

REV.
B

SAE
AS85049/95

RATIONALE

REVISED TO INCLUDE ALL OUTSTANDING AMENDMENTS, COMMENTS RECEIVED BY THE GOVERNMENT AND INDUSTRY AND UP-DATE SPECIFICATION REQUIREMENTS, FIGURES AND REFERENCES.

NOTICE

THE REQUIREMENTS FOR ACQUIRING THE PRODUCT DESCRIBED HEREIN SHALL CONSIST OF THIS SPECIFICATION SHEET AND THE LATEST ISSUE OF SAE AS85049.

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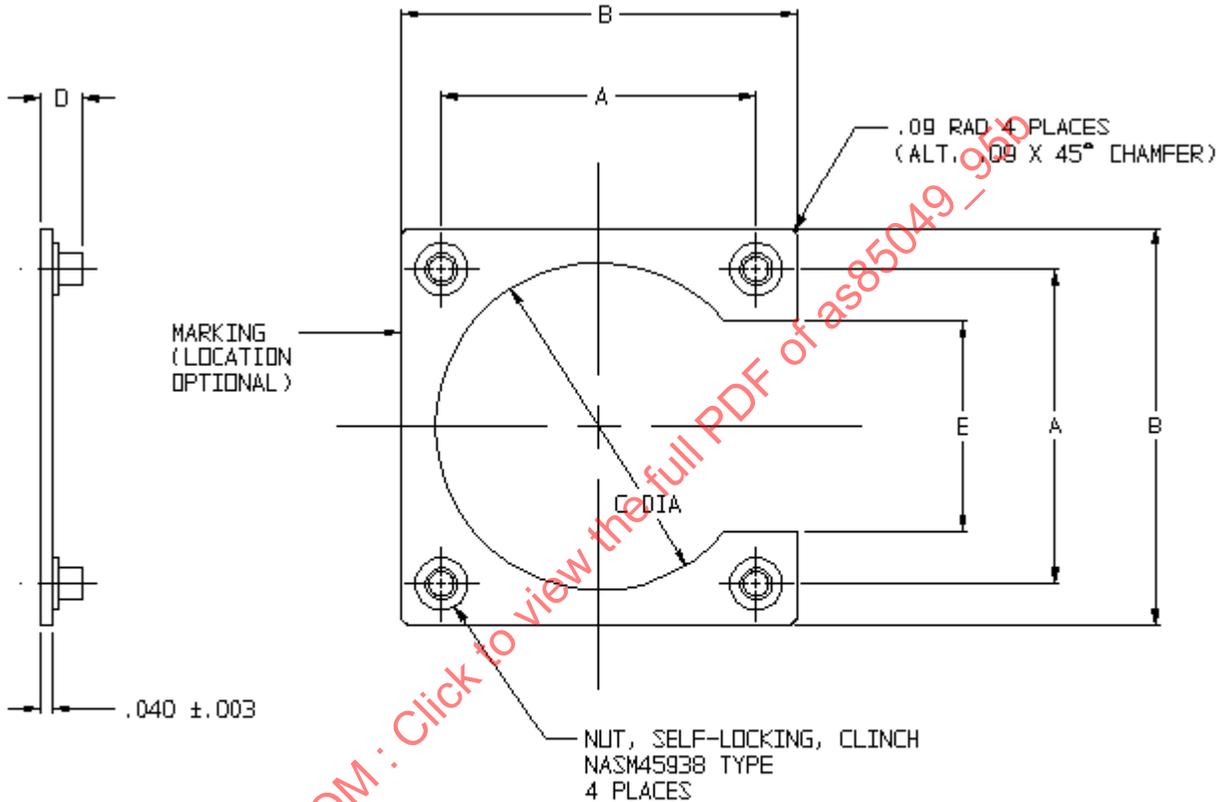
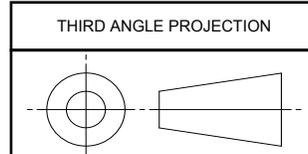


FIGURE 1

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CUSTODIAN: SAE AE-8/AE-8C1

PROCUREMENT SPECIFICATION: AS8504

SAE Aerospace
An SAE International Group

AEROSPACE STANDARD
(R) CONNECTOR ACCESSORIES, ELECTRICAL, MOUNTING DEVICE, FLANGE TYPE, CATEGORY 7, 3/4 PERIMETER

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TABLE 1 - DIMENSIONS

DASH NUMBER	CLASS	THRD UNJC -3B	A ± .005 1/	B MAX 1/	C ± .015	D	E ± .030 1/
3	A	4-40	.625 (15.88)	.940 (23.88)	.641 (16.28)	.106 (2.69) .166 (4.22)	.325 (8.26)
7	A	4-40	.719 (18.26)	1.034 (26.26)	.688 (17.48)	.106 (2.69) .166 (4.22)	.433 (11.00)
8	A	4-40	.594 (15.09)	.900 (22.86)	.570 (14.48)	.106 (2.69) .166 (4.22)	.308 (7.82)
10	A	4-40	.719 (18.26)	1.034 (26.26)	.720 (18.29)	.106 (2.69) .166 (4.22)	.433 (11.00)
	B	6-32	.812 (20.62)	1.202 (30.53)	.749 (19.02)	.123 (3.12) .183 (4.65)	
12	A	4-40	.812 (20.62)	1.119 (28.42)	.855 (21.72)	.106 (2.69) .166 (4.22)	.530 (13.46)
	B	6-32	.938 (23.83)	1.327 (33.71)	.938 (23.83)	.123 (3.12) .183 (4.65)	
14	A	4-40	.906 (23.01)	1.213 (30.81)	.984 (24.99)	.106 (2.69) .166 (4.22)	.624 (15.85)
	B	6-32	1.031 (26.19)	1.421 (36.09)	1.031 (26.19)	.123 (3.12) .183 (4.65)	
16	A	4-40	.969 (24.61)	1.295 (32.89)	1.094 (27.79)	.106 (2.69) .166 (4.22)	.687 (17.45)
	B	6-32	1.125 (28.58)	1.515 (38.48)	1.125 (28.58)	.123 (3.12) .183 (4.65)	
18	A	4-40	1.062 (26.97)	1.421 (36.09)	1.220 (30.99)	.106 (2.69) .166 (4.22)	.780 (19.81)
	B	6-32	1.203 (30.56)	1.593 (40.46)	1.234 (31.34)	.123 (3.12) .183 (4.65)	
19	A	4-40	.906 (23.01)	1.207 (30.66)	.953 (24.21)	.106 (2.69) .166 (4.22)	.620 (15.75)
20	A	4-40	1.156 (29.36)	1.550 (39.37)	1.345 (34.16)	.106 (2.69) .166 (4.22)	.874 (22.20)
	B	6-32	1.297 (32.94)	1.703 (43.26)	1.359 (34.52)	.123 (3.12) .183 (4.65)	.865 (21.97)
22	A	4-40	1.250 (31.75)	1.680 (42.67)	1.478 (37.54)	.106 (2.69) .166 (4.22)	.968 (24.59)
	B	6-32	1.375 (34.93)	1.753 (44.53)	1.483 (37.67)	.123 (3.12) .183 (4.65)	.907 (23.04)
24	A	4-40	1.500 (38.10)	1.906 (48.41)	1.560 (39.62)	.106 (2.69) .166 (4.22)	1.000 (25.40)
	B	6-32	1.375 (34.93)	1.800 (45.72)	1.595 (40.51)	.123 (3.12) .183 (4.65)	1.031 (26.19)
25	A	6-32	1.500 (38.10)	1.906 (48.41)	1.658 (42.11)	.123 (3.12) .183 (4.65)	1.125 (28.58)
27	A	4-40	.969 (24.61)	1.270 (32.26)	1.094 (27.79)	.106 (2.69) .166 (4.22)	.683 (17.35)
28	A	6-32	1.562 (39.67)	2.015 (51.18)	1.820 (46.23)	.123 (3.12) .183 (4.65)	1.125 (28.58)
32	A	6-32	1.750 (44.45)	2.327 (59.11)	2.062 (52.37)	.123 (3.12) .183 (4.65)	1.188 (30.18)
36	A	6-32	1.938 (49.23)	2.515 (63.88)	2.312 (58.72)	.123 (3.12) .183 (4.65)	1.375 (34.93)
37	A	4-40	1.187 (30.15)	1.515 (38.48)	1.281 (32.54)	.106 (2.69) .166 (4.22)	.874 (22.20)
61	A	4-40	1.437 (36.50)	1.827 (46.41)	1.594 (40.49)	.106 (2.69) .166 (4.22)	1.062 (40.69)
1/ DIMENSIONS A, B AND E SHALL BE MEASURED WITH THE MOUNTING FLANGE IN THE RESTRAINED STATE							

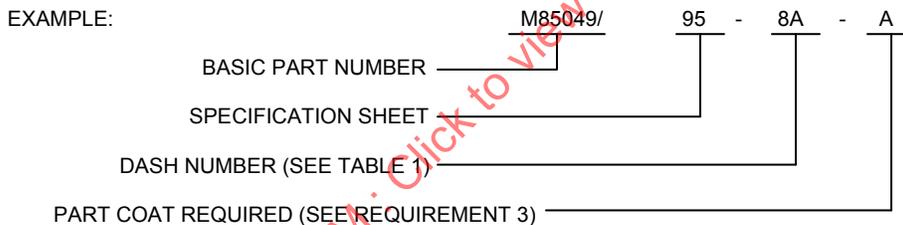
NOTES:

1. DIMENSIONS ARE INCHES.
2. UNLESS OTHERWISE SPECIFIED, TOLERANCE IS ± 0.10 .
3. CLASSES REPRESENT SHELL SIZE VARIATIONS (SEE TABLE 1).
4. FOR MOUNTING FLANGE CROSS REFERENCE INFORMATION, SEE TABLE 2.

REQUIREMENTS:

DESIGN AND CONSTRUCTION:

1. DIMENSIONS AND CONFIGURATION SHALL BE IN ACCORDANCE WITH FIGURE 1, TABLE 1.
2. FIGURE 1, MOUNTING FLANGES SHALL BE OF A CONSTRUCTION WITH PREDRILLED OR PUNCHED HOLES IN ALUMINUM ALLOY INCORPORATING SELF LOCKING NUTS, CLINCH TYPE.
3. MATERIAL AND FINISH: FLANGES, ALUMINUM ALLOY IN ACCORDANCE WITH SAE AS85049, CHEMICAL CONVERSION COATING PER MIL-DTL-5541, CLASS 1A. WHEN SPECIFIED IN THE PART NUMBER, BY LETTER 'A' DESIGNATOR, 2 COATS OF EPOXY POLYAMIDE PRIMER PER MIL-PRF-23377, TYPE I, SHALL BE APPLIED EITHER BEFORE OR AFTER NUT INSTALLATION AND OVERSPRAY IS ALLOWED PROVIDED THE PERFORMANCE CHARACTERISTICS OF THE NUT ARE NOT DEGRADED AND ALL OTHER REQUIREMENTS ARE MET.
4. CLINCH NUTS: IN ACCORDANCE WITH NASM45938, CLEAN AND DE-SCALE IN ACCORDANCE WITH ASTM A 380 AND/OR PASSIVATED IN ACCORDANCE WITH AMS-QQ-P-35 OR AMS2700, FOLLOWED BY A SOLID FILM LUBRICANT COATING PER MIL-PRF-46010.
5. PART NUMBER: SEE EXAMPLE BELOW.



6. QUALIFICATION: SEE SAE AS85049, CATEGORY 7, WITH THE FOLLOWING ADDITIONS:
 - a. INSTALLATION: WHEN TESTED AS SPECIFIED HEREIN EVIDENCE OF COCKING, LOOSENESS, SPLITS OR CRACKS SHALL BE CAUSE FOR REJECTION.
 - b. SALT SPRAY: IN ACCORDANCE WITH SAE AS85049, STANDARD TEST, 96 HOUR DURATION FOR CHEMICAL CONVERSION COATED PARTS AND EXTENDED TEST, 500 HOUR DURATION FOR POLYAMIDE PRIMER COATED PARTS.
 - c. VIBRATION: IN ACCORDANCE WITH SAE AS85049, RANDOM VIBRATION-MEDIUM DUTY, UNWIRED MOUNTED WITH FLANGE RECEPTACLE CONNECTOR ONLY.
 - d. SHOCK: IN ACCORDANCE WITH SAE AS85049, SHOCK-MEDIUM AND LIGHT DUTY, UNWIRED MOUNTED WITH FLANGE RECEPTACLE CONNECTOR ONLY.
 - e. LOCKING TORQUE: IN ACCORDANCE WITH NASM25027.
 - f. TORQUE OUT: IN ACCORDANCE WITH NASM45938, EXCEPT THE REQUIREMENT SHALL BE 15 IN LB MINIMUM FOR 4-40 THREADED NUTS AND 20 IN LB MINIMUM FOR 6-32 THREADED NUTS.

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	(R) CONNECTOR ACCESSORIES, ELECTRICAL, MOUNTING DEVICE, FLANGE TYPE, CATEGORY 7, 3/4 PERIMETER		

- g. PUSH OUT: IN ACCORDANCE WITH NASM45938, EXCEPT THE REQUIREMENT SHALL BE 88 LB MINIMUM FOR 4-40 THREADED NUTS AND 105 LB MINIMUM FOR 6-32 THREADED NUTS.
- h. POST EXAMINATION

TABLE 2 - MOUNTING FLANGE CONNECTOR APPLICATION DATA 1/

AS85049/95 DASH NUMBER/CLASS	MIL-DTL-38999				MIL-DTL-5015	AS81703 SERIES 3
	SERIES I	SERIES II	SERIES III	SERIES IV		
	CONNECTOR SHELL SIZE					
3A						3
7A						7
8A		8			8S	
10A	9	10	9 (A)		10SL	
10B						
12A	11	12	11 (B)	11 (B)	12, 12S	12
12B						
14A	13	14	13 (C)	13 (C)	14, 14S	19
14B						
16A	15	16	15 (D)	15 (D)	16, 16S	27
16B						
18A	17	18	17 (E)	17 (E)	18	
18B						
20A	19	20	19 (F)	19 (F)	20	
20B						
22A	21	22	21 (G)	21 (G)	22	
22B						
24A						
24B	23	24	23 (H)	23 (H)	24	
25A	25		25 (J)	25 (J)		
27A						
28A					28	
32A						
36A						
37A						37
61A						61

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