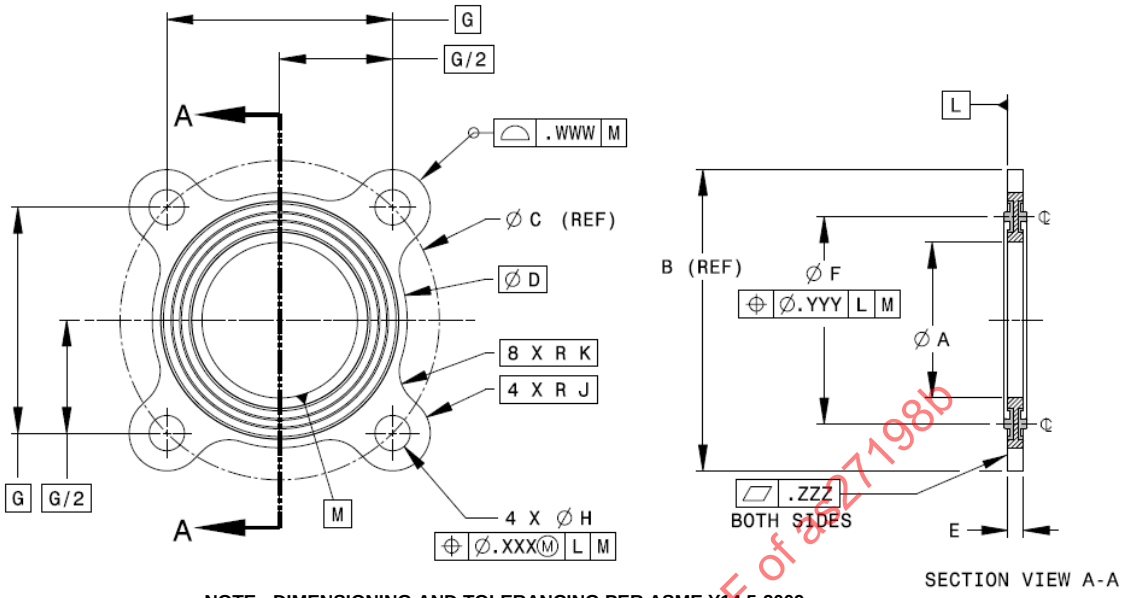
FEDERAL SUPPLY CLASS
5330

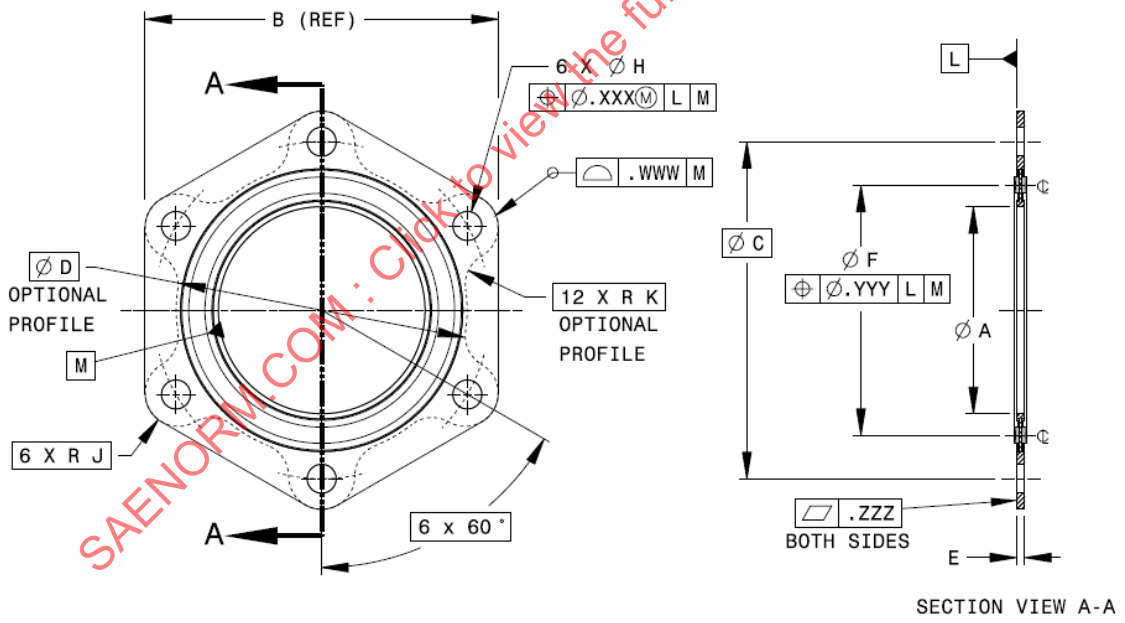
RATIONALE

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.



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

FIGURE 1 - SEAL -12 THRU -32

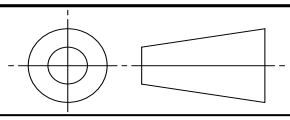


NOTE: DIMENSIONING AND TOLERANCING PER ASME Y14.5-2009

FIGURE 2 - SEAL -40 THRU -48

SAE values your input. To provide feedback on this Technical Report, please visit
http://www.sae.org/technical/standards/AS27198B

THIRD ANGLE PROJECTION



ISSUED 2001-03 REVISED 2014-06

CUSTODIAN: A-6/A-6C

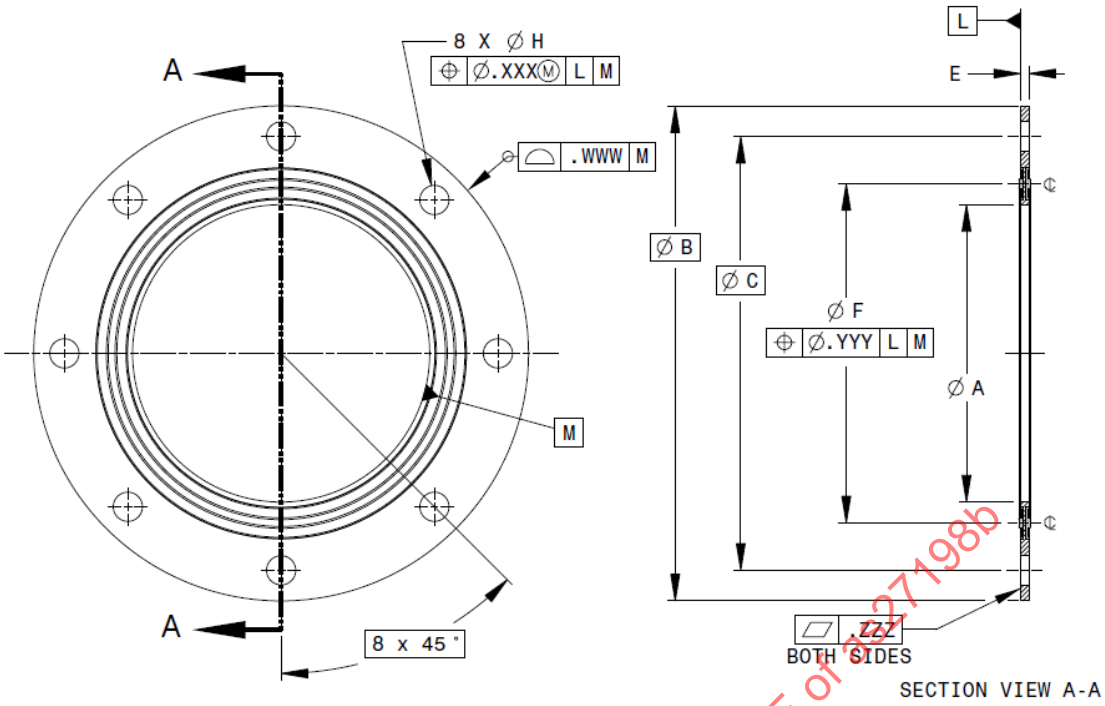
PROCUREMENT SPECIFICATION: NONE

AEROSPACE STANDARD

(R) SEAL, BONDED, 302 CORROSION RESISTANT STEEL, AMS5516, MOLD IN GROOVE, FLUOROSILICONE RUBBER, MIL-DTL-25988

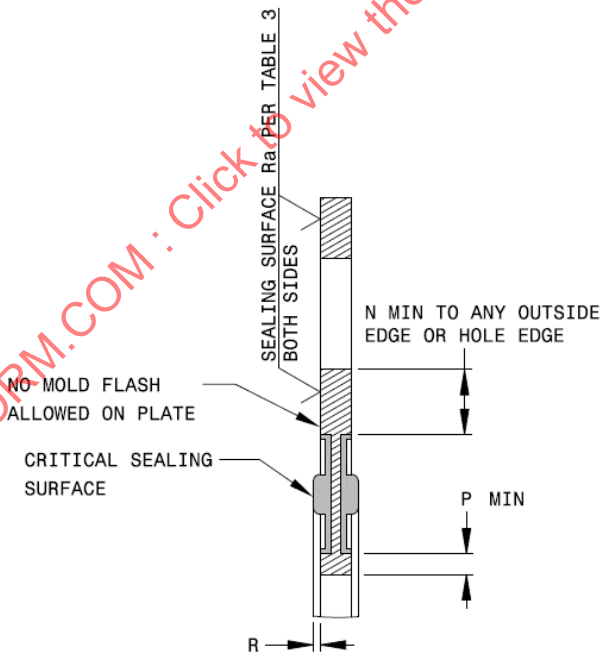
AS27198
SHEET 1 OF 6

REV. B



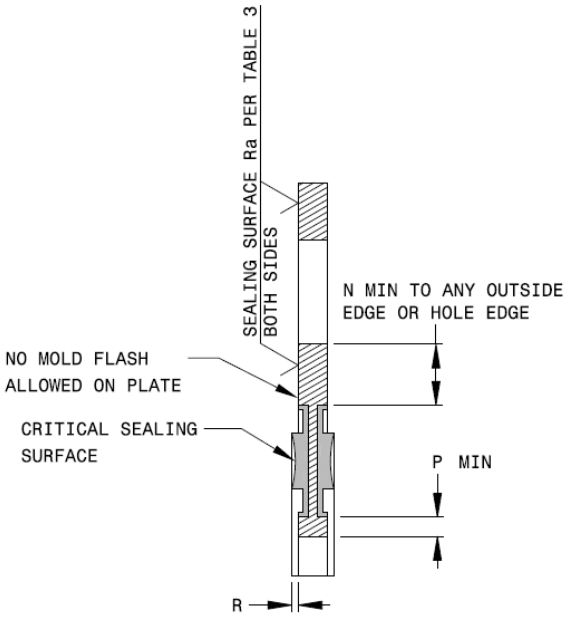
NOTE: DIMENSIONING AND TOLERANCING PER ASME Y14.5-2009

FIGURE 3 - SEAL -56 THRU -64



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

FIGURE 4 - ENLARGED SECTION, TYPICAL FOR ALL SIZES



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.
MS27198 -12	3/4	.669	1.594	1.635	1.250	.092	.953	1.156	.205	.219	.219
MS27198 -12-16	3/4	.669	1.750	1.856	1.500	.092	1.203	1.312	.205	.219	.219
MS27198 -16	1	.904	1.750	1.856	1.500	.092	1.203	1.312	.205	.219	.219
MS27198 -16 -24	1	.904	2.375	2.563	2.125	.092	1.734	1.812	.266	.281	.281
MS27198 -20	1 1/4	1.138	2.188	2.342	1.844	.092	1.500	1.656	.266	.266	.266
MS27198 -20 -24	1 1/4	1.138	2.375	2.563	2.125	.092	1.734	1.812	.266	.281	.281
MS27198 -24	1 1/2	1.372	2.375	2.563	2.125	.092	1.734	1.812	.266	.281	.281
MS27198 -32	2	1.841	3.000	3.359	2.750	.092	2.406	2.375	.328	.313	.313
MS27198 -40	2 1/2	2.341	4.000	3.812	3.250*	.092	2.828	-	.328	.375	.375*
MS27198 -48	3	2.841	4.500	4.312	3.750*	.092	3.313	-	.328	.625	.375*
MS27198 -56	3 1/2	3.341	5.563	4.875	-	.092	3.813	-	.328	-	-
MS27198 -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 ±0.38	G	ØH +.25 -.13	J RAD.	K RAD.
MS27198 -12	3/4	16.99	40.48	41.53	31.75	2.34	24.21	29.36	5.21	5.56	5.56
MS27198 -12 -16	3/4	16.99	44.45	47.14	38.10	2.34	30.56	33.33	5.21	5.56	5.56
MS27198 -16	1	22.96	44.45	47.14	38.10	2.34	30.56	33.33	5.21	5.56	5.56
MS27198-16 -24	1	22.96	60.33	65.10	53.98	2.34	44.05	46.03	6.76	7.14	7.14
MS27198 -20	1 1/4	28.91	55.56	59.49	46.83	2.34	38.10	42.06	6.76	6.75	6.75
MS27198 -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
MS27198 -24	1 1/2	34.85	60.33	65.10	53.98	2.34	44.05	46.03	6.76	7.14	7.14
MS27198 -32	2	46.76	76.20	85.32	69.85	2.34	61.12	60.33	8.33	7.94	7.94
MS27198 -40	2 1/2	59.46	101.60	96.83	82.55*	2.34	71.83	-	8.33	9.53	9.53*
MS27198 -48	3	72.16	114.30	109.53	95.25*	2.34	84.14	-	8.33	15.88	9.53*
MS27198 -56	3 1/2	84.86	141.29	123.83	-	2.34	96.84	-	8.33	-	-
MS27198 -64	4	97.56	155.58	138.13	-	2.34	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
MS27198 - ALL SIZES	.020	.005	.010	.003

TABLE 2B - TOLERANCES IN MILLIMETERS

MS PART NO.	.WWW	.XXX	.YYY	.ZZZ
MS27198 - 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)
MS27198 - 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)
MS27198 - 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 +350 °F (+177 °C) WHERE RESISTANCE TO 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.

AMS2817 PACKAGING AND IDENTIFICATION PREFORMED PACKINGS

AMS5516 STEEL, CORROSION-RESISTANT, SHEET, STRIP, AND PLATE 18Cr-9.0Ni (SAE 30302) SOLUTION HEAT TREATED

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 OR http://quicksearch.dla.mil.

MIL-DTL-25988 RUBBER, FLUOROSILICONE ELASTOMER, OIL-AND FUEL-RESISTANT, SHEETS, STRIPS, MOLDED PARTS, AND EXTRUDED SHAPES

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