



MAXIMUM ALLOWABLE WORKING PRESSURE (PSI) AT DESIGN TEMPERATURE (F)  
 ASTM A106 Grade B Carbon Steel Seamless Threaded Pipe Nipples  
 ASTM A234 WPB Swage Nipples and Bull Plugs  
**FOR REFERENCE ONLY**

Nominal Pipe Size	Wall Thickness	Weight Class	Schedule No.	Temperature						
				-20 to 100	200	300	400	500	600	650
1/8	0.068	STD	40	3140	3140	3140	3140	2965	2715	2670
	0.095	XS	80	5820	5820	5820	5820	5500	5035	4945
1/4	0.088	STD	40	2535	2535	2535	2535	2400	2195	2155
	0.119	XS	80	4805	4805	4805	4805	4540	4155	4085
3/8	0.091	STD	40	2180	2180	2180	2180	2060	1885	1850
	0.126	XS	80	4235	4235	4235	4235	4000	3660	3600
1/2	0.109	STD	40	1890	1890	1890	1890	1790	1635	1610
	0.147	XS	80	3655	3655	3655	3655	3455	3160	3105
	0.188	...	160	5625	5625	5625	5625	5315	4865	4780
	0.294	XXS	...	10710	10710	10710	10710	10120	9265	9100
3/4	0.113	STD	40	1645	1645	1645	1645	1555	1420	1395
	0.154	XS	80	3145	3145	3145	3145	2970	2720	2670
	0.218	...	160	5620	5620	5620	5620	5310	4860	4775
	0.308	XXS	...	9175	9175	9175	9175	8675	7940	7800
1	0.133	STD	40	1465	1465	1465	1465	1385	1265	1245
	0.179	XS	80	2795	2795	2795	2795	2640	2420	2375
	0.250	...	160	4990	4990	4990	4990	4715	4315	4240
	0.358	XXS	...	8385	8385	8385	8385	7925	7250	7125
1-1/4	0.140	STD	40	1310	1310	1310	1310	1235	1130	1110
	0.191	XS	80	2465	2465	2465	2465	2330	2135	2095
	0.250	...	160	3870	3870	3870	3870	3660	3350	3290
	0.382	XXS	...	7180	7180	7180	7180	6785	6210	6105
1-1/2	0.145	STD	40	1235	1235	1235	1235	1170	1070	1050
	0.200	XS	80	2320	2320	2320	2320	2195	2010	1975
	0.281	...	160	4010	4010	4010	4010	3790	3465	3405
	0.400	XXS	...	6620	6620	6620	6620	6255	5725	5625
2	0.154	STD	40	1120	1120	1120	1120	1060	970	955
	0.218	XS	80	2125	2125	2125	2125	2010	1840	1810
	0.344	...	160	4225	4225	4225	4225	3995	3655	3595
	0.436	XXS	...	5870	5870	5870	5870	5545	5075	4990
2-1/2	0.203	STD	40	1105	1105	1105	1105	1045	955	940
	0.276	XS	80	2050	2050	2050	2050	1935	1775	1740
	0.375	...	160	3390	3390	3390	3390	3205	2930	2880
	0.552	XXS	...	5930	5930	5930	5930	5605	5130	5040
3	0.216	STD	40	1040	1040	1040	1040	980	900	885
	0.300	XS	80	1930	1930	1930	1930	1825	1670	1640
	0.438	...	160	3460	3460	3460	3460	3270	2995	2940
	0.600	XXS	...	5380	5380	5380	5380	5085	4655	4575
3-1/2	0.226	STD	40	995	995	995	995	940	860	845
	0.318	XS	80	1850	1850	1850	1850	1745	1600	1570
4	0.237	STD	40	975	975	975	975	920	840	825
	0.337	XS	80	1795	1795	1795	1795	1695	1550	1525
	0.531	...	160	3465	3465	3465	3465	3275	3000	2945
	0.674	XXS	...	4770	4770	4770	4770	4505	4125	4055
5	0.258	STD	40	920	920	920	920	870	795	785
	0.375	XS	80	1695	1695	1695	1695	1605	1465	1440
	0.625	...	160	3435	3435	3435	3435	3245	2970	2920
	0.750	XXS	...	4345	4345	4345	4345	4100	3760	3695
6	0.280	STD	40	890	890	890	890	840	770	755
	0.432	XS	80	1735	1735	1735	1735	1640	1500	1475
	0.719	...	160	3415	3415	3415	3415	3225	2950	2900
	0.864	XXS	...	4300	4300	4300	4300	4065	3720	3655
8	0.322	STD	40	855	855	855	855	810	740	730
	0.500	XS	80	1615	1615	1615	1615	1525	1400	1375
	0.906	...	160	3435	3435	3435	3435	3245	2970	2920
	0.875	XXS	...	3290	3290	3290	3290	3110	2845	2795

**NOTES:**

- 1). The allowable working pressures were calculated based on formulas and allowable stress as specified in the ASME B31.3 Process Piping Code.
- 2). Considerations were taken into account for the wall thickness material removed by threading.
- 3). No allowances were made for corrosion, erosion, mechanical loads, and/or bending moments.
- 4). Allowable working pressures listed are non-shock working pressures.
- 5). For temperatures and working pressures above those listed consult the end users piping engineer.
- 6). This information is to be used as a reference guide only. Specifying the correct pipe schedule and pressure class of fitting depends on many different factors. Therefore, it is the ultimate responsibility of the end user's piping engineer to specify the correct pipe schedule and pressure class of fitting that will safely work in his intended application.