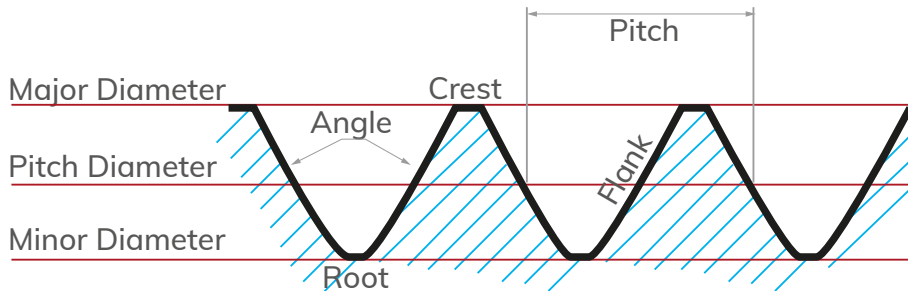


Metric Thread Form & Dimensions



This data sheet contains data on the thread dimensions for different types of threads on bolts of various sizes. The tabulated data has dimensions for both fine and coarse threaded metric bolts ranging from M2 to M24. You will find dimensions for the pitch, outer and inner diameters, tapping drill size and clearance drill size for different bolts.



Metric Coarse

Nominal Diameter (mm)	Pitch (mm)	Basic Major Diameter (mm)	Basic Effective Diameter (mm)	Basic Minor Diameter of External Thread (mm)	Basic Minor Diameter of Internal Thread (mm)	Tapping Drill Size (mm)	Clearance Drill Size (mm)
M2.5	0.45	2.5	2.208	1.948	2.013	2.05	2.60
M3	0.5	3	2.675	2.387	2.459	2.50	3.10
M4	0.7	4	3.545	3.141	3.242	3.30	4.10
M5	0.8	5	4.480	4.019	4.134	4.20	5.10
M6	1	6	5.350	4.773	4.917	5.00	6.10
M7	1	7	6.350	5.773	5.917	6.00	7.20
M8	1.25	8	7.188	6.466	6.647	6.80	8.20
M10	1.5	10	9.026	8.160	8.376	8.50	10.20
M12	1.75	12	10.863	9.853	10.106	10.20	12.20
M14	2	14	12.701	11.546	11.835	12.00	14.25
M16	2	16	14.701	13.546	13.835	14.00	16.25
M18	2.5	18	16.376	14.933	15.294	15.50	18.25
M20	2.5	20	18.376	16.933	17.294	17.50	20.25
M22	2.5	22	20.376	18.933	19.294	19.50	22.25
M24	3	24	22.051	20.319	20.752	21.00	24.25
M27	3	27	25.051	23.319	23.752	24.00	27.25
M30	3.5	30	27.727	25.706	26.211	26.50	30.50
M33	3.5	33	30.727	28.706	29.211	29.50	33.50
M36	4	36	33.402	31.093	31.670	32.00	36.50
M42	4.5	42	39.077	36.479	37.129	37.50	42.50
M48	5	48	44.752	41.866	42.587	43.00	48.50
M52	5	52	48.752	45.833	46.587	47.00	53.00
M56	5.5	56	52.428	49.252	50.046	50.50	57.00



Metric Fine

Nominal Diameter (mm)	Pitch (mm)	Basic Major Diameter (mm)	Basic Effective Diameter (mm)	Basic Minor Diameter of External Thread (mm)	Basic Minor Diameter of Internal Thread (mm)	Tapping Drill Size (mm)	Clearance Drill Size (mm)
M2	0.45	2.00	1.708	1.448	1.513	1.55	2.10
M3	0.60	3.00	2.610	2.264	2.35	2.40	3.10
M4	0.75	4.00	3.513	3.308	3.188	3.20	4.10
M5	0.90	5.00	4.415	3.896	4.026	4.10	5.10
M8	0.75	8.00	7.513	7.080	7.188	7.20	8.20
M8	1.00	8.00	7.350	6.773	6.917	7.00	8.20
M10	0.75	10.00	9.513	9.080	9.188	9.20	10.20
M10	1.00	10.00	9.350	8.773	8.917	9.00	10.20
M10	1.25	10.00	9.188	8.466	8.647	8.80	10.20
M12	1.00	12.00	11.350	10.773	10.917	11.00	12.20
M12	1.50	12.00	11.026	10.160	10.376	10.50	12.20
M14	1.20	14.00	13.188	12.466	12.647	12.80	14.25
M14	1.50	14.00	13.026	12.160	12.376	12.50	14.25
M16	1.00	16.00	15.350	14.773	14.917	15.00	16.25
M16	1.50	16.00	15.026	14.160	14.376	14.50	16.25
M18	1.50	18.00	17.026	16.160	16.376	16.50	18.25
M20	1.00	20.00	19.350	18.773	18.917	19.00	20.25
M20	2.00	20.00	18.701	17.546	17.835	18.00	20.25
M20	1.50	20.00	19.026	18.160	18.376	18.50	20.25
M22	1.50	22.00	21.026	20.160	20.376	20.50	22.25
M24	1.00	24.00	23.350	22.773	22.917	23.00	24.25
M24	1.50	24.00	23.026	22.160	22.376	22.50	24.25
M24	2.00	24.00	22.701	21.546	21.835	22.00	24.25

ⓘ The data provided in this document is for general guidance only and should not be solely relied upon when working to stringent specifications. We recommend consulting with qualified experts regarding any technical queries. This information may change without written notice.