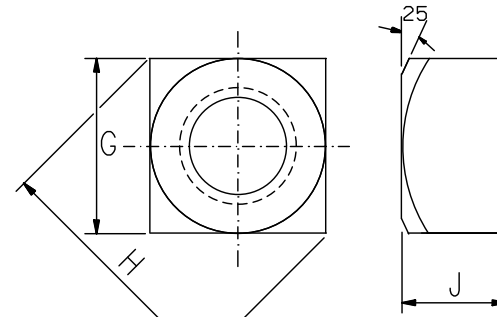


SQUARE BOLT



SQUARE NUT

NOTES:

- ALL DIMENSIONS ARE IN INCHES.
- BOLTS AND NUTS TO CONFORM TO AREMA SPECIFICATIONS, AND IN GENERAL TO SPECIFICATION SAE J429 FOR MECHANICAL AND MATERIAL REQUIREMENTS FOR EXTERNALLY THREADED FASTENERS.
- ALL 1-3/8" BOLTS TO BE GRADE 8 AND CONFORM TO THE REQUIREMENTS OF SAE J429.

ITEM NO.	NOMINAL SIZE	A		B			C		D			E	F	THDS. INCH
		BODY DIAMETER		WIDTH ACROSS FLATS			WIDTH ACROSS CORNERS		HEIGHT OF HEAD UNFINISHED					
		MAX.	MIN.	NOM.	MAX.	MIN.	MAX.	MIN.	NOM.	MAX.	MIN.	LENGTH OF BOLT	LENGTH OF THREAD	
1	3/4	0.768	0.737	1-1/8	1.125	1.088	1.591	1.494	1/2	0.524	0.476	2 1/2±1/8	1-3/4 +1/4	10
2	3/4	0.768	0.737	1-1/8	1.125	1.088	1.591	1.494	3/8	0.395	0.355	2 1/2±1/8	1-3/4 +1/4	10
3	3/4	0.768	0.737	1-1/8	1.125	1.088	1.591	1.494	1/2	0.524	0.476	3 1/2±1/8	1-3/4 +1/4	10
4	3/4	0.768	0.737	1-1/8	1.125	1.088	1.591	1.494	1/2	0.524	0.476	10 1/2±1/8	3 +1/4	10
5														
6														
7														
8														
9														
10	7/8	0.895	0.862	1-5/16	0.312	1.269	1.856	1.742	19/32	0.620	0.568	4 1/2±1/8	2 +9/32	9
11	1	1.022	0.986	1-1/2	1.500	1.450	2.121	1.991	21/32	0.684	0.628	6 3/4±1/8	2 1/2+5/16	8
12	1	1.022	0.986	1-1/2	1.500	1.450	2.121	1.991	21/32	0.684	0.628	±1/8	2 1/4+5/16	8
13	1	1.022	0.986	1-1/2	1.500	1.450	2.121	1.991	21/32	0.684	0.628	3 1/2±1/8	2 1/4+5/16	8
14	1	1.022	0.986	1-1/2	1.500	1.450	2.121	1.991	3/8	0.395	0.355	±1/8	2 1/4+5/16	8
15	1	1.022	0.986	1-1/2	1.500	1.450	2.121	1.991	21/32	0.684	0.628	4 1/2±1/8	2 1/4+5/16	8
16	1	1.022	0.986	1-1/2	1.500	1.450	2.121	1.991	21/32	0.684	0.628	6 ±1/8	2-1/4 +5/16	8
17	1	1.022	0.986	1-1/2	1.500	1.450	2.121	1.991	21/32	0.684	0.628	7 1/2±1/8	2-1/2 +5/16	8
18	1	1.022	0.986	1-1/2	1.500	1.450	2.121	1.991	21/32	0.684	0.628	8 1/2±1/8	2-1/2 +5/16	8
19	1	1.022	0.986	1-1/2	1.500	1.450	2.121	1.991	21/32	0.684	0.628	9 1/2±1/8	2-1/2 +5/16	8
20	1	1.022	0.986	1-1/2	1.500	1.450	2.121	1.991	3/8	0.395	0.355	3 1/2±1/8	2-1/2 +5/16	8
21	1	1.022	0.986	1-1/2	1.500	1.450	2.121	1.991	21/32	0.684	0.628	3-3/4±1/8	2-1/4 +5/16	8
22	1	1.022	0.986	1-1/2	1.500	1.450	2.121	1.991	3/8	0.395	0.355	3-3/4±1/8	2-1/4 +5/16	8
23	1	1.022	0.986	1-1/2	1.500	1.450	2.121	1.991	3/8	0.395	0.355	4 1/2±1/8	2-1/4 +5/16	8
24	1	1.022	0.986	1-1/2	1.500	1.450	2.121	1.991	21/32	0.684	0.628	4 1/2±1/8	2-1/4 +5/16	8
25	1	1.022	0.986	1-1/2	1.500	1.450	2.121	1.991	3/8	0.395	0.355	4 1/2±1/8	2-1/4 +5/16	8
26	1	1.022	0.986	1-1/2	1.500	1.450	2.121	1.991	3/8	0.395	0.355	2 1/4±5/16	2-1/4 +5/16	8
27														
28														
29														
30														
31	1 1/8	1.149	1.110	1-11/16	1.687	1.631	2.386	2.239	3/4	0.780	0.720	4-1/2 ±1/8	2 1/2 +11/32	7
32	1 1/8	1.149	1.110	1-11/16	1.687	1.631	2.386	2.239	3/4	0.780	0.720	6 ±1/8	2 1/2 +11/32	7
33	1 1/8	1.149	1.110	1-11/16	1.687	1.631	2.386	2.239	3/4	0.780	0.720	7 1/2±1/8	2 1/2 +11/32	7
34	1 1/8	1.149	1.110	1-11/16	1.687	1.631	2.386	2.239	3/4	0.780	0.720	8 1/2±1/8	2 1/2 +11/32	7
35	1 1/8	1.149	1.110	1-11/16	1.687	1.631	2.386	2.239	3/4	0.780	0.720	5 1/2±1/8	2 1/2 +11/32	7
36	1 1/8	1.149	1.110	1-11/16	1.687	1.631	2.386	2.239	3/4	0.780	0.720	9 1/2±1/8	2 3/4 +11/32	7
37	1 1/8	1.149	1.110	1-11/16	1.687	1.631	2.386	2.239	3/4	0.780	0.720	10 ±1/8	2 3/4 +11/32	7
38	1 1/8	1.149	1.110	1-11/16	1.687	1.631	2.386	2.239	3/4	0.780	0.720	10 1/2±1/8	2 3/4 +11/32	7
39	1 1/8	1.149	1.110	1-11/16	1.687	1.631	2.386	2.239	3/4	0.780	0.720	11 ±1/8	2 3/4 +11/32	7
40	1 1/8	1.149	1.110	1-11/16	1.687	1.631	2.386	2.239	3/4	0.780	0.720	11 1/2±1/8	2 3/4 +11/32	7
41	1 1/8	1.149	1.110	1-11/16	1.687	1.631	2.386	2.239	3/4	0.780	0.720	12 ±1/8	2 3/4 +11/32	7
42	1 1/8	1.149	1.110	1-11/16	1.687	1.631	2.386	2.239	3/4	0.780	0.720	12 1/2±1/8	2 3/4 +11/32	7
43	1 1/8	1.149	1.110	1-11/16	1.687	1.631	2.386	2.239	3/4	0.780	0.720	13 ±1/8	2 3/4 +11/32	7
44	1 1/8	1.149	1.110	1-11/16	1.687	1.631	2.386	2.239	3/4	0.780	0.720	13 1/2±1/8	2 3/4 +11/32	7
45	1 1/8	1.149	1.110	1-11/16	1.687	1.631	2.386	2.239	3/4	0.780	0.720	14 ±1/8	2 3/4 +11/32	7
46	1 1/8	1.149	1.110	1-11/16	1.687	1.631	2.386	2.239	3/4	0.780	0.720	14 1/2±1/8	2 3/4 +11/32	7
47	1 1/8	1.149	1.110	1-11/16	1.687	1.631	2.386	2.239	3/4	0.780	0.720	15 ±1/8	2 3/4 +11/32	7
48	1 1/8	1.149	1.110	1-11/16	1.687	1.631	2.386	2.239	3/4	0.780	0.720	15 1/2±1/8	2 3/4 +11/32	7
49	1 1/8	1.149	1.110	1-11/16	1.687	1.631	2.386	2.239	3/4	0.780	0.720	16 ±1/8	2 3/4 +11/32	7
50	1 1/8	1.149	1.110	1-11/16	1.687	1.631	2.386	2.239	3/4	0.780	0.720	16 1/2±1/8	2 3/4 +11/32	7
51	1 1/8	1.149	1.110	1-11/16	1.687	1.631	2.386	2.239	3/4	0.780	0.720	17 ±1/8	2 3/4 +11/32	7
52	1 1/8	1.149	1.110	1-11/16	1.687	1.631	2.386	2.239	3/4	0.780	0.720	17 1/2±1/8	2 3/4 +11/32	7
53	1 1/8	1.149	1.110	1-11/16	1.687	1.631	2.386	2.239	3/4	0.780	0.720	6 1/2±1/8	2 3/4 +11/32	7
54														
55														

FOR ITEM NUMBERS 56 TO 129 SEE PLAN NO. GTS-1309 SHEET 2 OF 2

ITEM NO.	NOMINAL SIZE	G			H			J			
		WIDTH ACROSS FLATS			WIDTH ACROSS CORNERS			THICKNESS OF NUT			
		NOM.	MAX.	MIN.	NOM.	MAX.	MIN.	NOM.	MAX.	MIN.	
1	1/4	1.250	1.212	1.768	1.655	3/4	0.774	0.710			
2	1/4	1.250	1.212	1.768	1.655	3/4	0.774	0.710			
3	1/4	1.250	1.212	1.768	1.655	3/4	0.774	0.710			
4	1/4	1.250	1.212	1.768	1.655	3/4	0.774	0.710			
5											
6											
7											
8											
9											
10	7/8	1.313	1.269	1.856	1.742	349/64	0.792	0.740			
11	1	1.625	1.575	2.298	2.162	1	1.028	0.956			
12	1	1.625	1.575	2.298	2.162	1	1.028	0.956			
13	1	1.625	1.575	2.298	2.162	1	1.028	0.956			
14	1	1.625	1.575	2.298	2.162	1	1.028	0.956			
15	1	1.625	1.575	2.298	2.162	1	1.028	0.956			
16	1	1.625	1.575	2.298	2.162	1	1.028	0.956			
17	1	1.625	1.575	2.298	2.162	1	1.028	0.956			
18	1	1.625	1.575	2.298	2.162	1	1.028	0.956			
19	1	1.625	1.575	2.298	2.162	1	1.028	0.956			
20	1	1.625	1.575	2.298	2.162	1	1.028	0.956			
21	1	1.625	1.575	2.298	2.162	1	1.028	0.956			
22	1	1.625	1.575	2.298	2.162	1	1.028	0.956			
23	1	1.625	1.575	2.298	2.162	1	1.028	0.956			
24	1	1.625	1.575	2.298	2.162	1	1.028	0.956			
25	1	1.625	1.575	2.298	2.162	1	1.028	0.956			
26	1	1.625	1.575	2.298	2.162	1	1.028	0.956			
27											
28											
29											
30											
31	1 13/16	1.812	1.756	2.563	2.411	1 1/8	1.155	1.079			
32	1 13/16	1.812	1.756	2.563	2.411	1 1/8	1.155	1.079			
33	1 13/16	1.812	1.756	2.563	2.411	1 1/8	1.155	1.079			
34	1 13/16	1.812	1.756	2.563	2.411	1 1/8	1.155	1.079			
35	1 13/16	1.812	1.756	2.563	2.411	1 1/8	1.155	1.079			
36	1 13/16	1.812	1.756	2.563	2.411	1 1/8	1.155	1.079			
37	1 13/16	1.812	1.756	2.563	2.411	1 1/8	1.155	1.079			
38	1 13/16	1.812	1.756	2.563	2.411	1 1/8	1.155	1.079			
39	1 13/16	1.812	1.756	2.563	2.411	1 1/8	1.155	1.079			
40	1 13/16	1.812	1.756	2.563	2.411	1 1/8	1.155	1.079			
41	1 13/16	1.812	1.756	2.563	2.411	1 1/8	1.155	1.079			
42	1 13/16	1.812	1.756	2.563	2.411	1 1/8	1				

