

REV.  
D

AS85049™/55

FEDERAL SUPPLY CLASS  
5935

RATIONALE

REVISION IS REQUIRED TO IMPROVE DRAWINGS, MOVE NOTES TO DESIGN PARAGRAPH TO FOLLOW C1 AS STANDARD FORMAT, REMOVE IMAGES, ADD PLASTIC TIE WRAP RESTRICTION TO NOTICE ON 1ST PAGE, CLARIFY RESTRICTIONS, ADD METRIC EQUIVALENTS TO FIGURE 1 AND ADD NOTE TO FIGURE 1 "KNURL (STYLE OPTIONAL).

NOTICE

THE COMPLETE REQUIREMENTS FOR PROCURING THE PRODUCT DESCRIBED HEREIN SHALL CONSIST OF THIS DOCUMENT AND THE LATEST ISSUE OF AS85049. SEE APPLICATION NOTE 1.

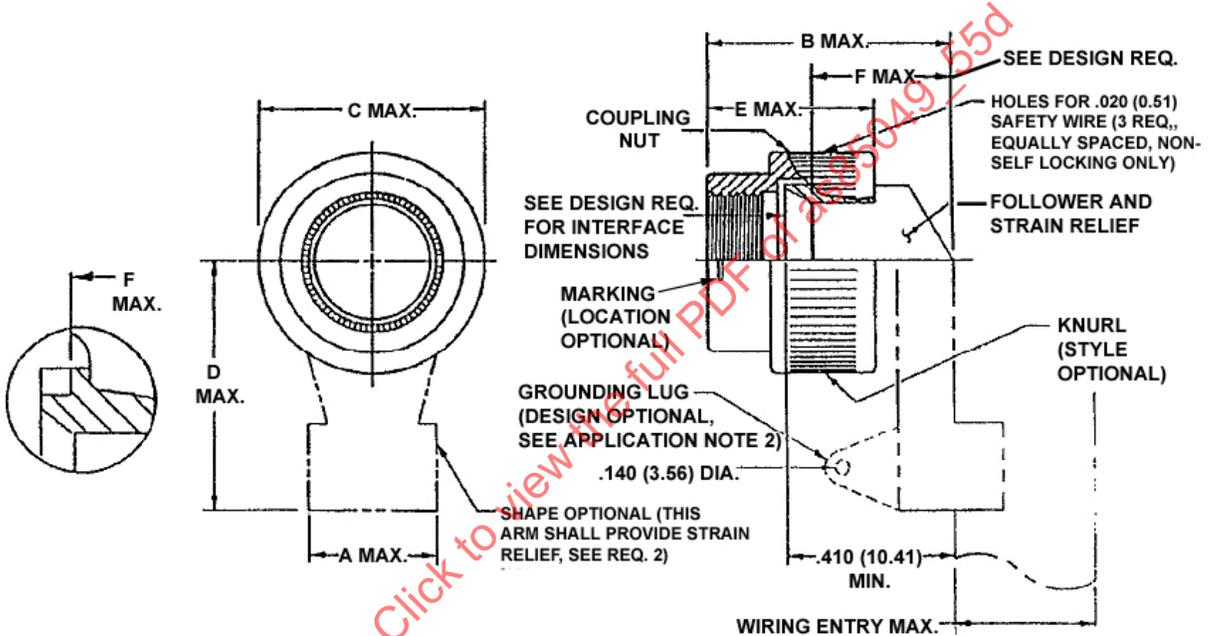
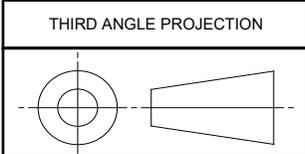


FIGURE 1 – ACCESSORY CONFIGURATION AND DIMENSIONS

For more information on this standard, visit  
<https://www.sae.org/standards/content/AS85049/55/>



CUSTODIAN: AE-8/AE-8C1

PROCUREMENT SPECIFICATION: AS85049



**AEROSPACE STANDARD**

(R) CONNECTOR ACCESSORIES, ELECTRICAL, STRAIN RELIEF, NON-ENVIRONMENTAL, 90° SELF-LOCKING AND NON-SELF-LOCKING, CATEGORY 4C (FOR AS50151 CRIMP, AS95234, MIL-DTL-26482 SERIES 2, AS81703 SERIES 3, AND MIL-DTL-83723 SERIES III CONNECTORS)

**AS85049™/55**  
SHEET 1 OF 4

**REV. D**

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ISSUED 2001-07 REVISED 2016-09 REAFFIRMED 2021-04

**TABLE 1 – FIGURE 1 DASH NUMBERS AND DIMENSIONS**

DASH NUMBER	FOR CONNECTOR SHELL SIZE (REF)				NON-SELF-LOCKING				SELF-LOCKING			
	AS81703 SERIES 3	MIL-DTL-26482 SERIES 2	AS50151 CRIMP AS95234	MIL-DTL-83723 SERIES III	B MAX.	C MAX.	E DIA. MAX.	F MAX.	B MAX.	C MAX.	E DIA. MAX.	F MAX.
03	3	--	--	--	.751 (19.08)	.782 (19.86)	.540 (13.72)	.431 (10.95)	1.05 (26.67)	1.010 (25.65)	.710 (18.03)	.73 (18.54)
08	--	8	8S	8	.751 (19.08)	.657 (16.69)	.540 (13.72)	.431 (10.95)	1.05 (26.67)	.885 (22.48)	.710 (18.03)	.73 (18.54)
10	--	10	10S,10SL	10	.751 (19.08)	.782 (19.86)	.540 (13.72)	.431 (10.95)	1.05 (26.67)	1.010 (25.65)	.710 (18.03)	.73 (18.54)
12	7	12	12,12S	12	.751 (19.08)	.937 (23.80)	.540 (13.72)	.431 (10.95)	1.05 (26.67)	1.135 (28.83)	.710 (18.03)	.73 (18.54)
14	12	14	14,14S	14	.751 (19.08)	1.050 (26.67)	.540 (13.72)	.431 (10.95)	1.05 (26.67)	1.260 (32.00)	.710 (18.03)	.73 (18.54)
16	19	16	16,16S	16	.751 (19.08)	1.239 (31.47)	.540 (13.72)	.431 (10.95)	1.05 (26.67)	1.385 (35.18)	.710 (18.03)	.73 (18.54)
18	27	18	18	18	.776 (19.71)	1.378 (35.00)	.540 (13.72)	.456 (11.58)	1.05 (26.67)	1.510 (38.35)	.710 (18.03)	.73 (18.54)
20	37	20	20	20	.776 (19.71)	1.500 (38.10)	.540 (13.72)	.456 (11.58)	1.07 (27.18)	1.635 (41.53)	.710 (18.03)	.75 (19.05)
22	--	22	22	22	.776 (19.71)	1.631 (41.43)	.540 (13.72)	.456 (11.58)	1.07 (27.18)	1.760 (44.70)	.710 (18.03)	.75 (19.05)
24	--	24	24	24	.776 (19.71)	1.750 (44.45)	.540 (13.72)	.456 (11.58)	1.07 (27.18)	1.885 (47.88)	.710 (18.03)	.75 (19.05)
28	--	--	28	--	.938 (23.83)	1.970 (50.04)	.702 (17.83)	.448 (11.38)	1.24 (31.50)	2.135 (54.23)	.890 (22.61)	.75 (19.05)

**TABLE 1 - FIGURE 1 DASH NUMBERS AND DIMENSIONS (CONTINUED)**

DASH NUMBER	A MAX	D MAX	WIRING ENTRY MAX
03	.500 (12.70)	1.29 (32.77)	.260 (6.60)
08	.463 (11.76)	1.22 (30.99)	.260 (6.60)
10	.551 (14.00)	1.29 (32.77)	.365 (9.27)
12	.644 (16.36)	1.62 (41.15)	.501 (12.73)
14	.738 (18.75)	1.66 (42.16)	.575 (14.61)
16	.834 (21.18)	1.72 (43.69)	.700 (17.78)
18	.914 (23.22)	1.72 (43.69)	.779 (19.79)
20	1.00 (25.40)	1.79 (45.47)	.904 (22.96)
22	1.10 (27.94)	1.85 (46.99)	1.029 (26.14)
24	1.20 (30.48)	1.91 (48.51)	1.144 (29.06)
28	1.48 (37.59)	2.06 (52.32)	1.379 (35.03)

REQUIREMENTS: ALL REQUIREMENTS SHALL CONSIST OF THIS DOCUMENT AND THE LATEST ISSUE OF AS85049.

1. DESIGN AND CONSTRUCTION:

ACCESSORIES SHALL BE DESIGNED IN ACCORDANCE WITH FIGURE 1 AND TABLE 1. DIMENSIONS ARE IN INCHES AND APPLY AFTER PLATING. UNLESS OTHERWISE SPECIFIED TOLERANCES SHALL BE: .XX = ± .03 AND .XXX = ± .015 ANGULAR TOLERANCES X = ± 2. METRIC EQUIVALENTS ARE IN PARENTHESES, ARE GIVEN FOR GENERAL INFORMATION ONLY AND ARE BASED UPON 1 INCH = 25.4 MM. DIMENSION F IS MEASURED FROM THE ROOT OF THE TOOTH TO THE REAR OF THE ACCESSORY BODY.

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

COMPLETE STRAIN RELIEF UNIT CONSISTS OF COUPLING NUT AND A FOLLOWER WITH STRAIN RELIEF ARM. THE COUPLING NUT SHALL BE CAPTIVATED TO THE FOLLOWER AND SHALL BE FREE TO ROTATE.

2. STRAIN RELIEF UNIT IS USED WITH AS33671-1-X PLASTIC STRAP (SEE APPLICATION NOTE 1) QUALIFIED IN ACCORDANCE WITH AS23190, AA-52080-AA-52084 LACING TAPE OR EQUIVALENT, NOT SUPPLIED WITH THE CONNECTOR ACCESSORY.
3. DETENTED SELF-LOCKING PROVIDES A POSITIVE AUDIBLE DETENTED COUPLING. OPTION "N" IS A FREE SPINNING SELF-LOCKING COUPLING.
4. THIS CLAMP WILL NOT ACCOMMODATE CONNECTORS USING SIZE 8, 4, AND 0 CONTACTS.
5. MATERIAL AND FINISH: SEE TABLE 2.

**TABLE 2 - MATERIAL AND FINISH**

FIGURE	MATERIAL	FINISH
COUPLING NUT AND FOLLOWER	ALUMINUM ALLOY IN ACCORDANCE WITH AS85049	3/ A, 1/ N, 2/ W, X, 3/ Y, 2/ Z
TIE MOUNT	POLYAMIDE (OPTIONAL)	NONE
FASTENER	STAINLESS STEEL (OPTIONAL)	NONE
SELF-LOCKING DEVICE	CORROSION RESISTANT MATERIAL	NONE

- 1/ N FINISH NOT RECOMMENDED FOR USE IN APPLICATIONS THAT MAY BE SUSCEPTIBLE TO SALT WATER CORROSION.
- 2/ W AND Z FINISH NOT RECOMMENDED FOR USE IN APPLICATIONS THAT MAY BE SUSCEPTIBLE TO OUT GASSING (ALSO SEE SPECIFICATION NOTES).
- 3/ NOT AVAILABLE WITH CONFIGURATION "G," "H," or "T."

6. QUALIFICATION: SEE AS85049, CATEGORY 4C.
7. PART NUMBER: SEE EXAMPLE BELOW:

