

REV. C

SAE AS9219

RATIONALE

FEDERAL SUPPLY CLASS 5306

GENERAL FORMAT REVISIONS. ADD OPTIONAL SHAPE AT BOTTOM OF LIGHTENING HOLE, ADD EXCEPTION TO EDGE DISTANCE REQUIREMENTS FOR HEAD MARKING, RELOCATE RUNOUT REQUIREMENT FOR WRENCHING ELEMENT, ADD AS3062, ADD DATUM REQUIREMENTS FOR -.04 THRU -.18 LENGTHS (NEW NOTE 1).

NOTICE

THE INITIAL SAE PUBLICATION OF THIS DOCUMENT WAS TAKEN DIRECTLY FROM U.S. MILITARY STANDARD MS9219, 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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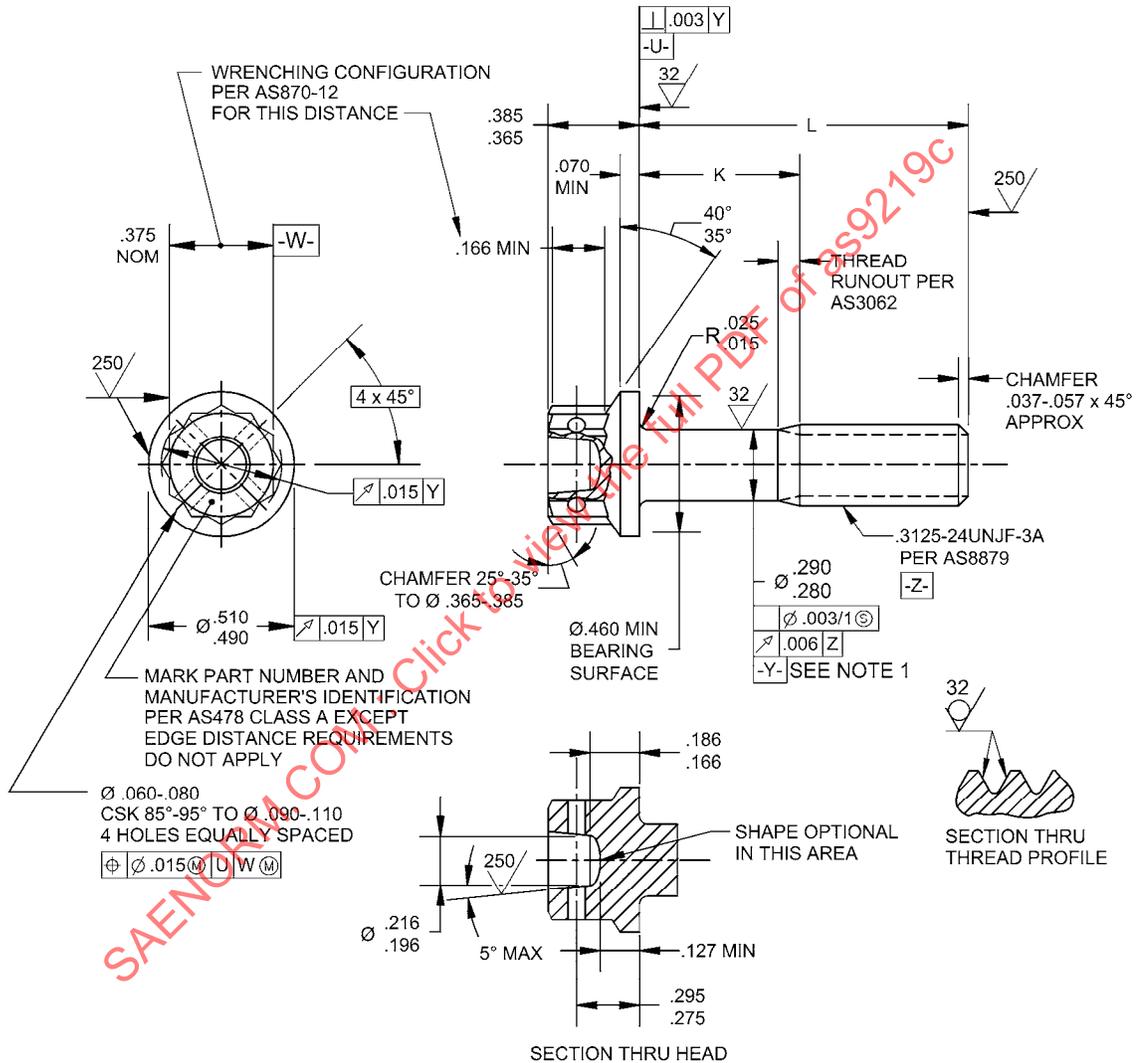
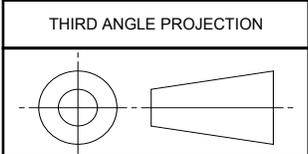


FIGURE 1 - BOLT

SAE values your input. To provide feedback on this Technical Report, please visit <http://www.sae.org/technical/standards/AS9219C>



CUSTODIAN: E-25

PROCUREMENT SPECIFICATION: AS7459

SAE Aerospace
An SAE International Group

AEROSPACE STANDARD

(R) BOLT, MACHINE - STEEL, DIFFUSED NICKEL-CADMIUM PLATED, DOUBLE HEXAGON EXTENDED WASHER HEAD, DRILLED, UNS K14675, 195 KSI MIN, .3125-24 UNJF-3A

SAE AS9219
SHEET 1 OF 3

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ISSUED 2000-08 REVISED 2011-11

TABLE 1 – PART NUMBERS AND DIMENSIONS

| PART NO. | L | K | APPROX. MASS LB/100 | PART NO. | L | K | APPROX. MASS LB/100. |
|-----------|-------------|-------------|---------------------|-----------|-------------|-------------|----------------------|
| MS9219-04 | .490-.510 | .088-.108 | 2.06 | MS9219-34 | 2.990-3.010 | 2.065-2.125 | 6.58 |
| MS9219-05 | .552-.572 | .088-.108 | 2.17 | MS9219-35 | 3.115-3.135 | 2.190-2.250 | 6.80 |
| MS9219-06 | .615-.635 | .088-.108 | 2.28 | MS9219-36 | 3.240-3.260 | 2.315-2.375 | 7.03 |
| MS9219-07 | .678-.698 | .088-.108 | 2.39 | MS9219-37 | 3.365-3.385 | 2.440-2.500 | 7.27 |
| MS9219-08 | .740-.760 | .088-.108 | 2.51 | MS9219-38 | 3.490-3.510 | 2.565-2.625 | 7.50 |
| MS9219-09 | .802-.822 | .088-.108 | 2.62 | MS9219-39 | 3.615-3.635 | 2.690-2.750 | 7.73 |
| MS9219-10 | .865-.885 | .088-.108 | 2.73 | MS9219-40 | 3.740-3.760 | 2.815-2.875 | 7.95 |
| MS9219-11 | .928-.948 | .088-.108 | 2.85 | MS9219-41 | 3.865-3.885 | 2.940-3.000 | 8.17 |
| MS9219-12 | .990-1.010 | .125-.145 | 2.96 | MS9219-42 | 3.990-4.010 | 3.065-3.125 | 8.40 |
| MS9219-13 | 1.052-1.072 | .128-.188 | 3.07 | MS9219-43 | 4.115-4.135 | 3.190-3.250 | 8.63 |
| MS9219-14 | 1.115-1.135 | .190-.250 | 3.19 | MS9219-44 | 4.240-4.260 | 3.315-3.375 | 8.86 |
| MS9219-15 | 1.178-1.198 | .252-.312 | 3.30 | MS9219-45 | 4.365-4.385 | 3.440-3.500 | 9.08 |
| MS9219-16 | 1.240-1.260 | .315-.375 | 3.41 | MS9219-46 | 4.490-4.510 | 3.565-3.625 | 9.30 |
| MS9219-17 | 1.302-1.322 | .378-.438 | 3.52 | MS9219-47 | 4.615-4.635 | 3.690-3.750 | 9.52 |
| MS9219-18 | 1.365-1.385 | .440-.500 | 3.64 | MS9219-48 | 4.740-4.760 | 3.815-3.875 | 9.74 |
| MS9219-19 | 1.428-1.448 | .502-.562 | 3.75 | MS9219-49 | 4.865-4.885 | 3.940-4.000 | 9.95 |
| MS9219-20 | 1.490-1.510 | .565-.625 | 3.87 | MS9219-50 | 4.990-5.010 | 4.065-4.125 | 10.17 |
| MS9219-21 | 1.552-1.572 | .628-.688 | 3.98 | MS9219-51 | 5.115-5.135 | 4.190-4.250 | 10.40 |
| MS9219-22 | 1.615-1.635 | .690-.750 | 4.10 | MS9219-52 | 5.240-5.260 | 4.315-4.375 | 10.63 |
| MS9219-23 | 1.678-1.698 | .752-.812 | 4.22 | MS9219-53 | 5.365-5.385 | 4.440-4.500 | 10.86 |
| MS9219-24 | 1.740-1.760 | .815-.875 | 4.33 | MS9219-54 | 5.490-5.510 | 4.565-4.625 | 11.10 |
| MS9219-25 | 1.865-1.885 | .940-1.000 | 4.55 | MS9219-55 | 5.615-5.635 | 4.690-4.750 | 11.33 |
| MS9219-26 | 1.990-2.010 | 1.065-1.125 | 4.77 | MS9219-56 | 5.740-5.760 | 4.815-4.875 | 11.56 |
| MS9219-27 | 2.115-2.135 | 1.190-1.250 | 5.00 | MS9219-57 | 5.865-5.885 | 4.940-5.000 | 11.78 |
| MS9219-28 | 2.240-2.260 | 1.315-1.375 | 5.23 | MS9219-58 | 5.990-6.010 | 5.065-5.125 | 12.00 |
| MS9219-29 | 2.365-2.385 | 1.440-1.500 | 5.45 | | | | |
| MS9219-30 | 2.490-2.510 | 1.565-1.625 | 5.67 | | | | |
| MS9219-31 | 2.615-2.635 | 1.690-1.750 | 5.90 | | | | |
| MS9219-32 | 2.740-2.760 | 1.815-1.875 | 6.13 | | | | |
| MS9219-33 | 2.865-2.885 | 1.940-2.000 | 6.36 | | | | |

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.

- FOR PART NUMBERS MS9219-04 THRU MS9219-18 THE THREAD PD (DATUM -Z-) SHALL REPLACE DATUM -Y-.
- MATERIAL: LOW ALLOY STEEL AMS6304 (UNS K14675).
- PROCUREMENT SPECIFICATION: AS7459.
- HARDNESS: 42-46 HRC.
- FINISH: DIFFUSED NICKEL-CADMIUM PLATE AMS2416. DIMENSIONS ARE AFTER PLATING. CONTACT POINTS PERMISSIBLE. PD MAY BE REDUCED .0012 MAXIMUM BEFORE PLATING.

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|---|--|-----------------------------------|------------------|
|  An SAE International Group | AEROSPACE STANDARD | SAE AS9219 SHEET 2 OF 3 | REV. C |
| | (R) BOLT, MACHINE - STEEL, DIFFUSED NICKEL-CADMIUM PLATED, DOUBLE HEXAGON EXTENDED WASHER HEAD, DRILLED, UNS K14675, 195 KSI MIN, .3125-24 UNJF-3A | | |