




Torque table

Dry bolts type 8.8 are normally used.

Metric Bolt Torque Table Estimated with clamp load as 75% of proof load as specified in ISO 898-1						
Property Class	8.8 	10.9 	12.9 Socket Head Cap Screw 			
Minimum Tensile Strength MPa	M6 - M16: 800 M20 - M30: 830	1040	1220			
Nominal Size and Thread Pitch	Bolt Torque Specs in Newton Meters - Nm					
	Dry	Lubed	Dry	Lubed	Dry	Lubed
M5 x 0.80	6.1	4.6	8.8	6.7	10.3	7.7
M6 x 1.00	10.4	7.8	15	11.2	17.6	13.1
M7 x 1.00	17.6	13.1	25.1	18.9	29.4	22
M8 x 1.25	25.4	19.1	37.6	27.3	42.6	32.1
M10 x 1.50	50	38	72	54	84	64
M12 x 1.75	88	66	126	94	146	110
M14 x 2.00	141	106	201	150	235	176
M16 x 2.00	218	164	312	233	365	274
M18 x 2.50	301	226	431	323	504	378
M20 x 2.50	426	319	609	457	712	534
M22 x 2.50	580	435	831	624	971	728
M24 x 3.00	736	552	1052	789	1231	923
M27 x 3.00	1079	809	1544	1158	1805	1353
M30 x 3.50	1463	1097	2092	1570	2446	1834
M33 x 3.50	1990	1493	2849	2137	3328	2497
M36 x 4.00	2557	1918	3659	2744	4276	3208
Lubed means cleaned dry bolts lubricated with a standard medium viscosity machine oil. Lubricate all contact areas of the bolts and washers. Lubricating the bolts is the suggested method. Thread Engagement						