

Bolt Hole Size Chart (mm)

Metric clearance holes per ISO 273 (Close / Normal / Loose fit) and recommended tap-drill / core-hole sizes per DIN 13. Values in millimetres. Verify against the assembly drawing or standard where one is specified.

EKINSUN LTD - custom & non-standard fasteners machined to drawing - www.ekinsun.com/custom-fasteners/clearance-hole-chart/

Clearance holes (ISO 273) - Close / Normal / Loose

Size	Close	Normal	Loose
M1.6	1.7	1.8	2
M2	2.2	2.4	2.6
M2.5	2.7	2.9	3.1
M3	3.2	3.4	3.6
M4	4.3	4.5	4.8
M5	5.3	5.5	5.8
M6	6.4	6.6	7
M8	8.4	9	10
M10	10.5	11	12
M12	13	13.5	14.5
M14	15	15.5	16.5
M16	17	17.5	18.5
M18	19	20	21
M20	21	22	24
M22	23	24	26
M24	25	26	28
M27	28	30	32
M30	31	33	35
M36	37	39	42

Tap drill / core hole - metric coarse (DIN 13)

Size	Pitch	Drill
M1.6	0.35	1.25
M2	0.4	1.6
M2.5	0.45	2.05
M3	0.5	2.5
M4	0.7	3.3
M5	0.8	4.2
M6	1	5
M8	1.25	6.8
M10	1.5	8.5
M12	1.75	10.2
M14	2	12
M16	2	14
M18	2.5	15.5
M20	2.5	17.5
M22	2.5	19.5
M24	3	21
M27	3	24
M30	3.5	26.5
M36	4	32

Tap drill / core hole - metric fine pitch

Thread	Pitch	Drill
M8 × 1	1	7
M10 × 1	1	9
M10 × 1.25	1.25	8.8
M12 × 1.25	1.25	10.8
M12 × 1.5	1.5	10.5
M14 × 1.5	1.5	12.5
M16 × 1.5	1.5	14.5
M18 × 1.5	1.5	16.5
M20 × 1.5	1.5	18.5
M22 × 1.5	1.5	20.5
M24 × 2	2	22

Core-hole rule of thumb: drill diameter = nominal - pitch (about 75% thread). Counterbore and countersink dimensions depend on the head standard (ISO 4762, ISO 10642) - EKINSUN can machine to your counterbore spec.