

RD J 306 SB 8 L
 ROSAN INSERT, C'BORED
 AS8879 INTERNAL THREAD
 SERIES NUMBER (THREAD COMBINATION)
 INTERNAL THREAD LOCKING FEATURE (LEAVE BLANK FOR NON-LOCK)
 "C" LENGTH IN 1/16" INCREMENTS
 MATERIAL CODE <1>

TABLE I

INSERT PART NUMBER	LOCKRING		A INTERNAL THREAD UNJF-3B	B EXTERNAL THREAD <2>			C ±.015	D ±.015	E ±.005	F ±.005
	INSERT PART NUMBER <3>	MILITARY PART NUMBER <3>		SIZE	PITCH DIA	MINOR DIA				
RDJ302()4	RLRR16SB5	MS51990-102P	.1120-48	.1900-32	.1699-.1714	.1475-.1534	.250	.150	.040	.113
RDJ303()5	RLRR18SB6	MS51990-103P	.1380-40	.2160-28	.1931-.1946	.1674-.1740	.310	.190	.040	.140
RDJ304()6	RLRR21SB6	MS51990-104P	.1640-36	.2500-28	.2271-.2286	.2014-.2080	.380	.250	.047	.166
RDJ305()7	RLRR24SB7	MS51990-105P	.1900-32	.3125-24	.2858-.2873	.2559-.2632	.440	.290	.062	.196
RDJ306()8	RLRR28SB8	MS51990-106P	.2500-28	.3750-24	.3479-.3498	.3185-.3257	.500	.330	.080	.257
RDJ307()9	RLRR31SB9	---	.3125-24	.4375-20	.4053-.4073	.3700-.3784	.560	.380	.095	.323
RDJ308()10	RLRR38SB9	MS51990-108P	.3750-24	.5000-20	.4678-.4698	.4325-.4409	.620	.420	.100	.386
RDJ309()11	RLRR47SB10	MS51990-109P	.4375-20	.6250-18	.5894-.5914	.5498-.5593	.690	.460	.100	.453
RDJ310()12	RLRR56SB11	MS51990-110P	.5000-20	.7500-16	.7097-.7122	.6656-.6761	.750	.490	.109	.516
RDJ311()14	RLRR64SB11	MS51990-111P	.5625-18	.8750-14	.8291-.8316	.7786-.7904	.880	.620	.125	.578
RDJ312()16	RLRR72SB11	MS51990-112P	.6250-18	1.0000-14	.9541-.9566	.9036-.9154	1.000	.740	.140	.640
RDJ313()18	RLRR82SB12	MS51990-113P	.7500-16	1.1250-12	1.0716-1.0741	1.0128-1.0260	1.120	.800	.156	.765
RDJ314()20	RLRR90SB12	MS51990-114P	.8750-14	1.2500-12	1.1966-1.1991	1.1378-1.1510	1.250	.900	.178	.890

NOTES:

- <1> FOR MATERIAL, HEAT TREAT AND FINISH CALLOUTS, SEE TABLE II.
- <2> THE EXTERNAL THREAD HAS A SPECIAL PITCH DIAMETER AND MINOR DIAMETER WHICH INSTALLS INTO A AS8879 CLASS 3B, FED-STD-H28/2 CLASS 3B, OR NATIONAL CLASS 3 TAPPED HOLE.
- <3> MATING LOCKRING IS NOT INCLUDED WITH INSERT. IT MUST BE ORDERED SEPARATELY.

MANUFACTURE OF THE PROPRIETARY PARTS SHOWN HERE WITHOUT WRITTEN CONSENT OF HOWMET FASTENING SYSTEMS IS ABSOLUTELY PROHIBITED.

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APPROVED DATE 08/24/07	CURRENT DESIGN ACTIVITY: Howmet Fastening Systems (HFS)	TITLE: INSERT - RINGLOCKED, WITH C'BORE FINE INTERNAL AND EXTERNAL THREADS	CURRENT DESIGN ACTIVITY: CAGE CODE: 83324
REV. LETTER AND DATE B 3/17/23	TOLERANCE OPERATIONS Rosan Products 3018 W. Lomita Blvd. Torrance, California 90505-5103	UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES & ASME Y14.5M TOLERANCES:	SALES DRAWING NO.
DAF NUMBER 122160		ANGLES = ±3° DECIMALS .XX = ±.02 .XXX = ±.010	RDJ300() (L) SERIES
			SHEET 1 OF 4



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TABLE II

INSERT					
CODE	MATERIAL	SPECIFICATION	HEAT TREAT	FINISH WITHOUT INTERNAL THREAD LOCKING FEATURE	FINISH WITH INTERNAL THREAD LOCKING FEATURE
SA <4>	4130 STEEL	AMS-S-6758, CONDITION F	125 KSI UTS MIN	CAD PLATE PER AMS-QQ-P-416, TYPE II, CL ASS 3	CAD PLATE PER AMS-QQ-P-416, TYPE II, CL ASS 3
SB <4>	1117 STEEL	ASTM-A-108	NONE		
SF	17-4PH CRES	AMS 5643	COND H1025	PASSIVATE PER AMS 2700	PASSIVATE PER AMS 2700 PLUS SOLID FILM LUBE
SM <4>	303 CRES	ASTM-A-582 OR AMS 5640	NONE		
SN	4340 STEEL ALTERNATE: 4140 STEEL	MIL-S-5000 OR AMS-S-5625	160-180 KSI UTS	CAD PLATE PER AMS-QQ-P-416, TYPE II, CL ASS 3	CAD PLATE PER AMS-QQ-P-416, TYPE II, CL ASS 3
SU <4>	A286 CRES	AMS 5731, AMS 5732, AMS 5737 OR AMS5734	83 HRB MIN <5>	PASSIVATE PER AMS 2700	PASSIVATE PER AMS 2700 PLUS SOLID FILM LUBE PER AS5272
TA	6Al-4V TITANIUM	MIL-T-9047 CONDITION A OR AMS 4967	130 KSI UTS MIN	NONE	<6>
TB	6Al-4V TITANIUM	AMS 4967	160 KSI UTS MIN	NONE	<6>

NOTES: (CONTINUED)

- <4> NOTED CODES INDICATE STANDARD MATERIALS.
- <5> FOR A286 HEAT TREATED TO 130 KSI UTS MIN, ADD SUFFIX EO349 TO INSERT PART NUMBER.
- <6> INTERNAL THREAD LOCKING FEATURE NOT AVAILABLE AT THIS TIME.
- 7. FOR 1117 STEEL CASE HARDENED TO 50-60 HRC, ADD SUFFIX EO238 TO LOCKRING PART NUMBER.

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REV. LETTER AND DATE B 3/17/23	TORRANCE OPERATIONS	UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES & ASME Y14.5M TOLERANCES:	SALES DRAWING NO.
DAF NUMBER 122160	Rosan Products 3018 W. Lamita Blvd. Torrance, California 90505-5103	ANGLES = ±5° DECIMALS .XX = ±.02 .XXX = ±.010	RDJ300()()(L) SERIES
			SHEET 2 OF 4



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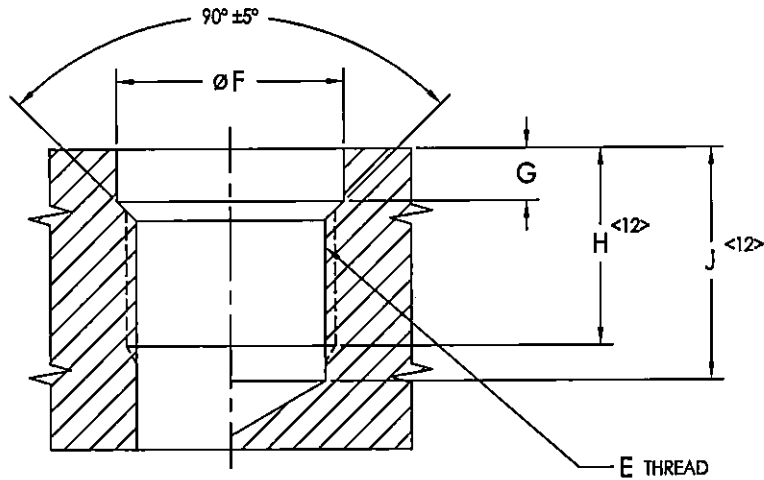


TABLE III

INSERT PART NUMBER REF	E THREAD CLASS 3B <10>	ØF +.003 -.000 <8>		G +.030 -.000	H MIN FULL THREAD DEPTH <12>	J MIN DRILL DEPTH <12>	
		AL	MAG			PLUG TAP	BOTTOM TAP
RDJ302()4	.1900-32UNJF	.250	.258	.094	.285	.426	.363
RDJ303()5	.2160-28UNJF	.281	.291	.109	.345	.506	.434
RDJ304()6	.2500-28UNJF	.328	.337	.109	.415	.576	.504
RDJ305()7	.3125-24UNJF	.375	.381	.141	.475	.663	.579
RDJ306()8	.3750-24UNJF	.437	.448	.156	.535	.723	.639
RDJ307()9	.4375-20UNJF	.484	.495	.172	.595	.820	.720
RDJ308()10	.5000-20UNJF	.593	.601	.172	.655	.880	.780
RDJ309()11	.6250-18UNJF	.734	.747	.188	.725	.975	.864
RDJ310()12	.7500-16UNJF	.875	.888	.203	.785	1.066	.941
RDJ311()14	.8750-14UNJF	1.000	1.015	.203	.915	1.236	1.094
RDJ312()16	1.0000-14UNJS	1.125	1.139	.203	1.035	1.356	1.214
RDJ313()18	1.1250-12UNJF	1.281	1.298	.219	1.155	1.530	1.363
RDJ314()20	1.2500-12UNJF	1.406	1.427	.219	1.285	1.660	1.493

NOTES: (CONTINUED)

- <8> "F" DIAMETER AND MINOR DIAMETER OF THREAD TO BE CONCENTRIC WITHIN .003 FIM.
- 9. WHEN PARENT MATERIAL SURFACE IS NOT FLAT OR NORMAL TO AXIS OF HOLE, PROVIDE A SPOTFACE FOR PROPER LOCKRING ENTRY.
- <10> THREAD AS SHOWN PER AS8879 IS PREFERRED. ALTERNATE THREAD PER FED-STD-H28/2 CLASS 3B OR NATIONAL CLASS 3 IS APPLICABLE WHEN SPECIFIED BY DESIGN ACTIVITY.
- 11. REMOVE ALL BURRS AND SHARP EDGES.
- <12> "H" MINIMUM FULL THREAD DEPTH AND "J" MINIMUM DRILL DEPTH ARE APPLICABLE FOR STANDARD INSERT LENGTH SHOWN ONLY. FOR NON-STANDARD LENGTHS (SEE PART NUMBER CODING) "H" AND "J" MUST CHANGE ACCORDINGLY.

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DAF NUMBER 122160	Rosan Products 3018 W. Lomita Blvd. Torrance, California 90505-5103	UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES & ASME Y14.5M TOLERANCES:	RDJ300() (L) SERIES SHEET 3 OF 4



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TABLE IV

INSERT PART NUMBER REF	STEP DRILL PART NUMBER <13>		BASIC TAP SIZE <14> REF	WRENCH PART NUMBER	LOCKRING DRIVE TOOL PART NUMBER	REMOVAL DRILL SIZE <15> REF
	ALUMINUM	MAGNESIUM				
RDJ302()4	RCDC16-159	RCADC16-159	.1900-32UNF	R1102W	R102D	7/32
RDJ303()5	RCDC18-180	RCADC18-180	.2160-28UNF	R1103W	R103D	1/4
RDJ304()6	RCDC21-213	RCADC21-213	.2500-28UNF	R1104W	R104D	19/64
RDJ305()7	RCDC24-272	RCADC24-272	.3125-24UNF	R1105W	R205D	F
RDJ306()8	RCDC28-332	RCADC28-332	.3750-24UNF	R1106W	R206D	5/16
RDJ307()9	RCDC31-386	RCADC31-386	.4375-20UNF	R1107W	R207D	U
RDJ308()10	RCDC38-453	RCADC38-453	.5000-20UNF	R1108W	R208D	29/64
RDJ309()11	RCDC47-569	RCADC47-569	.6250-18UNF	R1110W	R209D	9/16
RDJ310()12	RCDC56-687	RCADC56-687	.7500-16UNF	R1111W	R210D	11/16
RDJ311()14	RCDC64-802	RCADC64-802	.8750-14UNF	R1112W	R211D	25/32
RDJ312()16	RCDC72-927	RCADC72-927	1.0000-14UNS	R1113W	R212D	57/64
RDJ313()18	RCDC82-1043	RCADC82-1043	1.1250-12UNF	R1114W	R213D	1 1/32
RDJ314()20	RCDC90-1165	RCADC90-1165	1.2500-12UNF	R1115W	R214D	1 11/64

NOTES: (CONTINUED)

- <13> STEP DRILLS ARE DESIGNED FOR THRU HOLE DRILLING. WHEN USED TO DRILL A BLIND HOLE, IT MAY BE NECESSARY TO GRIND THE DRILL TO SUIT THE DEPTH REQUIRED.
- <14> TAPS ARE NOT SUPPLIED BY ALCOA.
- <15> REMOVAL DRILLS ARE NOT SUPPLIED BY ALCOA.

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DAF NUMBER 122160		ANGLES DECIMALS " ±.3" XX ±.02 .XXX ±.010	SHEET 4 OF 4