

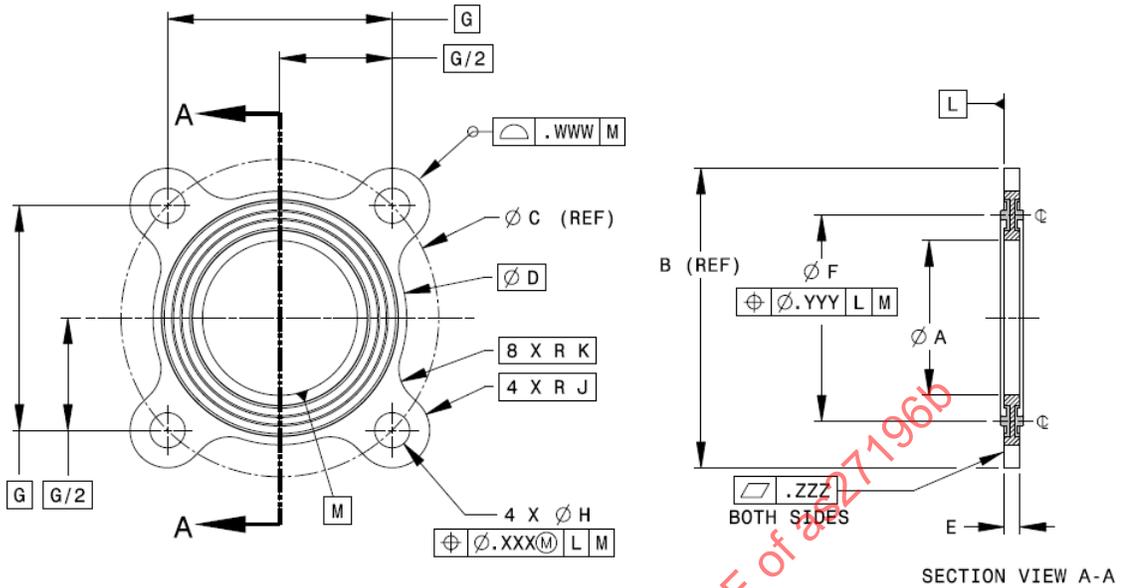
RATIONALE

THE PURPOSE OF THIS REVISION IS TO COMPLETELY UPDATE THE FIGURES, FORMAT AND REQUIREMENTS TO ALIGN WITH CURRENT STANDARDS AND TO REMOVE REFERENCES TO OBSOLETE DOCUMENTS.

REV.  
B

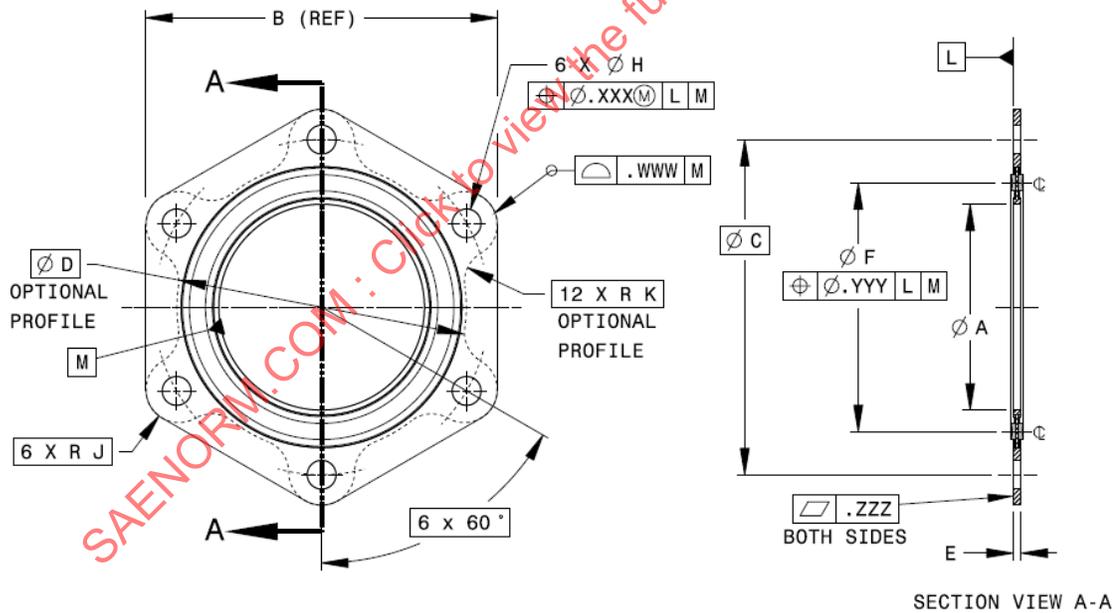
AS27196

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NOTE: DIMENSIONING AND TOLERANCING PER ASME Y14.5-2009

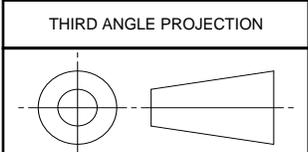
FIGURE 1 - SEAL -12 THRU -32



NOTE: DIMENSIONING AND TOLERANCING PER ASME Y14.5-2009

FIGURE 2 - SEAL -40 THRU -48

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CUSTODIAN: A-6/A-6C

PROCUREMENT SPECIFICATION: NONE

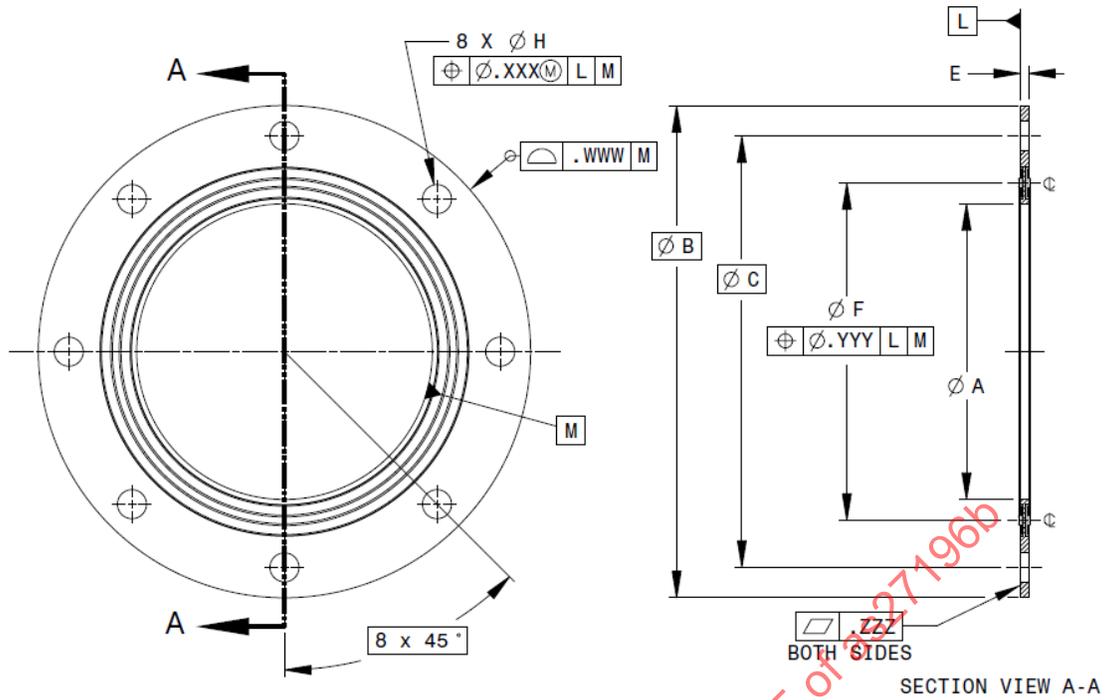


**AEROSPACE STANDARD**

(R) SEAL, BONDED, 302 CORROSION RESISTANT STEEL, AMS5516, MOLD IN GROOVE, FLUOROCARBON RUBBER, AMS7276

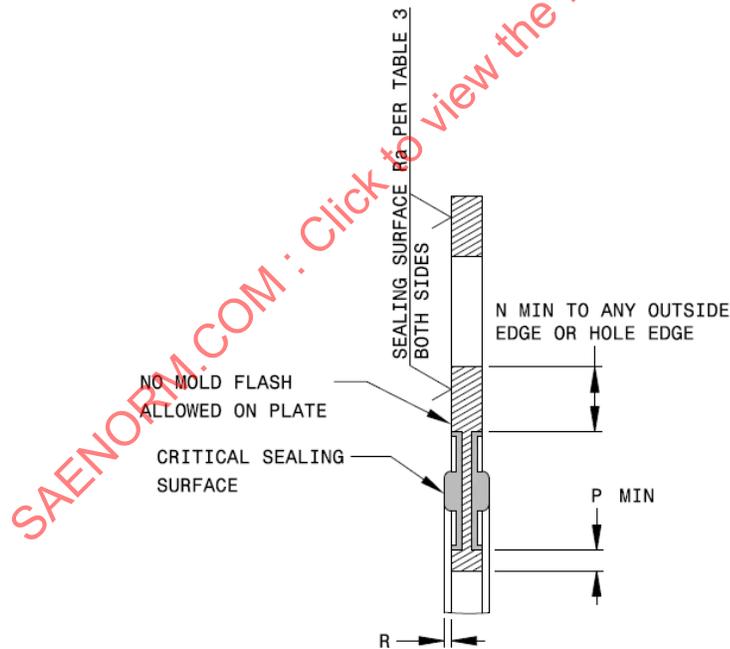
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SHEET 1 OF 6

**REV. B**



NOTE: DIMENSIONING AND TOLERANCING PER ASME Y14.5-2009

FIGURE 3 - SEAL -56 THRU -64



NOTE: DIMENSIONING AND TOLERANCING PER ASME Y14.5-2009

FIGURE 4 - ENLARGED SECTION, TYPICAL FOR ALL SIZES

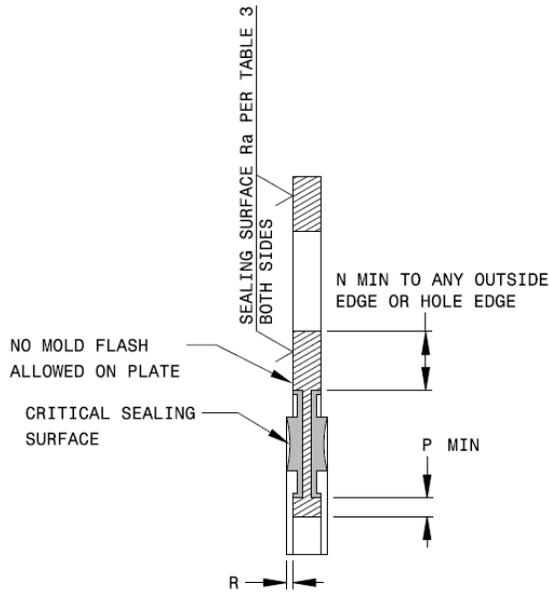


**AEROSPACE STANDARD**

(R) SEAL, BONDED, 302 CORROSION RESISTANT STEEL, AMS5516, MOLD IN GROOVE, FLUOROCARBON RUBBER, AMS7276

**AS27196**  
 SHEET 2 OF 6

**REV. B**



NOTE: DIMENSIONING AND TOLERANCING PER ASME Y14.5-2009

FIGURE 5 - OPTIONAL SEAL CONFIGURATION, ENLARGED SECTION, TYPICAL FOR ALL SIZES

TABLE 1A - DIMENSIONS IN INCHES

MS PART NO.	NOMINAL TUBE OD REF.	ØA	B	ØC	ØD	E ±.008	ØF ±.015	G	ØH +.010 -.005	J RAD.	K RAD.
MS27196 -12	3/4	.669	1.594	1.635	1.250	.092	.953	1.156	.205	.219	.219
MS27196 -12-16	3/4	.669	1.750	1.856	1.500	.092	1.203	1.312	.205	.219	.219
MS27196 -16	1	.904	1.750	1.856	1.500	.092	1.203	1.312	.205	.219	.219
MS27196 -16 -24	1	.904	2.375	2.563	2.125	.092	1.734	1.812	.266	.281	.281
MS27196 -20	1 1/4	1.138	2.188	2.342	1.844	.092	1.500	1.656	.266	.266	.266
MS27196 -20 -24	1 1/4	1.138	2.375	2.563	2.125	.092	1.734	1.812	.266	.281	.281
MS27196 -24	1 1/2	1.372	2.375	2.563	2.125	.092	1.734	1.812	.266	.281	.281
MS27196 -32	2	1.841	3.000	3.359	2.750	.092	2.406	2.375	.328	.313	.313
MS27196 -40	2 1/2	2.341	4.000	3.812	3.250*	.092	2.828	-	.328	.375	.375*
MS27196 -48	3	2.841	4.500	4.312	3.750*	.092	3.313	-	.328	.625	.375*
MS27196 -56	3 1/2	3.341	5.563	4.875	-	.092	3.813	-	.328	-	-
MS27196 -64	4	3.841	6.125	5.438	-	.092	4.313	-	.328	-	-

TABLE 1B - DIMENSIONS IN MILLIMETERS

MS PART NO.	NOMINAL TUBE OD REF.	ØA	B	ØC	ØD	E ±0.20	ØF ±.38	G	ØH +.25 -.13	J RAD.	K RAD.
MS27196 -12	3/4	16.99	40.48	41.53	31.75	2.34	24.21	29.36	5.21	5.56	5.56
MS27196 -12 -16	3/4	16.99	44.45	47.14	38.10	2.34	30.56	33.33	5.21	5.56	5.56
MS27196 -16	1	22.96	44.45	47.14	38.10	2.34	30.56	33.33	5.21	5.56	5.56
MS27196-16 -24	1	22.96	60.33	65.10	53.98	2.34	44.05	46.03	6.76	7.14	7.14
MS27196 -20	1 1/4	28.91	55.56	59.49	46.83	2.34	38.10	42.06	6.76	6.75	6.75
MS27196 -20 -24	1 1/4	28.91	60.33	65.10	53.98	2.34	44.05	46.03	6.76	7.14	7.14
MS27196 -24	1 1/2	34.85	60.33	65.10	53.98	2.34	44.05	46.03	6.76	7.14	7.14
MS27196 -32	2	46.76	76.20	85.32	69.85	2.34	61.12	60.33	8.33	7.94	7.94
MS27196 -40	2 1/2	59.46	101.60	96.83	82.55*	2.34	71.83	-	8.33	9.53	9.53*
MS27196 -48	3	72.16	114.30	109.53	95.25*	2.34	84.14	-	8.33	15.88	9.53*
MS27196 -56	3 1/2	84.86	141.29	123.83	-	2.34	96.84	-	8.33	-	-
MS27196 -64	4	97.56	155.58	138.13	-	2.34	109.54	-	8.33	-	-

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

	<b>AEROSPACE STANDARD</b> (R) SEAL, BONDED, 302 CORROSION RESISTANT STEEL, AMS5516, MOLD IN GROOVE, FLUOROCARBON RUBBER, AMS7276	<b>AS27196</b> SHEET 3 OF 6	<b>REV.</b> <b>B</b>

TABLE 2A - TOLERANCES IN INCHES

MS PART NO.	.WWW	.XXX	.YYY	.ZZZ
MS27196 - ALL SIZES	.020	.005	.010	.003

TABLE 2B - TOLERANCES IN MILLIMETERS

MS PART NO.	.WWW	.XXX	.YYY	.ZZZ
MS27196 - ALL SIZES	0.51	0.13	0.25	0.08

TABLE 3A - FIGURE 4 AND FIGURE 5 DIMENSIONS IN INCHES

MS PART NO.	N MIN	P MIN	R	MAXIMUM SEALING SURFACE Ra (µIN)
MS27196 - ALL SIZES	.050	.060	.020	63

TABLE 3B - FIGURE 4 AND FIGURE 5 DIMENSIONS IN MILLIMETERS

MS PART NO.	N MIN	P MIN	R	MAXIMUM SEALING SURFACE Ra (µm)
MS27196 - 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 +400 °F (+204 °C) WHERE RESISTANCE TO SYNTHETIC OIL OR FUEL IS REQUIRED.

**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](http://www.sae.org).

- AMS2817 PACKAGING AND IDENTIFICATION PREFORMED PACKINGS
- AMS5516 STEEL, CORROSION-RESISTANT, SHEET, STRIP, AND PLATE 18Cr-9.0Ni (SAE 30302) SOLUTION HEAT TREATED
- AMS7276 RUBBER: FLUOROCARBON (FKM) HIGH-TEMPERATURE-FLUID RESISTANT LOW COMPRESSION SET FOR SEALS IN FUEL SYSTEMS AND SPECIFIC ENGINE OIL SYSTEMS
- 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

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](http://www.asq.org).

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

	<b>AEROSPACE STANDARD</b>	<b>AS27196</b> SHEET 4 OF 6	<b>REV.</b> <b>B</b>
	(R) SEAL, BONDED, 302 CORROSION RESISTANT STEEL, AMS5516, MOLD IN GROOVE, FLUOROCARBON RUBBER, AMS7276		