

MIL-S-45933/1A
 22 September 1977
 SUPERSEDING
 MIL-S-45933/1
 30 June 1971

MILITARY SPECIFICATION SHEET

STUD, KEYRING LOCKED, 125 KSI FTU, SINGLE STEP

This specification is approved for use by all Departments and Agencies of the Department of Defense.

The complete requirements for procuring the studs described herein shall consist of this document and the latest issue of specification MIL-S-45933.

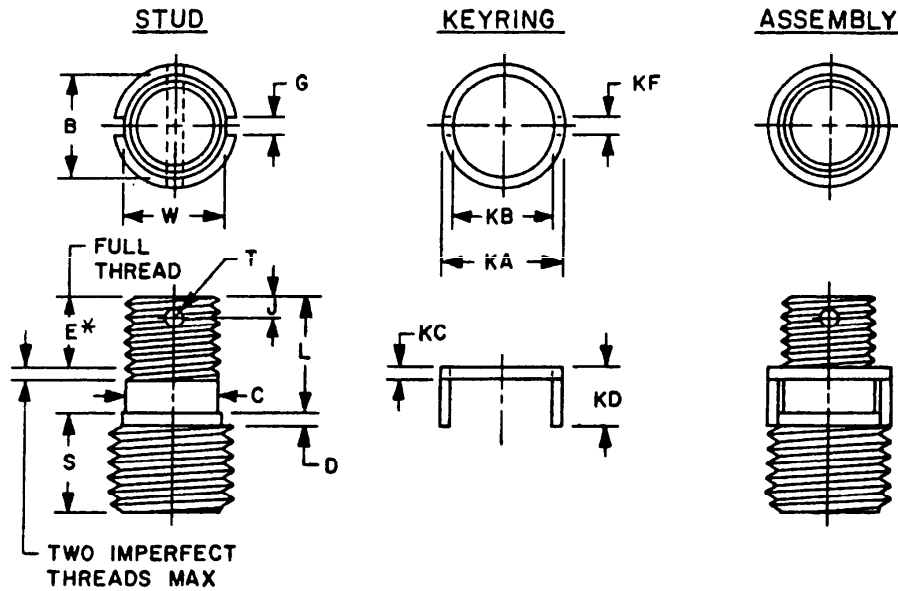


TABLE I - Sizes and Dimensions

DASH NO.	NUT END THREADS UNJF-3A	STUD END THREADS UNJF-3A	B	C	D	E	G
			$\pm .005$	$\begin{matrix} +.000 \\ -.005 \end{matrix}$	$\pm .005$	$\pm .030$	$\pm .005$
4	.1900-32	.2500-28	.185	.171	.037	.437	.065
5	.2500-28	.3125-24	.244	.228	.040	.500	.065
6	.3125-24	.3750-24	.306	.287	.045	.562	.081
7	.3750-24	.4375-20	.369	.340	.052	.625	.081

DASH NO.	J	S	T	W	KA	KB	KC	KD	KF
	$\pm .010$	$\pm .015$	$\pm .005$	REF	$\begin{matrix} +.000 \\ -.005 \end{matrix}$	$\begin{matrix} +.010 \\ -.000 \end{matrix}$	$\begin{matrix} +.005 \\ -.000 \end{matrix}$	$\pm .010$	REF
4	.125	.312	.070	.182	.250	.191	.032	.127	.060
5	.156	.437	.076	.242	.312	.250	.035	.145	.060
6	.156	.500	.076	.304	.375	.312	.040	.175	.076
7	.172	.687	.106	.367	.437	.375	.047	.203	.076

* When "L" is equal to or less than "E", then "E" shall equal "L" minus two imperfect threads.

MIL-S-45933/1A

TABLE II - Length Dash Numbers

L NUT END	LENGTH DASH NO.				L NUT END	LENGTH DASH NO.				
	NUT END DIAMETER					NUT END DIAMETER				
	±.015	.1900	.2500	.3125		.3750	±.015	.1900	.2500	.3125
.375	6	6			1.750	28	28	28	28	
.437	7	7			1.812	29	29	29	29	
.500	8	8			1.875	30	30	30	30	
.562	9	9	9		1.937	31	31	31	31	
.625	10	10	10	10	2.000	32	32	32	32	
.687	11	11	11	11	2.125		34	34	34	
.750	12	12	12	12	2.250		36	36	36	
.812	13	13	13	13	2.375		38	38	38	
.875	14	14	14	14	2.500		40	40	40	
.937	15	15	15	15	2.625		42	42	42	
1.000	16	16	16	16	2.750		44	44	44	
1.062	17	17	17	17	2.875		46	46	46	
1.125	18	18	18	18	3.000		48	48	48	
1.187	19	19	19	19	3.125		50	50	50	
1.250	20	20	20	20	3.250		52	52	52	
1.312	21	21	21	21	3.375		54	54	54	
1.375	22	22	22	22	3.500		56	56	56	
1.437	23	23	23	23	3.625		58	58	58	
1.500	24	24	24	24	3.750		60	60	60	
1.562	25	25	25	25	3.875		62	62	62	
1.625	26	26	26	26	4.000		64	64	64	
1.687	27	27	27	27						

NOTES:

1. MATERIAL: Studs: Alloy steel in accordance with MIL-S-6758 (4130) or MIL-S-5626 (4140).
Corrosion-resisting steel in accordance with AMS 5737, composition A286.
Keyrings: Corrosion-resisting steel, composition 410, in accordance with AMS 5504 or AMS 5613.
2. PROTECTIVE COATING: Alloy steel studs, with keyrings, shall be cadmium plated in accordance with QQ-P-416, Type II, Class 2.
Corrosion-resisting steel studs, with keyrings, shall be passivated in accordance with QQ-P-35 or silver plated in accordance with AMS 2411.
3. SURFACE ROUGHNESS: Thread surfaces shall be 63 microinches, turned surfaces shall be 125 microinches and milled areas shall be 125-250 microinches, in accordance with ANSI B46.1.

MIL-S-45933/1A

4. THREADS: Threads shall be in accordance with MIL-S-8879.
5. HARDNESS: Alloy steel studs shall be Rockwell C26-30. Corrosion-resisting steel studs shall be Rockwell C25-29. Keyrings shall be Rockwell C35-45.
6. DIMENSIONS: All dimensions are in inches and shall apply after protective coating.
7. CONCENTRICITY: Nut end and stud end threads shall be concentric within 0.006 at the pitch diameter.
8. PART NUMBER: The part number consists of M45933/1 plus a size dash number from Table I, plus a length dash number from Table II.
Add "A" in lieu of the first "dash" for A286 corrosion-resisting steel.
Add "D" in lieu of the second "dash" for drilled hole in nut end.
Add "P" as suffix to length dash number for silver plating.
Examples:
M45933/1-5-16 Alloy steel stud, not drilled, 1.000 nut end length.
M45933/1A5D16P Corrosion-resisting steel stud, drilled nut end, 1.000 nut end length, silver plated.
9. Studs shall be free of all hanging burrs and slivers which might become dislodged under usage.
10. These studs are manufactured under U.S. Patent No. 2,980,929 which expires 25 March 1978. The Government does not have a royalty free license.
11. Install studs in accordance with MIL-S-45933/3.
12. Revision letters are not used to denote changes due to the extensiveness of the changes.

Custodians:

Army - WC
Air Force - 99

Reviewer Activities:

Army - AV, EL
DSA - IS
NSA - NS

Preparing Activity:

Army - WC

Project No. 5307-0198

User Activities:

Navy - AS, OS

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