

INCH-POUND

MS51552A

11 September 1997

SUPERSEDING

MS51552

15 September 1987

## MILITARY STANDARD

NUT, SELF-LOCKING, PLATE, RIGHT ANGLE  
FLOATING, 125 KSI Ft<sub>u</sub> 450°F

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 STANDARD, AND THE LATEST ISSUE OF THE FOLLOWING SPECIFICATION LISTED IN THAT ISSUE OF THE DEPARTMENT OF INDEX OF SPECIFICATIONS AND STANDARDS (DODISS) SPECIFIED IN THE SOLICITATION: THE PROCUREMENT SPECIFICATION MIL-N-25027.

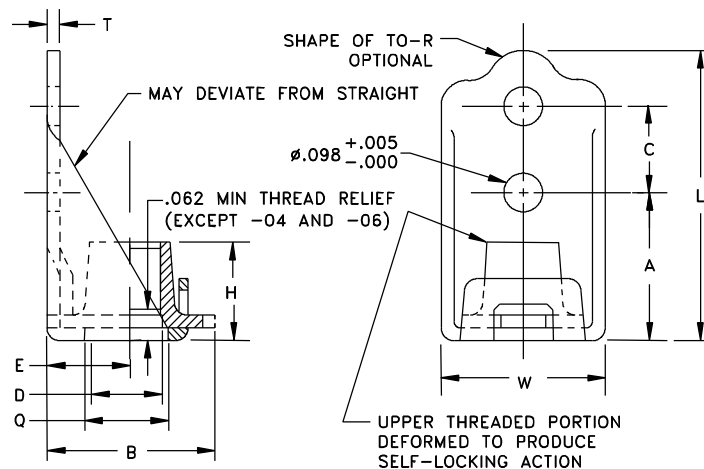


TABLE I DIMENSIONS

THREAD SIZE	A ±.005	B (MAX)	C ±.002	D (MIN)	E ±.005	H (MAX)	L (MAX)	Q (REF)	T (REF)	W (MAX)	AXIAL STRENGTH LBS/MIN	APPROX WEIGHT LBS/100
.1120-40UNJC-3B	.325	.347	.219	-	.170	.153	.684	.180	.025	.330	750	.30
.1380-32UNJC-3B	.325	.347	.219	-	.170	.170	.684	.180	.025	.330	1,130	.32
.1640-32UNJC-3B	.375	.425	.219	.168	.210	.250	.734	.230	.032	.420	1,720	.52
.1900-32UNJF-3B	.375	.425	.219	.194	.210	.250	.734	.230	.032	.420	2,460	.54

TABLE II. DASH NUMBERS.

THREAD SIZE	DASH NUMBERS		
	STEEL		CRES
	NON DRY FILM LUBE	DRY FILM LUBE	DRY FILM LUBE
.1120-40UNJC-3B	NO4	LO4	CLO4
.1380-32UNJC-3B	NO6	LO6	CLO6
.1640-32UNJC-3B	NO8	LO8	CLO8
.1900-32UNJF-3B	N3	L3	CL3

AMSC N/A

1 of 3

FSC 5310

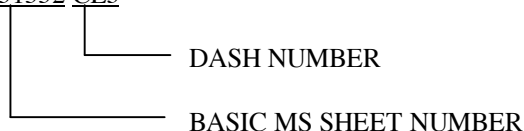
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## MS51552A

## REQUIREMENTS:

1. MATERIAL: CARBON, STEEL, GRADES 1035 (UNS G10350), 1040 (G10400) OR 1050 (UNS G10500) IN ACCORDANCE WITH ASTM A29.  
ALLOY STEEL, GRADES 4130 (UNS G41300), 4340 (UNS G43400), OR 8740 (UNS G87400) IN ACCORDANCE WITH ASTM A29.  
CORROSION-RESISTANT STEEL, NUT AND BASKET, TYPE A286 (UNS S66286) IN ACCORDANCE WITH AMS 5525, AMS 5732, AMS 5737, OR BASKET TYPE 321 (UNS S32100), IN ACCORDANCE WITH AMS 5510.
2. PROTECTIVE COATING AND SURFACE TREATMENT : STEEL NUTS, CADMIUM PLATE IN ACCORDANCE WITH QQ-P-416, TYPE II, CLASS 2. CRES NUTS SHALL BE CLEANED DESCALED AND PASSIVATED IN ACCORDANCE WITH ASTM A967.
3. HARDNESS: 49 HRC, MAX.
4. LUBRICANT: MOLYBDENUM DISULFIDE DRY FILM LUBRICANT IN ACCORDANCE WITH MIL-N-25027. OTHER LUBRICANTS SOLUBLE IN CLEANER SPECIFIED IN THE PROCUREMENT SPECIFICATION. CRES NUTS LIMITED TO FIVE (5) REUSE CYCLES.
5. SURFACE TEXTURE: SURFACE TEXTURE SHALL BE Ra 125 MICRO INCHES MAXIMUM IN ACCORDANCE WITH ASME B46.1.
6. FOAT OF NUT ELEMENT: FLOAT OF NUT ELEMENT PORTION OF ASSEMBLY SHALL NOT BE LESS THAN .020 RADIALLY FROM CENTERED POSITION. NUT ELEMENT SHALL BE CAPABLE OF ENGAGEMENT WITH BOLT IN THE MAXIMUM MISALIGNED POSITION.
7. THREADS: THREADS SHALL BE IN ACCORDANCE WITH MIL-S-8879 BEFORE LUBRICATION. THREAD ACCEPTABILITY SHALL BE IN ACCORDANCE WITH ASME B1.3, SYSTEM 21.
8. PART NUMBER: THE PART NUMBER CONSISTS OF THE BASIC MS SHEET NUMBER FOLLOWED BY A MATERIAL CODE AND DASH NUMBER FROM TABLE II.

EXAMPLE: MS51552 CL3



MS51552CL3 – INDICATES NUT, SELF-LOCKING, PLATE, RIGHT ANGLE, CRES, 125 KSI FTU, 450°F DRY FILM LUBRICATED, THREAD SIZE; .1900-32 UNJF-3B.

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NOTES:

1. ALL DIMENSIONS ARE INCHES, UNLESS OTHERWISE SPECIFIED.
2. PLATE NUTS MANUFACTURED PRIOR TO REVISION "A" ARE ACCEPTABLE UP TO TWO YEARS FROM DATE OF REVISION "A".
3. THERE IS NO QPL ASSOCIATED WITH MS51552.
4. DESIGN AND USAGE LIMITATIONS: THESE NUTS ARE DESIGNED TO DEVELOP A TENSILE STRENGTH OF 125 KSI BASED ON THE CROSS SECTIONAL AREA AT THE BASIC ROOT DIAMETER OF THE THREAD. THESE NUTS ARE DESIGNED TO BE USED WITH CLASS 3A THREADS. THESE NUTS SHALL BE USED IN ACCORDANCE WITH THE LIMITATIONS OF MS33588.
5. 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.
6. REFERENCED GOVERNMENT (OR NON-GOVERNMENT) DOCUMENTS OF THE ISSUE LISTED IN THAT ISSUE OF THE DEPARTMENT OF DEFENSE INDEX OF SPECIFICATION AND STANDARDS (DODISS) SPECIFIED IN THE SOLICITATION FORM A PART OF THE STANDARD TO THE EXTENT SPECIFIED HEREIN.

CUSTODIANS:

ARMY - AR  
NAVY - AS  
AIR FORCE - 99

PREPARING ACTIVITY:

DLA - IS

(PROJECT 5310-2335)

REVIEW ACTIVITIES:

ARMY - AT, AV, CR, MI