

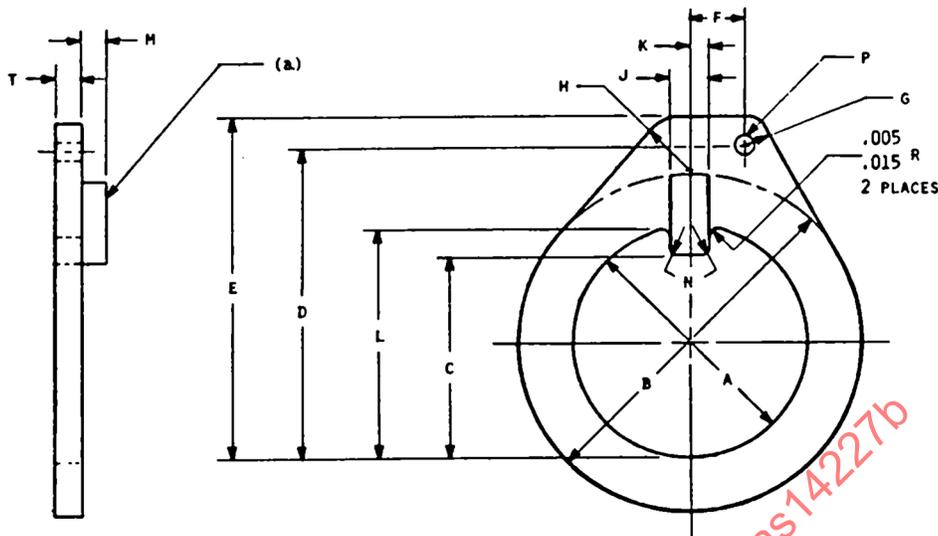
REV. B

SAE AS14227

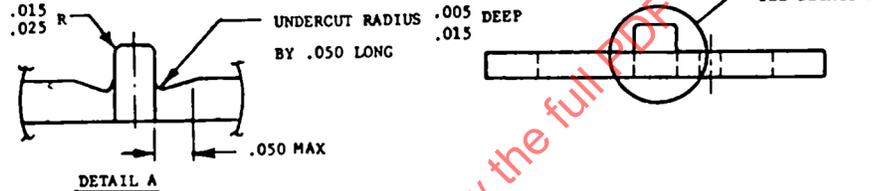
FEDERAL SUPPLY CLASS 5340

RATIONALE

AS14227B HAS BEEN REAFFIRMED TO COMPLY WITH THE SAE FIVE-YEAR REVIEW POLICY.



ALL UNSPECIFIED CORNER .005 R. .015 R.



(a) THE FLAT SURFACE OF THE LOCKING ELEMENT SHALL EXTEND TO DIAMETER B.

FIGURE 1 - ROD END LOCKING DEVICE

REQUIREMENTS:

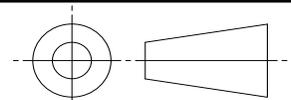
1. MATERIAL: STEEL CASTING - 17-4PH IN ACCORDANCE WITH AMS 5343.
2. HEAT TREATMENT: CASTING - IN ACCORDANCE WITH AMS 5343, ROCKWELL C38-45.
3. INSPECTION: 17-4PH (CASTING) PENETRANT INSPECT IN ACCORDANCE WITH ASTM E 1417, TYPE I, METHOD OPTIONAL, SENSITIVITY LEVEL 2 OR HIGHER. AQL SHALL BE 0.65 IN ACCORDANCE WITH ANSI/ASQC Z1.4, INSPECTION LEVEL II. ACCEPTANCE CRITERIA PER MIL-STD-1907, GRADE D.
4. FINISH: CADMIUM PLATE IN ACCORDANCE WITH AMS-QQ-P-416, TYPE II, CLASS 2.

WARNING: THE USE OF CADMIUM HAS BEEN RESTRICTED AND/OR BANNED FOR USE IN MANY COUNTRIES DUE TO ENVIRONMENTAL AND HEALTH CONCERNS. THE USER SHOULD CONSULT WITH LOCAL OFFICIALS ON APPLICABLE HEALTH AND ENVIRONMENTAL REGULATIONS REGARDING ITS USE.

5. SURFACE TEXTURE: ALL SURFACES SHALL BE 125 MICRINCHES. UNLESS OTHERWISE SPECIFIED, IN ACCORDANCE WITH ASME B46.1.
6. FLATNESS: WASHER FACES SHALL BE FLAT TO WITHIN 0.005 INCHES.

SAE values your input. To provide feedback on this Technical Report, please visit <http://www.sae.org/technical/standards/AS14227B>

THIRD ANGLE PROJECTION



CUSTODIAN: SAE ACBG/ACBGPB

SAE Aerospace An SAE International Group

AEROSPACE STANDARD

(R) LOCK, ROD END, IMPROVED STRENGTH, NAS LUG

SAE AS14227 SHEET 1 OF 4

REV. B

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ISSUED 1997-08 REVISED 2003-01 REAFFIRMED 2012-09

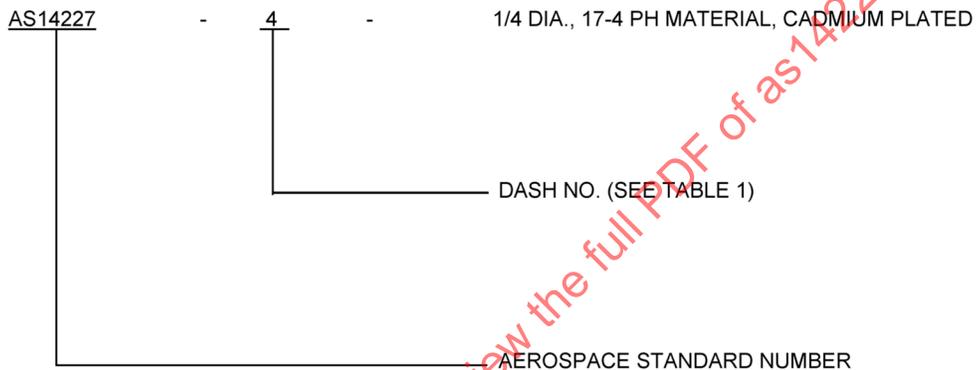
TABLE 1 - LOCK DIMENSIONS

DASH NO.	TERMINAL THREAD SIZE (REF) <sup>1</sup>	A DIA	B DIA +0.02 -0.0	C	D ±0.016	E ±0.016	F ±0.031	G RAD	H RAD	J ±0.005	K	L +0.000 -0.015	M ±0.005	N RAD +0.010 -0.000	P DIA ±0.005	T ±0.005
4	1/4-28UNJF-3A	.272 ± .005	.44	.214 ± .005	.406	.500	.125	.094	.094	.052	.026 ± .005	.280	.046	.005	.062	.050
5	5/16-24UNJF-3A	.334 ± .005	.50	.273 ± .005	.484	.578	.125	.094	.094	.052	.026 ± .005	.342	.046	.005	.062	.050
6	3/8-24UNJF-3A	.396 ± .008	.56	.327 ± .008	.562	.656	.125	.094	.094	.082	.041 ± .005	.404	.046	.015	.062	.050
7	7/16-20UNJF-3A	.459 ± .008	.63	.386 ± .008	.625	.719	.125	.094	.094	.082	.041 ± .005	.467	.059	.015	.062	.063
8	1/2-20UNJF-3A	.520 ± .008	.75	.450 ± .008	.709	.813	.156	.094	.156	.082	.041 ± .005	.528	.059	.015	.062	.063
9	9/16-18UNJF-3A	.583 ± .008	.88	.496 ± .010	.812	.906	.188	.094	.156	.114	.057 ± .005	.591	.067	.015	.071	.071
10	5/8-18UNJF-3A	.647 ± .010	1.00	.559 ± .010	.937	1.031	.188	.094	.188	.114	.057 ± .005	.655	.067	.015	.071	.071
12	3/4-16UNJF-3A	.772 ± .010	1.12	.681 ± .010	1.062	1.156	.188	.094	.188	.114	.057 ± .005	.780	.067	.015	.071	.071
14	7/8-14UNJF-3A	.897 ± .010	1.31	.795 ± .010	1.250	1.344	.188	.094	.250	.142	.071 ± .007	.905	.076	.015	.080	.080
16	1 -12UNJF-3A	1.022 ± .010	1.50	.918 ± .010	1.422	1.516	.188	.094	.250	.142	.071 ± .007	1.030	.084	.015	.090	.090
18	1 1/8-12UNJF-3A	1.147 ± .010	1.62	1.028 ± .010	1.547	1.656	.219	.109	.313	.174	.087 ± .007	1.155	.084	.015	.090	.090

1. FOR TERMINAL THREAD SIZES 1-1/4 INCH THROUGH 2-1/4 INCH USE NASM 14198 LOCKS

NOTES:

1. AS14227 ROD END LOCK IS INTENDED FOR USE AS A DIRECT REPLACEMENT FOR NAS 513 WASHERS FOR SIZES -4 THROUGH -18. AS14227 KEYTAB IS WITHIN NAS 513 ENVELOPE DIMENSIONS.
2. NASM 14198 MAY DIRECTLY REPLACE NAS 513 WASHERS FOR SIZES -20 THROUGH -36.
3. AS14227 ROD END LOCK IS NOT INTENDED FOR USE IN NEW DESIGN. USE NASM 14198 ROD END LOCKS IN NEW DESIGN.
4. AS14227 MAY DIRECTLY REPLACE NAS 509 FOR APPLICATIONS WHICH ACCOMMODATE THE WASHER THICKNESS (DIMENSION 'T').
5. AS14227 ROD END LOCKS SHALL BE USED WITH NAS 509 OR NAS 1423 JAM NUTS FOR POSITIVE LOCKING OF ROD END BEARINGS TO HYDRAULIC CYLINDER PISTON RODS.
6. WHERE ASSEMBLY LENGTHS MUST BE ADJUSTED TO WITHIN 0.001 INCH, USE NAS 1193 LOCKS.
7. UNLESS OTHERWISE SPECIFIED, ALL DIMENSIONS ARE IN INCHES.
8. PARTS SHALL BE FREE FROM BURRS AND SHARP EDGES. PARTS SHALL HAVE GATES TRIMMED FLUSH.
9. ALL INTERIOR PACKAGING SHALL BE IN ACCORDANCE WITH MIL-STD-2073-1.
10. EXAMPLE OF PART NUMBER:



11. REFERENCED DOCUMENTS SHALL BE OF THE ISSUE IN EFFECT ON DATE OF INVITATIONS FOR BIDS, OR REQUEST FOR PROPOSAL EXCEPT THAT REFERENCED ADOPTED INDUSTRY DOCUMENTS SHALL GIVE THE DATE OF THE ISSUE ADOPTED.
12. FOR DESIGN FEATURE PURPOSES, THIS STANDARD TAKES PRECEDENCE OVER PROCUREMENT DOCUMENTS REFERENCED HEREIN.
13. THE CHANGE BAR ( | ) 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.

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	(R) LOCK, ROD END, IMPROVED STRENGTH, NAS LUG		