11	16.714	2.3091
1-1/4	11	19.050	2.3091
1-1/2	11	19.050	2.3091
2	11	23.378	2.3091
2-1/2	11	26.698	2.3091
3	11	29.873	2.3091
4	11	35.791	2.3091

STANDARDS COMPARISON

JIS K6747 mm		DIN 8062 mm		ASTM D 1785			NPT-ANSI B1.20.1 Tapered Thread		BSP-ISO 7/1 Parallel Thread	
Nominal	Actual O.D.	Nominal	Actual O.D.	Nominal	Actual O.D.		Designation	Threads per inch	Designation	Threads per 25.4mm
				inches	inches	mm				
16	22	15	20	1/2	.840	21.34	1/2	14	1/2	14
20	26	20	25	3/4	1.050	26.67	3/4	14	3/4	14
25	32	25	32	1	1.315	33.40	1	11-1/2	1	11
30	38	32	40	1-1/4	1.660	42.16	1-1/4	11-1/2	1-1/4	11
40	48	40	50	1-1/2	1.900	48.26	1-1/2	11-1/2	1-1/2	11
50	60	50	63	2	2.375	60.32	2	11-1/2	2	11
75	89	80	90	3	3.500	88.90	3	8	3	11
100	114	100	110	4	4.500	114.30	4	8	4	11