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REV.
A

AS3077

FEDERAL SUPPLY CLASS
4730

RATIONALE

AS3077A HAS BEEN REAFFIRMED TO COMPLY WITH THE SAE FIVE-YEAR REVIEW POLICY.

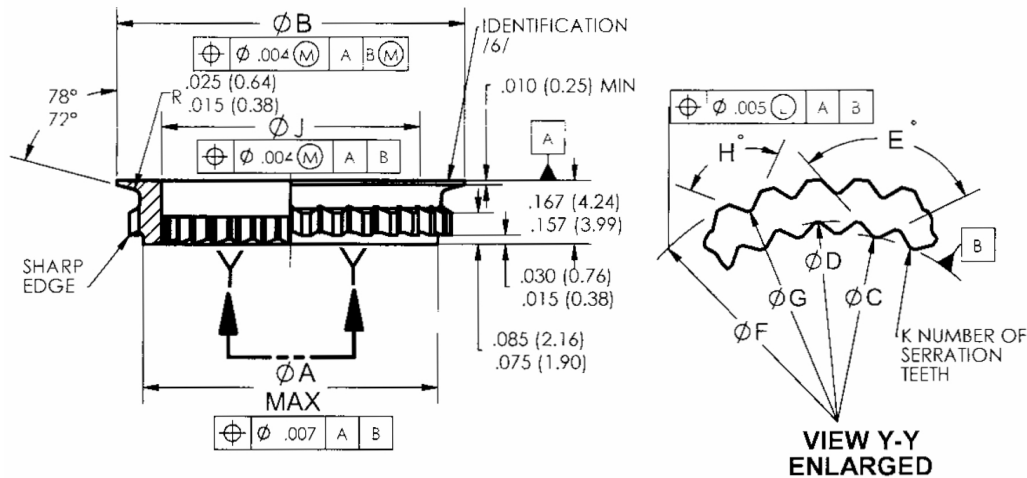
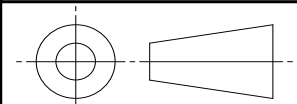


FIGURE 1- LOCKRING

1. MATERIAL: A286 CORROSION RESISTANT STEEL PER AMS5731, AMS5732, AMS5734, OR AMS 5737.
2. HEAT TREATMENT: IF THE RAW MATERIAL IS PROCURED IN THE SOLUTION TREATED CONDITION, AGE PER AMS5732, AMS5737, AMS2759/3 OR AMS-H-6875.
3. HARDNESS: 33-42 HRC.
4. FINISH: PASSIVATE PER AMS-QQ-P-35, TYPE II.
5. USERS OF THIS STANDARD SHALL PROCURE THIS PRODUCT FROM MANUFACTURER(S) ACCREDITED TO AS7112 AND AS7112/2 IN ACCORDANCE WITH AS7003. THE MANUFACTURER SHALL BE LISTED ON THE QUALIFIED MANUFACTURERS LIST (QML) FOR THIS TYPE PRODUCT.
- /6/ IDENTIFICATION:
 - a. MARK AT LOCATION SHOWN PER AS478 METHOD 2 OR 15. MANUFACTURER'S NAME, TRADEMARK OR CAGE CODE.
 - b. MARK PER AS478 CLASS 35D. MANUFACTURER'S NAME, TRADEMARK OR CAGE CODE, AND PART NUMBER.
- /7/ INTENDED USE: LOCKRING TO BE USED IN CONJUNCTION WITH AS3078 FLUID BOSS INSERT AND TO BE INSTALLED PER AS1959 INTO BOSS CAVITIES PER AS1958.
8. THE CHANGE BAR (I) LOCATED IN THE LEFT MARGIN IS FOR THE CONVENIENCE OF THE USER IN LOCATING AREAS WHERE TECHNICAL REVISIONS, 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.
9. SURFACE TEXTURE: SYMBOLS PER ASME Y14.36M, REQUIREMENTS PER ASME B46.1. UNLESS OTHERWISE SPECIFIED NON-SERRATED SURFACES TO BE 125 MICROINCHES (3.1 MICROMETERS). SERRATED SURFACES 250 MICROINCHES (6.3 MICROMETERS).
10. BREAK SHARP EDGES .003 - .015 (0.08 - 0.38) UNLESS OTHERWISE SPECIFIED.
11. DIMENSIONING AND TOLERANCING. ASME Y14.5M-1994. INTERPRETATION OF DRAWING PER ARP4296.
12. DIMENSIONS IN INCHES (MILLIMETERS). METRIC CONVERSIONS ARE IN INTERNATIONAL SYSTEM UNITS (SI). UNLESS OTHERWISE SPECIFIED, TOLERANCES: LINEAR DIMENSIONS ± 0.005 (± 0.13), ANGULAR DIMENSIONS $\pm 0^{\circ}30'$.
- /13/ EXAMPLE OF PART NUMBER: AS3077-04
BASIC PART NUMBER ——— SIZE CODE
14. INVENTORIED PARTS CONFORMING TO PREVIOUS "LETTER CHANGE" MAY BE USED TO DEPLETION.

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<http://www.sae.org/technical/standards/AS3077A>

THIRD ANGLE PROJECTION



CUSTODIAN: G-3/G-3B



AEROSPACE STANDARD

(R) LOCKRING - FLUID CONNECTION BOSS
INSERT, INTERNAL STRAIGHT THREAD

AS3077
SHEET 1 OF 2

REV.
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Documents

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TABLE 1A – DIMENSIONS A-C

BASIC PART NO AS3077 /13/ SIZE CODE	A		B		C	
	INCH	mm	INCH	mm	INCH	mm
02	.630	16.00	.755 - .775	19.18 - 19.68	.509 - .516	12.93 - 13.10
03	.693	17.60	.820 - .840	20.83 - 21.33	.576 - .583	14.64 - 14.80
04	.755	19.17	.880 - .900	22.36 - 22.86	.639 - .646	16.24 - 16.40
05	.818	20.77	.940 - .960	23.88 - 24.38	.702 - .709	17.84 - 18.00
06	.865	21.97	.990 - 1.010	25.15 - 25.65	.764 - .771	19.41 - 19.58
08	1.113	28.27	1.240 - 1.260	31.50 - 32.00	.994 - 1.001	25.25 - 25.42
10	1.238	31.44	1.370 - 1.390	34.80 - 35.30	1.129 - 1.136	28.68 - 28.85
12	1.455	36.95	1.590 - 1.610	40.39 - 40.89	1.317 - 1.324	33.46 - 33.62
16	1.716	43.58	1.850 - 1.870	46.99 - 47.49	1.567 - 1.574	39.81 - 39.97
20	2.111	53.61	2.240 - 2.260	56.90 - 57.40	1.973 - 1.980	50.12 - 50.29

TABLE 1B – DIMENSIONS D-G

BASIC PART NO AS3077 /13/ SIZE CODE	D		E	F		G	
	INCH	mm		INCH	mm	INCH	mm
02	.549 - .559	13.95 - 14.19	95 - 98	.697 - .706	17.71 - 17.93	.649 - .658	16.49 - 16.71
03	.616 - .626	15.65 - 15.90	94 - 97	.760 - .769	19.31 - 19.53	.712 - .721	18.09 - 18.31
04	.677 - .687	17.20 - 17.44	93.5 - 96.5	.822 - .831	20.88 - 21.10	.774 - .783	19.66 - 19.88
05	.742 - .752	18.85 - 19.10	93 - 96	.885 - .894	22.48 - 22.70	.837 - .846	21.26 - 21.48
06	.806 - .816	20.48 - 20.72	93 - 96	.932 - .941	23.68 - 23.90	.884 - .893	22.46 - 22.68
08	1.034 - 1.044	26.27 - 26.51	92 - 95	1.183 - 1.192	30.05 - 30.27	1.134 - 1.143	28.81 - 29.03
10	1.177 - 1.187	29.90 - 30.14	92 - 95	1.308 - 1.317	33.23 - 33.45	1.259 - 1.268	31.98 - 32.20
12	1.367 - 1.377	34.73 - 34.97	91.5 - 94.5	1.527 - 1.536	38.79 - 39.01	1.478 - 1.487	37.54 - 37.76
16	1.617 - 1.627	41.08 - 41.32	91 - 94	1.793 - 1.802	45.55 - 45.77	1.744 - 1.753	44.30 - 44.52
20	2.022 - 2.032	51.36 - 51.61	90.5 - 93.5	2.183 - 2.192	55.45 - 55.67	2.134 - 2.143	54.21 - 54.43

TABLE 1C – DIMENSIONS H-K AND WEIGHTS

BASIC PART NO AS3077 /13/ SIZE CODE	H	J		K	WEIGHT		AS3078 INSERT SIZE CODE /7/
		INCH	mm		LB/100 APPROX REF	kg/100 APPROX REF	
02	92 - 96	.559 - .567	14.20 - 14.40	24	.69	0.313	02
03	92.5 - 96.5	.626 - .634	15.90 - 16.10	28	.72	0.327	03
04	92 - 96	.687 - .695	17.45 - 17.65	31	.77	0.349	04
05	92 - 96	.752 - .760	19.10 - 19.30	34	.87	0.395	05
06	92 - 96	.816 - .824	20.73 - 20.93	36	.78	0.354	06
08	91.5 - 95.5	1.044 - 1.052	26.52 - 26.72	48	1.12	0.508	08
10	91 - 95	1.187 - 1.195	30.15 - 30.35	46	1.17	0.531	10
12	90.5 - 94.5	1.377 - 1.385	34.98 - 35.18	54	1.61	0.730	12
16	90 - 94	1.627 - 1.635	41.33 - 41.53	64	2.10	0.952	16
20	90 - 94	2.032 - 2.040	27.43 - 51.82	80	2.39	1.084	20



AEROSPACE STANDARD

(R) LOCKRING - FLUID CONNECTION BOSS
INSERT, INTERNAL STRAIGHT THREADAS3077
SHEET 2 OF 2

REV.



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