



TIGHTENING TORQUES

QUICK REFERENCE GUIDE

Tightening Torque in Newton Meters [Nm] For Screws + Bolts

Material Class	Untreated Black Oxide Finish				Clear or Yellow Zinc Plated Finish				Untreated Stainless Steel		
	5.6	8.8	10.9	12.9	5.6	8.8	10.9	12.9	A2-50	A2-70	A2-80
M3	0.6	1.37	1.92	2.30	0.56	1.28	1.8	2.15	0.85	1	1.3
M4	1.37	3.10	4.49	5.25	1.28	2.9	4.10	4.95	0.8	1.7	2.3
M5	2.7	6.15	8.65	10.4	2.50	5.75	8.1	9.7	1.6	3.4	4.6
M6	4.6	10.5	15	18	4.3	9.9	14	16.5	2.8	5.9	8
M7	7.6	17.5	25	29	7.1	16.5	23	27			
M8	11	26	36	43	10.5	24	34	40	6.8	14.5	19.3
M8X1.0		27	38	45		25	35	42			
M10	22	51	72	87	21	48	67	81	13.7	30	39.4
M10X1.25		52	73	88		49	68	85			
M12	39	89	125	150	36	83	117	140	23.6	50	67
M12X1.25		95	135	160		88	125	150			
M14	62	141	198	240	58	132	185	220	37.1	79	106
M14X1.5		150	210	250		140	195	235			
M16	95	215	305	365	88	200	285	340	56	121	161
M16X1.5		225	315	380		210	295	350			
M18	130	295	420	500	121	275	390	470	81	174	232
M18X1.5		325	460	550		305	425	510			
M20	184	420	590	710	171	390	550	660	114	224	325
M20X1.5		460	640	770		425	600	720			
M22	250	570	800	960	230	530	745	890	148	318	424
M22X1.5		610	860	1050		570	800	960			
M24	315	725	1020	1220	295	675	960	1140	187	400	534
M24X2.0		780	1100	1300		720	1000	1200			
M27	470	1070	1510	1810	435	995	1400	1680	275		
M30	635	1450	2050	2450	590	1350	1900	2280	374		
M33	865	1970	2770	3330	800	1830	2580	3090	506		
M36	1111	2530	3560	4280	1030	2360	3310	3980	651		

*The information provided here is for general use only, and may not cover all specific cases or applications.

The tightening torques above are reference values based on nominal diameter.