Torque-Tension Relationship Electrodeposited Zinc and Lubricated All-Metal Prevailing Torque Locknuts

Locknut Size	threads per inch	Steel Hex Locknut						Steel Hex Flange Nut					
		Grade C			FNL Grade 9			Grade F			Grade G		
		Clamp Load (lbs.)	Tightening Torque (ft-lbs.)		Clamp Load (lbs.)	Tightening Torque (ft-lbs.)		Clamp Load (lbs.)	Tightening Torque (ft-lbs.)		Clamp Load (lbs.)	Tightening Torque (ft-lbs.)	
			min	max		min	max		min	max		min	max
Coarse Thread Series													
1/4	20	2864	8	12	3357	8	11	2029	6	8	2864	9	11
5/16	18	4719	16	21	5531	17	23	3342	13	17	4719	18	23
3/8	16	6974	28	37	8174	31	41	4940	23	29	6974	33	41
7/16	14	9568	45	59	11214	49	65	6777	37	47	9568	52	66
1/2	13	12771	69	90	14969	75	100	9046	57	72	12771	80	101
9/16	12	16375	100	130	19193	108	144	11599	82	103	16375	115	146
5/8	11	20340	138	180	23840	149	199	14408	113	143	20340	159	201
3/4	10	30101	245	320	35281	265	353	21322	200	253	30101	282	357
7/8	9	41556	394	515	48707	426	568						
1	8	54517	591	772	63899	639	852						
1 1/8	7	68695	837	1095	80516	906	1208						
1 1/4	7	87220	1181	1545	102229	1278	1704						
Fine Thread Series													
1/4	28	3274	9	12	3837	10	13	2319	7	9	3274	10	13
5/16	24	5226	18	23	6125	19	26	3702	14	18	5226	20	26
3/8	24	7905	32	42	9265	35	46	5599	26	33	7905	37	47
7/16	20	10684	51	66	12523	55	73	7568	41	52	10684	58	74
1/2	20	14396	78	102	16873	84	112	10197	64	81	14396	90	114
9/16	18	18268	111	146	21412	120	161	12940	91	115	18268	128	163
5/8	18	23036	156	204	27000	169	225	16317	127	161	23036	180	228
3/4	16	33566	273	357	39343	295	393	23776	223	282	33566	315	399
7/8	14	45853	435	568	53743	470	627						
1	14	61190	663	867	71720	717	956						
1 1/8	12	77015	939	1227	90268	1016	1354						
1 1/4	12	96565	1308	1710	113182	1415	1886						

Notes:

Clamp loads are listed at 75% of the proof loads specified for the appropriate grade of bolt::

Grade C: SAE J429 Grade 8 Bolt
Grade 9: FNL Grade 9 Bolt
Grade F: SAE J429 Grade 5 Bolt
Grade G: SAE J429 Grade 8 Bolt

All torque values listed in foot-pounds (ft-lbs.)