



TABLE J

NOMINAL SIZE	.250	.3125	.375	.4375		
THREADS PER INCH (-2A)	20UNC	18UNC	16UNC	14UNC		
D BODY DIAMETER	MAX .260 MIN .2127	.324 .2712	.388 .3287	.452 .3850		
F WIDTH ACROSS FLATS	MAX .375 MIN .362	.500 .484	.5625 .544	.625 .603		
G WIDTH ACROSS CORNERS	MAX .530 MIN .498	.707 .665	.795 .747	.884 .826		
H HEAD HEIGHT	MAX .188 MIN .156	.220 .186	.268 .232	.316 .278		
R RADIUS	MAX .031	.031	.031	.031		
TENSILE STRENGTH LBS-MIN	1,900	3,150	4,650	6,400		
L LENGTH	TOLERANCE		DASH NO.	DASH NO.	DASH NO.	DASH NO.
	SIZE .375 & UNDER	SIZE .4375				
.75	+.02	+.02	1	32	63	
1.00	-.03	-.03	2	33	64	94
1.25			3	34	65	95
1.50	+.02	+.04	4	35	66	96
2.00	-.04	-.06	5	36	67	97
2.50			6	37	68	98
3.00			7	38	69	99
3.50	+.04	+.06	8	39	70	100
4.00	-.06	-.08	9	40	71	101
4.50			10	41	72	102
5.00	+.06	+.08	11	42	73	103
5.50	-.10	-.10	12	43	74	104
6.00			13	44	75	105
6.50			14	45	76	106
7.00			15	46	77	107
7.50			16	47	78	108
8.00			17	48	79	109
8.50			18	49	80	110
9.00			19	50	81	111
9.50			20	51	82	112
10.00			21	52	83	113
11.00			22	53	84	114
12.00	+.10	+.12	23	54	85	115
13.00	-.18	-.18	24	55	86	116
14.00			25	56	87	117
15.00			26	57	88	118
16.00			27	58	89	119
17.00			28	59	90	120
18.00			29	60	91	121
19.00			30	61	92	122
20.00			31	62	93	123

NOTES:

- MATERIAL:** Carbon steel, SAE Grade J in accordance with procurement specification, having an ultimate tensile strength of 60,000 psi-min.
- PROTECTIVE COATING:** Cadmium plated in accordance with Type 2, Class 3 of QQ-P-416 or zinc coated in accordance with Type 2, Class 3 of QQ-Z-325.
- THREADS:** Threads shall be in accordance with Screw-Thread Standards for Federal Services, Handbook H24.
- THREAD LENGTH:** Minimum thread length shall be twice the basic diameter plus 0.25 inch for lengths up to and including 6.00 inches and twice the basic diameter plus 0.50 inch for lengths over 6.00 inches. Bolts too short for the formula thread length shall be threaded as close to the head as practical.
- DIMENSIONS:** All dimensions are in inches unless otherwise specified.
- PART NUMBER:** The MS part number consists of the MS number, plus the dash number.  
Example: MS35355-1.
- Referenced documents shall be of the issue in effect on date of invitations for bid.
- For design feature purposes, this standard takes precedence over procurement documents referenced herein.
- For interchangeability note see sheet 2.

(B) For changes see sheets 1 and 2.

This military standard is mandatory for use by all Departments and Agencies of the Department of Defense. Selection for all new engineering and design applications and for repetitive use shall be made from this document.

REVIEWER: IS, ME, MI  
USER: AS, AT, AV, MC, OS, YD

APPROVED 24 JAN 1955 REVISED (A) 28 JUL 1966 (B) 6 OCT 1971

P.A. WC	TITLE	MILITARY STANDARD
Other Cust SH 82	BOLT, MACHINE, SQUARE HEAD, STEEL, CADMIUM OR ZINC PLATED, UNC-2A	MS35355
PROCUREMENT SPECIFICATION FF-B-575	SUPERSEDES: BAAX1, BAAX2, BAAX3, BAAX3.1, MS35354 and BAAX1.1 in part.	SHEET 1 OF 2

TABLE I - Continued

FED. SUP CLASS  
5306

NOMINAL SIZE		(B)		.500	.625	.750	.875	1.000	1.125	1.250		
THREADS PER INCH (-2A)				13UNC	11UNC	10UNC	9UNC	8UNC	7UNC	7UNC		
D	BODY DIAMETER	MAX	MIN	.515 .4435	.642 .5589	.768 .6773	.895 .7946	1.022 .9100	1.149 1.0228	1.277 1.1476		
F	WIDTH ACROSS FLATS	MAX	MIN	.750 .725	.9375 .906	1.125 1.088	1.3125 1.269	1.500 1.450	1.6875 1.631	1.875 1.812		
G	WIDTH ACROSS CORNERS	MAX	MIN	1.061 .995	1.326 1.244	1.591 1.494	1.856 1.742	2.121 1.991	2.386 2.239	2.652 2.489		
H	HEAD HEIGHT	MAX	MIN	.348 .308	.444 .400	.524 .476	.620 .568	.684 .628	.780 .720	.876 .812		
R	RADIUS	MAX		.031	.062	.062	.062	.093	.093	.093		
TENSILE STRENGTH LBS-MIN				(B)		8,500	13,600	20,000	27,700	36,400	45,800	58,100
L LENGTH	TOLERANCE				DASH NO.	DASH NO.	DASH NO.	DASH NO.	DASH NO.	DASH NO.	DASH NO.	
	SIZE .500	SIZE .625 & .750	SIZE .875 & 1.000	SIZE 1.125 & 1.250								
1.00	+ .02				124							
1.25	- .03				125							
1.50					126	159	192	230	268			
2.00	+ .04	+ .06	+ .08	± .12	127	160	193	231	269			
2.50	- .06	- .08	- .10		128	161	194	232	270			
3.00					129	162	195	233	271	306	341	
3.50	+ .06	+ .08	+ .10	± .16	130	163	196	234	272	307	342	
4.00	- .08	- .10	- .14		131	164	197	235	273	308	343	
4.50					132	165	198	236	274	309	344	
5.00	+ .08	± .10	+ .12	± .18	133	166	199	237	275	310	345	
5.50	- .10		- .16		134	167	200	238	276	311	346	
6.00					135	168	201	239	277	312	347	
6.50					136	169	202	240	278	313	348	
7.00					137	170	203	241	279	314	349	
7.50					138	171	204	242	280	315	350	
8.00					139	172	205	243	281	316	351	
8.50					140	173	206	244	282	317	352	
9.00					141	174	207	245	283	318	353	
9.50					142	175	208	246	284	319	354	
10.00					143	176	209	247	285	320	355	
11.00					144	177	210	248	286	321	356	
12.00	+ .12	+ .14	+ .16	± .22	145	178	211	249	287	322	357	
13.00	- .18	- .18	- .20		146	179	212	250	288	323	358	
14.00					147	180	213	251	289	324	359	
15.00					148	181	214	252	290	325	360	
16.00					149	182	215	253	291	326	361	
17.00					150	183	216	254	292	327	362	
18.00					151	184	217	255	293	328	363	
19.00					152	185	218	256	294	329	364	
20.00					153	186	219	257	295	330	365	
21.00					154	187	220	258	296	331	366	
22.00					155	188	221	259	297	332	367	
23.00					156	189	222	260	298	333	368	
24.00					157	190	223	261	299	334	369	
25.00					158	191	224	262	300	335	370	
26.00							225	263	301	336	371	
27.00							226	264	302	337	372	
28.00							227	265	303	338	373	
29.00							228	266	304	339	374	
30.00							229	267	305	340	375	

INTERCHANGEABILITY

Bolts specified on MS35354 are cancelled after 28 July 1966 and superseded by the bolts specified on MS35355 having the same dash numbers. Use only MS35355 bolts for new design. Cancelled bolts may be used until existing stock is depleted.

P.A. WC Other Cust SH 82	TITLE BOLT, MACHINE, SQUARE HEAD, STEEL, CADMIUM OR ZINC PLATED, UNC-2A	MILITARY STANDARD <b>MS 35355</b>
PROCUREMENT SPECIFICATION FF-B-575	SUPERSEDES: BAAX1, BAAX2, BAAX3, BAAX3.1, MS35354 and BAAX1.1 in part.	SHEET 2 OF

REVIEWER: IS, ME, MU (USER: AS, AT, AV, MC, OS, YD)  
 This military standard is mandatory for use by all Departments and Agencies of the Department of Defense. Selection for all new engineering and design applications and for repetitive use shall be made from this document.

APPROVED 24 JAN 1955 REVISED 28 JUL 1966 (B) FOR CHANGES SEE SHEETS 1 AND 2