

INCH-POUND

MS17825J
27 June 2011
SUPERSEDING
MS17825H
5 February 2004

DETAIL SPECIFICATION SHEET

NUT, SELF-LOCKING, CASTELLATED, HEXAGON, 250 °F
NON-METALLIC INSERT

Reactivate after 5 February 2004 and may be used for new
and existing designs and acquisitions.

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

The requirements for acquiring the product described herein shall consist of this specification sheet and NASM25027.

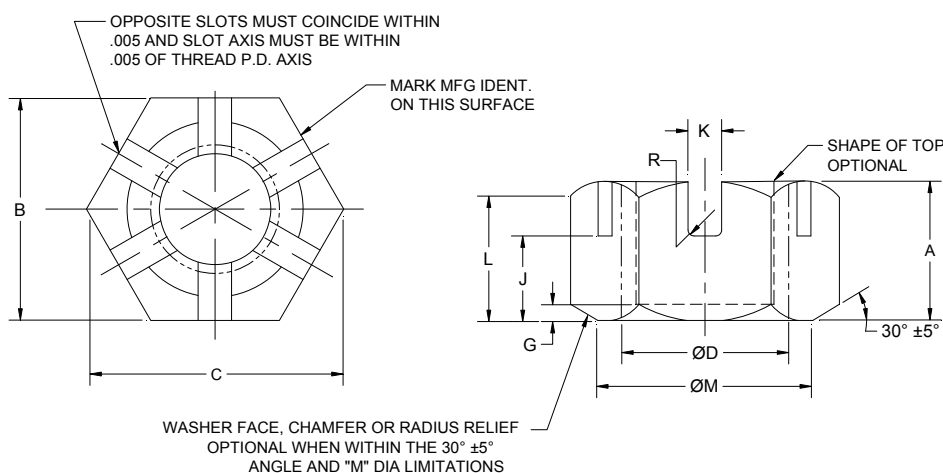


FIGURE 1. NUT.

TABLE I. DASH NUMBERS, DIMENSIONS AND STRENGTHS.

SIZE DASH NO.	THREAD AS8879	A		B		C	ØD	G		J	
		MAX	MIN	MAX	MIN	MIN	MAX	MAX	MIN	MAX	MIN
-3	.1900-32 UNJF-3B	.265	.235	.376	.367	.410	.215	.032	.006	.125	.105
-4	.2500-28 UNJF-3B	.296	.266	.439	.430	.482	.275	.036	.007	.141	.121
-5	.3125-24 UNJF-3B	.343	.313	.502	.492	.552	.338	.042	.008	.188	.168
-6	.3750-24 UNJF-3B	.421	.391	.564	.553	.622	.400			.235	.215
-7	.4375-20 UNJF-3B	.468	.438	.690	.679	.766	.463	.050	.010	.282	.262
-8	.5000-20 UNJF-3B	.578	.548	.752	.741	.837	.525			.375	.355
-9	.5625-18 UNJF-3B	.624	.594	.877	.865	.978	.587	.055	.012	.406	.386
-10	.6250-18 UNJF-3B	.734	.704	.940	.928	1.051	.650			.484	.464
-12	.7500-16 UNJF-3B	.828	.798	1.064	1.052	1.191	.795	.063	.014	.578	.558
-14	.8750-14 UNJF-3B	.921	.891	1.252	1.239	1.403	.900			.672	.652
-16	1.0000-12 UNJF-3B	1.015	.985	1.440	1.427	1.615	1.025	.083	.018	.766	.746
-18	1.1250-12 UNJF-3B	1.171	1.141	1.627	1.614	1.825	1.150			.828	.808
-20	1.2500-12 UNJF-3B	1.265	1.235	1.815	1.801	2.038	1.275			.891	.871

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TABLE I. DASH NUMBERS, DIMENSIONS AND STRENGTHS.. (Continued)

SIZE DASH NO.	K		L	ØM			R	ULTIMATE TENSILE STRENGTH LB MIN	TEST WRENCHING TORQUE (IN. LBS)	ASSEMBLY TORQUE VIBRATION (IN. LBS)	WEIGHT LB/100
	MAX	MIN	MIN	MAX	MIN	MAX		MIN	MAX	MAX	
-3	.108	.078	.110	.376	.355	.035	1,950	35	28	.400	
-4			.125	.439	.418		3,500	80	65	.650	
-5			.172	.502	.480		5,500	225	180	1.000	
-6	.155	.125	.218	.564	.543	.053	9,000	325	260	1.400	
-7			.265	.690	.675		12,200	575	460	2.000	
-8			.359	.752	.737		16,600	900	720	3.900	
-9	.187	.157	.390	.877	.862	.062	21,200	1,100	880	6.900	
-10			.468	.940	.925		27,400	1,600	1,300	11.400	
-12			.562	1.064	1.049		40,000	2,800	2,200	16.900	
-14			.656	1.252	1.237		54,600	4,600	3,700	26.000	
-16			.750	1.440	1.425		71,000	6,800	5,400	38.000	
-18			.844	1.627	1.612		92,600	10,000	8,000	53.500	
-20			.938	1.815	1.800		118,500	14,000	11,000	74.500	

REQUIREMENTS:

- MATERIALS: Steel, UNS G11370 (AISI 1137) per AMS5024
UNS G41300 (AISI 4130) per AMS6348
UNS G87400 (AISI 8740) per AMS6322, 6323, 6325, 6327, and 6358
INSERT MATERIAL: Nylon.
- FINISH: Cadmium plating in accordance with SAE-AMS-QQ-P-416, Type II, Class 2.
- Break all sharp edges and remove burrs.
- SURFACE TEXTURE: $125\sqrt{\text{in}}$ in accordance with ASME B46.1.
- DIMENSIONS: All dimensions are in inches unless otherwise specified.
- DESIGN INFORMATION: These nuts may be used at temperatures 250° F and below in those types of applications for which slotted or castellated nuts are approved for use, and if such applications conflict with any limitation on the use of self-locking nuts, as cited by NASM33588, this standard takes precedence. Nuts are to be installed in accordance with NASM33540.
- EXAMPLE OF PART NUMBER: MS17825-4 = .2500-28 nut, cadmium plated, non-metallic insert.
- PERFORMANCE: Per NASM25027 except for:
 - Tabulated ultimate tensile strength values.
 - Vibration per NASM1312-7, (30,000 cycles) using assembly torques listed in Table I for one seated cycle.
 - Locking torque values applicable for one cycle at room temperature only.
- For design feature purposes, this standard takes precedence over procurement document referenced herein.
- Changes from previous issue. Marginal notations are not used in this revision to identify changes with respect to the previous issue due to the extent of the changes.

Custodians:
Navy - AS
Air Force - 99

Preparing activity:
DLA-IS

(Project 5310-2011-006)

NOTE: The activities listed above were interested in this document as of the date of this document. Since organizations and responsibilities can change, you should verify the currency of the information above using the ASSIST Online database at <https://assist.daps.dla.mil>.