WALL CHART · TRANSWORLD COMMERCIAL ENTERPRISES

Guide bolt torque chart

Sources: ISO 898-1:2013 (proof stress, stress area); T = K · F · d with F = 75% of proof load; typical nut factors K

Reviewed 11 Nov 2026. Reference values: the governing standard and your drawing take precedence.

Plain or zinc plated, dry, K = 0.2 (N·m)

Size	8.8	10.9	12.9	Preload 8.8 (kN)
M6	11	15	18	8.8
M8	25	36	43	15.9
M10	50	72	84	25.2
M12	88	126	147	36.7
M14	141	201	235	50.2
M16	218	312	365	68.2
M18	312	431	504	86.6
M20	441	610	712	110.2
M22	601	831	971	136.5
M24	761	1,053	1,231	158.6
M27	1,116	1,544	1,805	206.7
M30	1,514	2,094	2,447	252.3
M36	2,646	3,661	4,278	367.5

Lubricated (MoS2 paste or wax), K = 0.13 (N·m)

Size	8.8	10.9	12.9	Preload 8.8 (kN)
M6	7	10	11	8.8
M8	17	24	28	15.9
M10	33	47	55	25.2
M12	57	82	96	36.7
M14	91	131	153	50.2
M16	142	203	237	68.2
M18	203	280	328	86.6
M20	286	396	463	110.2
M22	390	540	631	136.5
M24	495	685	800	158.6
M27	726	1,004	1,173	206.7
M30	984	1,361	1,591	252.3
M36	1,720	2,379	2,781	367.5

Method: T = K × F × d, with preload F = 75% of proof load (proof stress Sp from ISO 898-1 × stress area As), metric coarse threads. Nut factors K are typical values and vary widely with surface condition. Guide values; the joint designer's values govern. For joint design use VDI 2230 or the fastener supplier's tested values.