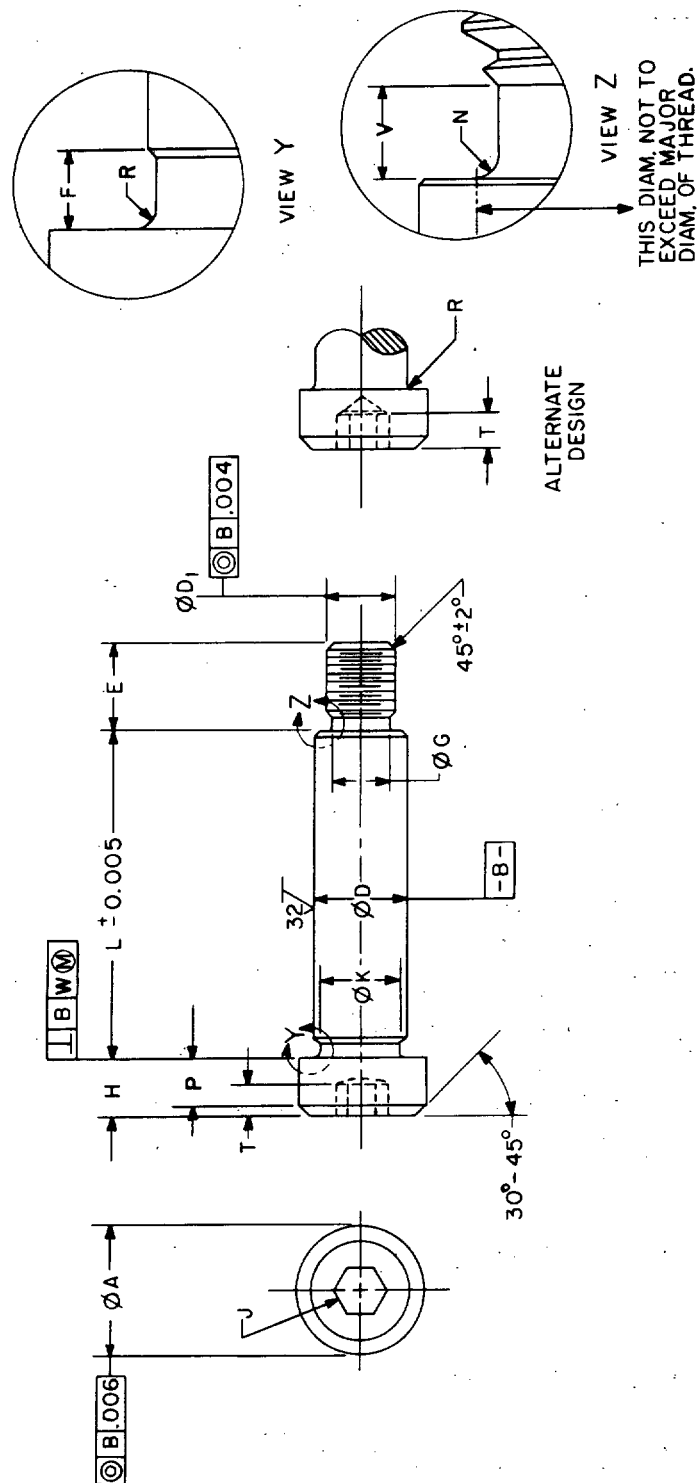


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 AIR FORCE-82 DLA - IS NAVY-MC
 NSA-NS



Ⓐ 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

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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				
	SHOULDER DIAMETER		HEAD DIAMETER		HEAD HEIGHT						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		THREAD LENGTH	
	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	.3125	18	.249	.237	.111	.031	.025	.500	.480	.003				
.500	.498	.496	.750	.729	.312	.302	.262	.250	.188	.020	.477	.093	.3750	16	.304	.291	.125	.035	.025	.625	.605	.004				
.625	.623	.621	.875	.853	.375	.365	.315	.312	.234	.024	.602	.093	.5000	13	.414	.397	.154	.042	.036	.750	.720	.004				

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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	OF
		2	2

REVIEWER ACTIVITIES: USER ACTIVITIES:
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