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**REV.
B**

AS85485™/8

FEDERAL SUPPLY CLASS
6145

RATIONALE

AS85485/8 IS BEING STABILIZED BECAUSE THE COMMITTEE DOES NOT ANTICIPATE FUTURE TECHNICAL CHANGES. FILTERLINE CABLES ARE CONSIDERED WELL-ESTABLISHED PRODUCTS. QUALIFIED SUPPLIERS ARE STILL MAINTAINED. REFERENCE CHANGES NOTED BY THE SUPPLIERS WHICH RESULTS IN A PRODUCT CHANGE WILL BE ADDRESSED BY A NEW REVISION.

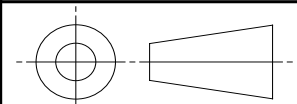
STABILIZED NOTICE

THIS DOCUMENT HAS BEEN DECLARED "STABILIZED" BY THE SAE AE-8D WIRE AND CABLE COMMITTEE AND WILL NO LONGER BE SUBJECT TO PERIODIC REVIEWS FOR CURRENCY. USERS ARE RESPONSIBLE FOR VERIFYING REFERENCES AND CONTINUED SUITABILITY OF TECHNICAL REQUIREMENTS. NEWER TECHNOLOGY MAY EXIST.

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For more information on this standard, visit
<https://www.sae.org/standards/content/AS85485/8B/>

THIRD ANGLE PROJECTION



CUSTODIAN: AE-8/AE-8D

PROCUREMENT SPECIFICATION: AS85485



AEROSPACE STANDARD

CABLE, ELECTRIC,
FILTER LINE, SHIELDED, JACKETED,
RADIO FREQUENCY ABSORPTIVE, 150 °C, 600-VOLT

AS85485™/8

**REV.
B**

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ISSUED 2004-06 REVISED 2016-05 STABILIZED 2021-06

NOTICE

THE COMPLETE REQUIREMENTS FOR PROCURING THE PRODUCT DESCRIBED HEREIN SHALL CONSIST OF THIS DOCUMENT AND THE LATEST ISSUE OF AS85485.

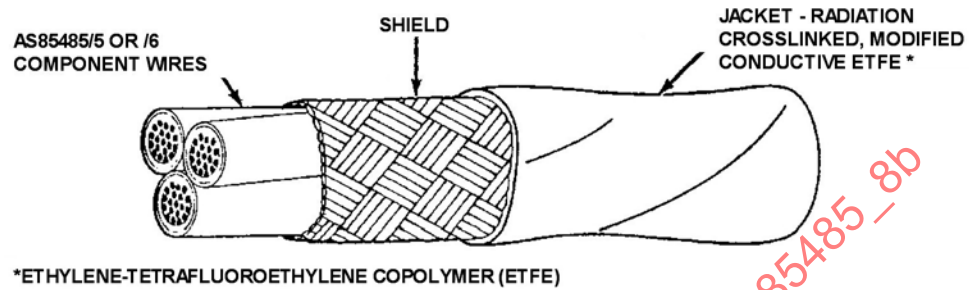


FIGURE 1 - TYPICAL AS85485/8 CABLE CONFIGURATION

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	AEROSPACE STANDARD	AS85485™/8 SHEET 1 OF 5	REV. B
	CABLE, ELECTRIC, FILTER LINE, SHIELDED, JACKETED, RADIO FREQUENCY ABSORPTIVE, 150 °C, 600-VOLT		

TABLE 1 - CONSTRUCTION DETAILS

PART NO. M85485/8 1/	CONDUCTOR SIZE	NUMBER OF CONDUCTORS	JACKET THICKNESS (INCHES)		OUTSIDE DIAMETER (INCHES)		MAXIMUM WEIGHT (LB/1000 FT)
			(MIN)	(NOM)	(NOM)	(MAX)	
-24*1A	24	1	.0060	.008	.089	.093	9.0
-22*1A	22	1	.0060	.008	.095	.100	10.6
-20*1A	20	1	.0060	.008	.103	.108	13.1
-18*1A	18	1	.0060	.008	.113	.119	16.5
-16*1A	16	1	.0060	.008	.119	.125	19.0
-14*1A	14	1	.0060	.008	.133	.140	24.9
-12*1A	12	1	.0060	.008	.160	.168	36.4
-10*1A	10	1	.0060	.008	.184	.193	51.1
-24*2A	24	2	.0060	.008	.145	.152	16.1
-22*2A	22	2	.0060	.008	.157	.165	19.3
-20*2A	20	2	.0060	.008	.173	.182	24.2
-18*2A	18	2	.0060	.008	.193	.203	31.0
-16*2A	16	2	.0060	.008	.205	.215	35.9
-14*2A	14	2	.0070	.009	.235	.247	47.6
-24*3A	24	3	.0060	.008	.154	.162	21.2
-22*3A	22	3	.0060	.008	.167	.175	25.7
-20*3A	20	3	.0060	.008	.184	.193	32.7
-18*3A	18	3	.0060	.008	.206	.216	42.5
-16*3A	16	3	.0060	.008	.219	.230	49.5
-14*3A	14	3	.0070	.009	.251	.264	67.2
-24*4A	24	4	.0060	.008	.169	.196	26.4
-22*4A	22	4	.0060	.008	.183	.214	32.3
-20*4A	20	4	.0060	.008	.202	.237	41.4
-18*4A	18	4	.0060	.008	.227	.266	54.2
-16*4A	16	4	.0070	.009	.243	.285	64.0
-14*4A	14	4	.0070	.009	.277	.326	86.5
-24*5A	24	5	.0060	.008	.177	.211	31.4
-22*5A	22	5	.0060	.008	.192	.230	38.7
-20*5A	20	5	.0060	.008	.213	.255	49.9
-18*5A	18	5	.0070	.009	.241	.289	66.3
-16*5A	16	5	.0070	.009	.256	.308	77.7
-14*5A	14	5	.0070	.009	.292	.352	105.

1/ PART NO.: THE ASTERISKS IN THE PART NUMBER COLUMN SHALL BE REPLACED BY A COMBINED COMPONENT CONSTRUCTION TYPE MATERIAL DESIGNATOR. SEE CABLE IDENTIFICATION MARKING.

REQUIREMENTS: ALL REQUIREMENTS SHALL CONSIST OF THIS DOCUMENT AND THE LATEST ISSUE OF AS85485 (SEE AS85485/5 AND /6 FOR COMPONENT WIRE REQUIREMENTS).

1. CABLE CONFIGURATION AND MATERIAL

CABLE CONFIGURATION AND MATERIAL SHALL BE IN ACCORDANCE WITH FIGURE 1 AND TABLE 1. CABLE INCLUDES ONE THROUGH FIVE AS85485/5 OR /6 WIRES (SEE TABLE 1).

CABLING SHALL BE IN ACCORDANCE WITH AS85485.

SHIELD SHALL BE IN ACCORDANCE WITH AS85485 (SEE PIN). SHIELD COVERAGE AND ANGLE SHALL BE 85% (MIN) COVERAGE WITH AN 18° (MIN) AND 40° (MAX) ANGLE. SHIELD STRAND SIZE SHALL BE 38 AWG ROUND WIRE STRANDS.

2. CABLE RATINGS:

TEMPERATURE RATING: 150 °C (302 °F) MAXIMUM CONTINUOUS CONDUCTOR TEMPERATURE

VOLTAGE RATING: IN ACCORDANCE WITH AS85485

3. CABLE BLOCKING: 200 °C ± 3 °C (392 °F ± 5 °F) FOR 6 HOURS

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	CABLE, ELECTRIC, FILTER LINE, SHIELDED, JACKETED, RADIO FREQUENCY ABSORPTIVE, 150 °C, 600-VOLT		

4. CABLE IDENTIFICATION MARKING:

PART IDENTIFICATION NUMBER (PIN) MARK SHALL BE APPLIED TO THE CABLE JACKET.

M85485	/8	-22	T	3	A	COMPONENT WIRE MARKING DESIGNATION (SEE TABLE 2)
						NUMBER OF CABLE WIRES (1 THROUGH 5)
						CONSTRUCTION TYPE (T, M, U, V)
						T – AS85485/5 WITH TIN COATED COPPER SHIELD
						M – AS85485/6 WITH SILVER COATED HIGH STRENGTH COPPER ALLOY SHIELD
						U – AS85485/6 WITH TIN COATED COPPER SHIELD
						V – AS85485/6 WITH SILVER COATED COPPER SHIELD
						CONDUCTOR SIZE
						DETAIL SPECIFICATION NUMBER
						PART NUMBER DESIGNATION “M” AND BASIC SPECIFICATION NUMBER

TABLE 2 – JACKET AND COMPONENT WIRE STRIPE COLORS AS DESIGNATED BY LETTER “A”

COMPONENT WIRE MARK (SEE APPLICATION NOTES) <u>1/</u>	NUMBER OF CABLE WIRES <u>1/</u>				CABLE JACKET COLOR
PIN MARK (NO STRIPE)	<u>1 2/</u>	2	3	4	BLACK
BLUE STRIPE					
ORANGE STRIPE					
GREEN STRIPE					
RED STRIPE					

1/ COMPONENT WIRE MARKING CONTROLLED BY THE NUMBER OF CABLE WIRES (SEE AS85485 FINISHED CABLE MARKING AND COMPONENT WIRE NUMBER COLOR DESIGNATION)

2/ COMPONENT WIRE PIN IS NOT REQUIRED, BUT IS PERMITTED.

CABLE JACKET PIN MARK DURABILITY: 125 CYCLES (250 STROKES) MINIMUM WITH 500 GRAMS WEIGHT

COMPONENT WIRE NUMBER AND STRIPE MARK DURABILITY: 125 CYCLES (250 STROKES) MINIMUM WITH 500 GRAMS WEIGHT. TO BE PERFORMED PRIOR TO CABLING (SEE AS85485/5 AND AS85485/6).

5. JACKET CHARACTERISTICS

CONCENTRICITY: 70% MINIMUM

ELONGATION: 50% MINIMUM

TENSILE STRENGTH: 3500 lbf/in² MINIMUM

JACKET FLAWS: NOT APPLICABLE

6. CROSSLINKING PROOF TEST: 7 HOURS AT 300 °C ± 3 °C (572 °F ± 5 °F)

7. FLAMMABILITY: 3 SECONDS MAXIMUM AND 3 INCHES MAXIMUM

8. HUMIDITY: NOT REQUIRED FOR THE JACKET (SEE AS85485/5 AND /6)

9. IMMERSION: DIAMETER INCREASE 5% MAXIMUM; NO CRACKING OF JACKET

10. LIFE CYCLE: 168 HOURS AT 200 °C ± 3 °C (392 °F ± 5 °F)

11. LOW TEMPERATURE-COLD BEND: -65 °C ± 2 °C (-85 °F ± 4 °F) FOR 4 HOURS

12. SURFACE TRANSFER IMPEDANCE, EFFECTIVE: NOT REQUIRED (SEE APPLICATION NOTE)

13. THERMAL SHOCK RESISTANCE: OVEN TEMPERATURE, 150 °C ± 3 °C (302 °F ± 5 °F). MAXIMUM CHANGE IN MEASUREMENTS, .125 INCH

	AEROSPACE STANDARD	AS85485™/8 SHEET 3 OF 5	REV. B
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