

Ultimate Thread Comparison Cheat Shee

Essential Data for Metric, UNF, NPT, and BSPP Standards (v2026.1)

"Which Thread Do I Have?"

Parallel or Tapered?

Parallel (Metric, UNF, BSPP): The diameter remains constant along the thread length.

Tapered (NPT): The diameter narrows towards the end (1:16 taper).

Thread Angle:

60°: Metric, UNF, NPT.

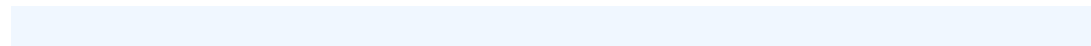
55°: BSPP (G-series).

Standard	Designation	Angle	Sealing Type	Key Characteristic
Metric-thread-size-chart	M, ISO	60D	Washer / O-ring	Global mechanical standard
UNF-thread-size-chart	Fine, SAE	60D	Metal-to-Metal	Vibration-resistant, Aerospace
BSPP-thread-size-chart	G, Parallel	55D	Bonded Seal / Gasket	European/Asian Hydraulics
NPT-threads-size-chart	Tapered	60D	Thread Interference	Self-sealing, North American

Click any standard name above for the full online size chart.

NPT - American National Standard Taper Pipe Threads Size Chart

Nominal Size (inch)	TPI (Threads Per Inch)	Pitch (inch)	Major Dia. (inch)	Tap Drill (inch)
1/16" - 27	27	0.0370	0.3125	1/4" (0.250)
1/8" - 27	27	0.0370	0.405	R (0.339)
1/4" - 18 ★	18	0.0555	0.540	7/16" (0.437)
3/8" - 18	18	0.0555	0.675	37/64" (0.578)
1/2" - 14 ★	14	0.0714	0.840	23/32" (0.718)
3/4" - 14	14	0.0714	1.050	59/64" (0.922)
1" - 11.5 ★	11.5	0.0869	1.315	1-5/32" (1.156)
1-1/4" - 11.5	11.5	0.0869	1.660	1-1/2" (1.500)
1-1/2" - 11.5	11.5	0.0869	1.900	1-47/64" (1.734)
2" - 11.5	11.5	0.0869	2.375	2-7/32" (2.218)
2-1/2" - 8	8	0.1250	2.875	2-5/8" (2.625)
3" - 8	8	0.1250	3.500	3-1/4" (3.250)
4" - 8	8	0.1250	4.500	4-1/4" (4.250)



ISO Metric (M) Thread Size Chart & Manufacturing Guide

Thread (M)	Major Dia. (mm)	Pitch (mm)	Tap Drill (mm)	Inquiry
M20 ★	20.00	2.50	17.50	Get Quote
M22	22.00	2.50	19.50	Inquiry
M24 ★	24.00	3.00	21.00	Get Quote
M27	27.00	3.00	24.00	Inquiry
M30 ★	30.00	3.50	26.50	Get Quote
M33	33.00	3.50	29.50	Inquiry
M36 ★	36.00	4.00	32.00	Get Quote
M39	39.00	4.00	35.00	Inquiry
M42 ★	42.00	4.50	37.50	Get Quote
M45	45.00	4.50	40.50	Inquiry
M48 ★	48.00	5.00	43.00	Get Quote
M52	52.00	5.00	47.00	Inquiry
M56 ★	56.00	5.50	50.50	Get Quote
M60	60.00	5.50	54.50	Inquiry
M64 ★	64.00	6.00	58.00	Get Quote
M68	68.00	6.00	62.00	Inquiry

UNF (Unified National Fine) Thread Size & Dimensions Chart

Size Designation	TPI (Threads Per Inch)	Major Diameter (inch)	Major Diameter (mm)	Tap Drill Size
#0 - 80 UNF	80	0.0600	1.524	3/64" (#53)
#4 - 48 UNF	48	0.1120	2.845	#42
1/4" - 28 UNF ★	28	0.2500	6.350	#3 (0.213")
5/16" - 24 UNF	24	0.3125	7.938	1 (0.272")
3/8" - 24 UNF ★	24	0.3750	9.525	Q (0.332")
7/16" - 20 UNF	20	0.4375	11.113	25/64"
1/2" - 20 UNF ★	20	0.5000	12.700	29/64"
9/16" - 18 UNF	18	0.5625	14.288	33/64"
5/8" - 18 UNF	18	0.6250	15.875	37/64"
3/4" - 16 UNF	16	0.7500	19.050	11/16"
7/8" - 14 UNF	14	0.8750	22.225	13/16"
1" - 12 UNF	12	1.0000	25.400	59/64"
1-1/4" - 12 UNF	12	1.2500	31.750	1-11/64"
1-1/2" - 12 UNF	12	1.5000	38.100	1-27/64"

BSPB Thread Size Chart

hread (G)	Major Dia. (mm)	TPI / Pitch	Tap Drill (mm)	Action
G 1/8"	9.728	28 / 0.907	8.80	Inquiry
G 1/4" ★	13.157	19 / 1.337	11.80	Inquiry
G 3/8"	16.662	19 / 1.337	15.25	Inquiry
G 1/2" ★	20.955	14 / 1.814	19.00	Inquiry
G 5/8"	22.911	14 / 1.814	21.00	Inquiry
G 3/4" ★	26.441	14 / 1.814	24.50	Inquiry
G 7/8"	30.201	14 / 1.814	28.25	Inquiry
G 1"	33.249	11 / 2.309	30.75	Inquiry
G 1-1/4"	41.910	11 / 2.309	39.50	Inquiry
G 1-1/2"	47.803	11 / 2.309	45.25	Inquiry
G 2"	59.614	11 / 2.309	57.00	Inquiry
G 2-1/2"	75.184	11 / 2.309	72.60	Inquiry
G 3"	87.884	11 / 2.309	85.30	Inquiry
G 4"	113.030	11 / 2.309	110.40	Inquiry

- **Metric:** M6x1.0 | M10x1.5 | M20x2.5
- **UNF:** 1/4"-28 | 3/8"-24 | 1/2"-20
- **BSPP:** G 1/4" | G 1/2" | G 1"
- **NPT:** 1/4" NPT | 1/2" NPT | 1" NPT