



# Suggested Torque Values

## ISO 898 Grd 12.9

Bolt Size	TPI	Proof Load (lbs)	Clamp Load (lbs)	Tightening Torque (ft.lbs)		
				Oil	Zinc	Plain
3mm	0.5	1097	823	1.2	1.4	1.6
3.5mm	0.6	1479	1109	1.9	2.2	2.5
4mm	0.7	1915	1436	2.8	3.2	3.8
5mm	0.8	3102	2327	5.7	6.5	7.6
6mm	1	4384	3288	9.7	11.0	12.9
7mm	1	6294	4721	16.3	18.4	21.7
8mm	1.25	7980	5985	23.6	26.7	31.4
10mm	1.5	12656	9492	46.7	52.9	62.3
12mm	1.75	18389	13791	81.4	92.3	108.6
14mm	2	25178	18883	130.1	147.5	173.5
16mm	2	34170	25627	201.8	228.7	269.0
18mm	2.5	41813	31360	277.8	314.8	370.4
20mm	2.5	53502	40127	394.9	447.6	526.6
22mm	2.5	66091	49568	536.6	608.2	715.5
24mm	3	76882	57661	681	771.8	908
27mm	3	100036	75027	996.8	1129.7	1329.1
30mm	3.5	122291	91718	1354.1	1534.7	1805.5
33mm	3.5	151290	113468	1842.7	2088.4	2457
36mm	4	178042	133531	2365.7	2681.1	3154.2
39mm	4	212886	159664	3064.4	3472.9	4085.8