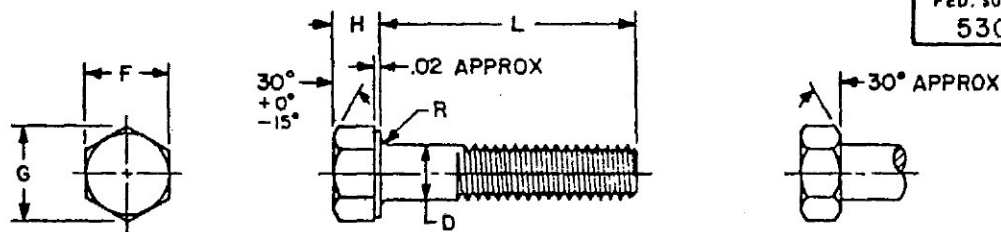


FED. SUP CLASS  
5305

OPTIONAL DESIGN

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

NOMINAL SIZE				.250	.3125	.375	.4375	.500	.5625	.625	
THREADS PER INCH (UNC-2A)				20	18	16	14	13	12	11	
D BODY DIAMETER				MAX MIN	.250 .245	.3125 .3065	.375 .369	.4375 .4305	.500 .493	.5625 .5545	.625 .617
F WIDTH ACROSS FLATS				MAX MIN	.4375 .4280	.500 .489	.5625 .5510	.625 .612	.750 .736	.8125 .7980	.9375 .9220
G WIDTH ACROSS CORNERS				MAX MIN	.505 .488	.577 .557	.650 .628	.722 .698	.866 .840	.938 .910	1.083 1.051
H HEAD HEIGHT				MAX MIN	.163 .150	.211 .195	.243 .226	.291 .272	.323 .302	.371 .348	.403 .378
R RADIUS				MAX MIN	.025 .015	.025 .015	.025 .015	.025 .015	.025 .015	.045 .020	.045 .020
TENSILE STRENGTH (LBS-MIN)					1,900	3,140	4,650	6,370	8,510	10,920	13,560
L LENGTH	TOLERANCE			DASH NO.	DASH NO. (C)	DASH NO.	DASH NO. *	DASH NO.	DASH NO. *	DASH NO.	
	SIZE .375 AND UNDER	SIZES .4375 AND .500	SIZES .5625 AND .625								
.375				301	327	353					
.438				302*	328*	354*	379				
.500				303	329	355	380	404			
.562	+.000	+.000	+.000	304*	330*	356*	381	405*	430		
.625	-.030	-.030	-.030	305	331	357	382	406	431	455	
.750				306	332	358	383	407	432	456	
.875				307	333	359	384	408	433	457	
1.000				308	334	360	385	409	434	458	
1.125				309*	335*	361*	386	410*	435	459*	
1.250				310	336	362	387	411	436	460	
1.375				311*	337*	363*	388	412*	437	461*	
1.500	+.000	+.000	+.000	312	338	364	389	413	438	462	
1.750	-.040	-.060	-.080	313	339	365	390	414	439	463	
2.000				314	340	366	391	415	440	464	
2.250				315	341	367	392	416	441	465	
2.500				316	342	368	393	417	442	466	
2.750				317	343	369	394	418	443	467	
3.000				318	344	370	395	419	444	468	
3.250	+.000	+.000	+.000	319	345	371	396	420	445	469	
3.500	-.060	-.080	-.100	320	346	372	397	421	446	470	
3.750				321*	347*	373*	398	422*	447	471*	
4.000				322	348	374	399	423	448	472	
4.250				323*	349*	375*	400	424*	449	473*	
4.500				324	350	376	401	425	450	474	
4.750	+.000	+.000	+.000	325*	351*	377*	402	426*	451	475*	
5.000	-.100	-.100	-.100	326	352	378	403	427	452	476	
5.500								428	453	477	
6.000								429	454	478	

\* INACTIVE FOR NEW DESIGN - Dash numbers 379 thru 403, 430 thru 454 and those with an (\*) are inactive for new design.

(C)

(C) For changes see sheet 1.

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

P.A.	WC	TITLE	MILITARY STANDARD
Other Cust	SH	SCREW, CAP, HEXAGON HEAD -	
	82	NAVAL BRASS, PLAIN FINISH, UNC-2A	MS 35309
PROCUREMENT SPECIFICATION	SUPERSEDES:		SHEET 1 OF 2
FF-S-RS			

APPROVED 4 MAR 1954 REVISED (A) 30 SEP 1966 (B) 15 FEB 1973 (C) 12 DEC 1974

FED. SUP. CLASS

5305

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

NOMINAL SIZE				.750	.875	1.000	1.125	1.250
THREADS PER INCH (UNC-2A)				10	9	8	7	7
D BODY DIAMETER	MAX			.750	.875	1.000	1.125	1.250
	MIN			.741	.866	.990	1.114	1.239
F WIDTH ACROSS FLATS	MAX			1.125	1.3125	1.500	1.6875	1.875
	MIN			1.100	1.2850	1.469	1.6310	1.812
G WIDTH ACROSS CORNERS	MAX			1.299	1.516	1.732	1.949	2.165
	MIN			1.254	1.465	1.675	1.859	2.066
H HEAD HEIGHT	MAX			.483	.563	.627	.718	.813
	MIN			.455	.531	.591	.658	.749
R RADIUS	MAX			.045	.065	.095	.095	.095
	MIN			.020	.040	.060	.060	.060
TENSILE STRENGTH (LBS-MIN)				20,040	27,720	36,360	44,250	56,200
L LENGTH	TOLERANCE			DASH NO.	DASH NO.	DASH NO.	DASH NO. *	DASH NO.
	SIZE .750	SIZES .875 AND 1.000	SIZES 1.125 AND 1.250					
.750	+.000	+.000	-----	479				
.875	-.030	-.040		480	502			
1.000				481	503	524		
1.125				482*	504*	525*	545	
1.250				483	505	526	546	565
1.375				484*	506*	527*	547	566*
1.500	+.000	+.000	+.000	485	507	528	548	567
1.750	-.080	-.100	-.120	486	508	529	549	568
2.000				487	509	530	550	569
2.250				488	510	531	551	570*
2.500				489	511	532	552	571
2.750				490	512	533	553	572*
3.000				491	513	534	554	573
3.250	+.000	+.000	+.000	492	514*	535*	555	574*
3.500	-.100	-.140	-.160	493	515	536	556	575
3.750				494*	516*	537*	557	576*
4.000				495	517	538	558	577
4.250				496*	518*	539*	559	578*
4.500				497	519	540	560	579
4.750	+.000	+.000	+.000	498*	520*	541*	561	580*
5.000	-.100	-.160	-.180	499	521	542	562	581
5.500				500	522	543	563	582
6.000				501	523	544	564	583

● INACTIVE FOR NEW DESIGN - Dash numbers 545 thru 564 and those with an (\*) are inactive for new design.

## NOTES:

- MATERIAL: Naval Brass in accordance with QQ-B-637, alloy no. 464, half-hard or alloy no. 462, hard having a minimum ultimate tensile strength of 60,000 PSI for sizes thru 1.000, and 58,000 PSI for sizes over 1.000.
- PROTECTIVE COATING: None.
- THREADS: The threads shall be in accordance with Screw Thread Standards for Federal Services, Handbook H28.
- DIMENSIONS: All dimensions are in inches, unless otherwise specified.
- THREAD LENGTH: Minimum thread length shall be twice the diameter plus 0.250 inch. The tolerance shall be plus 0.188 inch or 2-1/2 threads, whichever is greater. On screws that are too short for minimum thread lengths, the distance from the head bearing surface to the first complete thread shall not exceed the length of 2-1/2 threads for sizes thru 1.000 and 3-1/2 threads for sizes over 1.000.
- PART NUMBER: The MS part number consists of the MS number, plus the dash number.  
Example: MS35309-301
- 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.

## INTERCHANGEABILITY

The former dash numbers of MS35309 (1 thru 283) are cancelled and superseded by the present dash numbers of MS35309 (301 thru 583 respectively). Use only the present dash numbers for new design.

This military standard is approved 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.

P.A. WC	TITLE	MILITARY STANDARD
Other Cusl SH 82	SCREW, CAP, HEXAGON HEAD - NAVAL BRASS, PLAIN FINISH, UNC-2A	MS 35309
PROCUREMENT SPECIFICATION FF-S-55	SUPERSEDES.	SHEET 2 OF 2

DD FORM 672-1 (Coordinated)

APPROVED 4 MAR 1954 REVISED (A) 30 SEP 1966 (B) 15 FEB 1973 (C) FOR CHANGES SEE SHEET 1.