

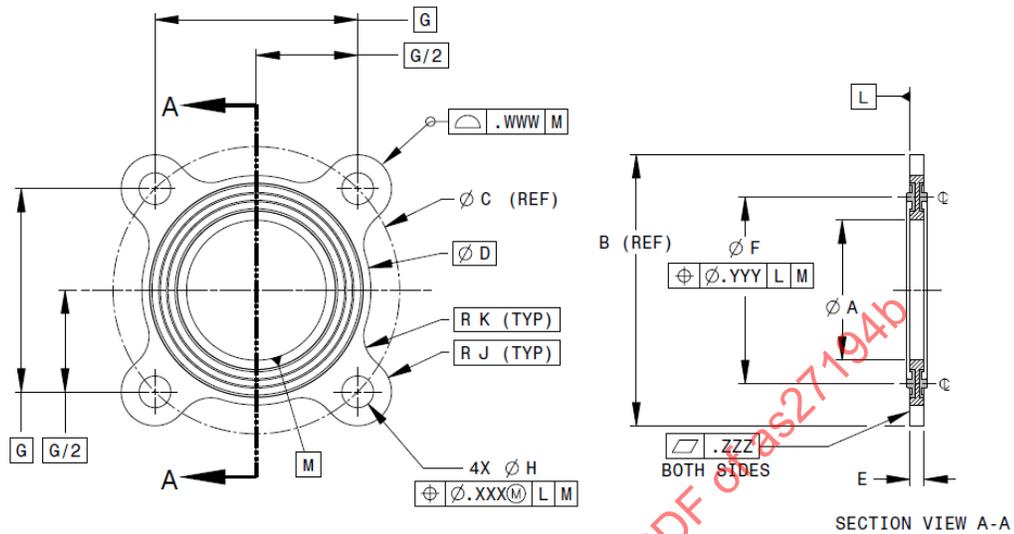
RATIONALE

THE PURPOSE OF THIS REVISION IS TO REMOVE A CONFLICT IN SEALING SURFACE INSPECTION REQUIREMENTS AND TO CORRECT AN ERROR IN THE TEMPERATURE LIMITS IN THE APPLICATION SECTION.

REV.
B

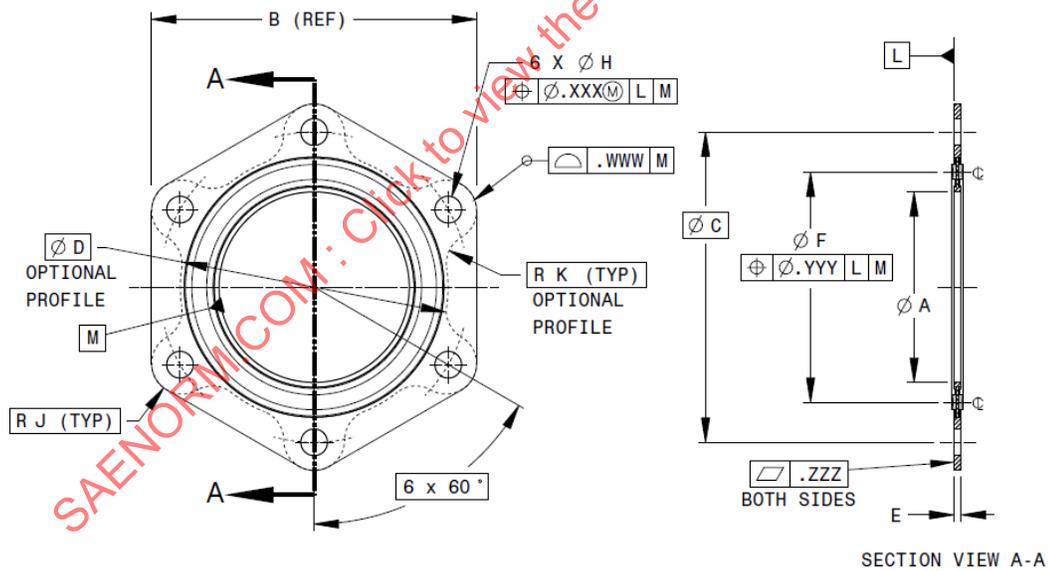
AS27194

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NOTE: DIMENSIONING AND TOLERANCING PER ASME Y14.5

FIGURE 1 - SEAL -12 THRU -32

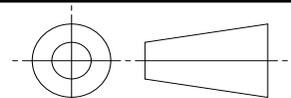


NOTE: DIMENSIONING AND TOLERANCING PER ASME Y14.5

FIGURE 2 - SEAL -40 THRU -48

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THIRD ANGLE PROJECTION



CUSTODIAN: A-6/A-6C2

PROCUREMENT SPECIFICATION: NONE

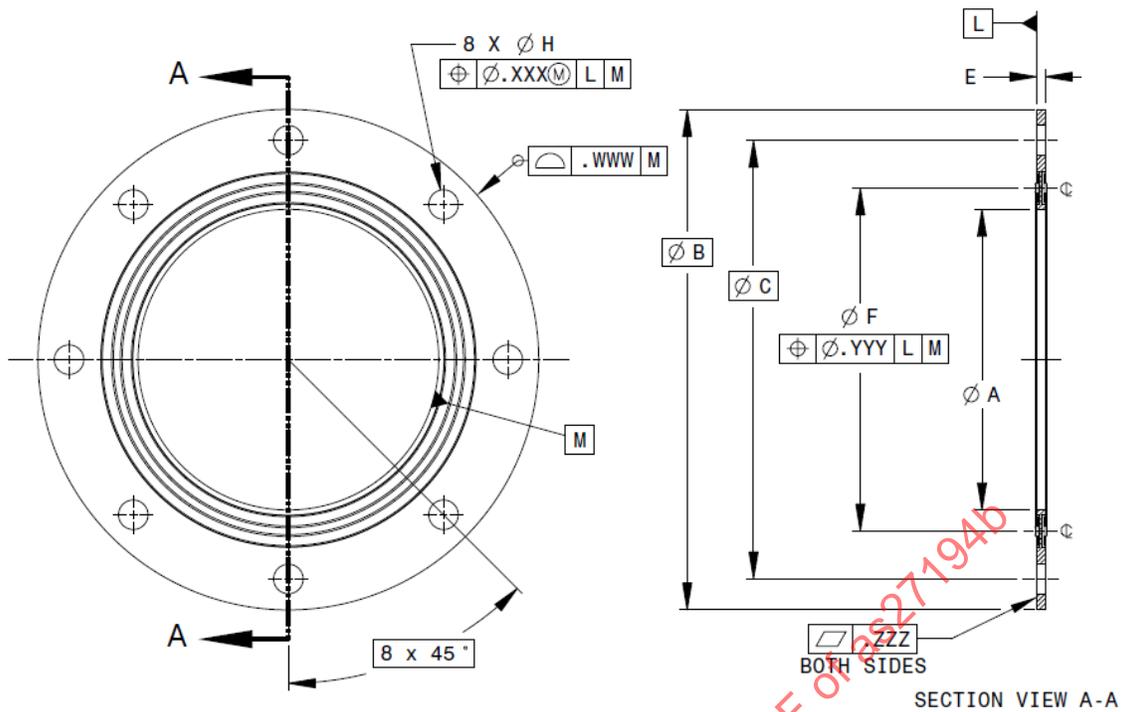


AEROSPACE STANDARD

SEAL, BONDED, ALUMINUM ALLOY 6061-T6, AMS4027, MOLD IN GROOVE, NBR RUBBER, AMS-P-5315

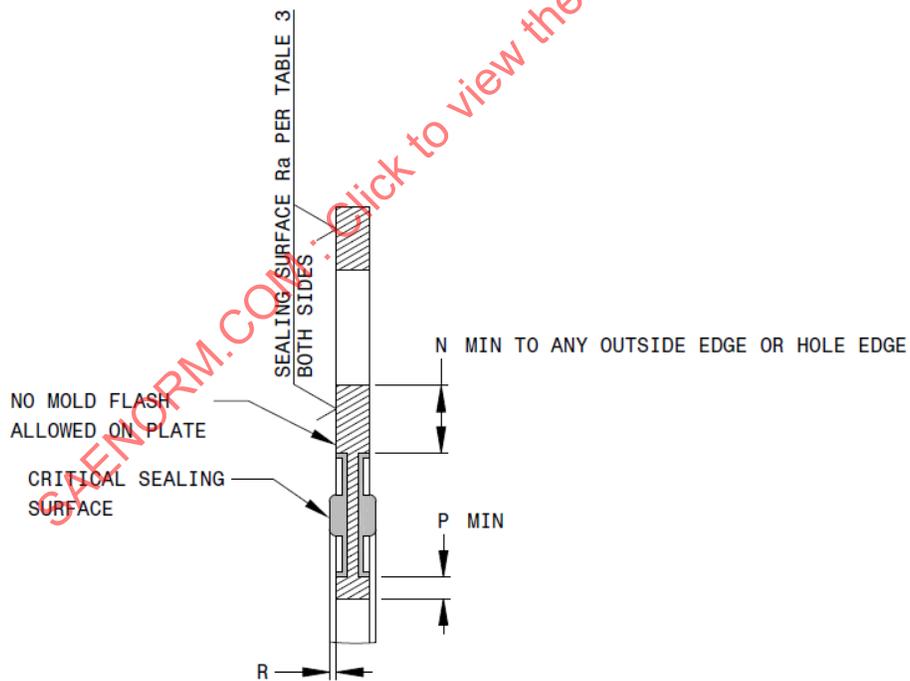
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SHEET 1 OF 6

REV. B



NOTE: DIMENSIONING AND TOLERANCING PER ASME Y14.5

FIGURE 3 - SEAL -56 THRU -64



NOTE: DIMENSIONING AND TOLERANCING PER ASME Y14.5

FIGURE 4 - ENLARGED SECTION, TYPICAL FOR ALL SIZES

	AEROSPACE STANDARD	AS27194 SHEET 2 OF 6	REV. B
	SEAL, BONDED, ALUMINUM ALLOY 6061-T6, AMS4027, MOLD IN GROOVE, NBR RUBBER, AMS-P-5315		

TABLE 1A - DIMENSIONS IN INCHES

MS PART NO.	NOMINAL TUBE OD REF.	ØA	B ±.015	ØC	ØD ±.015	E ±.004	ØF	G	ØH +.010 - .005	J RAD.	K RAD.
MS27194 -12	3/4	.669	1.594	1.635	1.250	.080	.953	1.156	.205	.219	.219
MS27194 -12-16	3/4	.669	1.750	1.856	1.500	.080	1.203	1.312	.205	.219	.219
MS27194 -16	1	.904	1.750	1.856	1.500	.080	1.203	1.312	.205	.219	.219
MS27194 -16 -24	1	.904	2.375	2.563	2.125	.080	1.734	1.812	.266	.281	.281
MS27194 -20	1 1/4	1.138	2.188	2.342	1.844	.080	1.500	1.656	.266	.266	.266
MS27194 -20 -24	1 1/4	1.138	2.375	2.563	2.125	.080	1.734	1.812	.266	.281	.281
MS27194 -24	1 1/2	1.372	2.375	2.563	2.125	.080	1.734	1.812	.266	.281	.281
MS27194 -32	2	1.841	3.000	3.359	2.750	.080	2.406	2.375	.328	.313	.313
MS27194 -40	2 1/2	2.341	4.000	3.812	3.250*	.090	2.828		.328	.375	.375*
MS27194 -48	3	2.841	4.500	4.312	3.750*	.090	3.313		.328	.625	.625*
MS27194 -56	3 1/2	3.341	5.563	4.875		.090	3.813		.328		
MS27194 -64	4	3.841	6.125	5.438		.090	4.313		.328		

TABLE 1B - DIMENSIONS IN MILLIMETERS

MS PART NO.	NOMINAL TUBE OD REF.	ØA	B ±.38	ØC	ØD ±.38	E ±0.10	ØF	G	ØH +.25 - .13	J RAD.	K RAD.
MS27194 -12	3/4	16.99	40.48	41.53	31.75	2.03	24.21	29.36	5.21	5.56	5.56
MS27194 -12 -16	3/4	16.99	44.45	47.14	38.10	2.03	30.56	33.33	5.21	5.56	5.56
MS27194 -16	1	22.96	44.45	47.14	38.10	2.03	30.56	33.33	5.21	5.56	5.56
MS27194-16 -24	1	22.96	60.33	65.10	53.98	2.03	44.05	46.03	6.76	7.14	7.14
MS27194 -20	1 1/4	28.91	55.56	59.49	46.83	2.03	38.10	42.06	6.76	6.75	6.75
MS27194 -20 -24	1 1/4	28.91	60.33	65.10	53.98	2.03	44.05	46.03	6.76	7.14	7.14
MS27194 -24	1 1/2	34.85	60.33	65.10	53.98	2.03	44.05	46.03	6.76	7.14	7.14
MS27194 -32	2	46.76	76.20	85.32	69.85	2.03	61.12	60.33	8.33	7.94	7.94
MS27194 -40	2 1/2	59.46	101.60	96.83	82.55*	2.29	71.83		8.33	9.53	9.53*
MS27194 -48	3	72.16	114.30	109.53	95.25*	2.29	84.14		8.33	15.88	15.88*
MS27194 -56	3 1/2	84.86	141.29	123.83		2.29	96.84		8.33		
MS27194 -64	4	97.56	155.58	138.13		2.29	109.54		8.33		

*SUGGESTED DIMENSIONS FOR "D" AND "K" SIZES -40 THROUGH -48.

TABLE 2A - TOLERANCES IN INCHES

MS PART NO.	.WWW	.XXX	.YYY	.ZZZ
MS27194 - ALL SIZES	.020	.005	.010	.003

TABLE 2B - TOLERANCES IN MILLIMETERS

MS PART NO.	.WWW	.XXX	.YYY	.ZZZ
MS27194 - ALL SIZES	0.51	0.13	0.25	0.08

TABLE 3A - FIGURE 4 DIMENSIONS IN INCHES

MS PART NO.	N MIN	P MIN	R	SEALING SURFACE Ra (MICROINCHES)
MS27194 - ALL SIZES	.050	.060	.020	63

TABLE 3B - FIGURE 4 DIMENSIONS IN MILLIMETERS

MS PART NO.	N MIN	P MIN	R	SEALING SURFACE Ra (MICROMETERS)
MS27194 - ALL SIZES	1.27	1.52	0.51	1.6

APPLICATION:

THESE PRODUCTS HAVE BEEN USED TYPICALLY AT TEMPERATURES FROM -65 °F (-54 °C) TO +160 °F (+71 °C) WHERE RESISTANCE TO FUEL IS REQUIRED. THESE PRODUCTS ARE NOT TO BE USED DIRECTLY ON CFRP COMPOSITE MATERIALS.

APPLICABLE REFERENCES:

SAE PUBLICATIONS:

AVAILABLE FROM SAE INTERNATIONAL, 400 COMMONWEALTH DRIVE, WARRENDALE, PA 15096-0001, TEL: 877-606-7323 (INSIDE USA AND CANADA) OR 724-776-4970 (OUTSIDE USA), www.sae.org.

- AMS2817 PACKAGING AND IDENTIFICATION PREFORMED PACKINGS
- AMS4027 ALUMINUM ALLOY, SHEET AND PLATE 1.0Mg - 0.60Si - 0.28Cu - 0.20Cr (6061; -T6 SHEET, -T651 PLATE) SOLUTION AND PRECIPITATION HEAT TREATED - UNS A96061
- AMS-P-5315 ACRYLONITRILE-BUTADIENE (NBR) RUBBER FOR FUEL-RESISTANT SEALS 60 TO 70
- AS478 IDENTIFICATION MARKING METHODS
- ARP5316 STORAGE OF ELASTOMER SEALS AND SEAL ASSEMBLIES WHICH INCLUDE AN ELASTOMER ELEMENT PRIOR TO HARDWARE ASSEMBLY
- AS5752 AEROSPACE - VISUAL INSPECTION STANDARD FOR ELASTOMERIC SEALING ELEMENTS OTHER THAN O-RINGS

U.S. GOVERNMENT PUBLICATIONS:

AVAILABLE FROM DLA DOCUMENT SERVICES, BUILDING 4/D, 700 ROBBINS AVENUE, PHILADELPHIA, PA 19111-5094, TEL: 215-697-6396, <http://quicksearch.dla.mil/>.

- MIL-A-8625 ANODIC COATINGS FOR ALUMINUM AND ALUMINUM ALLOYS

ASQ PUBLICATIONS:

AVAILABLE FROM AMERICAN SOCIETY FOR QUALITY, 600 NORTH PLANKINTON AVENUE, MILWAUKEE, WI 53203, TEL: 800-248-1946 (UNITED STATES OR CANADA)), 001-800-514-1564 (MEXICO) OR +1-414-272-8575 (ALL OTHER LOCATIONS), www.asq.org.

- ANSI/ASQ Z1.4 SAMPLING PROCEDURES AND TABLES FOR INSPECTION BY ATTRIBUTES

	AEROSPACE STANDARD	AS27194 SHEET 4 OF 6	REV. B
	SEAL, BONDED, ALUMINUM ALLOY 6061-T6, AMS4027, MOLD IN GROOVE, NBR RUBBER, AMS-P-5315		