

REV.  
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SAE AS3233

# RATIONALE

FEDERAL SUPPLY CLASS  
5306

ADD NEW PART NUMBERS AS3233-05 THRU -13, UPDATE THREAD SPECIFICATION TO AS8879, ADD EXCEPTION TO EDGE DISTANCE REQUIREMENTS FOR HEAD MARKING, UPDATE DIMENSIONING AND TOLERANCING TO ANSI Y14.5M-1982, UPDATE THREAD RUNOUT TO AS3062, REMOVE METRIC DIMENSIONS AND REFERENCES, REFORMAT TABLE 1, UPDATE SURFACE TEXTURE NOTE, DELETE FPI NOTE (DUPLICATES AS7471 REQUIREMENT), AND REDRAW FIGURE 1, GENERAL REVISION AND EDITORIAL UPDATE.

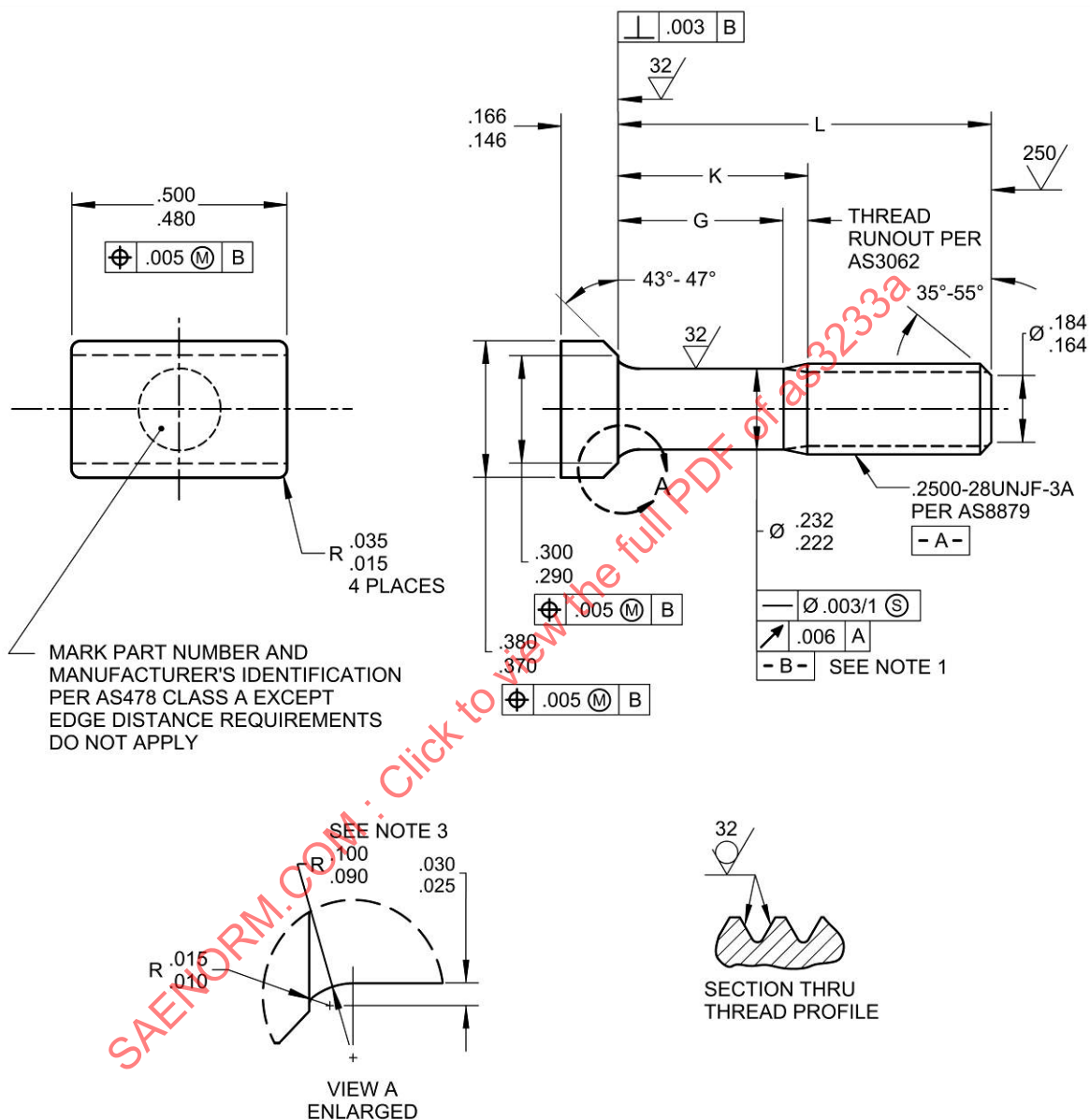


FIGURE 1 - BOLT

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CUSTODIAN: E-25

PROCUREMENT SPECIFICATION: AS7471 /3/

**SAE Aerospace**  
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## AEROSPACE STANDARD

(R) BOLT, TEE HEAD - CHAMFERED, PD SHANK,  
NICKEL ALLOY, 165 KSI MIN UTS  
.2500-28 UNJF-3A

**SAE AS3233**  
SHEET 1 OF 3

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TABLE 1 - PART NUMBERS AND DIMENSIONS

| PART NUMBER | L           | G MIN | K MAX | APPROX MASS LB/100 | PART NUMBER | L           | G MIN | K MAX | APPROX MASS LB/100 |
|-------------|-------------|-------|-------|--------------------|-------------|-------------|-------|-------|--------------------|
| AS3233-05   | .428- .448  | .063  | .141  | 1.31               | AS3233-34   | 2.490-2.510 | 1.619 | 1.750 | 3.72               |
| AS3233-06   | .490- .510  | .063  | .141  | 1.38               | AS3233-35   | 2.615-2.635 | 1.744 | 1.875 | 3.86               |
| AS3233-07   | .552- .572  | .063  | .141  | 1.45               | AS3233-36   | 2.740-2.760 | 1.869 | 2.000 | 4.02               |
| AS3233-08   | .615- .635  | .063  | .141  | 1.52               | AS3233-37   | 2.865-2.885 | 1.994 | 2.125 | 4.16               |
| AS3233-09   | .678- .698  | .063  | .141  | 1.59               | AS3233-38   | 2.990-3.010 | 2.119 | 2.250 | 4.31               |
| AS3233-10   | .740- .760  | .063  | .141  | 1.66               | AS3233-39   | 3.115-3.135 | 2.244 | 2.375 | 4.45               |
| AS3233-11   | .802- .822  | .063  | .141  | 1.74               | AS3233-40   | 3.240-3.260 | 2.369 | 2.500 | 4.60               |
| AS3233-12   | .865- .885  | .063  | .141  | 1.81               | AS3233-41   | 3.365-3.385 | 2.494 | 2.625 | 4.76               |
| AS3233-13   | .928- .948  | .063  | .188  | 1.88               | AS3233-42   | 3.490-3.510 | 2.619 | 2.750 | 4.90               |
| AS3233-14   | .990-1.010  | .119  | .250  | 1.95               | AS3233-43   | 3.615-3.635 | 2.744 | 2.875 | 5.05               |
| AS3233-15   | 1.052-1.072 | .181  | .312  | 2.02               | AS3233-44   | 3.740-3.760 | 2.869 | 3.000 | 5.20               |
| AS3233-16   | 1.115-1.135 | .244  | .375  | 2.09               | AS3233-45   | 3.865-3.885 | 2.994 | 3.125 | 5.35               |
| AS3233-17   | 1.178-1.198 | .307  | .438  | 2.17               | AS3233-46   | 3.990-4.010 | 3.119 | 3.250 | 5.49               |
| AS3233-18   | 1.240-1.260 | .369  | .500  | 2.25               | AS3233-47   | 4.115-4.135 | 3.244 | 3.375 | 5.64               |
| AS3233-19   | 1.302-1.322 | .431  | .562  | 2.32               | AS3233-48   | 4.240-4.260 | 3.369 | 3.500 | 5.79               |
| AS3233-20   | 1.365-1.385 | .494  | .625  | 2.39               | AS3233-49   | 4.365-4.385 | 3.494 | 3.625 | 5.93               |
| AS3233-21   | 1.428-1.448 | .557  | .688  | 2.46               | AS3233-50   | 4.490-4.510 | 3.619 | 3.750 | 6.09               |
| AS3233-22   | 1.490-1.510 | .619  | .750  | 2.52               | AS3233-51   | 4.615-4.635 | 3.744 | 3.875 | 6.23               |
| AS3233-23   | 1.552-1.572 | .681  | .812  | 2.62               | AS3233-52   | 4.740-4.760 | 3.869 | 4.000 | 6.38               |
| AS3233-24   | 1.615-1.635 | .744  | .875  | 2.69               | AS3233-53   | 4.865-4.885 | 3.994 | 4.125 | 6.53               |
| AS3233-25   | 1.678-1.698 | .807  | .938  | 2.75               | AS3233-54   | 4.990-5.010 | 4.119 | 4.250 | 6.67               |
| AS3233-26   | 1.740-1.760 | .869  | 1.000 | 2.83               | AS3233-55   | 5.115-5.135 | 4.244 | 4.375 | 6.82               |
| AS3233-27   | 1.802-1.822 | .931  | 1.062 | 2.90               | AS3233-56   | 5.240-5.260 | 4.369 | 4.500 | 6.97               |
| AS3233-28   | 1.865-1.885 | .994  | 1.125 | 2.98               | AS3233-57   | 5.365-5.385 | 4.494 | 4.625 | 7.12               |
| AS3233-29   | 1.928-1.948 | 1.057 | 1.188 | 3.05               | AS3233-58   | 5.490-5.510 | 4.619 | 4.750 | 7.26               |
| AS3233-30   | 1.990-2.010 | 1.119 | 1.250 | 3.12               | AS3233-59   | 5.615-5.635 | 4.744 | 4.875 | 7.40               |
| AS3233-31   | 2.115-2.135 | 1.244 | 1.375 | 3.28               | AS3233-60   | 5.740-5.760 | 4.869 | 5.000 | 7.54               |
| AS3233-32   | 2.240-2.260 | 1.369 | 1.500 | 3.42               | AS3233-61   | 5.865-5.885 | 4.994 | 5.125 | 7.69               |
| AS3233-33   | 2.365-2.385 | 1.494 | 1.625 | 3.57               | AS3233-62   | 5.990-6.010 | 5.119 | 5.250 | 7.83               |

## NOTES:

- FOR PART NUMBERS AS3233-05 THRU AS3233-17 THE THREAD PD (DATUM A) SHALL REPLACE DATUM B.
- MATERIAL: CORROSION AND HEAT RESISTANT NICKEL ALLOY AMS5708 (UNS N07001).
- PROCUREMENT SPECIFICATION: AS7471 EXCEPT THE .090 - .100 HEAD-TO-SHANK FILLET RADIUS SHALL NOT BE COLD WORKED.
- SURFACE TEXTURE: SYMBOLS PER ASME Y14.36M. REQUIREMENTS PER ASME B46.1. UNLESS OTHERWISE SPECIFIED, SURFACES TO BE 125 MICROINCHES Ra EXCEPT UPSET HEAD.
- BREAK SHARP EDGES .003 TO .015 UNLESS OTHERWISE SPECIFIED.
- DIMENSIONS IN INCHES.

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|-------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------|-----------------------------------|-------------------------|
| <br>An SAE International Group | <b>AEROSPACE STANDARD</b>                                                                      | <b>SAE AS3233</b><br>SHEET 2 OF 3 | <b>REV.</b><br><b>A</b> |
|                                                                                                                   | (R) BOLT, TEE HEAD - CHAMFERED, PD SHANK,<br>NICKEL ALLOY, 165 KSI MIN UTS<br>.2500-28 UNJF-3A |                                   |                         |