

REV.
C

AS9581™

FEDERAL SUPPLY CLASS
5310

RATIONALE

CORRECT LOCATION OF G DIMENSION TO BE THE FULL WIDTH OF THE TAB (I.E., RESTORE TO PREVIOUS REVISION). UPDATE TO ASME Y14.5-2018. MINOR EDITORIAL UPDATES.

NOTICE

THE INITIAL SAE PUBLICATION OF THIS DOCUMENT WAS TAKEN DIRECTLY FROM U.S. MILITARY STANDARD MS9581B, NOTICE 1. THIS SAE STANDARD MAY RETAIN THE SAME PART NUMBERS ESTABLISHED BY THE ORIGINAL MILITARY DOCUMENT.

ANY REQUIREMENTS ASSOCIATED WITH QUALIFIED PRODUCTS LISTS (QPL'S) MAY CONTINUE TO BE MANDATORY FOR DoD CONTRACTS. REQUIREMENTS RELATING TO QPL'S HAVE NOT BEEN ADOPTED BY SAE FOR THIS STANDARD AND ARE NOT PART OF THIS SAE DOCUMENT.

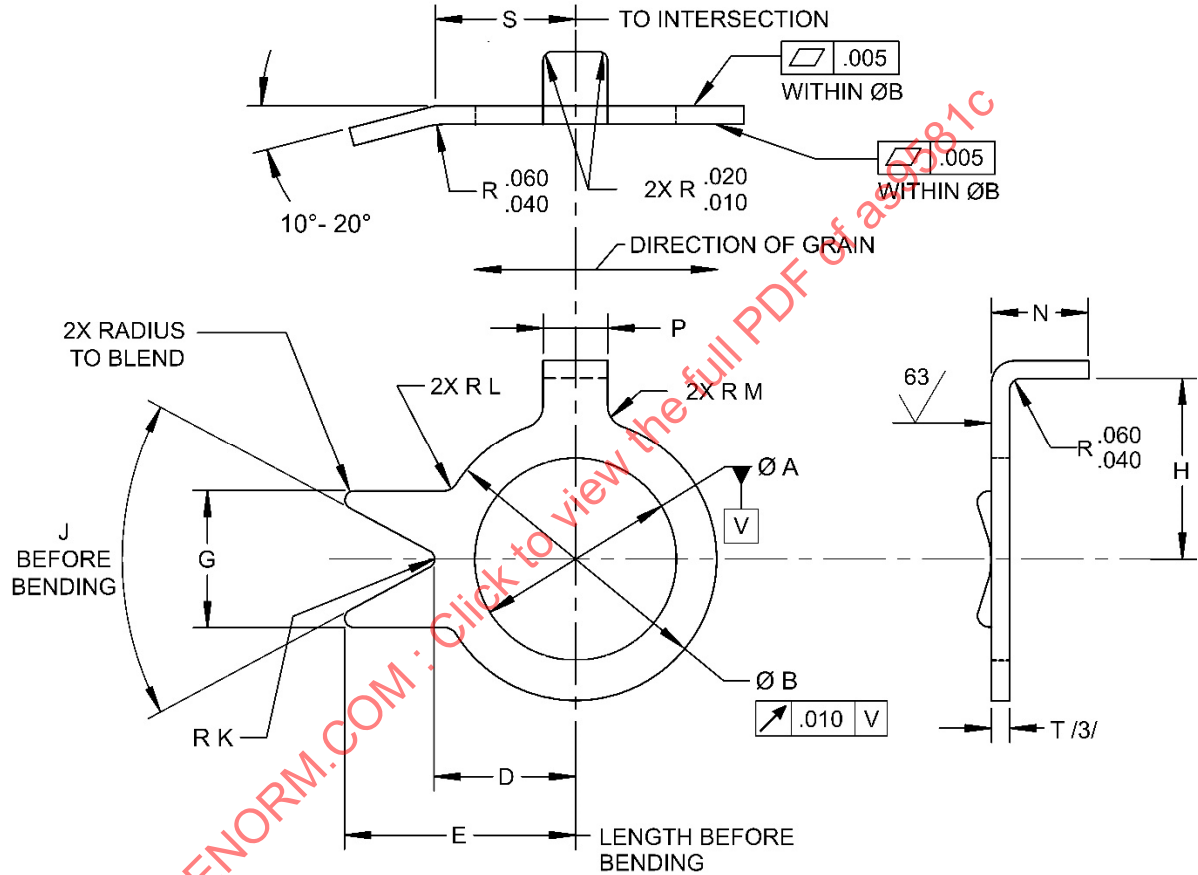
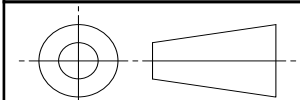


FIGURE 1 - WASHER

For more information on this standard, visit
<https://www.sae.org/standards/content/AS9581C>

THIRD ANGLE PROJECTION



CUSTODIAN: E-25

PROCUREMENT SPECIFICATION: NONE



AEROSPACE STANDARD

WASHER, KEY - 90 DEG, LOCKING,
CRES, UNS S32100

AS9581™
SHEET 1 OF 3

REV.
C

TABLE 1 - DIMENSIONS

PART NUMBER	NOM SIZE	A	B	D	E	G	H	J
MS9581-08	.1640	.170 - .175	.310 - .320	.160 - .165	.275 - .285	.175 - .185	.181 - .191	48° - 52°
MS9581-09	.1900	.195 - .200	.370 - .380	.190 - .195	.295 - .305	.200 - .210	.221 - .231	58° - 62°
MS9581-10	.2500	.255 - .260	.440 - .450	.220 - .225	.350 - .360	.250 - .260	.265 - .275	58° - 62°
MS9581-11	.3125	.320 - .325	.495 - .505	.250 - .255	.410 - .420	.280 - .290	.325 - .335	58° - 62°
MS9581-12	.3750	.390 - .395	.560 - .570	.280 - .285	.450 - .460	.320 - .330	.365 - .375	58° - 62°
MS9581-13	.4375	.450 - .455	.685 - .695	.345 - .350	.525 - .535	.390 - .400	.415 - .425	58° - 62°
MS9581-14	.5000	.515 - .520	.745 - .755	.375 - .380	.590 - .600	.425 - .435	.465 - .475	58° - 62°
MS9581-15	.5625	.575 - .580	.870 - .880	.440 - .445	.640 - .650	.500 - .510	.540 - .550	78° - 82°
MS9581-16	.6250	.640 - .645	.930 - .940	.470 - .475	.680 - .690	.530 - .540	.565 - .575	78° - 82°
MS9581-17	.7500	.765 - .770	1.055 - 1.065	.530 - .535	.730 - .740	.550 - .560	.665 - .675	88° - 92°
MS9581-18	.8750	.890 - .895	1.245 - 1.255	.625 - .630	.860 - .870	.600 - .610	.790 - .800	88° - 92°
MS9581-19	1.0000	1.015 - 1.020	1.430 - 1.440	.715 - .720	.950 - .960	.650 - .660	.865 - .875	88° - 92°

TABLE 1 - DIMENSIONS (CONTINUED)

PART NUMBER	K	L	M	N	P	S	T	APPROX MASS LB/100
MS9581-08	.005 - .025	.027 - .047	.027 - .047	.080 - .090	.080 - .085	.175 - .185	.019 - .025	.041
MS9581-09	.005 - .025	.027 - .047	.027 - .047	.095 - .105	.110 - .115	.205 - .215	.019 - .025	.065
MS9581-10	.015 - .035	.030 - .050	.030 - .050	.100 - .110	.110 - .115	.235 - .245	.028 - .036	.128
MS9581-11	.020 - .040	.030 - .050	.040 - .060	.100 - .110	.140 - .145	.275 - .285	.028 - .036	.160
MS9581-12	.020 - .040	.030 - .050	.040 - .060	.140 - .150	.140 - .145	.315 - .325	.028 - .036	.182
MS9581-13	.035 - .055	.030 - .050	.040 - .060	.150 - .160	.170 - .175	.375 - .385	.032 - .040	.246
MS9581-14	.040 - .060	.040 - .060	.040 - .060	.150 - .160	.200 - .205	.415 - .425	.032 - .040	.396
MS9581-15	.040 - .060	.040 - .060	.065 - .085	.150 - .160	.200 - .205	.475 - .485	.032 - .040	.532
MS9581-16	.040 - .060	.040 - .060	.065 - .085	.150 - .160	.200 - .205	.495 - .505	.032 - .040	.592
MS9581-17	.040 - .060	.050 - .070	.090 - .110	.150 - .160	.230 - .235	.565 - .575	.032 - .040	.709
MS9581-18	.040 - .060	.050 - .070	.090 - .110	.150 - .160	.260 - .265	.675 - .685	.032 - .040	.821
MS9581-19	.090 - .110	.050 - .070	.090 - .110	.150 - .160	.290 - .295	.775 - .785	.032 - .040	1.060

NOTES:

1. MATERIAL: CORROSION RESISTANT STEEL AMS5510 (COMPOSITION SIMILAR TO UNS S32100).
2. HEAT TREATMENT: FORMED WASHERS SHALL BE STRESS RELIEVED AT 1600 °F ± 25 °F FOR 30 MINUTES IN A PROTECTIVE ATMOSPHERE FOLLOWED BY AIR COOL.
- 3/ DIMENSION "T" SHALL BE OF UNIFORM THICKNESS WITHIN .002.
4. REMOVE BURRS AND SHARP EDGES.
5. SURFACE TEXTURE: SYMBOLS PER ASME Y14.36M. REQUIREMENTS PER ASME B46.1. UNLESS OTHERWISE SPECIFIED, MACHINED SURFACES TO BE 125 MICROINCHES Ra.
6. IDENTIFICATION: MARK PART NUMBER AND MANUFACTURER'S IDENTIFICATION ON CONTAINER.
7. DIMENSIONING AND TOLERANCING: ASME Y14.5-2018.
8. ALL DIMENSIONS ARE IN INCHES, UNLESS OTHERWISE SPECIFIED.

	AEROSPACE STANDARD		AS9581™ SHEET 2 OF 3	REV. C
	WASHER, KEY - 90 DEG, LOCKING, CRES, UNS S32100			