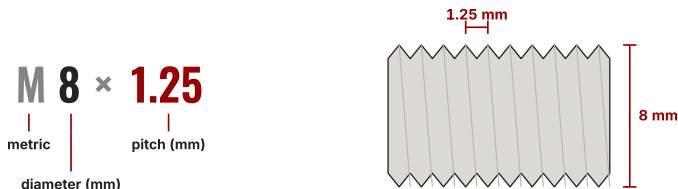


Metric Thread Pitch & Tap Drill

jandesupply.com/reference-metric-thread-pitch.php

Pitch and tap-drill sizes for metric threads, M3 through M24 — coarse and fine. The metric companion to our inch thread chart.

Metric sizes are written **diameter × pitch** in millimeters — an **M8×1.25** is 8 mm across with threads 1.25 mm apart. Most sizes have a **coarse** pitch (the default, written just “M8”) and one or more **fine** pitches. Cutting your own threads? The **tap drill** column gives the hole to drill first — in metric it’s simply the diameter minus the pitch.



An M8 coarse bolt, drawn to scale and enlarged.

METRIC: BIGGER NUMBER = COARSER

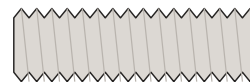
M10 × 1.5 is coarser than M10 × 1.25



Easy to trip on: metric gives the **distance** between threads, inch gives a **count** per inch. So the numbers run opposite ways.

INCH: BIGGER NUMBER = FINER

½ - 20 is finer than ½ - 13



The tap-drill rule: **diameter – pitch**, then the nearest standard drill

M8 8 – 1.25 = 6.75 → **6.8 mm drill**

M10 10 – 1.5 = 8.5 → **8.5 mm drill**

Metric coarse — the default

SIZE	PITCH (MM)	TAP DRILL (MM)
M3	0.50	2.5
M4	0.70	3.3
M5	0.80	4.2
M6	1.00	5.0
M8	1.25	6.8
M10	1.50	8.5
M12	1.75	10.2
M14	2.00	12.0
M16	2.00	14.0
M18	2.50	15.5
M20	2.50	17.5
M22	2.50	19.5
M24	3.00	21.0

Coarse is the everyday metric thread. Tap drills give roughly a 75% thread (drill ≈ diameter – pitch).

Good to know

Metric and inch don’t mix. Some sizes look alike — an M8 is almost a 5/16” — but they won’t actually thread together. If you’re not sure which system you have, see metric vs. inch. Working in inch sizes instead? Here’s the inch thread pitch & tap-drill chart.

Not sure of a pitch? Bring the bolt to either counter and we’ll gauge it — an instant, exact read.

Reference values drawn from the governing standards. For critical applications, confirm against the standard and the manufacturer’s published data. Technical information disclaimer →



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