FEDERAL SUPPLY CLASS
5325

RATIONALE

FIGURE 1 UPDATED TO CORRECT REFERENCES TO LOCKING KEYS DIM L DELETED. THREAD SPEC CORRECTED, CORRECT QPL NUMBER IN NOTE 14 AND MASS VALUES RECALCULATED.

AS3654A HAS BEEN REAFFIRMED TO COMPLY WITH THE SAE FIVE-YEAR REVIEW POLICY.

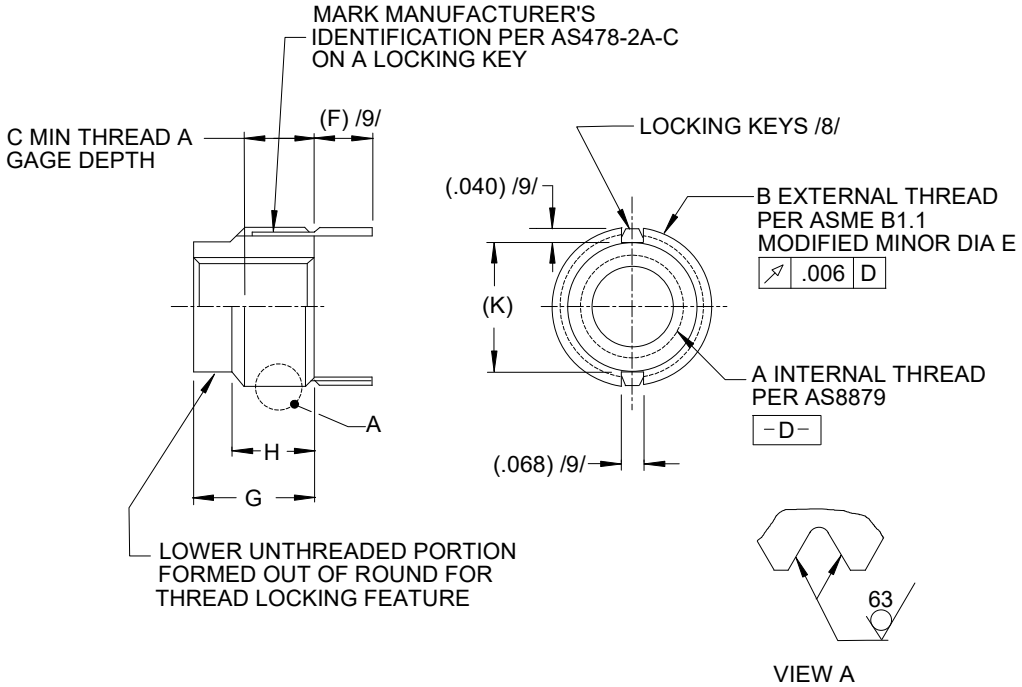


FIGURE 1 - INSERT

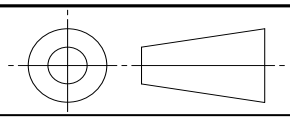
TABLE 1 - DIMENSIONS

PART NUMBER	A INTERNAL THREAD UNJF-3B	B EXTERNAL THREAD	E EXTERNAL THREAD MODIFIED MINOR DIAMETER	F REF	G	H	K REF	C MIN GAGE DEPTH
AS3654-3	.1900 - 32	.4375-14 UNC-3A	.375 - .383	.160	.360 - .390	.255 - .285	.344	.226
AS3654-4	.2500 - 28	.5000-13 UNC-3A	.432 - .440	.190	.497 - .527	.360 - .390	.407	.324
AS3654-5	.3125 - 24	.5625-12 UNC-3A	.495 - .503	.190	.695 - .725	.520 - .550	.469	.475
AS3654-6	.3750 - 24	.6250-11 UNC-3A	.551 - .565	.190	.784 - .814	.581 - .611	.532	.536
AS3654-7	.4375 - 20	.6875-12 UN-3A	.615 - .625	.190	.875 - .905	.650 - .680	.594	.593
AS3654-8	.5000 - 20	.8125-16 UN-3A	.744 - .752	.190	.983 - 1.013	.723 - .753	.720	.666

PART NUMBER	APPROX MASS LB/100
AS3654-3	.76
AS3654-4	1.38
AS3654-5	2.32
AS3654-6	2.93
AS3654-7	3.83
AS3654-8	6.74

For more information on this standard, visit
https://www.sae.org/standards/content/AS3654A/

THIRD ANGLE PROJECTION



ISSUED 2014-01 REVISED 2015-02 REAFFIRMED 2026-01

CUSTODIAN: E-25

PROCUREMENT SPECIFICATION: AS5887

SAE INTERNATIONAL

AEROSPACE STANDARD

INSERT, SCREW THREAD, LONG, SELF-LOCKING, KEY LOCKED, OVERSIZE SELF-BROACHING KEYS, UNS S66286

AS3654™
SHEET 1 OF 2

REV. A

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NOTES:

1. MATERIAL: INSERT - STEEL, CORROSION-RESISTANT, TYPE A286 (UNS S66286) IN ACCORDANCE WITH AMS5731, AMS5732, AMS5734, OR AMS5737.
LOCKING KEYS: STEEL, CORROSION-RESISTANT, TYPE 420 CRES. CHEMICAL COMPOSITION OF AMS5621.

2. HEAT TREATMENT: AMS5731, AMS5732, AMS5734 SHALL BE HEAT TREATED TO 140 000 PSI FTU MINIMUM PER AMS2759/3.

3. HARDNESS: INSERTS SHALL HAVE A HARDNESS RANGE OF 31 - 36 HRC
KEYS SHALL HAVE A HARDNESS RANGE OF 54 - 57 HRC

4. FINISH: ALL DIMENSIONS APPLY AFTER PLATING.
INSERTS:
PASSIVATE PER AMS2700 METHOD 1 OR 2.
SILVER PLATED PER AMS2411 ON THE INTERNAL THREADS ONLY WITH OPTIONAL COVERAGE ON COUNTERSINK. ON INSERTS WITH THREAD A OF .2500 OR LARGER THE PLATING THICKNESS SHALL BE .0002 TO .0006. INSERTS WITH THREAD A OF .1900 SHALL SHOW COMPLETE PLATING COVERAGE ON THE THREAD, PLATING THICKNESS NOT AN ACCEPTANCE REQUIREMENT.

LOCKING KEYS:
PASSIVATE PER AMS2700 METHOD 1 OR 2.

5. FLUORESCENT PENETRANT INSPECTION PER ASTM E1417/1417M TYPE I, SENSITIVITY LEVEL 2, PRIOR TO PLATING.

6. SURFACE TEXTURE: SYMBOLS PER ASME Y14.36M. REQUIREMENTS PER ASME B46.1. UNLESS OTHERWISE SPECIFIED, SURFACES TO BE 125 MICROINCHES Ra. INTERNAL SCREW THREADS TO BE 63 MICROINCHES Ra.

7. DIMENSIONING AND TOLERANCING: ANSI Y14.5M-1982. (ASME PUBLICATION)

/8/ INSERTS WITH INTERNAL THREAD SIZES .1900 AND .2500 SHALL BE SUPPLIED WITH TWO LOCKING KEYS SPACED 180 DEGREES APART. INSERTS WITH INTERNAL THREAD SIZE .3125 AND GREATER SHALL BE SUPPLIED WITH FOUR LOCKING KEYS SPACED 90 DEGREES APART.

/9/ DIMENSION APPLIES TO LOCKING KEYS, SLOT CONFIGURATION PER MANUFACTURER'S OPTION. KEYS TO BE RETAINED IN SLOT UNTIL USE/INSTALLATION.

10. INSERTS SHALL BE FREE OF BURRS AND SLIVERS.

11. UNLESS OTHERWISE SPECIFIED, BREAK SHARP EDGES .015 MAXIMUM.

12. INSERTS TO BE INSTALLED IN ACCORDANCE WITH AS4724.

13. UNLESS OTHERWISE SPECIFIED, FILLETS R .015 MAXIMUM

14. PROCUREMENT SPECIFICATION: AS5887.

15. PRODUCT SUPPLIED TO THIS SPECIFICATION SHALL BE MANUFACTURED BY A QUALIFIED MANUFACTURER AS LISTED IN THE PERFORMANCE REVIEW INSTITUTE (PRI) QUALIFIED PRODUCTS LIST PRI-QPL-AS3654 FOR THIS STANDARD. THIS PART STANDARD MAY BE RELEASED PRIOR TO A MANUFACTURER BEING APPROVED AND LISTED ON PRI-QPL-AS3654. IT IS THE USER'S RESPONSIBILITY TO ENSURE AN APPROVED MANUFACTURER IS LISTED PRIOR TO SPECIFYING ANY OF THESE PARTS FOR USAGE.

16. UNDEFINED FEATURES ARE AT MANUFACTURER'S DISCRETION.

17. DESIGNED FOR USE IN MATERIALS WITH A MINIMUM ULTIMATE SHEAR STRENGTH OF 27 000 PSI.

18. A CHANGE BAR (I) LOCATED IN THE LEFT MARGIN IS FOR THE CONVENIENCE OF THE USER IN LOCATING AREAS WHERE TECHNICAL REVISIONS, NOT EDITORIAL CHANGES, HAVE BEEN MADE TO THE PREVIOUS ISSUE OF THIS DOCUMENT. AN (R) SYMBOL TO THE LEFT OF THE DOCUMENT TITLE INDICATES A COMPLETE REVISION OF THE DOCUMENT, INCLUDING TECHNICAL REVISIONS. CHANGE BARS AND (R) ARE NOT USED IN ORIGINAL PUBLICATIONS NOR IN DOCUMENTS THAT CONTAIN EDITORIAL CHANGES ONLY.

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