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FEDERAL SUPPLY CLASS
5340

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PREPARED BY AIRFRAME CONTROL BEARINGS GROUP

SAE The Engineering Society For Advancing Mobility Land Sea Air and Space®
INTERNATIONAL
400 Commonwealth Drive, Warrendale, PA 15096-0001

AEROSPACE STANDARD

LOCK, ROD END, IMPROVED STRENGTH, NAS LUG

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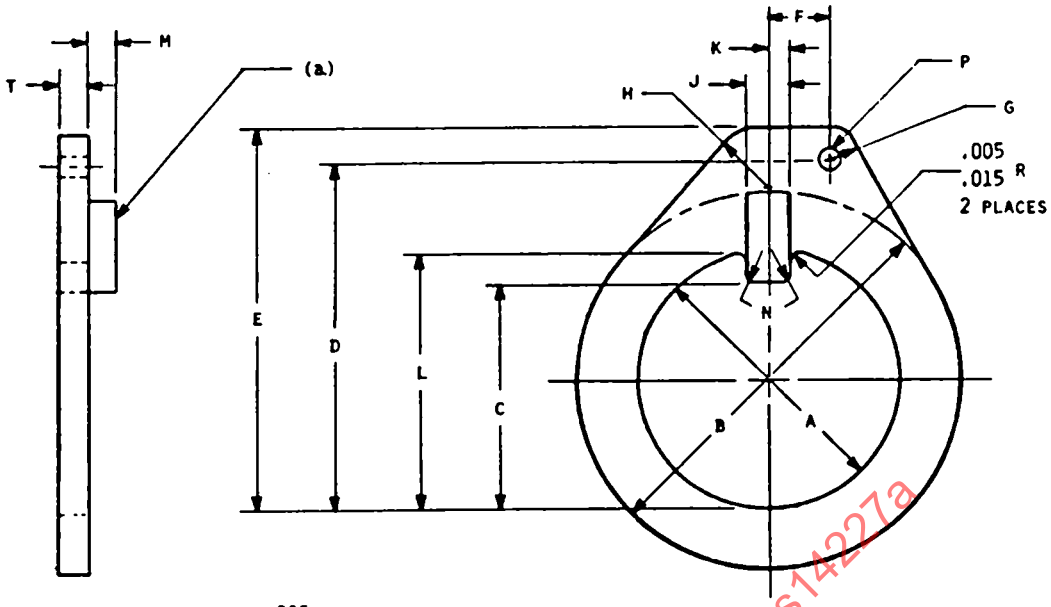

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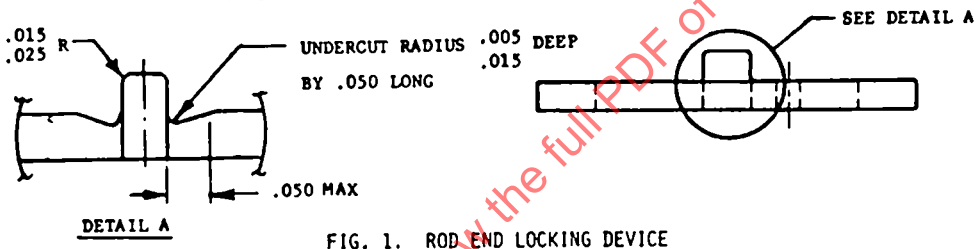

DETAIL A

FIG. 1. ROD END LOCKING DEVICE

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

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. FINISH: CADMIUM PLATE IN ACCORDANCE WITH QQ-P-416, TYPE II, CLASS 2.

4. SURFACE TEXTURE: ALL SURFACES SHALL BE 125 MICROINCHES UNLESS OTHERWISE SPECIFIED, IN ACCORDANCE WITH ANSI B46.1.

5. FLATNESS: WASHER FACES SHALL BE FLAT TO WITHIN 0.005 INCHES.

6. INSPECTION: 17-4PH (CASTING) PENETRANT INSPECT IN ACCORDANCE WITH MIL-I-6866, AQL SHALL BE 0.65 IN ACCORDANCE WITH MIL-STD-105, INSPECTION LEVEL II.

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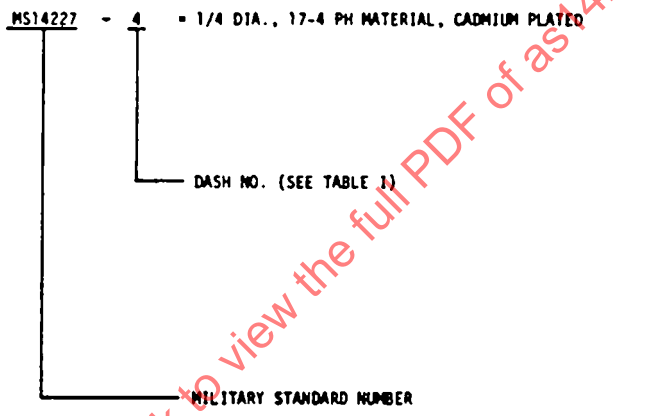
TABLE 1. LOCK DIMENSIONS

DASH NO.	TERMINAL THREAD SIZE (REF) (b)	A DIA	B DIA +.02 -.00	C	D ±.016	E ±.016	F ±.031	G RAD	H RAD	J ±.005	K	L +.000 -.015	M ±.005	N RAD +.010 -.000	P DIA ±.005	T ±.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	.719	.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

(b) FOR TERMINAL THREAD SIZES 1 1/4 INCH THROUGH 2 1/4 INCH USE MS14198 LOCKS.

NOTES:

1. MS14227 ROD END LOCK IS INTENDED FOR USE AS A DIRECT REPLACEMENT FOR NAS 513 WASHERS FOR SIZES -4 THRU -18. MS14227 KEYTAB IS WITHIN NAS 513 ENVELOPE DIMENSIONS.
2. MS14198 MAY DIRECTLY REPLACE NAS 513 WASHERS FOR SIZES -20 THROUGH -36.
3. MS14227 ROD END LOCK IS NOT INTENDED FOR USE IN NEW DESIGN. USE MS14198 ROD END LOCKS IN NEW DESIGN.
4. MS14227 MAY DIRECTLY REPLACE NAS 559 FOR APPLICATIONS WHICH ACCOMMODATE THE WASHER THICKNESS (DIMENSION 'T').
5. MS14227 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 PPP-H-1581.
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.