

THE REQUIREMENTS FOR ACQUIRING THE PRODUCT(S) DESCRIBED HEREIN SHALL CONSIST OF THIS SPECIFICATION SHEET AND THE ISSUE OF THE FOLLOWING SPECIFICATION LISTED IN THAT ISSUE OF THE DODDSS SPECIFIED IN THE SOLICITATION FF-S-86

THIS SPECIFICATION IS APPROVED FOR USE BY ALL DEPARTMENTS AND AGENCIES OF THE DEPARTMENT OF DEFENSE

Form Approved
OMB No 0704-0186

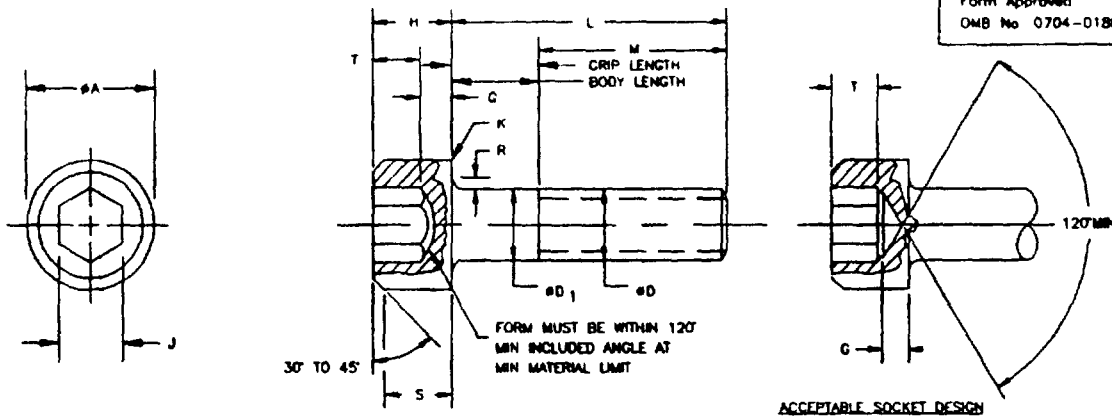


TABLE I DASH NUMBERS AND DIMENSIONS

D NOMINAL SIZE	#0 060	#10 190	1/4 250	5/16 3125	3/8 375											
THREADS PER INCH	80 UNF-3A	32 UNF-3A	28 UNF-3A	24 UNF-3A	24 UNF-3A											
#D ₁ BODY	MAX 0600 MIN 0568	1900 1840	2500 2435	.3125 3053	3750 3678											
#A HEAD	MAX 096 MIN 091	313 303	375 365	469 457	563 550											
H HEAD HEIGHT	MAX 060 MIN 057	190 185	250 244	313 306	375 368											
S HEAD SIZE HEIGHT	MIN 054	171	225	281	337											
J SOCKET WIDTH ACROSS FLATS	MAX 0510 MIN 0500	1587 1562	1900 1875	2530 2500	3160 3125											
T KEY ENGAGEMENT	MIN 025	090	120	151	182											
G WALL THICKNESS	MIN 020	065	095	119	143											
K CHAMFER OR RADIUS	MAX 003	005	008	008	008											
R FILLET RADIUS	MAX 007 MIN 003	014 009	014 009	017 015	020 015											
M BASIC THREAD LENGTH	REF 500	875	1 000	1 125	1 250											
MIN TENSILE STRENGTH LOAD LBS 1/	140	1 600	2 910	4 640	7 020											
L LENGTH	TOLERANCE	DASH NO	GRIP LENGTH MAX	BODY LENGTH MIN	DASH NO	GRIP LENGTH MAX	BODY LENGTH MIN	DASH NO	GRIP LENGTH MAX	BODY LENGTH MIN	DASH NO	GRIP LENGTH MAX	BODY LENGTH MIN	DASH NO	GRIP LENGTH MAX	BODY LENGTH MIN
125	+ 000 - 030	1														
188		2														
250		3														
375		4														
500					9											
625					10			21								
750					11			22								
875					12			23			31			39		
1 000					13			24			32			40		
1 250	+ 000 - 040				14			25			33			41		
1 500					15	375	167	26	500	250	34			42		

1/ BASED ON 80,000 PSI MINIMUM TENSILE STRENGTH, LOAD POUNDS ARE CALCULATED BY THE AREAS IN ACCORDANCE WITH FED-STD-H28/2

(F) DENOTES CHANGES

INCH-POUND

PREPARING ACTIVITY DLA-IS CUSTODIANS ARMY- AR NAVY- OS AIR FORCE- 99 DLA-	MILITARY SPECIFICATION SHEET TITLE SCREW, CAP, SOCKET HEAD-HEXAGON, CORROSION RESISTANT STEEL, UNF-3A	SPECIFICATION SHEET NUMBER 24 NOV 93 MS16996 REV F SUPERSEDING MS16996E 28 SEPT 1988 AMSC- N/A FSC 5305
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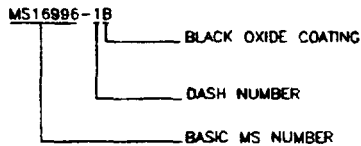
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REQUIREMENTS

- 1 **MATERIAL.** CORROSION RESISTANT STEEL TYPES 302 (UNS S30200) 303 (UNS S30300) 304 (UNS S30400) 302HQ (UNS S30430), 305 (UNS S30500) AND 316 (UNS S31600) IN ACCORDANCE WITH PROCUREMENT SPECIFICATION
- (F) 2 **CLEANED, DESCALED AND PASSIVATED;** SCREWS SHALL BE CLEANED DESCALED AND PASSIVATED IN ACCORDANCE WITH QQ-P-35
- 3 **PROTECTIVE COATING AND SURFACE TREATMENT,** WHEN SPECIFIED, SCREWS SHALL BE BLACK OXIDE COATED IN ACCORDANCE WITH MIL-C-13924 CLASS 4 (WHEN BLACK OXIDE COATING IS REQUIRED, THE DASH NUMBER SHALL BE FOLLOWED BY A CODE LETTER "B")
- 4 **MAGNETIC PERMEABILITY,** THESE SCREWS HAVE A MAGNETIC PERMEABILITY OF 2.0 MAXIMUM (AIR = 1.0) FOR A FIELD STRENGTH OF H = 200 OERSTEDS USING A MAGNETIC INDICATOR IN ACCORDANCE WITH MIL-I-17214
- 5 **THREADS,** THREADS SHALL BE IN ACCORDANCE WITH FED-STD-H2B/2 ACCEPTABILITY OF SCREW THREADS SHALL BE IN ACCORDANCE WITH FED-STD-H2B/20 SYSTEM 22 ACCEPTABILITY OF SCREW THREADS FOR SIZES 060 (#0) AND 190 (#10) SHALL BE IN ACCORDANCE WITH FED-STD-H2B/20 SYSTEM 21 SCREWS ABOVE HEAVY LINE SHALL HAVE COMPLETE (FULL FORM) THREADS EXTENDING TO WITHIN TWO THREADS OF THE HEAD
- 6 **HEAD STYLE,** HEAD OF SCREW MAY BE KNURLED OR NOT KNURLED AT THE OPTION OF THE MANUFACTURER TYPE OF KNURLING OPTIONAL
- 7 **SOURCE MARKING IDENTIFICATION,** SCREWS WITH NOMINAL SIZES 250 AND LARGER SHALL BE MARKED TO IDENTIFY THE SOURCE ACCEPTING RESPONSIBILITY FOR THE SCREW MEETING THE REQUIREMENTS SPECIFIED HEREIN THE MARKING SHALL BE A SOURCE IDENTIFICATION SYMBOL OR CAGE (COMMERCIAL AND GOVERNMENT ENTITY) CODE THE MARKING SHALL BE DEPRESSED AND OPTIONALLY LOCATED ON THE TOP OR SIDE OF THE SCREW HEAD
- 8 **PART NUMBER,** PART NUMBER SHALL CONSIST OF THE BASIC MS NUMBER FOLLOWED BY A DASH NUMBER FROM TABLE 1 AND A CODE LETTER "B" FROM BLACK OXIDE IF APPLICABLE



MS16996-1B INDICATES - SCREW CAP SOCKET HEAD HEXAGON, CORROSION RESISTANT STEEL, UNF-3A, 060-80 UNF-3A NOMINAL THREAD SIZE 125 LENGTH, BLACK OXIDE COATING

NOTES

- 1 ALL DIMENSIONS ARE IN INCHES
- 2 THE BASIC THREAD LENGTH "M" (TABLE 1) IS A REFERENCED VALUE CONTROLLED BY THE GRIP LENGTH AND "L" LENGTH AS SPECIFIED
- 3 IN THE EVENT OF A CONFLICT BETWEEN THE TEXT OF THIS STANDARD AND THE REFERENCES CITED HEREIN, THE TEXT OF THIS STANDARD SHALL TAKE PRECEDENCE
- 4 REFERENCED GOVERNMENT (OR NON-GOVERNMENT) DOCUMENTS OF THE ISSUE LISTED IN THAT ISSUE OF THE DEPARTMENT OF DEFENSE INDEX OF SPECIFICATIONS AND STANDARDS (DODISS) SPECIFIED IN THE SOLICITATION FORM A PART OF THIS STANDARD TO THE EXTENT SPECIFIED HEREIN

PREPARING ACTIVITY DLA-IS CUSTODIANS ARMY- AR NAVY- OS AIR FORCE- 99 DLA- REVIEW USER PROJECT NUMBER 5305-2024	MILITARY SPECIFICATION SHEET TITLE SCREW, CAP SOCKET HEAD-HEXAGON CORROSION RESISTANT STEEL, UNF-3A	SPECIFICATION SHEET NUMBER 24 NOV 93 MS16996 REV F SUPERSEDING MS16996 28 SEPT 1988 AMSC- N/A FSC 5305
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