

Recommended Assembly Torques Class 4.6 ISO Metric Coarse Pitch Bolts and Screws

Diameter	Pitch (mm)	Bolt Tension Corresponding to 65% of Proof Load kN	Recommended Assembly Torque Nm
M1.6	0.35	0.19	0.06
M2	0.40	0.31	0.12
M2.5	0.45	0.50	0.25
M3	0.50	0.73	0.44
M4	0.70	1.29	1.0
M5	0.80	2.08	2.1
M6	1.00	2.94	3.5
M8	1.25	5.34	8.5
M10	1.50	8.45	17
M12	1.75	12.4	30
M14	2.00	16.8	47
M16	2.00	22.9	73
M18	2.50	28.1	101
M20	2.50	35.8	143
M22	2.50	44.3	195
M24	3.00	51.6	248
M27	3.00	67	362
M30	3.50	81.9	491
M33	3.50	101	669
M36	4.00	120	864
M39	4.00	143	1115
M42	4.50	164	1378
M48	5.00	215	2064
M56	5.50	298	3338
M64	6.00	393	5030

To convert kN to lbft - Multiply kN by 224.809

To convert Nm to lbft - Multiply Nm by 0.737562

Table 2 Surface Condition Torque Adjustment Factors

Plain steel, as supplied	x 1.0
Plain steel, degreased	x 2.0
Zinc Plated, as supplied	x 1.0
Zinc Plated, lightly oiled	x 0.9
Galvanized, degreased	x 2.1
Galvanized, lightly oiled	x 1.1
Heavily greased	x 0.7

In the absence of site specific torque values or engineering calculations, the charts above can be used as a guide to the maximum safe torque for a particular size/grade fastener. There is no torque difference for fine or coarse threads.

NB: Refer *Table 2* for finish and lubricant coatings when calculating values.

