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REV.
B

AS9296

FEDERAL SUPPLY CLASS
5306

RATIONALE

ADD Ø TO STRAIGHTNESS FEATURE CONTROL FRAME, ADD MARKING EDGE DISTANCE NOTE, UPDATE POSITION FEATURE CONTROL FRAME, UPDATE DRAWING NOTE 4, AND GENERAL EDITORIAL UPDATE.

NOTICE

THE INITIAL SAE PUBLICATION OF THIS DOCUMENT WAS TAKEN DIRECTLY FROM U.S. MILITARY STANDARD MS9296(ASG), NOTICE 1. THIS SAE STANDARD RETAINS THE SAME PART NUMBERS ESTABLISHED BY THE ORIGINAL MILITARY DOCUMENT.

ANY REQUIREMENTS ASSOCIATED WITH QUALIFIED PRODUCTS LISTS (QPL) MAY CONTINUE TO BE MANDATORY FOR DOD CONTRACTS. REQUIREMENTS RELATING TO QPL'S HAVE NOT BEEN ADOPTED BY THE SAE FOR THIS STANDARD AND ARE NOT PART OF THIS SAE DOCUMENT.

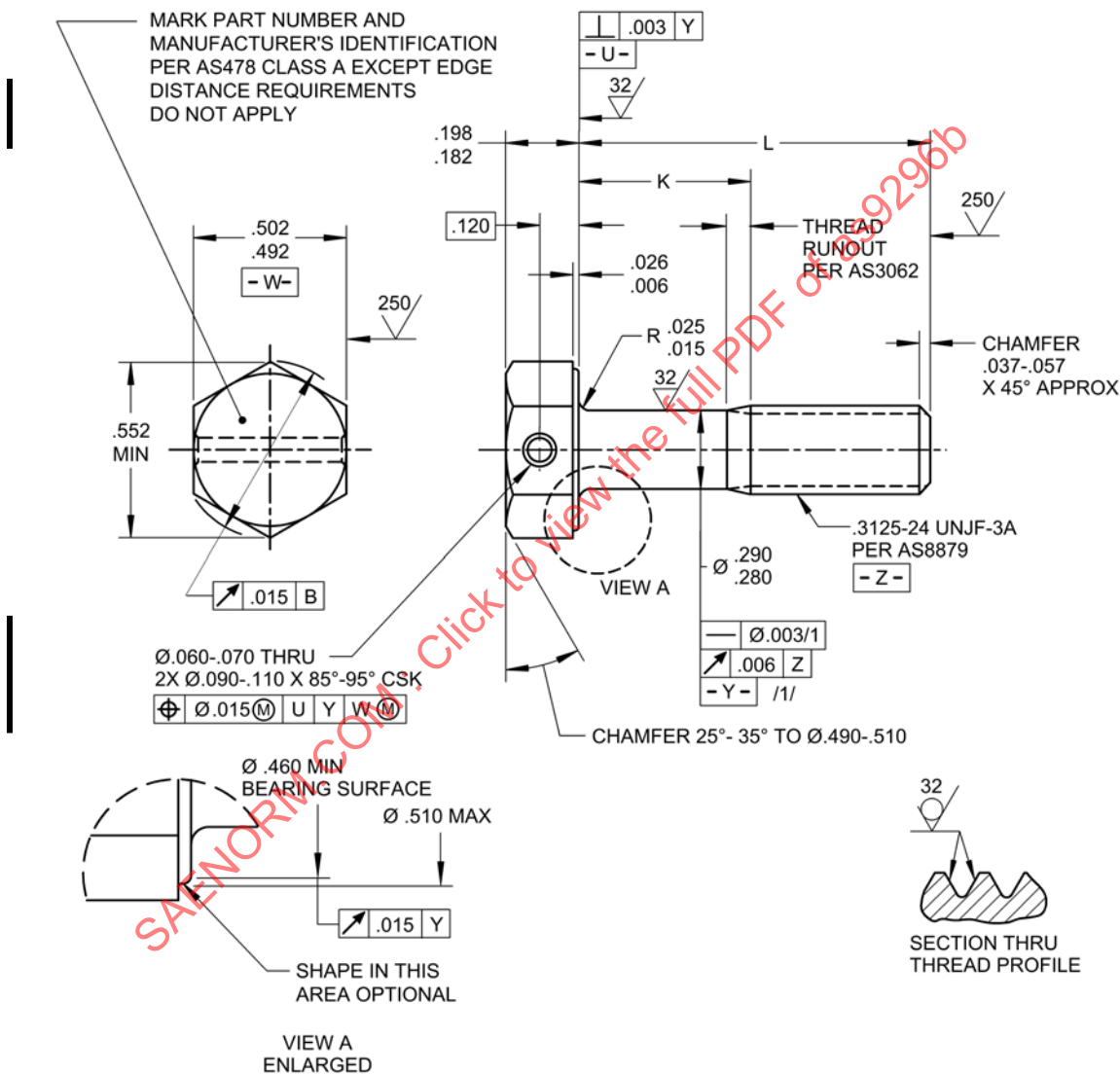


FIGURE 1 - BOLT

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CUSTODIAN: E-25

PROCUREMENT SPECIFICATION: AS7452 /3/



AEROSPACE STANDARD

BOLT, MACHINE - HEXAGON HEAD, DRILLED
1 HOLE, PD SHANK, BLACK OXIDE, STEEL
UNS G87400, 125 KSI MIN, .3125-24 UNJF-3A

AS9296
SHEET 1 OF 3

REV.
B

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ISSUED 1999-04 REAFFIRMED 2004-07 REVISED 2015-06

TABLE 1 - PART NUMBERS AND DIMENSIONS

PART NUMBER	L	K	APPROX. MASS LB/100	PART NUMBER	L	K	APPROX. MASS LB/100
MS9296-04	.490-.510	.088-.108	2.12	MS9296-32	2.740-2.760	1.815-1.875	6.17
MS9296-05	.552-.572	.088-.108	2.23	MS9296-33	2.865-2.885	1.940-2.000	6.40
MS9296-06	.615-.635	.088-.108	2.34	MS9296-34	2.990-3.010	2.065-2.125	6.62
MS9296-07	.678-.698	.088-.108	2.45	MS9296-35	3.115-3.135	2.190-2.250	6.85
MS9296-08	.740-.760	.088-.108	2.56	MS9296-36	3.240-3.260	2.315-2.375	7.08
MS9296-09	.802-.822	.088-.108	2.67	MS9296-37	3.365-3.385	2.440-2.500	7.30
MS9296-10	.865-.885	.088-.108	2.79	MS9296-38	3.490-3.510	2.565-2.625	7.53
MS9296-11	.928-.948	.088-.108	2.90	MS9296-39	3.615-3.635	2.690-2.750	7.75
MS9296-12	.990-1.010	.088-.125	3.01	MS9296-40	3.740-3.760	2.815-2.875	7.98
MS9296-13	1.052-1.072	.128-.188	3.13	MS9296-41	3.865-3.885	2.940-3.000	8.20
MS9296-14	1.115-1.135	.190-.250	3.24	MS9296-42	3.990-4.010	3.065-3.125	8.43
MS9296-15	1.178-1.198	.252-.312	3.35	MS9296-43	4.115-4.135	3.190-3.250	8.66
MS9296-16	1.240-1.260	.315-.375	3.46	MS9296-44	4.240-4.260	3.315-3.375	8.88
MS9296-17	1.302-1.322	.378-.438	3.58	MS9296-45	4.365-4.385	3.440-3.500	9.11
MS9296-18	1.365-1.385	.440-.500	3.69	MS9296-46	4.490-4.510	3.565-3.625	9.33
MS9296-19	1.428-1.448	.502-.562	3.80	MS9296-47	4.615-4.635	3.690-3.750	9.56
MS9296-20	1.490-1.510	.565-.625	3.92	MS9296-48	4.740-4.760	3.815-3.875	9.78
MS9296-21	1.552-1.572	.628-.688	4.03	MS9296-49	4.865-4.885	3.940-4.000	10.01
MS9296-22	1.615-1.635	.690-.750	4.14	MS9296-50	4.990-5.010	4.065-4.125	10.24
MS9296-23	1.678-1.698	.752-.812	4.25	MS9296-51	5.115-5.135	4.190-4.250	10.46
MS9296-24	1.740-1.760	.815-.875	4.37	MS9296-52	5.240-5.260	4.315-4.375	10.69
MS9296-25	1.865-1.885	.940-1.000	4.59	MS9296-53	5.365-5.385	4.440-4.500	10.91
MS9296-26	1.990-2.010	1.065-1.125	4.82	MS9296-54	5.490-5.510	4.565-4.625	11.14
MS9296-27	2.115-2.135	1.190-1.250	5.04	MS9296-55	5.615-5.635	4.690-4.750	11.36
MS9296-28	2.240-2.260	1.315-1.375	5.27	MS9296-56	5.740-5.760	4.815-4.875	11.59
MS9296-29	2.365-2.385	1.440-1.500	5.50	MS9296-57	5.865-5.885	4.940-5.000	11.81
MS9296-30	2.490-2.510	1.565-1.625	5.72	MS9296-58	5.990-6.010	5.065-5.125	12.04
MS9296-31	2.615-2.635	1.690-1.750	5.95				

NOTES:

- /1/ FOR PARTS NUMBERS MS9296-04 THRU MS9296-20 DATUM **Z** SHALL REPLACE DATUM **Y**.
2. MATERIAL: STEEL PER AMS6322 (UNS G87400).
- /3/ PROCUREMENT SPECIFICATION: AS7452, EXCEPT HEAD SHALL BE UPSET.
4. HEAD TO SHANK FILLET SHALL BE COLD ROLLED AFTER HEAT TREATMENT. COLD ROLLING SHALL BE SUFFICIENT TO REMOVE ALL VISUAL EVIDENCE OF GRINDING OR TOOL MARKS.
5. FINISH: BLACK OXIDE TREATMENT PER AMS2485.
6. MAGNETIC PARTICLE INSPECTION PER ASTM E1444.
7. SURFACE TEXTURE: SYMBOLS PER ASME Y14.36M. REQUIREMENTS PER ASME B46.1. UNLESS OTHERWISE SPECIFIED, SURFACES TO BE 125 MICROINCHES Ra.
8. BREAK SHARP EDGES .003 TO .015, UNLESS OTHERWISE SPECIFIED.
9. DIMENSIONS ARE IN INCHES.
10. DIMENSIONING AND TOLERANCING PER ANSI Y14.5M-1982 (ASME PUBLICATION).
11. DO NOT USE UNASSIGNED PART NUMBERS.

	AEROSPACE STANDARD	AS9296 SHEET 2 OF 3	REV. B
	BOLT, MACHINE - HEXAGON HEAD, DRILLED 1 HOLE, PD SHANK, BLACK OXIDE, STEEL UNS G87400, 125 KSI MIN, .3125-24 UNJF-3A		