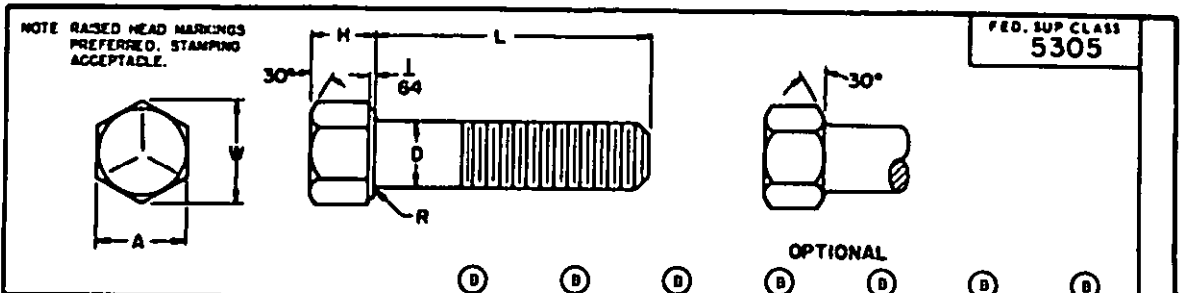


REVIEWER: MI. EL. ME. VC. SH
 USER: OS. MC. GL. AT. MU



NOMINAL SIZE		1/4	5/16	3/8	7/16	1/2	9/16	5/8
THREADS PER INCH		20UNC	18UNC	16UNC	14UNC	13UNC	12UNC	11UNC
BODY DIAMETER	D	Max .2500 Min .2450	.3125 .3065	.3750 .3690	.4375 .4305	.5000 .4930	.5625 .5545	.6250 .6170
WIDTH ACROSS FLATS	A	Max .4375 Min .4280	.5000 .4890	.5625 .5510	.6250 .6120	.7500 .7360	.8125 .7950	.9375 .9220
WIDTH ACROSS CORNERS	V	Max .5090 Min .4880	.5770 .5570	.6500 .6250	.7220 .6930	.8260 .8400	.9380 .9100	1.0830 1.0510
HEAD HEIGHT	H	Max .1630 Min .1560	.2110 .1950	.2430 .2260	.2910 .2720	.3230 .3020	.3710 .3480	.4010 .3750
RADIUS	R	Max .023 Min .009	.023 .009	.023 .009	.023 .009	.023 .009	.041 .021	.041 .021
LENGTH	L	Tolerance	Dash Number	Dash Number	Dash Number	Dash Number	Dash Number	Dash Number
3/8	+0 -1/32		47	53	59	65	71	77
7/16			54	60	66	72	78	84
1/2			61	67	73	79	85	91
9/16			68	74	80	86	92	98
5/8			75	81	87	93	99	105
3/4	+0 -1/16		82	88	94	100	106	112
7/8			89	95	101	107	113	119
1-1/8			96	102	108	114	120	126
1-1/4			103	109	115	121	127	133
1-3/8			110	116	122	128	134	140
1-1/2	+0 -1/32		117	123	129	135	141	147
1-3/4			124	130	136	142	148	154
2-1/8			131	137	143	149	155	161
2-1/2			138	144	150	156	162	168
2-3/8			145	151	157	163	169	175
3	+0 -1/32		152	158	164	170	176	182
3-1/8			159	165	171	177	183	189
3-1/2			166	172	178	184	190	196
3-3/4			173	179	185	191	197	203
4-1/8			180	186	192	198	204	210
4-1/2	+0 -1/32		187	193	199	205	211	217
4-3/4			194	200	206	212	218	224
5			201	207	213	219	225	231
5-1/2			208	214	220	226	232	238
6			215	221	227	233	239	245

MATERIAL: Medium Carbon Steel, Grade 5 of procurement specification. Minimum tensile strengths: 120,000 psi for diameters through 3/4"; 110,000 psi for 7/8" and 1" diameters; 105,000 psi for diameters 1-1/8" through 1-1/2"; 90,000 psi for diameters over 1-1/2".

FINISH: Plain (untreated).
THREADS: The threads shall be in accordance with Screw-Thread Standards for Federal Services Handbook H-25.

MINIMUM THREAD LENGTH: Shall be twice the diameter plus 1/4" for lengths up to and including 6". The tolerance shall be plus 3/16" or 2-1/2 threads, whichever is greater. On products that are too short for minimum thread lengths, the distance from the bearing surface of the head to the first complete thread shall not exceed the length of 2-1/2 threads, for sizes up to and including 1" and 3-1/2 threads for sizes larger than 1".

- NOTES:**
- (1) Referenced documents of issue in effect on date of invitation for bids shall apply.
 - (2) In case of conflict with any referenced document, this standard will govern.
 - (3) The MS part number consists of the MS sheet number, plus the dash number. Example: MS35295-1.
 - (4) All dimensions in inches.

ⓑ CANCELLED IN PART
 SEE SHEET 2

ⓑ For Changes see Sheets 1, 2 and 3.

This military standard is approved by the Department of Defense and is mandatory on all activities. Reference to all new engineering and design applications and for replacement use shall be made from this document.

P.A. VC Other Case SH	TITLE SCREW, CAP, HEXAGON HEAD (FINISHED HEXAGON BOLT), MEDIUM CARBON STEEL, PLAIN FINISH, UNC-2A	MILITARY STANDARD MS 35295
PROCUREMENT SPECIFICATION PP-3-85	SUPERSEDED	SHEET 1 OF 3

APPROVED MARCH 1954 REVISED 28 APRIL 63 9 JUNE 1967

REVIEWER: MI, EL, ME, VC, SH
USER: OS, MC, GL, AT, MU

NOMINAL SIZE		(B)	(B)	(B)	(B)	(B)	(B)	(B)	(B)	
THREADS PER INCH		10UNC	9UNC	8UNC	7UNC	7UNC	6UNC	6UNC		
BODY DIAMETER	D	{Max Min	.7500 .7410	.8750 .8660	1.0000 0.9900	1.1250 1.1140	1.2500 1.2390	1.3750 1.3630	1.5000 1.4980	
WIDTH ACROSS FLATS	A	{Max Min	1.1250 1.1000	1.3125 1.2950	1.5000 1.4690	1.6875 1.6310	1.8750 1.8120	2.0625 1.9940	2.2500 2.1750	
WIDTH ACROSS CORNERS	W	{Max Min	1.2990 1.2540	1.5160 1.4650	1.7320 1.6750	1.9490 1.8590	2.1650 2.0660	2.3820 2.2730	2.5980 2.4800	
HEAD HEIGHT	H	{Max Min	.4830 .4550	.5630 .5310	.6270 .5910	.7180 .6580	.8130 .7490	.8790 .8100	.9740 .9020	
RADIUS	R	{Max Min	.041 .021	.062 .041	.093 .062	.093 .062	.093 .062	.093 .062	.093 .062	
LENGTH	L	TOLERANCE		Dash Number	Dash Number	Dash Number	Dash Number	Dash Number	Dash Number	Dash Number
		Size 3/4 and under	Size 7/8 and over							
	3/4	+0	+0	179						
	7/8	-1/32	-1/16	180	202					
	1-1/8			181	203	224				
	1-1/4			182	204	225	245			
	1-3/8	+0	+0	183	205	226	246	265		
	1-1/2	-1/16	-1/8	184	206	227	247	266	284	
	1-3/4			185	207	228	248	267	285	308
	2			186	208	229	249	268	286	309
	2-1/4			187	209	230	250	269	287	310
	2-1/2			188	210	231	251	270	288	311
	2-3/4			189	211	232	252	271	289	312
	3			190	212	233	253	272	290	313
	3-1/4			191	213	234	254	273	291	314
	3-1/2			192	214	235	255	274	292	315
	3-3/4	+0	+0	193	215	236	256	275	293	316
	4	-3/32	-3/16	194	216	237	257	276	294	317
	4-1/4			195	217	238	258	277	295	318
	4-1/2			196	218	239	259	278	296	319
	4-3/4			197	219	240	260	279	297	320
	5			198	220	241	261	280	298	321
	5-1/2			199	221	242	262	281	299	322
	6			200	222	243	263	282	300	323
				201	223	244	264	283	301	324

NOTE: For illustration, material, finish and other pertinent data, see sheet 1.

(B) CANCELLED IN PART AFTER 9 June 1967. USE MS90725. INTERCHANGEABILITY RELATIONSHIP - MS90725 can replace the cancelled screws of the same size. The cancelled MS35295 cannot always replace MS90725 and should be used until existing stock is depleted. Then use only the superseding MS screws of the same size for design and replacement.

(B) CANCELLED IN PART
SEE NOTE

APPROVED MARCH 4, 1954 REVISED 26 APRIL 63 (B) FOR CHANGES SEE SHEETS 1, 2 AND 3

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

P.A. Other Cast	WC SH	TITLE SCREW, CAP, HEXAGON HEAD (FINISHED HEXAGON BOLT), MEDIUM CARBON STEEL, PLAIN FINISH, UNC-2A	MILITARY STANDARD MS 35295
PROCUREMENT SPECIFICATION PP-S-85	SUPERSEDES:	SHEET	2 OF

REVIEWER: MI, EL, ME, MC, SH
USER: OS, MC, GL, AT, MU

NOMINAL SIZE		1-3/8	2	2-1/2	2-1/2				
THREADS PER INCH		5UNC		4-1/2UNC		4-1/2UNC		4UNC	
BODY DIAMETER	D	Max 1.7500 Min 1.7380	2.0000 1.9980	2.2500 2.2380	2.5000 2.4880				
WIDTH ACROSS FLATS	A	Max 2.6250 Min 2.5380	3.0000 2.9000	3.3750 3.2620	3.7500 3.6250				
WIDTH ACROSS CORNERS	V	Max 3.0310 Min 2.8930	3.4640 3.3060	3.8970 3.7190	4.3300 4.1330				
HEAD HEIGHT	H	Max 1.1340 Min 1.0540	1.2630 1.1750	1.4230 1.3270	1.5930 1.4790				
RADIUS	R	Max .093 Min .062	.093 .062	.093 .062	.093 .062				
LENGTH	L	Tolerance	Dash Number	Dash Number	Dash Number	Dash Number	Dash Number	Dash Number	Dash Number
1-3/8	2	+0 -1/8	310 306						
2-1/4	2-1/2		310 303	317 314					
2-3/8	3		310 304	317 310	320 310	361 360			
3-1/8	3-1/2	+0 -3/16	310 307	310 307	317 310	361 360			
3-3/8	4		310 307	317 310	317 310	361 360			
4-1/8	4-1/2		310 307	317 310	317 310	361 360			
4-3/8	5		310 307	317 310	317 310	361 360			
5-1/8	6		310 307	317 310	317 310	361 360			

NOTE: For illustration, material, finish and other pertinent data, see sheet 1.

Ⓟ CANCELLED IN PART
SEE SHEET 2

This military standard is approved by the Department of Defense and is mandatory on all activities. Submission for all new engineering and design applications and for revisions are subject to such for this standard.

P.A. NC Other Coat SH	TITLE SCREW, CAP, HEXAGON HEAD (FINISHED HEXAGON BOLT), MEDIUM CARBON STEEL, PLAIN FINISH, UNC-2A	MILITARY STANDARD MS 35295
PROCUREMENT SPECIFICATION PP-3-85	SUPERSEDES:	SHEET 3 OF

APPROVED MARCH 4, 1956 REVISED 26 APRIL 63 Ⓟ FOR CHANGES SEE SHEETS 1, 2 AND 3