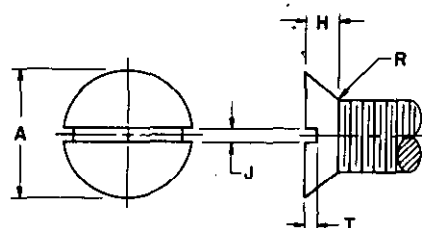
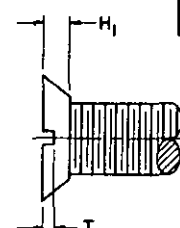
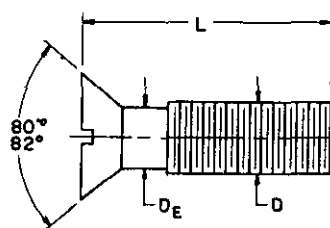


This military standard is approved by the Department of Defense and is mandatory on all activities. Selection for all new engineering and design applications and for repetitive use shall be made from this document.



**FULL HEAD**



UNDERCUT HEAD

FED. SUP CLASS  
5305

NOMINAL SIZE D		#1 (.0730)	#2 (.0860)	#4 (.1120)	#6 (.1380)	#8 (.1640)	#10 (.1900)	1/4 (.2500)	5/16 (.3125)	
THREADS PER INCH		64NC	56NC	40NC	32NC	32NC	24NC	20UNC	18UNC	
BODY DIAMETER D <sub>B</sub> (MAX MIN)		.0730 .0603	.0860 .0717	.1120 .0925	.1380 .1141	.1640 .1399	.1900 .1586	.2500 .2127	.3125 .2712	
HEAD DIAMETER A <sub>H</sub> (MAX SHARP MIN SHARP ABS MIN)		.146 .130 .126	.172 .156 .150	.225 .207 .200	.279 .257 .249	.332 .308 .300	.385 .359 .348	.507 .477 .462	.635 .600 .581	
SLOT WIDTH J (MAX MIN)		.026 .019	.031 .023	.039 .031	.048 .039	.054 .045	.060 .050	.075 .064	.084 .072	
FLAT S MAX		.003	.003	.004	.005	.006	.007	.009	.011	
RADIUS R MAX		.031	.036	.050	.063	.063	.083	.100	.111	
FULL HEAD	HEAD HEIGHT H (MAX MIN)	.043 .033	.051 .040	.067 .055	.083 .069	.100 .084	.116 .098	.153 .131	.191 .165	
	SLOT DEPTH T (MAX MIN)	.019 .012	.023 .015	.030 .020	.038 .024	.045 .029	.053 .034	.070 .046	.088 .058	
UNDERCUT HEAD	HEAD HEIGHT H <sub>U</sub> (MAX MIN)	.032 .022	.037 .026	.048 .036	.060 .046	.071 .055	.083 .065	.108 .086	.135 .109	
	SLOT DEPTH T <sub>U</sub> (MAX MIN)	.016 .012	.019 .015	.025 .020	.032 .024	.037 .029	.044 .034	.058 .046	.073 .058	
THREADS SHALL EXTEND TO WITHIN 2 THREADS OF THE BEARING SURFACE OF THE HEAD, OR CLOSER IF PRACTICABLE.	LENGTH L	TOLERANCE	DASH NO.	DASH NO.	DASH NO.	DASH NO.	DASH NO.	DASH NO.	DASH NO.	DASH NO.
	1/8	+0 -1/32	1	8	18	31	46	65 66 67	83	
	3/16		2	9	19	32	47			
	1/4		3	10	20	33	48			
	5/16		4	11	21	34	49			
	3/8	+0 -1/32	5	12	22	35	50	68 69 70 71	84 85 86 87	99 100 101 102
	7/16		6	13	23	36	51			
	1/2		7	14	24	37	52			
	5/8			15	25	38	53			
	3/4	+0 -1/16	16 17	26	39	54	72	88 89 90 91	103 104 105 106	
	7/8			27	40	55	73			
	1			28	41	56	74			
1-1/4	29			42	57	75				
1-1/2	+0 -1/16	30	43	58	76	92	107 108 109 110			
1-3/4			44	59	77	93				
2			45	60	78	94				
2-1/4				61	79	95				
MINIMUM COMPLETE THREAD LENGTH OF 1-3/4.	+0 -3/32	(A) CANCELLED SEE SHEET 2		62	80	96	111			
				63	81	97	112			
				64	82	98	113			

**MATERIAL:** CARBON STEEL, SPECIFICATION QQ-W-409 OR QQ-S-633, EXCEPT BESSEMER COMPOSITIONS; 55,000 PSI MINIMUM ULTIMATE TENSILE STRENGTH.

FINISH: CADMIUM PLATED, SPECIFICATION QQ-P-416, TYPE II, CLASS C.

THREADS: THE THREADS SHALL BE IN ACCORDANCE WITH SCREW-THREAD STANDARDS FOR FEDERAL SERVICES HANDBOOK H-28.

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: MS 35239-1.
- (4) SIZES ABOVE DOTTED LINE HAVE UNDERCUT HEAD.
- (5) ALL DIMENSIONS IN INCHES.

Ⓐ FOR CHANGES SEE SHEETS 1 AND 2.

P.A. ORD Other Cust - SHIPS	TITLE SCREW, MACHINE, FLAT COUNTERSUNK HEAD, CARBON STEEL, CADMIUM PLATED, NC-2A AND UNC-2A.	MILITARY STANDARD
		MS 35239
PROCUREMENT SPECIFICATION FF-S-92	SUPERSEDES:	SHEET 1 OF 2

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, 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.

FED. SUP CLASS  
5305

NOMINAL SIZE D	3/8 (.3750)	7/16 (.4375)	1/2 (.5000)	9/16 (.5625)	5/8 (.6250)	3/4 (.7500)		
THREADS PER INCH	16UNC	14UNC	13UNC	12UNC	11UNC	10UNC		
BODY DIAMETER D <sub>e</sub>	{ MAX MIN	.3750 .3287	.4375 .3850	.5000 .4435	.5625 .5016	.6250 .5589	.7500 .6773	
HEAD DIAMETER A	{ MAX SHARP MIN SHARP ABS MIN	.762 .722 .700	.812 .771 .743	.875 .831 .802	1.000 .950 .919	1.125 1.069 1.035	1.375 1.306 1.267	
SLOT WIDTH J	{ MAX MIN	.094 .081	.094 .081	.106 .091	.118 .102	.133 .116	.149 .131	
FLAT S	MAX	.013	.016	.018	.020	.023	.027	
RADIUS R	MAX	.125	.143	.154	.167	.182	.200	
FULL HEAD	HEAD HEIGHT H	{ MAX MIN	.230 .200	.223 .190	.223 .186	.260 .220	.298 .253	.372 .319
	SLOT DEPTH T	{ MAX MIN	.106 .070	.103 .066	.103 .065	.120 .077	.137 .088	.171 .111
UNDERCUT HEAD	HEAD HEIGHT H <sub>i</sub>	{ MAX MIN	.162 .132	.156 .126	.160 .123	.185 .145	.212 .167	.264 .211
	SLOT DEPTH T <sub>i</sub>	{ MAX MIN	.088 .070	.085 .066	.085 .065	.100 .077	.114 .088	.142 .111
THREADS SHALL EXTEND TO WITHIN 2 THREADS OF THE BEARING SURFACE OF THE HEAD, OR CLOSER IF PRACTICABLE.	LENGTH L	TOLERANCE	DASH NO.	DASH NO.	DASH NO.	DASH NO.	DASH NO.	DASH NO.
	1/8	+0 -1/32						
	3/16							
	1/4							
	5/16							
	3/8							
	7/16							
	1/2							
	5/8							
	3/4	+0 -1/16						
	7/8							
	1							
	1-1/4							
MINIMUM COMPLETE THREAD LENGTH OF 1-3/4	1-1/2	+0 -3/32						
	1-3/4							
	2							
	2-1/4							
	2-1/2							
	2-3/4							
	3							

Ⓐ CANCELLED  
SEE NOTE

NOTE: FOR ILLUSTRATION, MATERIAL, FINISH, AND OTHER PERTINENT DATA, SEE SHEET 1.

Ⓐ CANCELLED AFTER 7 May 1962 USE MS 35190. INTERCHANGEABILITY RELATIONSHIP-MS 35190 CAN REPLACE THE CANCELLED SCREWS OF THE SAME SIZE. THE CANCELLED MS 35239 CANNOT ALWAYS REPLACE MS 35190 AND SHOULD BE USED UNTIL EXISTING STOCK IS DEPLETED. THEN USE ONLY THE SUPERSEDING MS SCREWS OF THE SAME SIZE FOR DESIGN AND REPLACEMENT.

REVISED Ⓐ FOR CHANGES SEE SHEETS 1 AND 2.  
APPROVED FEB 9, 1954

P.A.	ORD	TITLE	MILITARY STANDARD
Other Cust	SHIPS	SCREW, MACHINE, FLAT COUNTERSUNK HEAD, SLOTTED, CARBON STEEL, CADMIUM PLATED, NC-2A AND UNC-2A.	MS 35239
PROCUREMENT SPECIFICATION FF-S-92	SUPERSEDES:		SHEET 2 OF