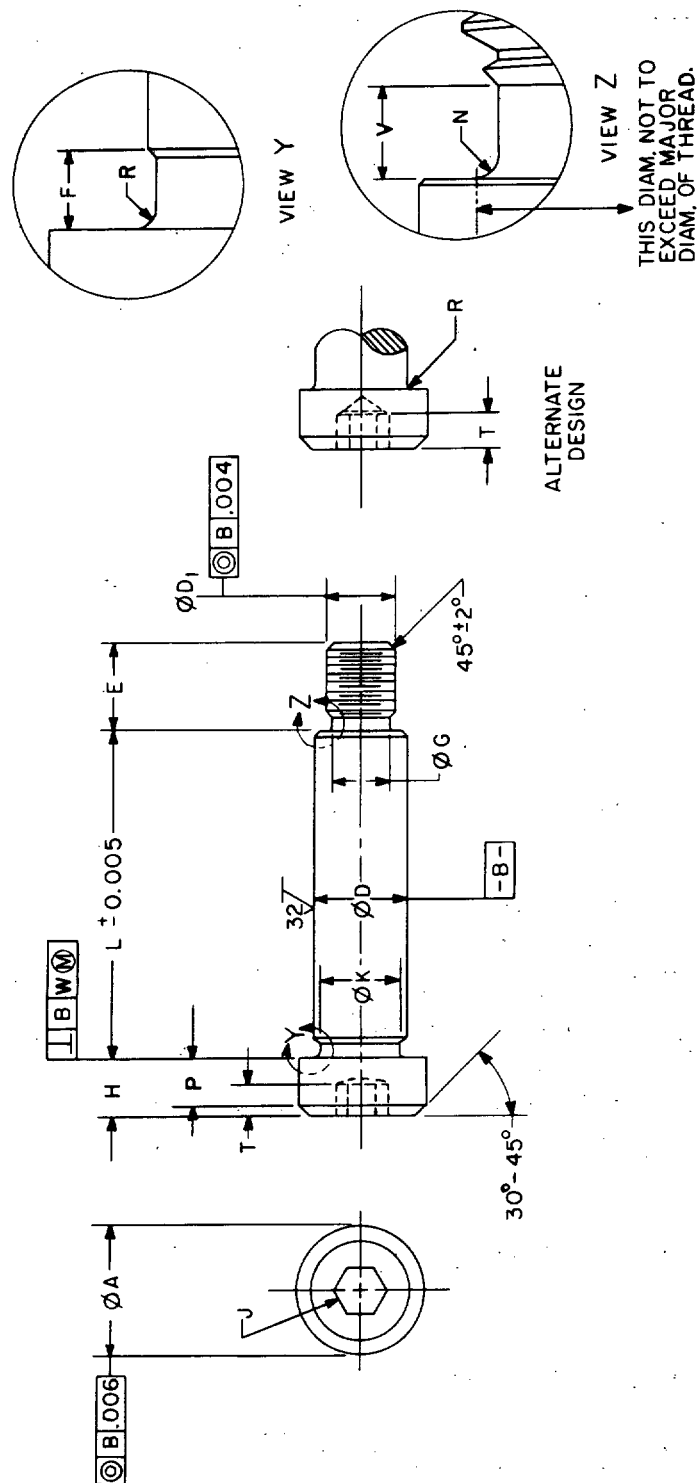


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REVIEWER ACTIVITIES: CML AGENCIES COORDINATING ACTIVITIES: USER ACTIVITIES:
 ARMY-AR GSA - FSS ARMY-GL
 AIR FORCE-82 DLA - IS NAVY-MC
 NSA-NS



(A) ENTIRE STANDARD REVISED

P.A. ARMY-ER Other Cust NAVY-YD AIR FORCE-99	INTERNATIONAL INTEREST	TITLE SCREW, SHOULDERED, HEX-SOCKET HEAD .375, .500, .625 UNC-3A, UNPLATED
PROCUREMENT SPECIFICATION ASME/ANSI B18.3	SUPERSEDES:	

MILITARY STANDARD
MS21301

PAGE 1 OF 2

TABLE 1. DIMENSIONS AND DIMENSIONS

NOMINAL SIZE OR BASIC SHOULDER DIAMETER	Ø D		Ø A		H		P	J	T	R ¹	Ø K		P	Ø D ₁		Ø G	V	N		E		W	TOLERANCE		
	SHOULDER DIAMETER		HEAD DIAMETER		HEAD HEIGHT		HEAD SIDE HEIGHT	HEAD SOCKET SIZE	KEY EXTRA- HEIGHT	HEAD FILLET RADIUS	SHOULDER NECK DIAMETER		SHOULDER NECK WIDTH	NOMINAL THREAD SIZE OR BASIC THREAD DIAMETER		UNC-3A THREADS/ INCH	THREAD NECK DIAMETER	THREAD NECK WIDTH	THREAD NECK FILLET	MAX	MIN			MAX	MIN
	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX			MIN	
.375	.373	.371	.562	.543	.250	.240	.209	.188	.141	.015	.352	.093	.093	18	.3125	.249	.237	.111	.031	.025	.500	.480	.003		
.500	.498	.496	.750	.729	.312	.302	.262	.250	.188	.020	.477	.093	.093	16	.3750	.304	.291	.125	.035	.029	.625	.605	.004		
.625	.623	.621	.875	.853	.375	.365	.315	.312	.234	.024	.602	.093	.093	13	.5000	.414	.397	.154	.042	.036	.750	.720	.004		

APPROVED 18 JUL 58

REVISED (A) 21 DEC 87

DD FORM 672-1 (COORDINATED)

PREVIOUS EDITIONS OF THIS FORM ARE OBSOLETE

5305-1734

DS-918

FED. SUP. CLASS
5305

TABLE II. DASH NUMBERS AND DIMENSIONS

NOMINAL SIZE SHOULDER DIAMETER		.375	.500	.625
THREAD SIZE		3125-18 UNC-3A	.375-26 UNC-3A	.500-13 UNC-3A
L SHOULDER LENGTH	TOLERANCE	DASH NUMBER	DASH NUMBER	DASH NUMBER
1.00	±.005	-1		
1.25		-3	-27	
1.50		-5	-29	-59
1.75		-7	-31	-61
2.00		-9	-33	-63
2.25		-11	-35	-65
2.50		-13	-37	-67
2.75		-15	-39	-69
3.00		-17	-41	-71
3.25		-19	-43	-73
3.50		-21	-45	-75
3.75		-23	-47	-77
4.00		-25	-49	-79
4.25			-51	-81
4.50			-53	-83
4.75			-55	-85
5.00			-57	-87
5.50				-89
6.00				-91

REQUIREMENTS

- MATERIAL:** MATERIAL SHALL BE ALLOY STEEL GRADE 4340 (UNS G43400) IN ACCORDANCE WITH AMS 6415 OR MIL-S-5000.
- PROTECTIVE COATING:** UNCOATED (NONE).
- THREADS:** THREADS SHALL BE IN ACCORDANCE WITH FED-STD-H28/2. ACCEPTABILITY OF SCREW THREADS SHALL BE IN ACCORDANCE WITH FED-STD-H28/20, SYSTEM 21.
- TENSILE STRENGTH:** ULTIMATE TENSILE STRENGTH SHALL BE 140 KSI, BASED ON THE MINIMUM THREAD NECK AREA.
- HARDNESS:** HARDNESS SHALL BE IN THE RANGE OF 32 TO 43 HRC.
- PART NUMBER:** THE PART NUMBER SHALL CONSIST OF THE BASIC MS NUMBER FOLLOWED BY A DASH NUMBER FROM TABLE II.

EXAMPLE: MS21301-5

DASH NUMBER

BASIC MS NUMBER

MS21301-5 INDICATES - SCREW, SHOULDER, HEX-SOCKET HEAD, .375 SHOULDER DIAMETER;
.3125-18 UNC-3A THREAD SIZE; 1.50 SHOULDER LENGTH.

NOTES:

- ALL DIMENSIONS ARE IN INCHES.
- 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.
- 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.
- FOR CADMIUM PLATED BOLTS SEE MS51975.

P.A. ARMY-ER	INTERNATIONAL INTEREST	TITLE	MILITARY STANDARD
Other Cust NAVY-YD		SCREW, SHOULDER, HEX-SOCKET HEAD .375, .500, .625 UNC-3A, UNPLATED	MS21301
AIR FORCE-99			
PROCUREMENT SPECIFICATION ASME / ANSI B18.3	SUPERSEDES:	PAGE 2 OF 2	

REVIEWER ACTIVITIES: USER ACTIVITIES:
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APPROVED 18 JUL 58 REVISED (A) FOR CHANGES SEE PAGES 1 AND 2