

Model	bolt		Tension		area of thrust surface		A		B		C		D				weight	stroke
	imperial	metric	Lbs	KN	in²	mm²	in	mm	in	mm	in	mm	imperial		metric			
													in	mm	in	mm	kg	mm
TSR0	3/4" 7/8"	M20 M22	35500	160	1.65	1067	2.6	66	3.7	93	2.5	63	5.4 5.6	136 142	5.5 5.6	142 144	2.5	10mm
TSR1	1" 1-1/8"	M24 M27	61950	280	2.89	1867	3.4	87	4.6 4.6 4.7	117 117 120	2.7 2.7 2.8	68 68 72	6.9 7.1	175 181	6.9 7	175 178	3.7	10mm
TSR2	1" 1-1/8" 1-1/4" 1-3/8"	M24 M27 M30 M33 M36	99700	450	4.65	3001	4.1	103	4.6 4.6 4.7 4.8 5	117 117 120 123 126	3 3 3.2 3.3 3.5	75 75 80 84 89	6.9 7.1 7.1 7.4 7.7	175 181 188 195 196	6.9 7 7.2 7.5 7.7	175 178 184 190 196	5.5	10mm
TSR3	1-1/4" 1-3/8" 1-1/2" 1-5/8"	M33 M36 M39 M42	145950	660	6.82	4401	4.7	118	4.8 5 5.1 5.2	123 126 130 133	3.5 3.8 3.8 4.1	88 96 96 105	7.5 7.8 8 8.2	190 197 203 209	7.6 7.8 8 8.3	192 198 204 211	7.5	10mm
TSR4	1-1/2" 1-5/8" 1-3/4" 1-7/8" 2"	M39 M42 M45 M48 M52	223550	1000	10.34	6668	5.5	140.5	5.2 5.3 5.5 5.6 5.7	132 135 139 142 145	4.4 4.5 4.7 4.5 4.7	112 114 118 114 120	8.3 8.5 8.8 9.1 9.3	211 217 223 230 236	8.4 8.6 8.9 9.1 9.1	212 218 225 231 236	11.5	10mm
TSR5	2" 2-1/4" 2-1/2" 2-3/4"	M52 M56 M60 M64 M68	331400	1500	15.5	10003	6.9	175.5	5.8 6.1 6.3 6.3 6.6	148 154 161 161 167	4.7 5.4 5.4 6 6.1	120 138 138 153 156	9.7 10.2 10.2 10.7 11.2	246 259 259 272 284	9.8 10.2 10.3 10.8 11.1	248 258 262 273 283	18.5	10mm
TSR6	2-3/4" 3" 3-1/4" 3-1/2"	M72 M76 M80 M85 M90	553200	2500	25.84	16671	9.2	235	6.6 6.9 7.1 7.1 7.3	167 171 180 180 186	6.2 7.2 7.5 7.5 8.1	157 182 190 190 205	11.6 12.1 12.6 12.6 13.1	294 307 320 320 332	11.7 12.1 12.3 12.7 13.2	297 308 312 323 334	33	10mm
TSR7	3-1/2" 3-3/4" 4"	M90 M95 M100	708200	3200	33.06	21339	9.9	252	7.3 7.3 7.6 7.8	186 186 192 199	7.9 7.9 7.9 8.3	200 200 200 210	13.2 13.2 13.7 14.2	339 339 352 363	13.3 13.5 13.9 13.9	341 346 356 356	47	10mm
TSR9	4" 4-1/4" 4-1/2"	M105 M110 M115	929513	4200	42.35	27336	11.1	283.00	7.8 7.8 8.1 8.3	199 199 205 212	10.0 10.0 10.2 10.6	255 255 260 270	10.4 10.4 10.6 10.9	264 264 270 277			63	10mm

