NPT pipe thread *chart*

The NPT size is the pipe size, not the thread diameter. A **1/2 in NPT** thread has **14 threads per inch** and is cut on pipe with a **0.840 in OD**. All NPT threads taper **1 in 16** on the diameter, and the thread angle is 60°.

SIZE	TPI	PITCH, IN	PIPE OD, IN (MM)	E0, IN	E1, IN	L1 HAND-TIGHT, IN	L2 EFFECTIVE, IN	TURNS HAND-TIGHT
1/16	27	0.03704	0.3125 (7.9)	0.27118	0.28118	0.1600	0.2611	4.3
1/8	27	0.03704	0.405 (10.3)	0.36351	0.37360	0.1615	0.2639	4.4
1/4	18	0.05556	0.540 (13.7)	0.47739	0.49163	0.2278	0.4018	4.1
3/8	18	0.05556	0.675 (17.1)	0.61201	0.62701	0.2400	0.4078	4.3
1/2	14	0.07143	0.840 (21.3)	0.75843	0.77843	0.3200	0.5337	4.5
3/4	14	0.07143	1.050 (26.7)	0.96768	0.98887	0.3390	0.5457	4.7
1	11.5	0.08696	1.315 (33.4)	1.21363	1.23863	0.4000	0.6828	4.6
1-1/4	11.5	0.08696	1.660 (42.2)	1.55713	1.58338	0.4200	0.7068	4.8
1-1/2	11.5	0.08696	1.900 (48.3)	1.79609	1.82234	0.4200	0.7235	4.8
2	11.5	0.08696	2.375 (60.3)	2.26902	2.29627	0.4360	0.7565	5.0
2-1/2	8	0.12500	2.875 (73.0)	2.71953	2.76216	0.6820	1.1375	5.5
3	8	0.12500	3.500 (88.9)	3.34062	3.38850	0.7660	1.2000	6.1
3-1/2	8	0.12500	4.000 (101.6)	3.83750	3.88881	0.8210	1.2500	6.6
4	8	0.12500	4.500 (114.3)	4.33438	4.38712	0.8440	1.3000	6.8

Sources: NBS Handbook H28 (1957), Part II · Standard
unitcheatsheet.com/cheatsheets/npt-pipe-threads · Updated November 2026 · Free to print and share. Check critical values against the standard before use.

Scan or tap for the live, searchable chart