

Bolt Size vs. Torque

"K" is an experimental nut factor (based on ASTM A193, B7 Studs with Heavy Hex Nuts)

Stud Diameter (inches)	Nut Size (ATF)	TORQUE VALUES (FT-LBS)								
		40% of Yield			50% of Yield			60% of Yield		
		K = .14	K = .18	K = .20	K = .14	K = .18	K = .20	K = .14	K = .18	K = .20
1/2	7/8	35	45	50	43	56	62	52	67	75
5/8	1-1/16	69	89	99	87	111	124	104	134	148
3/4	1-1/4	123	158	175	153	197	219	184	237	263
7/8	1-7/16	198	255	283	248	318	354	297	382	424
1	1-5/8	297	382	424	371	477	530	445	573	636
1-1/8	1-13/16	435	560	622	544	700	778	653	840	933
1-1/4	2	613	788	875	766	984	1,094	919	1,181	1,313
1-3/8	2-3/16	831	1,068	1,187	1,038	1,335	1,483	1,245	1,602	1,780
1-1/2	2-3/8	1,097	1,410	1,567	1,371	1,762	1,958	1,645	2,115	2,350
1-5/8	2-9/16	1,417	1,822	2,025	1,772	2,278	2,531	2,126	2,733	3,037
1-3/4	2-3/4	1,784	2,293	2,548	2,230	2,867	3,185	2,675	3,440	3,822
1-7/8	2-15/16	2,214	2,847	3,163	2,768	3,559	3,954	3,321	4,270	4,745
2	3-1/8	2,715	3,490	3,878	3,393	4,090	4,848	4,072	5,235	5,817
2-1/4	3-1/2	3,925	5,046	5,607	4,906	6,308	7,009	5,887	7,569	8,411
2-1/2	3-7/8	4,921	6,327	7,030	6,151	7,909	8,788	7,382	9,491	10,545
2-3/4	4-1/4	6,620	8,512	9,457	8,275	10,639	11,822	9,930	12,767	14,186
3	4-5/8	8,658	11,132	12,369	10,823	13,915	15,461	12,987	16,698	18,554
3-1/4	5	11,080	14,246	15,829	13,850	17,807	19,786	16,620	21,369	23,743
3-1/2	5-3/8	13,903	17,875	19,861	17,379	22,344	24,827	20,854	26,813	29,792
3-3/4	5-3/4	17,190	22,102	24,558	21,488	27,627	30,697	25,785	33,153	36,836
4	6-1/8	20,943	26,927	29,919	26,179	33,659	37,398	31,415	40,390	44,878
4-1/4	6-1/2	19,903	25,589	28,433	24,878	31,987	35,541	29,854	38,384	42,649
4-1/2	6-7/8	23,783	30,578	33,975	29,728	38,222	42,469	35,674	45,866	50,963
4-3/4	7-1/4	27,930	35,910	39,900	34,913	44,888	49,875	41,895	53,865	59,850
5	7-5/8	32,725	42,075	46,750	40,096	52,594	58,438	49,088	63,113	70,125
5-1/4	8	38,036	48,904	54,338	47,545	61,130	67,922	57,054	73,356	81,506
5-1/2	8-3/8	43,698	56,183	62,425	54,622	70,228	78,031	65,546	84,274	93,638
5-3/4	8-3/4	50,111	64,429	71,588	62,639	80,536	89,484	75,167	96,643	107,381
6	9-1/8	56,910	73,170	81,300	71,138	91,463	101,625	85,365	109,755	121,950

Material Yield Strength

1/2" - 2-1/4" Diameter Studs: 105,000 PSI
 2-1/2" - 4" Diameter Studs: 95,000 PSI
 4-1/3" - 6" Diameter Studs: 75,000 PSI

Number of Threads

1/2" Diameter Studs: 13 TPI
 5/8" Diameter Studs: 11 TPI
 3/4" Diameter Studs: 10 TPI
 7/8" Diameter Studs: 9 TPI
 1" - 6" Diameter Studs: 8 TPI

