



THE REQUIREMENTS FOR ACQUIRING THE PRODUCT(S) DESCRIBED HEREIN SHALL CONSIST OF THIS SPECIFICATION SHEET AND THE ISSUE OF THE FOLLOWING SPECIFICATION LISTED IN THAT ISSUE OF THE DODSSS SPECIFIED IN THE SOLICITATION MIL-R-25027

TABLE 1										(a)
SIZE DASH NUMBER	THREAD	A		(b) B		C MIN	D ±.020	F MIN	BEARING SURFACE SQUARENESS MAX	
		MAX	MIN	MAX	MIN					
-04C	4-40UNC-3B	.157	.133	.252	.243	.268	.136	.044	.005	
-06C	6-32UNC-3B	.188	.160	.316	.305	.339	.161	.061	.006	
-08C	8-32UNC-3B	.281	.219	.347	.336	.374	.188	.091	.006	
-3C	10-24UNC-3B	.281	.208	.378	.367	.410	.210	.085	.006	
-3F	10-32UNF-3B	.281	.208	.378	.367	.410	.210	.085	.006	
-4C	1/4-20UNC-3B	.360	.240	.439	.430	.482	.273	.116	.007	
-4F	1/4-28UNF-3B									
-5C	5/16-18UNC-3B	.360	.271	.504	.492	.552	.336	.123	.007	
-5F	5/16-24UNF-3B									
-6C	3/8-16UNC-3B	.469	.318	.566	.553	.622	.398	.153	.008	
-6F	3/8-24UNF-3B									
-7C	7/16-14UNC-3B	.469	.435	.692	.679	.766	.467	.178	.008	
-7F	7/16-20UNF-3B									
-8C	1/2-13UNC-3B	.610	.575	.755	.741	.837	.531	.221	.009	
-8F	1/2-20UNF-3B									
-9C	9/16-12UNC-3B	.704	.623	.880	.865	.978	.594	.243	.010	
-9F	9/16-18UNC-3B									
-10C	5/8-11UNC-3B	.766	.732	.944	.928	1.051	.656	.274	.010	
-10F	5/8-18UNF-3B									
-12C	3/4-10UNC-3B	.891	.855	1.068	1.052	1.191	.782	.316	.010	
-12F	3/4-16UNF-3B									
-14C	7/8-9UNC-3B	1.016	.965	1.257	1.239	1.403	.918	.570	.011	
-14F	7/8-16UNF-3B									
-16C	1-8UNC-3B	1.141	1.010	1.446	1.427	1.615	1.044	.635	.012	
-16F	1-12UNF-3B									
-18C	1 1/8-7UNC-3B	1.266	1.130	1.634	1.614	1.826	1.171	.710	.013	
-18F	1 1/8-12UNF-3B									
-20C	1 1/4-7UNC-3B	1.454	1.300	1.822	1.801	2.038	1.295	.795	.014	
-20F	1 1/4-12UNF-3B									
-22C	1 3/8-6UNC-3B	1.609	1.547	2.011	1.973	2.232	1.447	.890	.015	
-22F	1 3/8-12UNF-3B									
-24C	1 1/2-6UNC-3B	1.640	1.578	2.200	2.159	2.444	1.568	.980	.016	
-24F	1 1/2-12UNF-3B									
-28C	1 3/4-5UNC-3B	2.376	2.250	2.766	2.715	3.075	1.818	1.250	.018	
-32C	2-4 1/2UNC-3B	2.469	2.343	3.142	3.086	3.497	2.065	1.350	.020	
-36C	2 1/4-4 1/2UNC-3B	2.876	2.750	3.518	3.457	3.918	2.328	1.600	.020	
-40C	2 1/2-4UNC-3B	3.204	3.078	4.020	3.875	4.393	2.578	1.860	.020	

(a) BEARING SURFACE SQUARENESS MEASURED IN ACCORDANCE WITH MIL-R-25027

(b) MAXIMUM DIMENSION ACROSS FLATS INCLUDES DEFORMATION DUE TO INSTALLATION OF LOCKING DEVICE

(c) THREAD SIZE 1/4 INCH AND LARGER SHALL BE MARKED IN ACCORDANCE WITH NAS 1347, USING THE SYMBOL "NICU"

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 BID.

Ⓝ DENOTES CHANGES

THIS SPECIFICATION IS APPROVED FOR USE BY ALL DEPARTMENTS AND AGENCIES OF THE DEPARTMENT OF DEFENSE

PREPARING ACTIVITY NAVY - AS

CUSTODIANS ARMY - AV NAVY -

AIR FORCE - 99 DLA -

REVIEW ARMY - AV, NAVY - AS, SH, DLA - IS  
USER

PROJECT NUMBER 5310-1664

# MILITARY SPECIFICATION SHEET

TITLE NLT, SELF-LOCKING, HEXAGON, REGULAR-HEIGHT, (NON-METALLIC INSERT) 250°F, NICKEL-COPPER ALLOY

SPECIFICATION SHEET NUMBER

MS17828J 19 JULY 1989

SUPERSEDING

MS17828H 11 FEB 80

AMSC -

N/A

FSC 5310

DISTRIBUTION STATEMENT A Approved for public release distribution is unlimited

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TABLE II

SIZE DASH NUMBER	AXIAL STRENGTH POUNDS MIN.	MINIMUM ULTIMATE WRENCH TORQUE (IN.-LB.)	WEIGHT LB./100 REF.	MAXIMUM LOCKING TORQUE INSTALLATION OR REMOVAL (IN.-LB.)	MINIMUM BREAKAWAY TORQUE (IN.-LB.)
-04C	520	6	17	PER MIL-N-25027	PER MIL-N-25027
-06C	780	11	31		
-08C	1 250	17	50		
-3C	1 460	29	60		
-3F	1 790	34	60		
-4C	3 900	40	1 13		
-4F	4 000	50			
-5C	6 000	85	1 51		
-5F	6 400	110			
-6C	9 600	140	2 26		
-6F	10 750	190			
-7C	12 000	245	3 89		
-7F	13 070	325			
-8C	19 100	440	5 39		
-8F	19 600	500			
-9C	22 200	550	8 90		
-9F	25 000	710			
-10C	28 900	750	10 40		
-10F	30 300	1 000			
-12C	38 700	1 225	15 03		
-12F	39 300	1 725			
-14C	56 700	2 225	23 80		
-14F	61 300	2 775			
-16C	66 700	3 675	33 82		
-16F	71 500	4 135			
-18C	81 900	5 350	51 36	900	137 0
-18F	90 400	5 975		900	117 0
-20C	115 700	7 350	72 66	1 000	165 0
-20F	119 800	8 375		1 000	143 0
-22C	110 300	7 700	96 46	1 200	200 0
-22F	115 200	8 850		1 200	180 0
-24C	134 000	11 200	125 28	1 400	230 0
-24F	139 000	11 650		1 400	210 0
-28C	205 000	18 000	278 40	1 800	300 0
-32C	233 000	20 000	359 60	2 200	360 0
-36C	390 000	20 000	522 00	2 600	430 0
-40C	500 000	20 000	791 12	3 000	500 0

## NOTES

## ③ MATERIAL

1 NICKEL-COPPER ALLOY (UNS N04400) CONFORMING TO QQ-N-281, CLASS A ANNEALED (HOT FINISH OR COLD DRAWN) OR CLASS B COLD DRAWN

2 THE INSERT SHALL BE IN ACCORDANCE WITH ASTM D4066, COMPOSITION A, TYPE I

LOCKING DEVICE THE LOCKING DEVICE SHALL BE A RING OR COLLAR INSERT CAPABLE OF COMPLETE CIRCUMFERENTIAL THREAD ENGAGEMENT FOR AT LEAST ONE FULL THREAD

THREADS THREADS SHALL BE "RIGHT HAND", UNIFIED COARSE OR UNIFIED FINE IN ACCORDANCE WITH N-28, CLASS 3B FIT EXCEPT THAT THE MINOR DIAMETER REQUIREMENTS OF MIL-S-8879 MAY APPLY

BOLTS OR STUDS FOR MAXIMUM LOCKING TORQUE AND MINIMUM BREAKAWAY TORQUE TEST BOLTS OR STUDS SHALL BE EITHER NICKEL-COPPER-ALUMINUM ALLOY CONFORMING TO MS18116 OR OF CORROSION-RESISTANT STEEL OF THE 300 SERIES CLASS

BREAK ALL SHARP EDGES AND REMOVE ALL BURRS AND SLIVERS

SURFACE TEXTURE IN ACCORDANCE WITH ANSI/ASME B46.1 UNLESS OTHERWISE SPECIFIED, THE SURFACE TEXTURE SHALL NOT EXCEED 125 MICROINCHES

DIMENSIONS ARE IN INCHES UNLESS OTHERWISE SPECIFIED

PREPARING ACTIVITY NAVY - AS	MILITARY SPECIFICATION SHEET	SPECIFICATION SHEET NUMBER
CUSTODIANS ARMY - AV NAVY -	TITLE NUT, SELF-LOCKING, HEXAGON, REGULAR-HEIGHT, (NON-METALLIC INSERT) 250°F, NICKEL-COPPER ALLOY	<b>MS17828J</b> 19 JULY 1989
AIR FORCE - 99 DLA -		SUPERSEDING
REVIEW ARS - AV, NAVY - AS, SH, DLA - IS		MS17828H 11 FEB 80
USER		AMSC - N/A FSC 5310
PROJECT NUMBER 5310-1664		

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SAMPLING FOR EXAMINATION OF BEARING SURFACE SQUAREDNESS SAMPLE NUTS EXAMINED FOR SURFACE SQUAREDNESS SHALL BE AS SPECIFIED IN TABLE III

TABLE III			
SAMPLING FOR EXAMINATION OF BEARING SURFACE SQUAREDNESS			
LOT SIZE NUMBER OF NUTS	SAMPLE SIZE NUMBER TO BE EXAMINED	ACCEPTANCE NUMBER	REJECTION NUMBER
1 TO 150	ALL	--	--
151 TO 1,250	150	0	1
1,251 TO 1,500	200	0	1
1,501 TO 6,300	315	1	2
6,301 TO 16,000	500	2	3
16,001 TO 30,000	800	3	4

EXAMPLE OF PART NUMBER

MS17828-04C

DASH NUMBER FROM TABLE I

BASIC PART NO

INTERCHANGEABILITY RELATIONSHIP MS17828 NUTS ARE UNIVERSALLY INTERCHANGEABLE WITH MIL-N-24129/1 (SHIPS) AND MS17828 (SHIPS)

TABLE IV		
INTERCHANGEABILITY TABLE		UNIVERSALLY INTERCHANGEABLE
INACTIVE AND CANCELLED		
MS17828 (SHIPS)	MIL-N-24129/1A (SHIPS)	MS17828
-----	M24129/1-04C	MS17828-04C
-----	M24129/1-06C	MS17828-06C
-----	M24129/1-08C	MS17828-08C
-----	M24129/1-3C	MS17828-3C
-----	M24129/1-3F	MS17828-3F
MS17828-4C	M24129/1-4C	MS17828-4C
MS17828-4F	M24129/1-4F	MS17828-4F
MS17828-5C	M24129/1-5C	MS17828-5C
MS17828-5F	M24129/1-5F	MS17828-5F
MS17828-6C	M24129/1-6C	MS17828-6C
MS17828-6F	M24129/1-6F	MS17828-6F
MS17828-7C	M24129/1-7C	MS17828-7C
MS17828-7F	M24129/1-7F	MS17828-7F
MS17828-8C	M24129/1-8C	MS17828-8C
MS17828-8F	M24129/1-8F	MS17828-8F
MS17828-9C	M24129/1-9C	MS17828-9C
MS17828-9F	M24129/1-9F	MS17828-9F
MS17828-10C	M24129/1-10C	MS17828-10C
MS17828-10F	M24129/1-10F	MS17828-10F
MS17828-12C	M24129/1-12C	MS17828-12C
MS17828-12F	M24129/1-12F	MS17828-12F
MS17828-14C	M24129/1-14C	MS17828-14C
MS17828-14F	M24129/1-14F	MS17828-14F
MS17828-16C	M24129/1-16C	MS17828-16C
MS17828-16F	M24129/1-16F	MS17828-16F
MS17828-18C	M24129/1-18C	MS17828-18C
MS17828-18F	M24129/1-18F	MS17828-18F
MS17828-20C	M24129/1-20C	MS17828-20C
MS17828-20F	M24129/1-20F	MS17828-20F
MS17828-22C	M24129/1-22C	MS17828-22C
MS17828-22F	M24129/1-22F	MS17828-22F
MS17828-24C	M24129/1-24C	MS17828-24C
MS17828-24F	M24129/1-24F	MS17828-24F
MS17828-28C	M24129/1-28C	MS17828-28C
MS17828-28F	M24129/1-28F	MS17828-28F
MS17828-32C	M24129/1-32C	MS17828-32C
MS17828-32F	M24129/1-32F	MS17828-32F
MS17828-36C	M24129/1-36C	MS17828-36C
MS17828-36F	M24129/1-36F	MS17828-36F
MS17828-40C	M24129/1-40C	MS17828-40C

PREPARING ACTIVITY NAVY - AS

CUSTODIANS ARMY-AV NAVY-

AIR FORCE-99 DLA-

REVIEW ARMY - AV, NAVY - AS, SH, DLA - IS  
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PROJECT NUMBER 5310-1664

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REGULAR-HEIGHT, (NON-METALLIC  
INSERT) 250°F, NICKEL-COPPER  
ALLOY

SPECIFICATION SHEET NUMBER

**MS17828J** 19 JULY 1989

SUPERSEDING

MS17828H 11 FEB 80

AMSC- N/A

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