

## Recommended Assembly Torque Values \*

(Steel Hex. Head Bolts)

Size	Pitch	Class 4.6		Class 8.8		Class 10.9		Class 12.9	
		Nm	lb ft	Nm	lb ft	Nm	lb ft	Nm	lb ft
M 5	0.8	2.1	1.5	5	4	8	6	9	7
M 6	1	3.5	2.5	9	7	13	10	15	11
M 8	1.25	8.5	6.3	22	16	32	24	37	27
M 8	1.0 (Fine)			27	19	38	28	45	33
M 10	1.5	17	12	44	32	63	46	73	54
M 10	1.25 (Fine)			52	38	73	53	88	66
M 12	1.75	30	22	77	57	109	81	130	96
M 12	1.25 (Fine)			95	70	135	99	150	111
M 14	2	47	35	121	90	175	130		
M 14	1.5 (Fine)			150	110	210	154	250	184
M 16	2	73	54	190	140	270	200	320	237
M 16	1.5 (Fine)			225	165	315	232	380	280
M 18	2.5	101	75	269	198	370	275		
M 18	1.5 (Fine)			325	239	460	339	550	407
M 20	2.5	143	106	370	270	528	390	620	459
M 20	1.5 (Fine)			450	339	640	472	770	587
M 22	2.5	195	145	520	380	720	530		
M 22	1.5 (Fine)			610	449	860	634	1050	774
M 24	3	248	183	640	470	915	675	1070	792
M 24	2.0 (Fine)			780	575	1100	811	1300	958
M 27	3	362	265	955	700	1340	990		
M 30	3.5	491	362	1310	970	1820	1340	2120	1569
M 33	3.5	669	495	1785	1320	2450	1810		
M 36	4	864	637	2300	1690	3170	2340	3710	2745
M 39	4	1115	820	2970	2190	4110	3030		
M 42	4.5	1378	1020	3670	2710				
M 48	5	2064	1520	5500	4060				
M 56	5.5	3338	2460	8870	6540				
M 64	6	5030	3710	13380	9870				

### Notes

1. Values given represent the torque required to induce a tension in the bolt corresponding to approximately 65% of its proof load.

2. Values given are applicable to plain finish (uncoated) fasteners only. Torque settings for fasteners with zinc, galvanised, or other surface treatments, will vary due to differences in frictional coefficients.

\* This table is recommended for use as a guide only. While all care has been taken with its preparation, no responsibility is accepted for the absolute accuracy of the data provided.