

REV.  
C

AS9687™

FEDERAL SUPPLY CLASS  
5306

RATIONALE

FIGURE REDRAWN TO ASME Y14.5-2018, LEAD CHAMFERS TO AS1132, SPECS UPDATED NOTICE.

NOTICE

THE INITIAL SAE PUBLICATION OF THIS DOCUMENT WAS TAKEN DIRECTLY FROM U.S. MILITARY STANDARD MS9687, 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.

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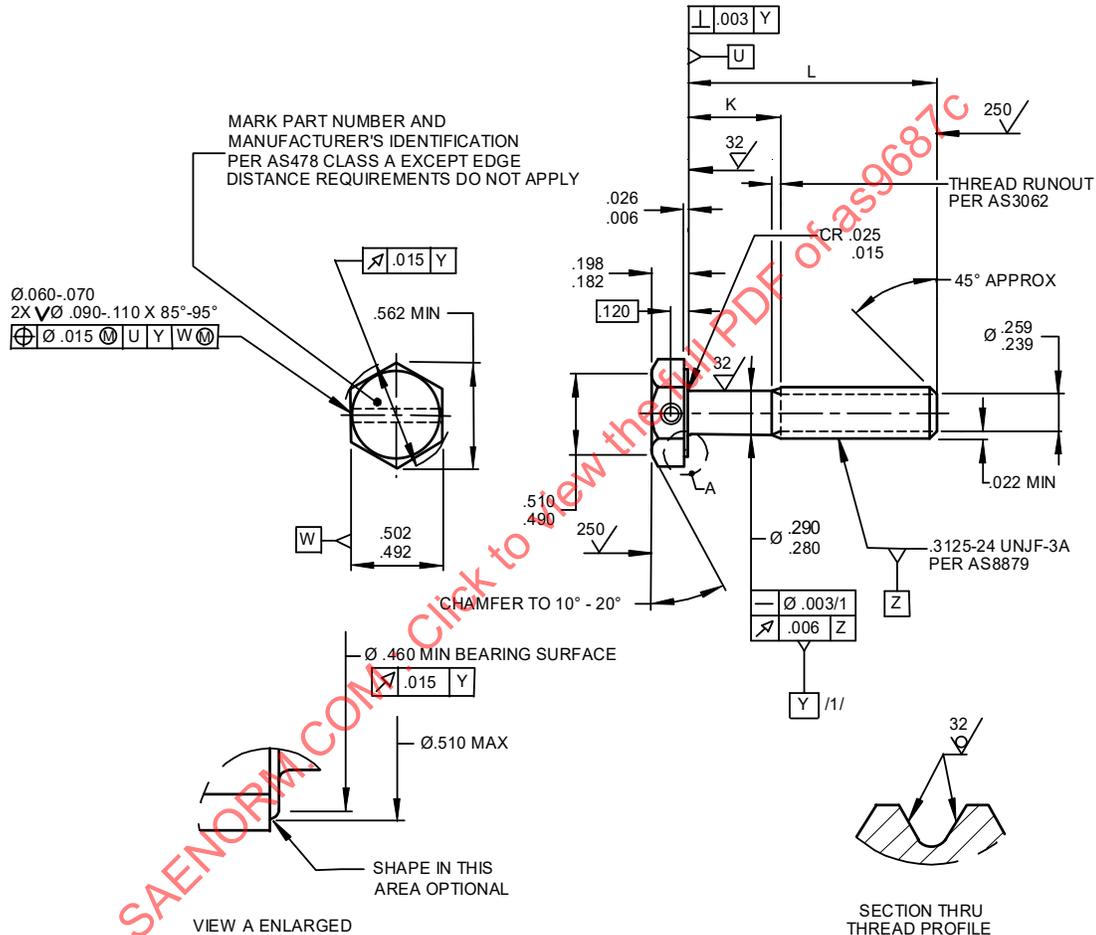
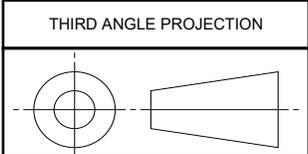


FIGURE 1 - BOLT

For more information on this standard, visit  
<https://www.sae.org/standards/content/AS9687C/>



CUSTODIAN: E-25

PROCUREMENT SPECIFICATION: AS7459



**AEROSPACE STANDARD**

BOLT, MACHINE - HEXAGON HEAD, DRILLED,  
1 HOLE, PD SHANK, STEEL, UNS K14675,  
DIFFUSED NICKEL-CADMIUM PLATE,  
195 KSI MIN, .3125-24 UNJF-3A

AS9687™  
SHEET 1 OF 3

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ISSUED 1998-08 REAFFIRMED 2007-06 REVISED 2022-08

**TABLE 1 - PART NUMBERS AND DIMENSIONS**

PART NO.	L	K	APPROX MASS LB/100	PART NO.	L	K	APPROX MASS LB/100
MS9687-04	.490- .510	.088- .108	2.12	MS9687-34	2.740-2.760	1.815-1.875	6.17
MS9687-05	.552- .572	.088- .108	2.23	MS9687-35	2.865-2.885	1.940-2.000	6.40
MS9687-06	.615- .635	.088- .108	2.34	MS9687-36	2.990-3.010	2.065-2.125	6.62
MS9687-07	.678- .698	.088- .108	2.45	MS9687-37	3.115-3.135	2.190-2.250	6.85
MS9687-08	.740- .760	.088- .108	2.56	MS9687-38	3.240-3.260	2.315-2.375	7.08
MS9687-09	.802- .822	.088- .108	2.67	MS9687-39	3.365-3.385	2.440-2.500	7.30
MS9687-10	.865- .885	.088- .108	2.79	MS9687-40	3.490-3.510	2.565-2.625	7.53
MS9687-11	.928- .948	.088- .108	2.90	MS9687-41	3.615-3.635	2.690-2.750	7.75
MS9687-12	.990-1.010	.088- .125	3.01	MS9687-42	3.740-3.760	2.815-2.875	7.98
MS9687-13	1.052-1.072	.128- .188	3.13	MS9687-43	3.865-3.885	2.940-3.000	8.20
MS9687-14	1.115-1.135	.190- .250	3.24	MS9687-44	3.990-4.010	3.065-3.125	8.43
MS9687-15	1.178-1.198	.252- .312	3.35	MS9687-45	4.115-4.135	3.190-3.250	8.66
MS9687-16	1.240-1.260	.315- .375	3.46	MS9687-46	4.240-4.260	3.315-3.375	8.88
MS9687-17	1.302-1.322	.375- .438	3.58	MS9687-47	4.365-4.385	3.440-3.500	9.11
MS9687-18	1.365-1.385	.440- .500	3.69	MS9687-48	4.490-4.510	3.565-3.625	9.33
MS9687-19	1.428-1.448	.502- .562	3.80	MS9687-49	4.615-4.635	3.690-3.750	9.56
MS9687-20	1.490-1.510	.565- .625	3.92	MS9687-50	4.740-4.760	3.815-3.875	9.78
MS9687-21	1.552-1.572	.628- .688	4.03	MS9687-51	4.865-4.885	3.940-4.000	10.01
MS9687-22	1.615-1.635	.690- .750	4.14	MS9687-52	4.990-5.010	4.065-4.125	10.24
MS9687-23	1.678-1.698	.752- .812	4.25	MS9687-53	5.115-5.135	4.190-4.250	10.46
MS9687-24	1.740-1.760	.815- .875	4.37	MS9687-54	5.240-5.260	4.315-4.375	10.69
MS9687-25	1.802-1.822	.878- .938	4.48	MS9687-55	5.365-5.385	4.440-4.500	10.91
MS9687-26	1.865-1.885	.940-1.000	4.59	MS9687-56	5.490-5.510	4.565-4.625	11.14
MS9687-27	1.928-1.948	1.002-1.062	4.71	MS9687-57	5.615-5.635	4.690-4.750	11.36
MS9687-28	1.990-2.010	1.065-1.125	4.82	MS9687-58	5.740-5.760	4.815-4.875	11.59
MS9687-29	2.115-2.135	1.190-1.250	5.04	MS9687-59	5.865-5.885	4.940-5.000	11.81
MS9687-30	2.240-2.260	1.315-1.375	5.27	MS9687-60	5.990-6.010	5.065-5.125	12.04
MS9687-31	2.365-2.385	1.440-1.500	5.50				
MS9687-32	2.490-2.510	1.565-1.625	5.72				
MS9687-33	2.615-2.635	1.690-1.750	5.95				

**NOTICE**

THIS DOCUMENT REFERENCES A PART WHICH CONTAINS CADMIUM AS A PLATING MATERIAL. CONSULT LOCAL OFFICIALS IF YOU HAVE QUESTIONS CONCERNING CADMIUM'S USE.

**NOTES:**

- 1/ FOR PART NUMBERS MS9687-04 THROUGH MS9687-19, DATUM **Z** SHALL REPLACE DATUM **Y**.
2. MATERIAL: LOW ALLOY STEEL AMS6304 (COMPOSITION SIMILAR TO UNS K14675).
3. PROCUREMENT SPECIFICATION: AS7459.
4. FINISH: DIFFUSED NICKEL-CADMIUM PLATE AMS2416. DIMENSIONS APPLY AFTER PLATING. CONTACT POINTS PERMISSIBLE. PD MAY BE REDUCED .0012 MAXIMUM BEFORE PLATING.
5. MAGNETIC PARTICLE INSPECTION PER ASTM E1444/E1444M BEFORE PLATING.
6. INCOMPLETE THREADS NOT TO ENTER FILLET.
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. DIMENSIONING AND TOLERANCING PER ASME Y14.5-2018.
10. DIMENSIONS ARE IN INCHES.
11. UNLESS OTHERWISE SPECIFIED, PART INVENTORY MANUFACTURED TO PREVIOUS REVISIONS OF THE APPLICABLE DRAWING OR SPECIFICATION MAY BE PROCURED AND USED UNTIL STOCK IS DEPLETED.
12. DO NOT USE UNASSIGNED PART NUMBERS.

	<b>AEROSPACE STANDARD</b> BOLT, MACHINE - HEXAGON HEAD, DRILLED, 1 HOLE, PD SHANK, STEEL, UNS K14675, DIFFUSED NICKEL-CADMIUM PLATE, 195 KSI MIN, .3125-24 UNJF-3A	<b>AS9687™</b> SHEET 2 OF 3	<b>REV.</b> <b>C</b>