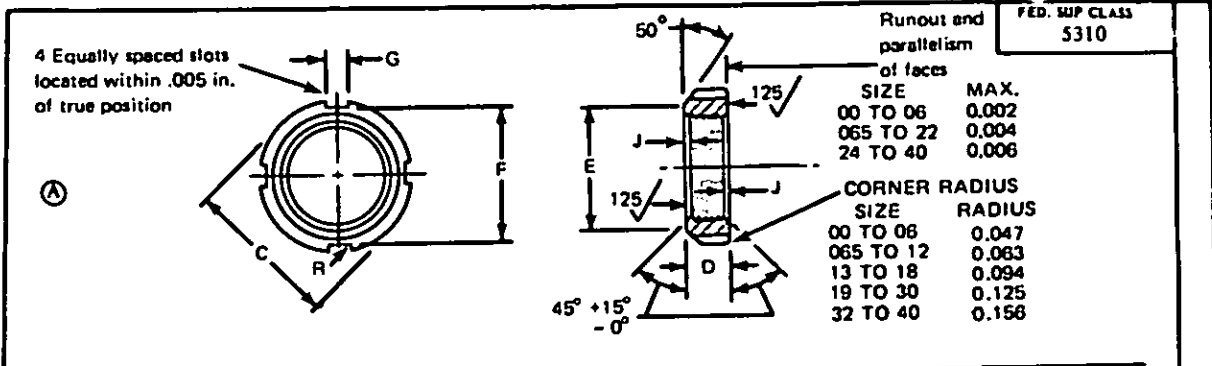


ARMY - MI
NAVY - SA, MC

ARMY - WC, MI, AV
DLA - IS

REVISER ACTIVITIES

Approved for use by all Departments and Agencies of the Department of Defense
unless otherwise indicated. For repetitive use shall be made from this
specification and design applications and for repetitive use shall be made from this



Dash No.	D Thickness		C OD +.005 -.015	E Face dim		J Cham	Slot dimensions (A)			No. per inch	Thread data				Min major dia	
	Min	Max		Min	Max		F +.010 -.020	G			R Max	Minor dia		Pitch dia		
			Min			Max		Min	Max	Min		Max	Min	Max		
00	0.209	0.229	0.750	0.605	0.625	.031	0.625	.120	.130	.010	32	0.3572	0.3606	0.3707	0.3733	0.391
01	0.303	0.323	0.875	0.699	0.719	.031	0.750	.120	.130	.010	32	0.4352	0.4386	0.4487	0.4513	0.469
02	0.303	0.323	1.000	0.793	0.813	.031	0.812	.120	.130	.010	32	0.5522	0.5556	0.5657	0.5687	0.586
03	0.334	0.354	1.125	0.918	0.938	.031	0.937	.120	.130	.010	32	0.6302	0.6336	0.6437	0.6467	0.664
04	0.365	0.385	1.375	1.105	1.125	.031	1.187	.178	.198	.015	32	0.7472	0.7506	0.7607	0.7641	0.781
05	0.396	0.416	1.562	1.261	1.281	.031	1.375	.178	.198	.015	32	0.9352	0.9386	0.9487	0.9521	0.969
06	0.396	0.416	1.750	1.480	1.500	.047	1.562	.178	.198	.015	18	1.1129	1.1189	1.1369	1.1409	1.173
065	0.428	0.448	2.062	1.793	1.813	.047	1.875	.178	.198	.015	18	1.2524	1.2584	1.2764	1.2804	1.3125
07	0.428	0.448	2.062	1.793	1.813	.047	1.875	.178	.198	.015	18	1.3159	1.3219	1.3399	1.3439	1.376
08	0.428	0.448	2.250	1.980	2.000	.047	2.062	.240	.260	.020	18	1.5029	1.5089	1.5269	1.5314	1.563
09	0.428	0.448	2.531	2.261	2.281	.047	2.343	.240	.260	.020	18	1.7069	1.7129	1.7309	1.7354	1.767
10	0.490	0.510	2.687	2.418	2.438	.047	2.500	.240	.260	.020	18	1.9069	1.9129	1.9309	1.9354	1.967
11	0.490	0.510	2.968	2.636	2.656	.047	2.718	.240	.260	.020	18	2.0969	2.1029	2.1209	2.1260	2.157
12	0.521	0.541	3.156	2.824	2.844	.047	2.906	.240	.260	.020	18	2.2999	2.3059	2.3239	2.3290	2.360
13	0.553	0.573	3.375	3.043	3.063	.047	3.125	.240	.260	.020	18	2.4879	2.4939	2.5119	2.5170	2.548
14	0.553	0.573	3.625	3.283	3.313	.047	3.375	.240	.260	.020	18	2.6909	2.6969	2.7149	2.7200	2.751
15	0.584	0.604	3.875	3.814	3.844	.078	3.625	.360	.385	.025	12	2.8428	2.8518	2.8789	2.8843	2.933
16	0.584	0.604	4.156	3.814	3.844	.078	3.906	.360	.385	.025	12	3.0468	3.0558	3.0829	3.0888	3.137
17	0.615	0.635	4.406	4.001	4.031	.078	4.093	.360	.385	.025	12	3.2498	3.2588	3.2859	3.2918	3.340
18	0.678	0.698	4.656	4.251	4.281	.078	4.343	.360	.385	.025	12	3.4368	3.4458	3.4729	3.4803	3.527
19	0.709	0.729	4.937	4.533	4.563	.078	4.625	.360	.385	.025	12	3.6398	3.6488	3.6759	3.6833	3.730
20	0.735	0.760	5.187	4.783	4.813	.078	4.875	.360	.385	.025	12	3.8278	3.8368	3.8639	3.8713	3.918
21	0.735	0.760	5.437	4.970	5.000	.078	5.062	.485	.510	.030	12	4.0318	4.0408	4.0679	4.0762	4.122
22	0.766	0.791	5.718	5.251	5.281	.078	5.343	.485	.510	.030	12	4.2348	4.2438	4.2709	4.2792	4.325
24	0.798	0.823	6.125	5.658	5.688	.078	5.750	.485	.510	.030	12	4.6258	4.6348	4.6619	4.6702	4.716
26	0.860	0.885	6.750	6.158	6.188	.078	6.250	.610	.635	.030	12	5.0158	5.0248	5.0519	5.0602	5.106
28	0.923	0.948	7.093	6.501	6.531	.078	6.593	.610	.635	.030	12	5.4068	5.4158	5.4429	5.4512	5.497
30	0.954	0.979	7.687	7.033	7.063	.078	7.125	.610	.635	.030	12	5.7978	5.8068	5.8339	5.8422	5.888
32	1.016	1.041	8.062	7.398	7.438	.094	7.500	.610	.635	.030	8	6.1487	6.1622	6.2028	6.2119	6.284
34	1.048	1.073	8.656	7.991	8.031	.094	8.093	.610	.635	.030	8	6.5237	6.5372	6.5778	6.5869	6.659
36	1.079	1.104	9.062	8.335	8.375	.094	8.437	.735	.760	.030	8	6.9307	6.9442	6.9848	6.9939	7.066
38	1.110	1.135	9.468	8.741	8.781	.094	8.843	.735	.760	.030	8	7.3367	7.3502	7.3908	7.3999	7.472
40	1.173	1.198	9.843	9.116	9.156	.094	8.218	.735	.760	.030	8	7.7117	7.7252	7.7658	7.7772	7.847

For NOTES see sheet 2

(A) denotes changes

P A NAVY-OS Other Code ARMY-AT AIR FORCE-11	INTERNATIONAL INTEREST	TITLE	MILITARY STANDARD MS19068
		NUTS, PLAIN, ROUND, RETAINING, BALL AND ROLLER BEARING, REGULAR SERIES	
PROCUREMENT SPECIFICATION MIL-N-21337	SUPERSEDES		

APPROVED 7 June 1961 REVISED (A) 3 June 1977

FED. SUP CLASS
5310 (A)

NOTES:

- (A) 1. MATERIALS:
- Carbon steel, AISI nos. C1015 to C1035, C1112 to C1118 or C1212 to C1215 in accordance with FED-STD-66.
 - Corrosion resisting steel, numbers 302, 303 or 304 in accordance with FED-STD-66.
2. HARDNESS:
- Carbon steel nuts shall have a hardness of Rockwell R_B-66-92.
 - Corrosion resisting steel shall have a maximum hardness of Rockwell R_B90.
- (A) 3. PROTECTIVE COATING:
- Carbon steel nuts are available either zinc plated or unplated. Zinc plated nuts shall be plated in accordance with QQ-Z-325, Type II, Class 3. (Cadmium plating in accordance with QQ-P-416, Type II, Class 3 may be furnished until 2 May 1979.
 - Corrosion resisting steel nuts shall be passivated in accordance with QQ-P-35.
4. THREADS: Threads shall be American National Form, Class NS-3B, in accordance with NBS Handbook H28 (1957).
5. SURFACE ROUGHNESS: Surface roughness shall be in accordance with ANSI B46.1-1962.
- (A) 6. MAGNETIC PARTICLE INSPECTION: Inspection shall be in accordance with the procurement specification.
7. DIMENSIONS: All dimensions are in inches. Tolerances; decimals $\pm .010$, angles $\pm 2^\circ$ unless otherwise specified.
- (A) 8. PART NUMBER: The MS part number is the MS number, plus the size and the material number. The material numbers are:
- 1 - carbon steel
 - 2 - zinc plated carbon steel
 - 3 - corrosion resisting steel.
- Examples: MS19068-002
└─ material number
└─ size number
- MS19068-0652
└─ material number
└─ size number
9. WASHERS: See MS 19070 for applicable key washers. Applicable washers should have size numbers corresponding to nut size numbers: e.g., nut size 00 should be used with washer size number 00.
10. OTHER NOTES:
- For design feature purposes, this standard takes precedence over procurement documents referenced herein.
 - Referenced documents shall be of the issue in effect on date of invitations for bids, or request for proposal, except that referenced adopted industry documents shall give the date of the issue adopted.

ARMY - ME
NAVY - SA, MC
USER ACTIVITIES:ARMY - WC, MI, AV
DLA - IS
REVIEWER ACTIVITIES:

This military standard is approved for use by all Departments and Agencies of the Department of Defense. No restriction for all procurement and design applications and for repetitive use shall be made from this document.

APPROVED 7 Jun 61 REVISED (A) For changes see sheets 1 and 2.

P. A. NAVY-OS <small>Other Code</small> ARMY-AT AIR Force-11	INTERNATIONAL INTEREST	TITLE NUTS, PLAIN, ROUND, RETAINING, BALL AND ROLLER BEARING, REGULAR SERIES	MILITARY STANDARD
			MS19068
PROCUREMENT SPECIFICATION MIL-N-21337	SUPERSEDES:		SHEET 2 OF 2

DD FORM 672-1 COORDINATED

U. S. GOVERNMENT PRINTING OFFICE: 1977-70 3-020/3662

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