FEDERAL SUPPLY CLASS
5935

RATIONALE

LIMITED SCOPE REVISION IS REQUIRED TO CLARIFY THE SAFETY WIRE HOLE REQUIREMENTS IN FIGURE 1 FOR THE NON-SELF-LOCKING COUPLING NUT CONFIGURATION.

AS85049/144B HAS BEEN REAFFIRMED TO COMPLY WITH THE SAE FIVE-YEAR REVIEW POLICY.

NOTICE

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

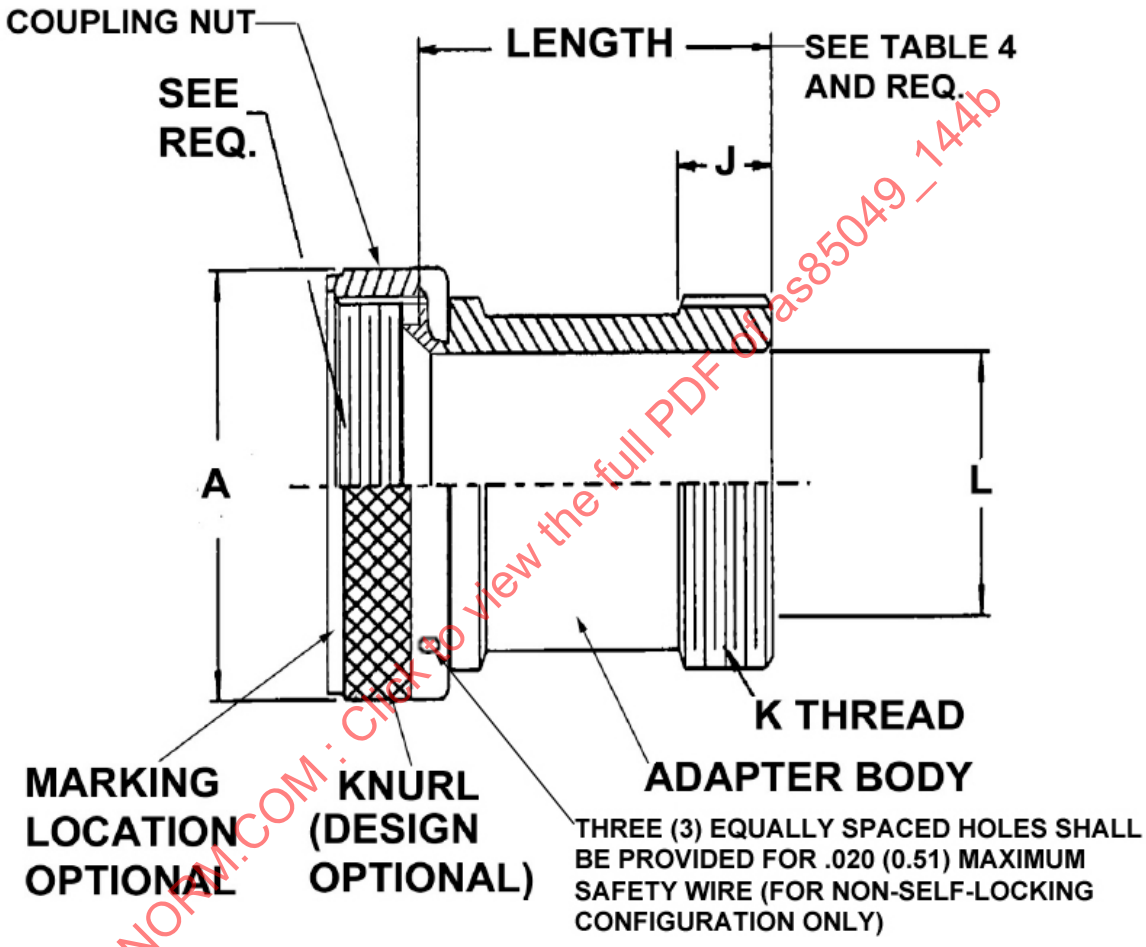
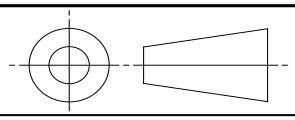


FIGURE 1 - ACCESSORY CONFIGURATION AND DIMENSIONS

ISSUED 2014-11 REVISED 2019-04 REAFFIRMED 2025-02

For more information on this standard, visit
https://www.sae.org/standards/content/AS85049/144B/

THIRD ANGLE PROJECTION



CUSTODIAN: AE-8C1

PROCUREMENT SPECIFICATION: AS85049

AEROSPACE STANDARD

CONNECTOR ACCESSORIES, ELECTRICAL BACKSHELL, STRAIGHT, NON-SELF LOCKING AND SELF LOCKING, MS "V" THREAD, CATEGORY 3B (FOR MIL-DTL-83723 SERIES III, AS50151 SERIES II AND III, AS81703 SERIES III, MIL-DTL-26482 SERIES II AND AS95234 CONNECTORS)

TABLE 1 - SHELL SIZE AND DIMENSIONS

ACCESSORY SHELL SIZE CODE	MAX. ALLOWABLE ENTRY SIZE (SEE TABLE 2)	AS81703 SERIES III SHELL SIZE (REF)	MIL-DTL-26482 SERIES II & MIL-DTL-83723 SERIES III SHELL SIZE (REF)	AS50151 SERIES II & III SHELL SIZE (REF)	AS95234 SHELL SIZE (REF)	A MAX DIAMETER	
						SELF LOCKING	NON-SELF LOCKING
03	03	3	-	-	-	.885 (22.48)	.669 (16.99)
08	03	-	8	8S	-	.885 (22.48)	.617 (15.67)
10	04	-	10	10S & 10SL	10SL	1.010 (25.65)	.734 (18.64)
12	06	7	12	12S & 12	-	1.135 (28.83)	.858 (21.79)
14	08	12	14	14S & 14	14S	1.260 (32.00)	.984 (24.99)
16	10	19	16	16S & 16	16S & 16	1.385 (35.18)	1.112 (28.24)
18	12	27	18	18	18	1.510 (38.35)	1.218 (30.94)
20	12	37	20	20	20	1.635 (41.53)	1.345 (34.16)
22	16	-	22	22	22	1.760 (44.70)	1.468 (37.29)
24	16	-	24	24	24	1.885 (47.88)	1.593 (40.46)
28	24	-	-	28	28	2.135 (54.23)	1.969 (50.01)
32	28	-	-	32	32	2.395 (60.83)	2.219 (56.36)
36	28	-	-	36	36	2.635 (66.93)	2.469 (62.71)
40	32	-	-	40	-	2.885 (73.28)	2.719 (69.06)
44	32	-	-	44	-	3.135 (79.63)	2.969 (75.41)
48	40	-	-	48	-	3.385 (85.98)	3.219 (81.76)
61	16	61	-	-	-	1.885 (47.88)	1.653 (41.99)

TABLE 2 - CABLE ENTRY DIMENSIONS

ENTRY SIZE	J (REFERENCE)	K THREAD	L WIRE BUNDLE ACCOMMODATION MAX 1/
03	.44 (11.18)	.500-28 UNEF-2A	.250 (6.4)
04		.625-24 UNEF-2A	.312 (7.9)
06		.750-20 UNEF-2A	.438 (11.1)
08		.875-20 UNEF-2A	.562 (14.3)
10		1.000-20 UNEF-2A	.625 (15.9)
12		1.188-18 UNEF-2A	.750 (19.1)
16		1.438-18 UNEF-2A	.938 (23.8)
20	.50 (12.70)	1.750-18 UNS-2A	1.250 (31.8)
24	.56 (14.22)	2.000-18 UNS-2A	1.375 (34.9)
28	.56 (14.22)	2.250-16 UN-2A	1.625 (41.3)
32	.62 (15.75)	2.500-16 UN-2A	1.875 (47.6)
40	.68 (17.27)	3.000-16 UN-2A	2.375 (60.3)

1/ WIRE BUNDLE ACCOMMODATION DIMENSION IS DEFINED AS THE ENVELOPE AREA OF THE WIRE BUNDLE. THIS DIMENSION IS NOT MEANT TO DEFINE THE HARDWARE LIMITS.

TABLE 3 - MATERIAL AND FINISH

FIGURE 1	MATERIAL	FINISH CODE
ADAPTER BODY AND COUPLING NUT	ALUMINUM ALLOY IN ACCORDANCE WITH AS85049	N 1/, W 2/, X, Y, Z 2/
	CORROSION RESISTANT STEEL IN ACCORDANCE WITH AS85049	B 2/, S, XS, YS, ZS 2/

1/ N FINISH NOT RECOMMENDED FOR USE IN APPLICATIONS THAT MAY BE SUSCEPTIBLE TO SALT WATER CORROSION.

2/ W, B, Z, AND ZS FINISHES NOT RECOMMENDED FOR USE IN APPLICATIONS THAT MAY BE SUSCEPTIBLE TO OUT GASSING (SEE SPECIFICATION NOTES).