

AEROSPACE STANDARD	AS27820™ - AS27829™	ISSUE 3
	Issued 1970-04 Revised 2004-09	
Nut, Self Locking, Extended Washer, Double Hexagon-Deep Counterbored		

NOTE: The issue status of this document remains unchanged as there have been no changes to the technical content.

SAE INDUSTRY TECHNOLOGIES CONSORTIA AEROSPACE STANDARDS AND PART QUALIFICATION PROGRAM

FOREWORD

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**NUT, SELF LOCKING, EXTENDED WASHER,
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SHEET 1 OF 2

3RD ANGLE PROJECTION



SHEET No

1

2

ISSUE

6

6

DATE

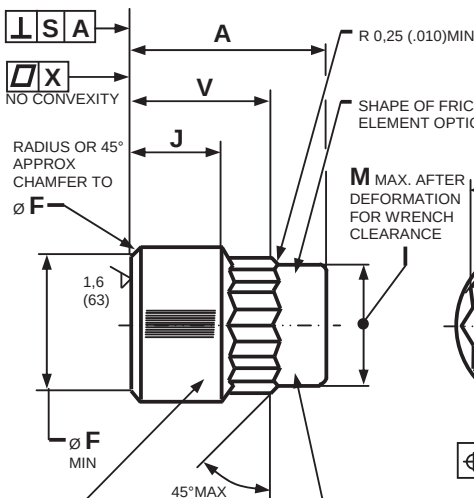
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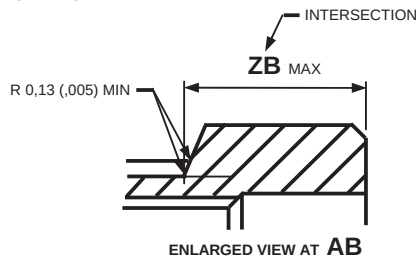
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FORWARD TO SBAC AEROSPACE INDUSTRY STANDARDS

ORIGINAL PAPER SIZE ISO A4 210 x 297 mm



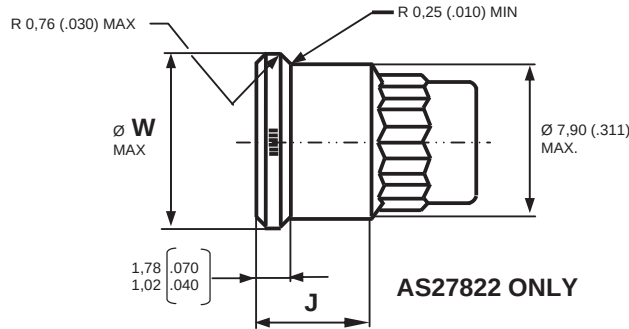
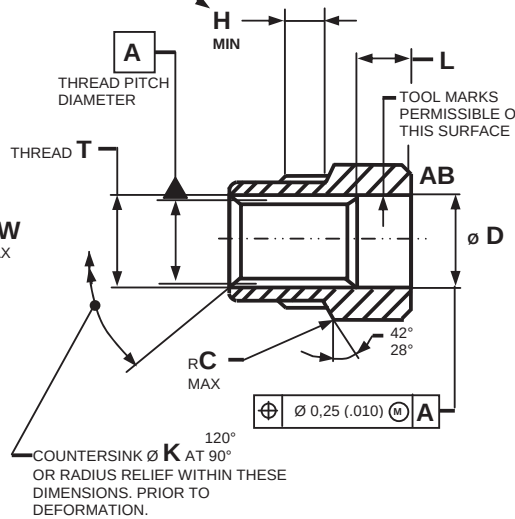
MARK PART NUMBER AND MANUFACTURERS IDENTITY AS GIVEN IN TS 200 TO SBAC SPEC RS 610 METHOD 2. UNMARKED AREA ON FLANGE TO BE STRAIGHT KNURLED.

CIRCUMFERENTIAL TOOL MARKS PERMISSIBLE IN LOCKING AREA.



ENLARGED VIEW AT AB

WRENCHING CONFIGURATION TO SBAC RS680 OVER THIS LENGTH PRIOR TO DEFORMATION OF UPPER THREADED PORTION



1. **PERFORMANCE** :- TS8
2. **MATERIAL** :- CORROSION RESISTANT STEEL BS HR650 OR AMS5737.
3. **FINISH** :- SILVER COAT TO EN2786, AMS2411 OR DTD939, COATING THICKNESS 0.005 (0.0002) TO 0.015 (0.0006). ON NUTS 0.250 AND LARGER THE COATING THICKNESS SHALL NOT BE LESS THAN 0.005 (0.0002) MEASURED AT THE PITCH DIAMETER. NUTS 0.190 AND SMALLER SHALL SHOW COMPLETE COATING COVERAGE ON THE THREADS.
4. **DIMENSIONS AND TOLERANCES**, EXCEPT FOR THREADS, ARE IN MILLIMETRES, INCH CONVERSIONS ARE IN PARENTHESES. ALL DIMENSIONS APPLY AFTER COATING.
5. **BREAK SHARP EDGES** 0,08 (0.003) TO 0,38 (0.015) UNLESS OTHERWISE SPECIFIED.
6. **SURFACE TEXTURE** :- BS1134, ALL UNSPECIFIED SURFACES 3,2 MICROMETRES (125 MICROINCHES).
7. **SCREW THREADS** :- ISO 3161 (SAE AS 8879)
8. **CRACK TEST** TO DTD929 OR BS M39 BEFORE COATING.
9. FOR APPROVED SOURCES OF SUPPLY SEE TS200.
10. **DRAWING PRACTICE** TO TS66
11. **DO NOT USE UNASSIGNED PART NUMBERS.**
12. **APPLICATION** :
 - (i) UPPER THREAD PORTION DEFORMED TO DEVELOP SPECIFIED LOCKING TORQUE WHEN USED ON STANDARD CLASS 3A UNIFIED THREADS AND ALSO ON UNIFIED THREADS REDUCED .001 FOR .164 SIZE ONLY AND .003 FOR .190 SIZES AND ABOVE ON MAJOR, PITCH AND MINOR DIAMETERS.
 - (ii) THESE NUTS ARE DESIGNED TO DEVELOP THE TENSILE STRENGTHS SPECIFIED ON SHEET 2 WHEN USED WITH 1100 MPA (160,000 LBF/IN²) BOLTS AT ROOM TEMPERATURE.

RS AND TS ARE SBAC PUBLICATIONS.
BS ARE BRITISH STANDARD INSTITUTION PUBLICATIONS.
DTD ARE MINISTRY OF DEFENCE (PROCUREMENT EXECUTIVE) PUBLICATIONS.
SAE AS AND AMS ARE SOCIETY OF AUTOMOTIVE ENGINEERING INC., USA, PUBLICATIONS.
ASTM ARE AMERICAN SOCIETY FOR TESTING MATERIALS SPECIFICATIONS.
EN ARE AECMA PUBLICATIONS

THESE PARTS REQUIRE QUALIFICATION – REFER TO TS202

PREPARED BY THE SOCIETY OF BRITISH AEROSPACE COMPANIES LTD

TECHNICAL STANDARDS GROUP

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