

NOTICE—When Government drawings, specifications, or other data are used for any purpose other than in connection with a definitely related Government procurement operation, the United States Government thereby incurs no responsibility, nor any obligation whatsoever; and the fact that the Government may have furnished, or in any way supplied the said drawings, specifications, or other data is not to be regarded by implication or otherwise as in any manner licensing the holder or any other person or corporation, or conveying any rights or permission to manufacture, use, or sell any patented invention that may in any way be related thereto.

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.

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 Min	.2500 .2450	.3125 .3065	.3750 .3690	.4375 .4305	.5000 .4930	.5625 .5545	.6250 .6170
WIDTH ACROSS FLATS	A	Max Min	.4375 .4280	.5000 .4890	.5625 .5510	.6250 .6120	.7500 .7360	.8125 .7980	.9375 .9220
WIDTH ACROSS CORNERS	W	Max Min	.5050 .4880	.5770 .5570	.6500 .6280	.7220 .6980	.8660 .8400	.9380 .9100	1.0830 1.0510
HEAD HEIGHT	H	Max Min	.1630 .1500	.2110 .1950	.2430 .2260	.2910 .2720	.3230 .3020	.3710 .3480	.4030 .3780
RADIUS	R	Max Min	.023 .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	Dash Number
3/8		+0 -1/32	1	27	53	79			
7/16			2	28	54	80	104		
1/2			3	29	55	81	105	130	
9/16			4	30	56	82	106	131	155
5/8			5	31	57	83	107	132	156
3/4			6	32	58				
7/8		+0 -1/16	7	33	59	84	108	133	157
1			8	34	60	85	109	134	158
1-1/8			9	35	61	86	110	135	159
1-1/4			10	36	62	87	111	136	160
1-3/8			11	37	63	88	112	137	161
1-1/2			12	38	64	89	113	138	162
1-3/4		+0 -3/32	13	39	65	90	114	139	163
2			14	40	66	91	115	140	164
2-1/4			15	41	67	92	116	141	165
2-1/2			16	42	68	93	117	142	166
2-3/4			17	43	69	94	118	143	167
3			18	44	70	95	119	144	168
3-1/4		+0 -3/32	19	45	71	96	120	145	169
3-1/2			20	46	72	97	121	146	170
3-3/4			21	47	73	98	122	147	171
4			22	48	74	99	123	148	172
4-1/4			23	49	75	100	124	149	173
4-1/2			24	50	76	101	125	150	174
4-3/4			25	51	77	102	126	151	175
5			26	52	78	103	127	152	176
5-1/2							128	153	177
6							129	154	178

④ CANCELLED
SEE SHEET 2

④ For Changes see Sheets 1, 2 and 3.

P.A.	WC	TITLE	MILITARY STANDARD
Other Cust	SHIPS ASD	SCREW, CAP, HEXAGON HEAD (FINISHED HEXAGON BOLT), LOW CARBON STEEL, PHOSPHATE FINISH, UNC-2A	MS35293
PROCUREMENT SPECIFICATION FF-S-85	SUPERSEDES:		SHEET 1 OF 3

APPROVED 4 MAR 54 REVISED ④ 26 APRIL 63

FED. SUP CLASS
5305

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NOMINAL SIZE			3/4	7/8	1	1-1/8	1-1/4	1-3/8	1-1/2
THREADS PER INCH			10UNC	9UNC	8UNC	7UNC	7UNC	6UNC	6UNC
BODY DIAMETER	D	Max	.7500	.8750	1.0000	1.1250	1.2500	1.3750	1.5000
		Min	.7410	.8660	0.9900	1.1140	1.2390	1.3630	1.4880
WIDTH ACROSS FLATS	A	Max	1.1250	1.3125	1.5000	1.6875	1.8750	2.0625	2.2500
		Min	1.1000	1.2850	1.4690	1.6310	1.8120	1.9940	2.1750
WIDTH ACROSS CORNERS	W	Max	1.2990	1.5160	1.7320	1.9490	2.1650	2.3820	2.5980
		Min	1.2540	1.4650	1.6750	1.8590	2.0660	2.2730	2.4800
HEAD HEIGHT	H	Max	.4830	.5630	.6270	.7180	.8130	.8780	.9740
		Min	.4550	.5310	.5910	.6580	.7490	.8100	.9020
RADIUS	R	Max	.041	.062	.093	.093	.093	.093	.093
		Min	.021	.041	.062	.062	.062	.062	.062
LENGTH	L	TOLERANCE		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 -1/32	+0 -1/16	179					
7/8				180	202				
1				181	203	224			
1-1/8				182	204	225	245		
1-1/4		+0 -1/16	+0 -1/8	183	205	226	246	265	
1-3/8				184	206	227	247	266	284
1-1/2				185	207	228	248	267	285
1-3/4				186	208	229	249	268	286
2				187	209	230	250	269	287
2-1/4				188	210	231	251	270	288
2-1/2				189	211	232	252	271	289
2-3/4				190	212	233	253	272	290
3		+0 -3/32	+0 -3/16	191	213	234	254	273	291
3-1/4				192	214	235	255	274	292
3-1/2				193	215	236	256	275	293
3-3/4				194	216	237	257	276	294
4				195	217	238	258	277	295
4-1/4				196	218	239	259	278	296
4-1/2				197	219	240	260	279	297
4-3/4				198	220	241	261	280	298
5				199	221	242	262	281	299
5-1/2				200	222	243	263	282	300
6				201	223	244	264	283	301

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

Ⓐ CANCELLED AFTER 26 April 1963. USE MS90725. INTERCHANGEABILITY RELATIONSHIP - MS90725 can replace the cancelled screws of the same size. The cancelled MS35293 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.

Ⓐ CANCELLED
SEE NOTE

P.A.	WC	TITLE	MILITARY STANDARD
Other Cust	SHIPS ASD	SCREW, CAP, HEXAGON HEAD (FINISHED HEXAGON BOLT), LOW CARBON STEEL, PHOSPHATE FINISH, UNC-2A	MS35293
PROCUREMENT SPECIFICATION FF-S-85	SUPERSEDES:	SHEET 2 OF	

FED. SUP CLASS
5305

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NOMINAL SIZE			1-3/4	2	2-1/4	2-1/2			
THREADS PER INCH			5UNC	4-1/2UNC	4-1/2UNC	4UNC			
BODY DIAMETER	D	Max	1.7500	2.0000	2.2500	2.5000			
		Min	1.7380	1.9880	2.2380	2.4880			
WIDTH ACROSS FLATS	A	Max	2.6250	3.0000	3.3750	3.7500			
		Min	2.5380	2.9000	3.2620	3.6250			
WIDTH ACROSS CORNERS	W	Max	3.0310	3.4640	3.8970	4.3300			
		Min	2.8930	3.3060	3.7190	4.1330			
HEAD HEIGHT	H	Max	1.1340	1.2630	1.4230	1.5830			
		Min	1.0540	1.1750	1.3270	1.4790			
RADIUS	R	Max	.093	.093	.093	.093			
		Min	.062	.062	.062	.062			
LENGTH	L	Tolerance	Dash Number	Dash Number	Dash Number	Dash Number	Dash Number	Dash Number	Dash Number
1-3/4		+0	319						
2		-1/8	320						
2-1/4			321	335					
2-1/2			322	336					
2-3/4			323	337	349	361			
3			324	338	350	362			
3-1/4			325	339	351	363			
3-1/2			326	340	352	364			
3-3/4		+0	327	341	353	365			
4		-3/16	328	342	354	366			
4-1/4			329	343	355	367			
4-1/2			330	344	356	368			
4-3/4			331	345	357	369			
5			332	346	358	370			
5-1/2			333	347	359	371			
6			334	348	360	372			

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

Ⓢ CANCELLED
SEE SHEET 2

P.A.	WC	1972	MILITARY STANDARD.
Other Code	SHIPS ASD		
SOMER, CAP, HEXAGON HEAD (FINISHED HEXAGON BOLT), LOW CARBON STEEL, PHOSPHATE FINISH, UNC-2A			MS35293
SPECIFICATION SPENS006			
PT-S-85			SHEET 3 OF

672-1 (Cancelled)

PREVIOUS EDITIONS OF THIS FORM ARE OBSOLETE.

APPROVED 4 MAR 54 REVISED Ⓐ FOR CHANGES SEE SHEETS 1, 2 AND 3.