



RECOMMENDED ASSEMBLY TORQUES

Class 12.9 ISO Metric Coarse Pitch Bolts and Screws

Class 12.9 ISO Metric Coarse Pitch Bolts and Screws		Bolt Tension Corresponding to 65% of Proof Load	Recommended Assembly Torque
Diameter	Pitch (mm)	kN	Nm
M3	0.50	3.17	1.9
M4	0.70	5.54	4.4
M5	0.80	8.97	8.9
M6	1.00	12.7	15
M8	1.25	23.1	37
M10	1.50	36.6	73
M12	1.75	53.2	128
M14	2.00	72.8	203
M16	2.00	98.8	316
M18	2.50	121	436
M20	2.50	155	620
M22	2.50	191	840
M24	3.00	222	1066
M27	3.00	289	1561
M30	3.50	354	2124
M33	3.50	437	2884
M36	4.00	515	3708

To convert kN to lbf; Multiply Kn by 224.809
To convert Nm to lbft; Multiply Nm by 0.737562

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
Galvanised, degreased	x 2.1
Galvanised, lightly oiled	x 1.1
Heavily greased	x 0.7

