



Nominal Pipe Size	O.D. of Pipe, D	Threads/ Inch	Allowance	External Thread, Class 2A				Internal Thread, Class 2B			
				Major Diameter		Pitch Diameter		Minor Diameter		Pitch Diameter	
				Max.	Min.	Max.	Min.	Min.	Max.	Min. <sup>1</sup>	Max.
1	2	3	4	5	6	7	8	9	10	11	12
1/8	0.405	27	0.0011	0.397	0.390	0.3725	0.3689	0.358	0.364	0.3736	0.3783
1/4	0.540	18	0.0013	0.526	0.517	0.4903	0.4859	0.468	0.481	0.4916	0.4974
3/8	0.675	18	0.0014	0.662	0.653	0.6256	0.6211	0.603	0.612	0.6270	0.6329
1/2	0.840	14	0.0015	0.823	0.813	0.7769	0.7718	0.747	0.759	0.7784	0.7851
3/4	1.050	14	0.0016	1.034	1.024	0.9873	0.9820	0.958	0.970	0.9889	0.9958
1	1.315	11.5	0.0017	1.293	1.281	1.2369	1.2311	1.201	1.211	1.2386	1.2462
1 1/4	1.660	11.5	0.0018	1.638	1.626	1.5816	1.5756	1.546	1.555	1.5834	1.5912
1 1/2	1.900	11.5	0.0018	1.877	1.865	1.8205	1.8144	1.785	1.794	1.8223	1.8302
2	2.375	11.5	0.0019	2.351	2.339	2.2944	2.2882	2.259	2.268	2.2963	2.3044
2 1/2	2.875	8	0.0022	2.841	2.826	2.7600	2.7526	2.708	2.727	2.7622	2.7720
3	3.500	8	0.0023	3.467	3.452	3.3862	3.3786	3.334	3.353	3.3885	3.3984
3 1/2	4.000	8	0.0023	3.968	3.953	3.8865	3.8788	3.835	3.848	3.8888	3.8988
4	4.500	8	0.0023	4.466	4.451	4.3848	4.3771	4.333	4.346	4.3871	4.3971
5	5.563	8	0.0024	5.528	5.513	5.4469	5.4390	5.395	5.408	5.4493	5.4593
6	6.625	8	0.0024	6.585	6.570	6.5036	6.4955	6.452	6.464	6.5060	6.5160

GENERAL NOTES:

- NPSM threads have a form similar to that of UN threads and tolerances similar to 2A/2B. The internal thread has a minimum pitch diameter equal to  $E_1$  of NPT threads.
- The minor diameters of external threads and major diameters of internal threads are those as produced by commercial straight pipe dies and commercial ground straight pipe taps. The major diameter of the external thread has been calculated on the basis of a truncation of  $0.10825P$ , and the minor diameter of the internal thread has been calculated on the basis of a truncation of  $0.21651P$ , to provide no interference at crest and root when product is gaged.

NOTE:

- Column 11 is the same as the pitch diameter at the large end of internal thread,  $E_1$ , Basic (see Table 2, column 8).

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**Table 7 Dimensions, External and Internal Straight Pipe Thread for Locknut Connections, NPSL (Loose-Fitting Mechanical Joints)**



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