

TORQUE FOR METRIC FASTENERS

70% OF MINIMUM YIELD STRENGTH

METRIC THREADS	A/F	BOLTS METRIC NORMAL DIN 13				FRICTION VALUE 0.14	
		8,8		10,9		12,9	
		TORQUE = Ma				PRELOAD = Pv (FM)	
		Pv N	Ma Nm	Pv N	Ma Nm	Pv N	Ma Nm
M2	4	863	0.290	1216	0.404	1461	0.488
M2,3	4,5	1245	0.465	1755	0.656	2099	0.785
M2,6	5	1598	0.671	2246	0.938	2697	1.128
M3	5,5	2206	1.045	3109	1.464	3727	1.754
M3,5	6	2962	1.602	4168	2.245	5001	2.707
M4	7	3825	2.364	5374	3.356	6453	4.003
M5	8-9	6257	4.690	8806	6.597	10591	7.933
M6	10	8836	8.010	12405	11.440	14906	13.728
M7	11-12	12945	13.347	18191	19.069	21771	22.117
M8	13-14	16230	19.829	22751	27.456	27360	32.794
M10	15-17	25791	38.896	36284	54.912	43541	66.351
M12	19-21	37657	67.877	52956	95.346	63547	114.40
M14	22-23	51681	107.56	72667	151.03	87279	183.07
M16	24-26	71196	163.94	100027	232.61	120131	278.34
M18	27	86494	224.99	121602	320.33	146118	381.31
M20	30	111305	320.33	156415	449.98	187796	541.51
M22	32	139254	434.73	195642	610.11	234378	732.13
M24	36	160338	552.94	225552	777.70	270662	930.13
M27	41	210842	815.81	296159	1,152	355980	1,380
M30	46	255952	1,106	359902	1,563	432471	1,869
M33	50	319695	1,503	449142	2,112	539363	2,540
M36	55	374612	1,929	527595	2,715	632526	3,264
M39	60	451104	2,509	633506	3,524	760992	4,233
M42	65	515827	3,104	725688	4,362	870826	5,232
M45	70	604087	3,882	850232	5,453	1019886	6,544
M48	75	679597	4,683	956144	6,589	1147372	7,894
M52	80	815909	6,025	1147372	8,465	1377827	10,182
M56	85	940453	7,498	1323891	10,565	1588669	12,660
M60	90	1098339	9,304	1544540	13,117	1853447	15,711
M64	95	1245438	11,211	1750478	15,787	2098612	18,914
M68	100	1425787	13,699	2005013	19,264	2406016	23,117
M72	105	1620036	16,395	2278175	23,055	2733810	27,667
M76	110	1826672	19,422	2568758	27,311	3082510	32,773
M80	115	2045697	22,797	2876762	32,058	3452115	38,740
M90	130	2647453	33,072	3722962	46,507	4467578	55,809
M100	145	3326624	46,040	4678066	64,744	5613679	77,692

FIGURES SHOWN ABOVE ARE TO BE USED AS A GUIDE ONLY.