

RATIONALE

RESTORE ORIGINAL MAGNETIC PARTICLE TEST REQUIREMENT, CORRECT L DIM FOR MS9928-24, REVISE LIGHTENING HOLE CONFIGURATION TO ALLOW OPTIONAL SHAPE, ADD EDGE DISTANCE EXCEPTION FOR HEAD MARKING, UPDATE THREADS TO AS8879, UPDATE COLD ROLLING DRAWING NOTE, UPDATE SURFACE FINISH REQUIREMENTS, DELETE .015 MAX RADIUS AT BASE OF WRENCH PAD, AND FIGURE 1 REDRAWN.

NOTICE

THE INITIAL SAE PUBLICATION OF THIS DOCUMENT WAS TAKEN DIRECTLY FROM U.S. MILITARY STANDARD MS9928A. 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.

REV.
B

AS9928™

SAE Technical Standards Board Rules provide that: "This report is published by SAE to advance the state of technical and engineering sciences. The use of this report is entirely voluntary, and its applicability and suitability for any particular use, including any patent infringement arising therefrom, is the sole responsibility of the user." SAE reviews each technical report at least every five years at which time it may be revised, reaffirmed, stabilized, or cancelled. SAE invites your written comments and suggestions.

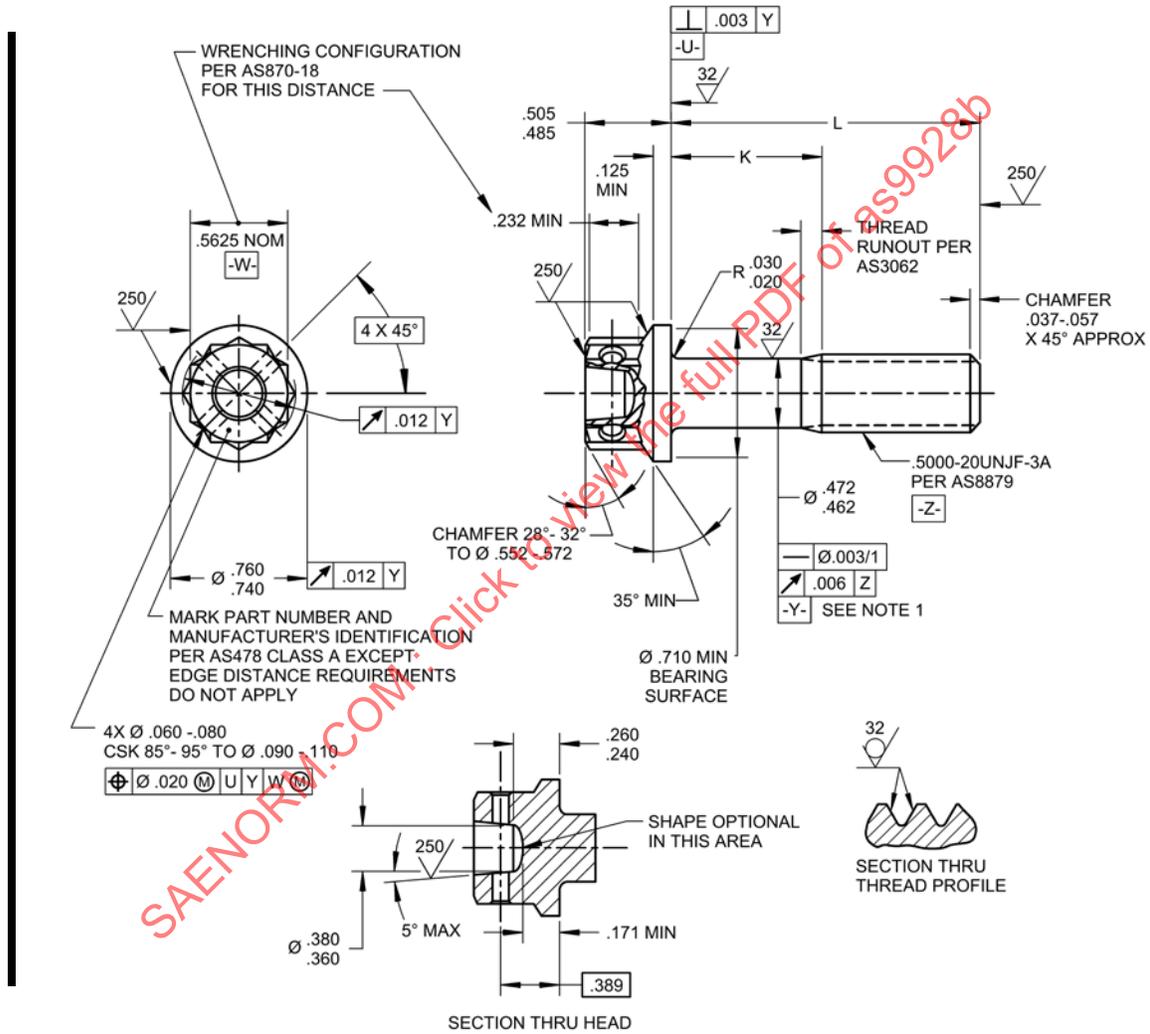
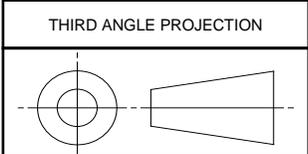


FIGURE 1 - BOLT

SAE values your input. To provide feedback on this Technical Report, please visit <http://www.sae.org/technical/standards/AS9928B>



CUSTODIAN: E-25

PROCUREMENT SPECIFICATION: AS7452 /3/



AEROSPACE STANDARD

BOLT, MACHINE - DOUBLE HEXAGON EXTENDED WASHER HEAD, DRILLED, PD SHANK, CADMIUM PLATED, STEEL, UNS G87400, 125 KSI MIN, .5000-20 UNJF-3A

AS9928™
SHEET 1 OF 3

REV.
B

TABLE 1 - PART NUMBERS AND DIMENSIONS

PART NO.	L	K	APPROX. MASS LB/100	PART NO.	L	K	APPROX. MASS LB/100
MS9928-03	.740-.760	.105-.125	7.25	MS9928-30	2.865-2.885	1.565-1.625	17.54
MS9928-04	.802-.822	.105-.125	7.56	MS9928-31	2.990-3.010	1.690-1.750	18.14
MS9928-05	.865-.885	.105-.125	7.86	MS9928-32	3.115-3.135	1.815-1.875	18.75
MS9928-06	.928-.948	.105-.125	8.16	MS9928-33	3.240-3.260	1.940-2.000	19.35
MS9928-07	.990-1.010	.105-.125	8.47	MS9928-34	3.365-3.385	2.065-2.125	19.95
MS9928-08	1.052-1.072	.105-.125	8.77	MS9928-35	3.490-3.510	2.190-2.250	20.54
MS9928-09	1.115-1.135	.105-.125	9.07	MS9928-36	3.615-3.635	2.315-2.375	21.17
MS9928-10	1.178-1.198	.105-.125	9.37	MS9928-37	3.740-3.760	2.440-2.500	21.77
MS9928-11	1.240-1.260	.105-.125	9.67	MS9928-38	3.865-3.885	2.565-2.625	22.32
MS9928-12	1.302-1.322	.105-.125	9.97	MS9928-39	3.990-4.010	2.690-2.750	22.98
MS9928-13	1.365-1.385	.105-.125	10.27	MS9928-40	4.115-4.135	2.815-2.875	23.59
MS9928-14	1.428-1.448	.128-.188	10.57	MS9928-41	4.240-4.260	2.940-3.000	24.16
MS9928-15	1.490-1.510	.190-.250	10.87	MS9928-42	4.365-4.385	3.065-3.125	24.79
MS9928-16	1.552-1.572	.252-.312	11.18	MS9928-43	4.490-4.510	3.190-3.250	25.40
MS9928-17	1.615-1.635	.315-.375	11.49	MS9928-44	4.615-4.635	3.315-3.375	26.01
MS9928-18	1.678-1.698	.378-.438	11.79	MS9928-45	4.740-4.760	3.440-3.500	26.61
MS9928-19	1.740-1.760	.440-.500	12.09	MS9928-46	4.865-4.885	3.565-3.625	27.22
MS9928-20	1.802-1.822	.502-.562	12.40	MS9928-47	4.990-5.010	3.690-3.750	27.82
MS9928-21	1.865-1.885	.565-.625	12.70	MS9928-48	5.115-5.135	3.815-3.875	28.43
MS9928-22	1.928-1.948	.628-.688	13.00	MS9928-49	5.240-5.260	3.940-4.000	29.22
MS9928-23	1.990-2.010	.690-.750	13.31	MS9928-50	5.365-5.385	4.065-4.125	29.61
MS9928-24	2.115-2.135	.815-.875	13.91	MS9928-51	5.490-5.510	4.190-4.250	30.24
MS9928-25	2.240-2.260	.940-1.000	14.51	MS9928-52	5.615-5.635	4.315-4.375	30.85
MS9928-26	2.365-2.385	1.065-1.125	15.11	MS9928-53	5.740-5.760	4.440-4.500	31.45
MS9928-27	2.490-2.510	1.190-1.250	15.72	MS9928-54	5.865-5.885	4.565-4.625	32.05
MS9928-28	2.615-2.635	1.315-1.375	16.33	MS9928-55	5.990-6.010	4.690-4.750	32.66
MS9928-29	2.740-2.760	1.440-1.500	16.93				

NOTES:

NOTICE

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

- 1/ FOR PART NUMBERS MS9928-03 THRU MS9928-24 DATUM **Z** SHALL REPLACE DATUM **Y**.
2. MATERIAL: LOW ALLOY STEEL AMS6322 (UNS G87400).
- 3/ PROCUREMENT SPECIFICATION AS7452, EXCEPT HEAD SHALL BE UPSET.
4. HEAD TO SHANK FILET RADIUS: 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: CADMIUM PLATE AMS2400. DIMENSIONS ARE AFTER PLATING.
6. MAGNETIC PARTICLE INSPECTION PER ASTM E1444/E1444M AFTER PLATING.

	AEROSPACE STANDARD BOLT, MACHINE - DOUBLE HEXAGON EXTENDED WASHER HEAD, DRILLED, PD SHANK, CADMIUM PLATED, STEEL, UNS G87400, 125 KSI MIN, .5000-20 UNJF-3A	AS9928™ SHEET 2 OF 3	REV. B