

TORQUE VALUES FOR NON-SELF LOCKING FASTENERS

		<i>PRESTRESS IN POUNDS (THOUSANDS) PER SQUARE INCH (KPSI)</i>											
SIZE	UNIT	1	5	10	20	40	50	60	80	100	120	140	160
0-80	AXIAL LOAD (LB)	1.8	9	18	36	72	90	108	144	180	216	252	258
	TOR IN. GM	5/6	28/31	56/61	115/125	--	--	--	--	--	--	--	--
	TOR IN. OZ	--	--	--	--	8/9	10/11	12/13	16/18	20/22	24/25	28/31	32/35
2-56	AXIAL LOAD (LB)	3.7	18.5	37	74	148	185	222	296	370	444	516	592
	TOR IN. GM	23/25	115/125	--	--	--	--	--	--	--	--	--	--
	TOR IN. OZ	--	4/4.5	8/9	16/18	32/35	40/45	48/53	64/70	80/90	96/105	112/122	128/140
4-40	AXIAL LOAD (LB)	6	30	60	121	242	300	360	483	600	720	841	866
	TOR IN. GM	45/50	--	--	--	--	--	--	--	--	--	--	--
	TOR IN. OZ	--	8/9	16/18	32/35	64/70	80/88	96/105	128/140	160/176	190/210	220/240	250/275
	TOR IN. LB	--	--	--	--	4/4.5	5/5.5	6/6.5	8/9	10/11	12/13	14/16	16/18
6-32	AXIAL LOAD (LB)	9.1	45	91	181	363	450	540	727	900	1080	1263	1454
	TOR IN. GM	71/78	--	--	--	--	--	--	--	--	--	--	--
	TOR IN. OZ	--	13/14	27/30	54/59	108/118	136/150	160/176	216/236	272/300	--	--	--
	TOR IN. LB	--	--	--	--	6.5/7	8/9	10/11	13/15	17/19	20/22	23.5/25	27/30
8-32	AXIAL LOAD (LB)	14	70	140	280	560	700	840	1120	1400	1680	1960	2240
	TOR IN. GM	14.5/5	23/25	46/50	92/100	--	--	--	--	--	--	--	--
	TOR IN. LBS	--	--	--	5.5/6	11/12	14/16	17/19	22/24	28/31	34/37	39/43	44/48
10-32	AXIAL LOAD (LB)	20	100	200	400	800	1000	1300	1600	2000	2400	2800	3200
	TOR IN. OZ	10/11	48/53	99/110	198/220	--	--	--	--	--	--	--	--
	TOR IN. LB	--	--	6/7	12/13	25/28	34/34	38/42	50/55	62/68	76/84	88/97	100/110
1/4-28	AXIAL LOAD (LB)	36.4	182	364	728	1456	1820	2180	2912	3640	4360	5096	5824
	TOR IN. OZ	25/28	125/135	250/275	--	--	--	--	--	--	--	--	--
	TOR IN. LBS	--	7.5/8.5	15/17	31/34	63/70	79/87	94/104	126/138	158/174	188/208	210/230	250/275
5/16-24	AXIAL LOAD (LB)	58	290	580	1160	2320	2900	3480	4640	5800	6960	8120	9280
	TOR IN. LBS	3/3.5	17/19	34/37	68/75	136/150	--	--	--	--	--	--	--
	TOR FT. LBS	--	--	--	--	11/12	14/16	17/19	22/24	28/31	34/37	39/41	45/50
3/8-24	AXIAL LOAD (LB)	88	439	878	1756	3512	4390	5260	7024	8780	10520	12276	14048
	TOR IN. LBS	6/6.5	29/32	60/66	120/132	--	--	--	--	--	--	--	--
	TOR FT. LBS	--	--	5/5.5	10/11	20/22	24/26	30/33	40/44	49/54	60/66	70/77	80/88
7/16-20	AXIAL LOAD (LB)	119	593	1187	2374	4748	5930	7120	9496	11860	14240	16614	18992
	TOR IN. LBS	9/10	46/50	90/100	180/200	--	--	--	--	--	--	--	--
	TOR FT. LBS	--	--	7.5/8	15/17	30/33	37/41	44/48	60/66	77/85	88/96	103/113	120/132
1/2-20	AXIAL LOAD (LB)	160	799	1599	3198	6396	7990	9600	12792	15980	19200	22390	25584
	TOR IN. LBS	14/15	70/80	143/155	280/310	--	--	--	--	--	--	--	--
	TOR FT. LBS	--	--	--	--	46/51	60/65	72/80	96/105	119/130	143/155	167/180	192/210

Values listed give a relatively close torque/prestress relationship, but exact values cannot be given in tables. Due to many variables (ie, type and amount of lubrication, amount of friction, thread tolerances, fastener material, joint relaxation, etc.), the torque/prestress relationship can deviate greatly from the nominal values listed. Therefore, the cognizant responsible engineer may assign different values to particular applications. Values are listed in a minimum/maximum condition (16/17, 16.5/7, etc.). Torque values to the right (max) include the plus tolerance.