INCH-POUND

MIL-F-3922/58D
30 October 2013
SUPERSEDING
MIL-F-3922/58C
04 May 1976

DETAIL SPECIFICATION SHEET

FLANGES, WAVEGUIDE (CONTACT)

(RECTANGULAR, 10 HOLE)

Inactive for new design after
18 September 1998.

This specification is approved for use by all Departments and Agencies of the Department of Defense.

The requirements for acquiring the flanges described herein shall consist of this specification sheet and MIL-DTL-3922.

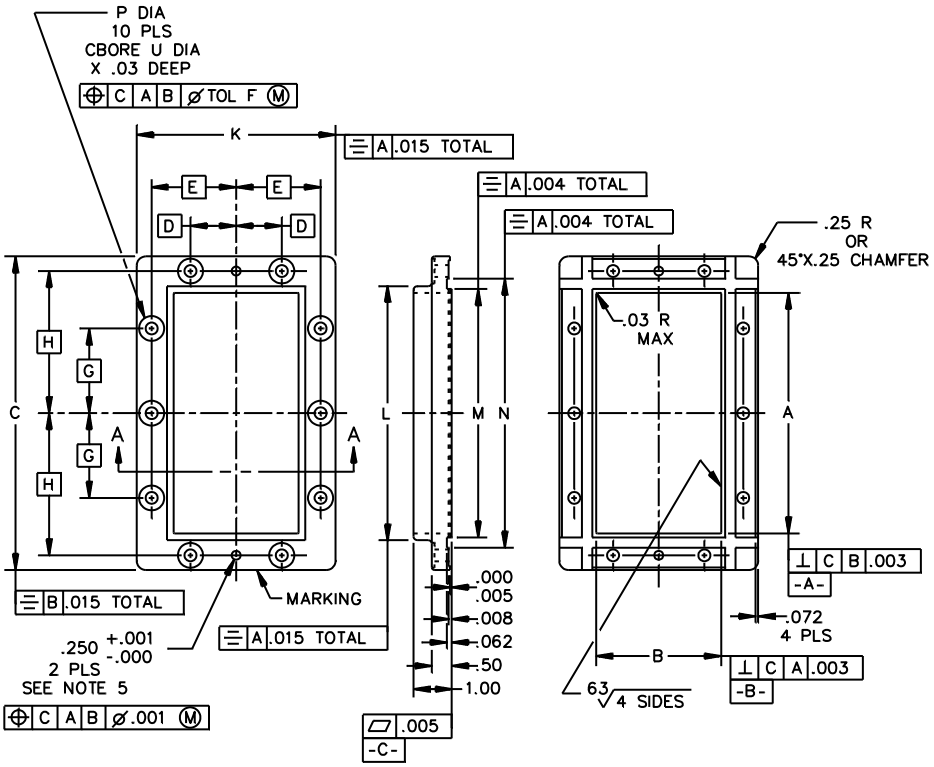
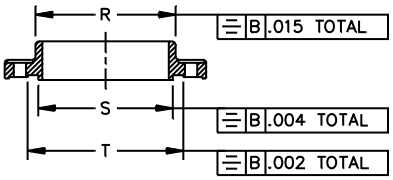


FIGURE 1. Flange.



Inches	mm	Inches	mm
.001	.03	.062	1.57
.002	.05	.078	1.98
.003	.08	.248	6.30
.004	.10	.250	6.35
.005	.13	.3125	7.94
.008	.20	.500	12.70
.015	.38	1.00	25.40
.03	.76	1.25	31.75
.045	1.14		

NOTES:

1. Dimensions are in inches.
2. Metric equivalents (to the nearest .01 mm) are given for general information only and are based upon 1 inch = 25.4 mm.
3. Unless otherwise specified, tolerances are ± .02 (.51 mm) on two place decimals and ± .005 (.13 mm) on three place decimals.
4. Roughness of mating surfaces shall not exceed 63 microinches in accordance with ASME-B46.1 except that flaws shall be included in the roughness height measurement.
5. These holes to be drilled after assembly of flange to waveguide. For alignment pins used with these holes, see table III.
6. For lettered dimensions, see table I.

FIGURE 1. Flange – continued.

TABLE I. Dash numbers and dimensions.

Part No. M3922/58-						Dimensions 1/			
Dash No. 2/	Used with		Dash No. 3/	Used with		A +.000 -.005 (.13)	B +.000 -.005 (.13)	C ±.015 (.38)	D BSC.
	Waveguide M85/1-	Matting flange M3922/58-		Waveguide M85/1-	Matting flange M3922/58-				
007	015 017	007	008	018 019 168	008	6.670 (169.42)	3.420 (86.87)	8.688 (220.68)	1.249 (31.72)
009	027 031	009	010	029 030 170	010	4.470 (113.54)	2.320 (58.93)	6.344 (161.44)	.938 (23.82)
011	033 037	011	012	035 036 171	012	3.570 (90.68)	1.870 (47.50)	5.438 (138.13)	.671 (17.04)

Dash No. 2/	Dash No. 3/	E BSC.	F	G BSC	H BSC.	K ±.015 (.38)	L ±.015 (.38)	M ±.004 (.10)	N ±.004 (.10)
007	008	2.311 (58.70)	.012 (.30)	2.374 (60.30)	3.937 (100.00)	5.438 (138.13)	7.063 (179.40)	6.880 (174.75)	7.452 (189.28)
009	010	1.720 (43.69)	.010 (.25)	1.787 (45.39)	2.795 (70.99)	4.188 (106.38)	4.875 (123.83)	4.660 (118.36)	5.232 (132.89)
011	012	1.500 (38.10)	.010 (.25)	1.344 (34.14)	2.344 (59.54)	3.750 (95.25)	4.000 (101.60)	3.762 (95.55)	4.334 (110.08)

Dash No. 2/	Dash No. 3/	P ±.005 (.13)	R ±.015 (.38)	S ±.004 (.10)	T ±.002 (.10)	U ±.005 (.13)
007	008	.328 (8.33)	3.813 (96.85)	3.630 (92.20)	4.202 (106.73)	.687 (17.45)
009	010	.264 (6.71)	2.688 (68.28)	2.510 (63.75)	3.082 (78.28)	.625 (15.88)
011	012	.264 (6.71)	2.250 (57.15)	2.063 (52.40)	2.635 (66.93)	.625 (15.88)

1/ Metric equivalent are in parentheses.
2/ Copper alloy.
3/ Aluminum alloy.

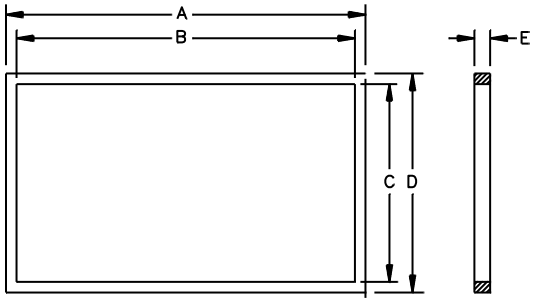


FIGURE 2. Gasket.

TABLE II. Gasket dimensions.

Used with flange dash number	Dimensions1/				
	A ± .015 (.38)	B ± .015 (.38)	C ± .015 (.38)	D ± .015 (.38)	E ±.015 (.38)
007, 008	7.390 (187.71)	7.140 (181.36)	3.890 (98.81)	4.140 (105.16)	.187 (4.75)
009, 010	5.172 (131.37)	4.922 (125.02)	2.766 (70.26)	3.015 (76.58)	.187 (4.75)
011, 012	4.266 (108.36)	4.015 (101.98)	2.328 (59.13)	2.578 (65.48)	.187 (4.75)

1/ Metric equivalents are in parentheses.

NOTES:

1. Dimensions are in inches.
2. Metric equivalents (to the nearest .01 mm) are given for general information only and are based upon 1 inch = 25.4 mm.

TABLE III. Items supplied with flange.

Item	Item description for part No. M3922/58-		Quantity
Gasket	007 and 008 Dimensions as shown in table II	009, 010, 011, and 012 Dimensions as shown in table II	1
Hex-head cap screw	(5/16) .3125-18 UNC-2A, 1.25 lg	(1/4) .250- 20 UNC-2A, 1.25 lg	5
Lockwasher	.3125 x .078 thick	.250 x .062 thick	5
Hex nut	(5/16) .3125-18 UNC 2B	(1/4) .250-20 UNC-2B	5
Alignment pin	.248 +.000 -.001 Dia. X 1.0 inch long Corrosion resistance steel per SAE-AMS-QQ-S-763, 300 series	.248 +.000 -.001 Dia. X 1.0 inch long Corrosion resistance steel per SAE-AMS-QQ-S-763, 300 series	1

REQUIREMENTS:

Dimensions and configuration:
Flange – See figure 1 and table I.
Gasket – See figure 2 and table II.

Material:
Flange – Metallic base alloy as specified in table I.

Marking: See figure 1.
Part number M3922/58 – (and dash number from table I).

Items supplied with flange: See table III.

AN nomenclature and engineering data: See table IV.

TABLE IV. Cross- reference of part numbers /AN nomenclature and engineering data.

Part No. M3933/58-	AN nomenclature	Frequency range GHz
007	UG-417B/U	1.12 – 1.70
008	UG-418B/U	1.12 – 1.70
009	UG-435B/U	1.70 – 2.60
010	UG-437B/U	1.70 – 2.60
011	UG-553A/U	2.20 – 3.30
012	UG-554A/U	2.20 – 3.30

Referenced documents. In addition to MIL-DTL-3922 this specification sheet references the following documents:
ASME-B46.1
SAE-AMS-QQ-S-763

Marginal notations are not used in this revision to identify changes with respect to the previous issue due to the extent of the changes.

Custodians:
Army - CR
Navy - EC
Air Force - 85
DLA - CC

Preparing activity:
DLA - CC

(Project 5985-2013-044)

Review activities:
Army - AV, MI
Navy - AS, CG, MC, OS, SH
Air Force - 19, 99

NOTE: The activities listed above were interested in this document as of the date of this document. Since organizations and responsibilities can change, you should verify the currency of the information above using the ASSIST Online database at https://assist.dla.mil/.