

## Recommended Assembly Torque Values \*

(Metric Socket Heads) All Class 12.9 material

Size	Socket Cap Screw		Low Head Cap Screws		Flat Head (Countersunk)		Button Head		Shoulder Screws		Grub Screws	
	Nm	lb ft	Nm	lb ft	Nm	lb ft	Nm	lb ft	Nm	lb ft	Nm	lb ft
M 1.6	0.3	0.2									0.008	0.006
M 2	0.6	0.4									0.15	0.11
M 2.5	1.2	0.9									0.4	0.31
M 3	2	1.5			1.4	1	1.2	0.9			0.8	0.59
M 4	5	3.7	4	3			3.4	2.5	2.8	2.1	2.2	1.63
M 5	10	7.4	8	6	6.8	5	5.5	4.1			4.6	3.4
M 6	16	12	13	10	11	8	10	7	7	5	7.8	5.77
M 8	39	28	32	24	28	21	24	18	12	9	18	13
M 10	77	57	64	47	55	41	47	35	29	21	36	27
M 12	135	100	110	81	95	70	82	61	57	42	60	44
M 14	215	159			150	111					62	46
M 16	330	244			237	175			100	74	150	111
M 18	455	337										
M 20	650	481			480	355			240	178	300	222
M 22	870	644										
M 24	1100	814			640	474			470	348	475	352
M 27	1650	1221										
M 30	2250	1665										
M 36	3850	2849										
M 42	6270	4640										

### 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.