

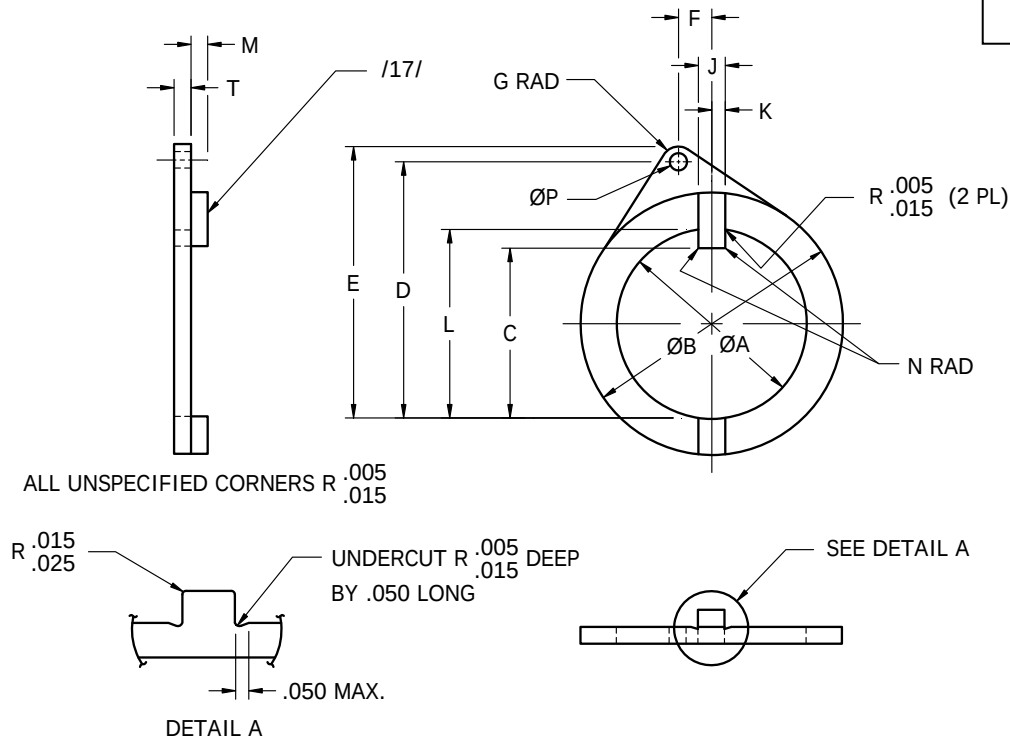


FIGURE 1 – ROD END LOCKING DEVICE

(2)

TABLE I – DIMENSIONS

DASH NO.	TERMINAL THREAD SIZE (REF)	ØA ±.005	ØB ±.01	C ±.005	D ±.015	E ±.015	F ±.015	G RAD NOM	J ±.005	K	L +.000 - .015	M ±.005	N RAD +.010 - .000	ØP ±.005	T ±.005
4	.2500-28 UNJF-3A	.260	.44	.206	.445	.506	.108	.061	.052	.026 ±.005	.268	.105	.005	.062	.063
5	.3125-24 UNJF-3A	.323	.50	.266	.514	.575	.108	.061	.052	.026 ±.005	.331	.105	.005	.062	.063
6	.3750-24 UNJF-3A	.385	.56	.316	.580	.641	.123	.061	.082	.041 ±.005	.393	.105	.015	.062	.063
7	.4375-20 UNJF-3A	.448	.63	.376	.648	.709	.123	.061	.082	.041 ±.005	.456	.105	.015	.062	.063
8	.5000-20 UNJF-3A	.510	.75	.441	.753	.814	.123	.061	.082	.041 ±.005	.518	.105	.015	.062	.063
9	.5625-18 UNJF-3A	.573	.88	.484	.857	.923	.148	.066	.114	.057 ±.005	.581	.105	.015	.071	.071
10	.6250-18 UNJF-3A	.635	1.00	.546	.960	1.026	.148	.066	.114	.057 ±.005	.643	.105	.015	.071	.071
12	.7500-16 UNJF-3A	.760	1.13	.668	1.095	1.161	.148	.066	.114	.057 ±.005	.768	.105	.015	.071	.071
14	.8750-14 UNJF-3A	.885	1.31	.782	1.268	1.343	.173	.075	.142	.071 ±.007	.893	.105	.015	.080	.080
16	1.0000-12 UNJF-3A	1.010	1.50	.905	1.443	1.526	.183	.083	.142	.071 ±.007	1.018	.105	.015	.090	.090
18	1.1250-12 UNJF-3A	1.135	1.63	1.015	1.576	1.659	.199	.083	.174	.087 ±.007	1.143	.105	.015	.090	.090
20	1.2500-12 UNJF-3A	1.260	1.75	1.141	1.719	1.821	.221	.102	.174	.087 ±.007	1.268	.110	.015	.112	.112
22	1.3750-12 UNJF-3A	1.385	1.88	1.241	1.849	1.951	.252	.102	.236	.118 ±.007	1.393	.110	.015	.112	.112
24	1.5000-12 UNJF-3A	1.510	2.00	1.366	1.984	2.086	.252	.102	.236	.118 ±.007	1.518	.110	.015	.112	.112
26	1.6250-12 UNJF-3A	1.635	2.13	1.482	2.122	2.235	.265	.113	.236	.118 ±.007	1.643	.120	.015	.125	.125
28	1.7500-12 UNJF-3A	1.760	2.25	1.594	2.254	2.367	.296	.113	.298	.149 ±.007	1.768	.120	.015	.125	.125
30	1.8750-12 UNJF-3A	1.885	2.38	1.719	2.390	2.503	.296	.113	.298	.149 ±.007	1.893	.120	.015	.125	.125
32	2.0000-12 UNJF-3A	2.010	2.63	1.844	2.598	2.711	.296	.113	.298	.149 ±.007	2.018	.120	.015	.125	.125
34	2.1250-12 UNJF-3A	2.135	2.75	1.960	2.733	2.846	.296	.113	.298	.149 ±.007	2.143	.120	.015	.125	.125
36	2.2500-12 UNJF-3A	2.260	2.88	2.085	2.866	2.979	.296	.113	.298	.149 ±.007	2.268	.120	.015	.125	.125

THE INITIAL RELEASE OF THIS DOCUMENT SUPERSEDES MS14198, REVISION A. PART NUMBERS REMAIN MS14198.

THIRD ANGLE PROJECTION	CUSTODIAN NATIONAL AEROSPACE STANDARDS COMMITTEE	REVISION 2
PROCUREMENT SPECIFICATION NONE	TITLE LOCK, ROD END, EXTRA STRENGTH, HIGH PROFILE LUG	CLASSIFICATION PART STANDARD MSM14198

MATERIAL:

STEEL CASTING – 17-4 PH, IN ACCORDANCE WITH AMS5343.
 ALLOY CASTING – NICKEL ALLOY 718 (UNS N06635), IN ACCORDANCE WITH AMS5838.
 STEEL BAR, FORGING AND RING – 15-5 PH (UNS S15500), IN ACCORDANCE WITH AMS5659.
 ALLOY BAR, FORGING AND RING – NICKEL ALLOY 718 (UNS N07718), IN ACCORDANCE WITH AMS5662.

HEAT TREATMENT:

STEEL CASTING – 38-45 HRC.
 ALLOY CASTING – 35-42 HRC.
 STEEL BAR, FORGING AND RING – 38-45 HRC.
 ALLOY BAR, FORGING AND RING – 35-42 HRC.

FINISH:

STEEL 17-4 PH AND 15-5 PH – CADMIUM PLATE IN ACCORDANCE WITH AMS-QQ-P-416, TYPE II, CLASS 2, OR PASSIVATE IN ACCORDANCE WITH AMS2700, METHOD 1, CLASS 4.
 NICKEL ALLOY – NO ADDITIONAL FINISH TREATMENT REQUIRED.

EXAMPLE OF PART NUMBER:

MS14198 K 4 C = Ø.2500, 17-4 PH MATERIAL, CADMIUM PLATED (2)

Diagram illustrating the part number breakdown:

- MS14198: BASIC PART NUMBER
- K: "K" DESIGNATES 17-4 PH OR 15-5 PH MATERIAL; "N" DESIGNATES NICKEL ALLOY 718 MATERIAL
- 4: DASH NUMBER (SEE TABLE I)
- C: "C" DENOTES CADMIUM PLATING (STEEL ONLY); "P" DENOTES PASSIVATION (STEEL ONLY); ABSENCE OF LETTER DENOTES NO ADDITIONAL FINISH TREATMENT (NICKEL ALLOY ONLY)

NOTES:

- (1) MS14198 LOCK IS INTENDED FOR USE IN NEW DESIGN. IT PROVIDES GREATER KEYTAB STRENGTH THAN EXISTING NAS ROD END LOCKS. THE HIGHER LUG PROFILE PERMITS IDENTIFICATION OF IMPROPERLY MATED PARTS.
- (2) FOR TERMINAL THREAD SIZES "20" (1.2500 INCH) THROUGH "36" (2.2500 INCH) MS14198 LOCKS MAY BE RETROFITTED INTO ROD END TERMINALS DESIGNED FOR NAS513 WASHERS.
- (3) USE NAS513 LOCKS OR AS14227 LOCKS FOR TERMINAL THREAD SIZES "4" (.2500 INCH) THROUGH "18" (1.1250 INCH) WHICH WERE DESIGNED PRIOR TO THE APPROVAL DATE OF THIS DOCUMENT.
- (4) MS14198 LOCKS SHALL BE USED WITH NAS509 OR NAS1423 JAM NUTS FOR POSITIVE LOCKING OF ROD END BEARINGS TO HYDRAULIC CYLINDER PISTON RODS.
- (5) WHERE ASSEMBLY LENGTHS MUST BE ADJUSTED WITHIN .001 INCH, USE NAS1193 LOCKS.
- (6) DIMENSIONS IN INCHES AND APPLY AFTER FINISH UNLESS OTHERWISE SPECIFIED.

REVISION

2

NASM14198

SHEET 2



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