BSP & NPT Pipe Thread Chart

Sizes 1/8" to 6" · threads per inch, pitch and outside diameter

TUPY

Size (in)	BSP TPI	BSP pitch mm	BSP major Ø mm	NPT TPI	NPT pitch mm	NPT OD mm	NPT OD in
1/8	28	0.907	9.728	27	0.941	10.29	0.405
1/4	19	1.337	13.157	18	1.411	13.72	0.540
3/8	19	1.337	16.662	18	1.411	17.15	0.675
1/2	14	1.814	20.955	14	1.814	21.34	0.840
3/4	14	1.814	26.441	14	1.814	26.67	1.050
1	11	2.309	33.249	11.5	2.209	33.40	1.315
1 1/4	11	2.309	41.910	11.5	2.209	42.16	1.660
1 1/2	11	2.309	47.803	11.5	2.209	48.26	1.900
2	11	2.309	59.614	11.5	2.209	60.33	2.375
2 1/2	11	2.309	75.184	8	3.175	73.03	2.875
3	11	2.309	87.884	8	3.175	88.90	3.500
4	11	2.309	113.030	8	3.175	114.30	4.500
5	11	2.309	138.430	8	3.175	141.30	5.563
6	11	2.309	163.830	8	3.175	168.28	6.625

BSP: 55° Whitworth thread form. Taper R / Rc / Rp to ISO 7-1 (taper 1:16 on diameter); parallel G to ISO 228-1.
NPT: 60° thread form to ASME B1.20.1, taper 1:16 on diameter. BSP major Ø is measured at the gauge plane.
1/2" and 3/4" have 14 TPI in both systems, but the thread angles differ (55° vs 60°): BSP and NPT do not seal together.