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REV.
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AS85049/31

FEDERAL SUPPLY CLASS
5935

RATIONALE

AS85049/31B HAS BEEN REAFFIRMED TO COMPLY WITH THE SAE FIVE-YEAR REVIEW POLICY.

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

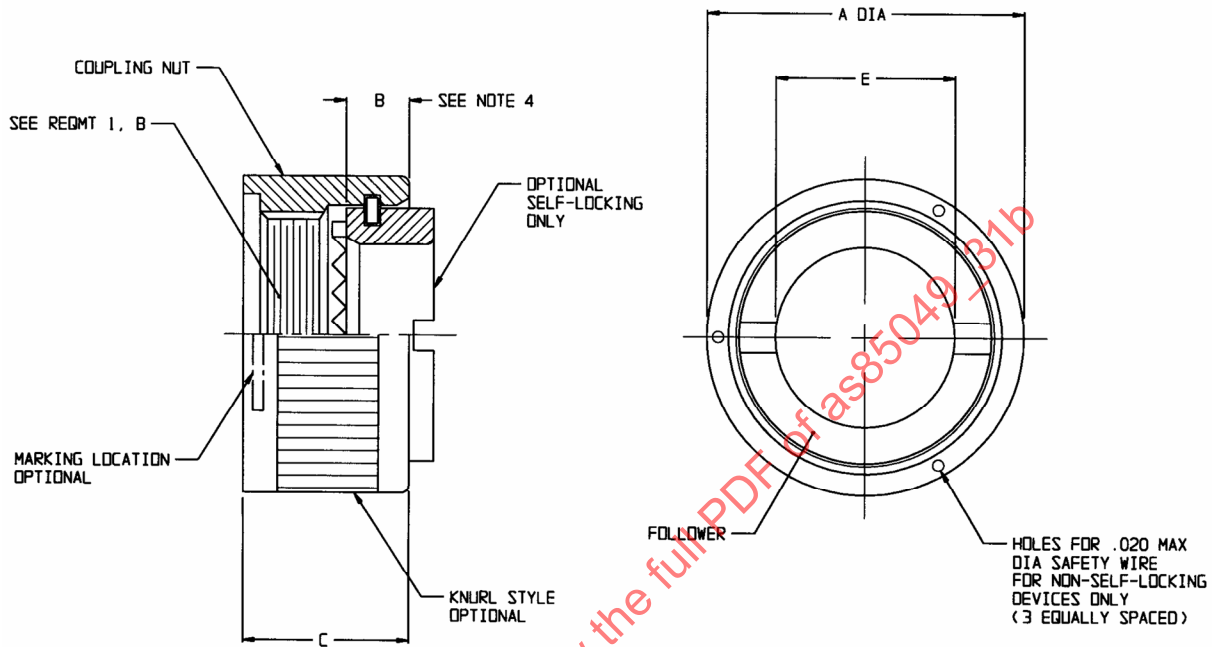
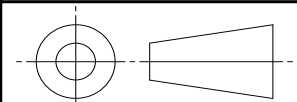


FIGURE 1 - CONFIGURATION AND DIMENSIONS

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THIRD ANGLE PROJECTION



CUSTODIAN: AE-8/AE-8C1

PROCUREMENT SPECIFICATION: AS85049



AEROSPACE STANDARD

CONNECTOR ACCESSORIES, ELECTRICAL, BACKSHELL, NONENVIRONMENTAL, STRAIGHT, NON-SELF-LOCKING AND SELF-LOCKING, CATEGORY 3B (FOR MIL-DTL-5015 CRIMP, MIL-DTL-26482 SERIES 2, AS81703 SERIES 3, AND MIL-DTL-83723 SERIES III CONNECTORS)

AS85049/31
SHEET 1 OF 4

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ISSUED 1998-08 REVISED 2009-07 REAFFIRMED 2014-09

TABLE 1A - DASH NUMBERS, SHELL SIZE AND DIMENSIONS (NONSELF-LOCKING)

DASH NUMBER	FOR CONNECTOR SHELL SIZE (REF)				NONSELF-LOCKING			
	AS81703 SERIES 3	MIL-DTL- 26482 SERIES 2	MIL-DTL-5015 CRIMP	MIL-DTL- 83723 SERIES III	A MAX	B MAX	C MAX	E MAX
-3	3				.669 (16.99)	.220 (5.59)	.540 (13.72)	.270 (6.86)
-8		8	8S	8	.617 (15.67)	↑	↑	.270 (6.86)
-10		10	10S, 10SL	10	.734 (18.64)			.375 (9.53)
-12	7	12	12S, 12	12	.858 (21.79)			.511 (12.98)
-14	12	14	14S, 14	14	.984 (24.99)			.585 (14.86)
-16	19	16	16S, 16	16	1.112 (28.24)			.710 (18.03)
-18	27	18	18	18	1.218 (30.94)			.789 (20.05)
-20	37	20	20	20	1.345 (34.16)			.914 (23.22)
-22		22	22	22	1.468 (37.29)		↓	1.039 (26.39)
-24		24	24	24	1.593 (40.46)		.540 (13.72)	1.154 (29.31)
-28			28		1.969 (50.01)		.702 (17.83)	1.389 (35.28)
-32			32		2.219 (56.36)		↑	1.635 (41.53)
-36			36		2.469 (62.71)			1.850 (46.99)
-40			40		2.719 (69.06)			2.065 (52.45)
-44			44		2.969 (75.41)		↓	2.320 (58.93)
-48			48		3.219 (81.76)	↓	.702 (17.83)	2.570 (65.28)
-61	61				1.653 (41.99)	.220 (5.59)	.540 (13.72)	1.194 (30.33)

TABLE 1B - DASH NUMBERS, SHELL SIZE AND DIMENSIONS (SELF-LOCKING)

DASH NUMBER	FOR CONNECTOR SHELL SIZE (REF)				SELF-LOCKING			
	AS81703 SERIES 3	MIL-DTL- 26482 SERIES 2	MIL-DTL-5015 CRIMP	MIL-DTL- 83723 SERIES III	A MAX	B MAX	C MAX	E MAX
-3	3							
-8		8	8S	8	.885 (22.48)	.39 (9.91)	.710 (18.03)	.270 (6.86)
-10		10	10S, 10SL	10	1.010 (25.65)	↑	↑	.375 (9.53)
-12	7	12	12S, 12	12	1.135 (28.83)			.511 (12.98)
-14	12	14	14S, 14	14	1.260 (32.00)			.585 (14.86)
-16	19	16	16S, 16	16	1.385 (35.18)			.710 (18.03)
-18	27	18	18	18	1.510 (38.35)			.789 (20.05)
-20	37	20	20	20	1.635 (41.53)			.914 (23.22)
-22		22	22	22	1.760 (44.70)	↓	↓	1.039 (26.39)
-24		24	24	24	1.885 (47.88)	.39 (9.91)	.710 (18.03)	1.154 (29.31)
-28			28		2.135 (54.23)	.41 (10.41)	.890 (22.61)	1.389 (35.28)
-32			32		2.395 (60.83)	↑	↑	1.635 (41.53)
-36			36		2.635 (66.93)			1.850 (46.99)
-40			40		2.885 (73.28)			2.065 (52.45)
-44			44		3.135 (79.63)	↓	↓	2.320 (58.93)
-48			48		3.385 (85.98)	.41 (10.41)	.890 (22.61)	2.570 (65.28)
-61	61							

NOTES

1. DIMENSIONS ARE IN INCHES.
2. METRIC EQUIVALENTS ARE BASED UPON 1.00 INCH = 25.4 MM AND SHALL BE IN ACCORDANCE WITH ASTM E 380, PARAGRAPH 4.5, METHOD A AND ASTM E 29, ROUNDING-OFF METHOD.
3. DIMENSIONS APPLY AFTER PLATING.
4. MEASURED FROM THE ROOT OF THE TOOTH TO THE BACK OF THE COUPLING NUT.

REQUIREMENTS

1. DESIGN AND CONSTRUCTION

DIMENSIONS AND CONFIGURATIONS: SEE FIGURE 1 AND TABLE 1A & 1B.

2. INTERFACE DIMENSIONS: IN ACCORDANCE WITH SAE AS85049, FIGURE 4 OR 4A.

3. ACCESSORY: CONSISTS OF A COUPLING NUT AND FOLLOWER. COUPLING NUT SHALL BE CAPTIVATED TO THE FOLLOWER AND ROTATABLE.

4. DETENTED SELF-LOCKING PROVIDES A POSITIVE AUDIBLE DETENTED COUPLING.

5. MATERIAL AND FINISH: SEE TABLE 2.

TABLE 2 - MATERIAL AND FINISH

FIGURE	MATERIAL	FINISH
1	ALUMINUM ALLOY IN ACCORDANCE WITH SAE AS85049	A N 1/ W 2/ X Y Z 2/

1/ NOT FOR NAVY USE. AIR FORCE USE IS FOR SPACE APPLICATIONS ONLY. W IS THE PREFERRED FINISH.

2/ W & Z ARE NOT FOR USE IN SPACE APPLICATION. ALSO SEE SPECIFICATION NOTE

6. SELF-LOCKING DEVICES DESIGN AND CONSTRUCTION: COUPLINGS WITH SELF-LOCKING DEVICES SHALL MEET ALL THE REQUIREMENTS SPECIFIED HEREIN FOR ITS SPECIFIC CATEGORY AND THE FOLLOWING ADDITIONAL TESTS

a. LIFE CYCLE: SEE SAE AS85049, PARAGRAPH 3.5.13.

b. VIBRATION: SEE SAE AS85049, PARAGRAPH 3.5.4.1.

7. QUALIFICATION: SEE SAE AS85049, CATEGORY 3B. BENDING MOMENT AND CABLE PULLOUT NOT APPLICABLE.



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SERIES 2, AS81703 SERIES 3, AND MIL-DTL-83723 SERIES III CONNECTORS)

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