

RATIONALE

ADD METRIC DIMENSIONS AND RESTATE AND FORMAT PER SAE TECHNICAL REPORT GUIDELINES.

NOTICE

THE COMPLETE REQUIREMENTS FOR PROCURING THE PRODUCT DESCRIBED HEREIN SHALL CONSIST OF THIS DOCUMENT AND THE LATEST ISSUE OF AS83519.

REV. C  
AS83519™/1

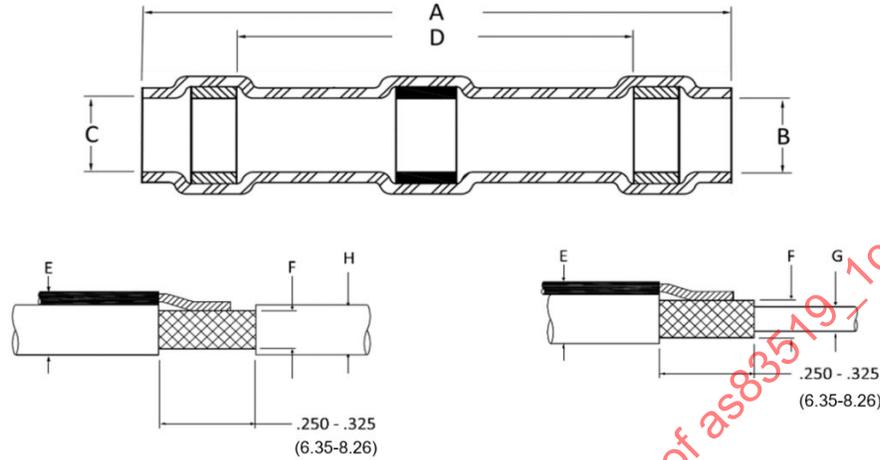


FIGURE 1 - CABLE DIAMETER RANGE AND PREPARATION MEASUREMENTS

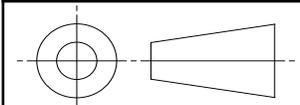
TABLE 1 - CONSTRUCTION DETAILS 1/

PART NUMBER	MARKING CODE	A ±.070	B MIN	C MIN	D MIN	E MAX	F MIN	G MIN	H MAX	WEIGHT POUNDS NOMINAL
M83519/1-1	S0101X	.650 (16.51)	.075 (1.91)	.105 (2.67)	.325 (8.26)	.105 (2.67)	.035 (0.89)	.020 (0.51)	.075 (1.91)	.0004 (0.181)
M83519/1-2	S0102X	.650 (16.51)	.105 (2.67)	.145 (3.68)	.325 (8.26)	.145 (3.68)	.055 (1.40)	.030 (0.76)	.105 (2.67)	.0005 (0.227)
M83519/1-3	S0103X	.650 (16.51)	.170 (4.32)	.200 (5.08)	.325 (8.26)	.200 (5.08)	.085 (2.16)	.050 (1.27)	.170 (4.32)	.0008 (0.363)
M83519/1-4	S0104X	.750 (19.05)	.235 (5.97)	.255 (6.48)	.325 (8.26)	.255 (6.48)	.130 (3.30)	.070 (1.78)	.235 (5.97)	.0014 (0.612)
M83519/1-5	S0105X	.750 (19.05)	.275 (6.99)	.300 (7.62)	.325 (8.26)	.300 (7.62)	.170 (4.32)	.100 (2.54)	.275 (6.99)	.0015 (0.680)

1/ ALL DIMENSIONS ARE IN INCHES. METRIC DIMENSIONS IN MILLIMETERS AND WEIGHTS IN GRAMS IN PARENTHESES ARE FOR REFERENCE ONLY.

For more information on this standard, visit  
<https://www.sae.org/standards/content/AS83519/1C/>

THIRD ANGLE PROJECTION



CUSTODIAN: AE-8C2

PROCUREMENT SPECIFICATION: AS83519



AEROSPACE STANDARD

(R) SHIELD TERMINATION, SOLDER STYLE, INSULATED, HEAT-SHRINKABLE, ENVIRONMENT RESISTANT FOR CABLES HAVING TIN OR SILVER PLATED SHIELDS (CLASS I)

AS83519™/1  
SHEET 1 OF 3

REV. C

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REQUIREMENTS: ALL REQUIREMENTS SHALL CONSIST OF THIS DOCUMENT AND THE LATEST ISSUE OF AS83519.

1. CONFIGURATION SHALL BE IN ACCORDANCE WITH FIGURE 1 AND TABLE 1. DIMENSIONS ARE IN INCHES. METRIC EQUIVALENTS IN PARENTHESES ARE FOR GENERAL INFORMATION ONLY AND ARE BASED ON 1 INCH = 25.4 MM. IN THE EVENT OF A CONFLICT, ENGLISH UNITS TAKE PRECEDENCE.
2. INSULATION SLEEVE SHALL BE HEAT-SHRINKABLE, TRANSPARENT POLYVINYLIDENE FLUORIDE PER THE REQUIREMENTS OF AS23053/8 EXCEPT THE DIMENSIONS SHALL BE AS SPECIFIED HEREIN.
3. INSULATION SLEEVE MATERIAL SHALL BE HEAT-SHRINKABLE, TRANSPARENT POLYVINYLIDENE FLUORIDE.
4. SOLDER PREFORM AND FLUX SHALL BE TYPE SN 63SRMAP PER IPC J-STD-006.
5. THERMAL INDICATOR SHALL BE COLOR TO COLORLESS.
6. TEMPERATURE RATING SHALL BE -55 TO +150 °C (-67 TO 302 °F).

QUALIFICATION:

1. FOR QUALIFICATION PERIODIC TESTING, CABLES SHALL BE IN ACCORDANCE WITH TABLE 2. THE TERMINATIONS SHALL BE INSTALLED PER THE "ASSEMBLY TO CABLES" PARAGRAPH IN AS83519 USING THE APPLICABLE CONVECTION OR INFRARED HEAT SOURCES.

**TABLE 2 - QUALIFICATION TEST CABLES**

PART NUMBER	MINIMUM	MAXIMUM
M83519/1-1	M2750030SB1T23	M2750026SB1T23
	30TG1T14	26TG1T14
	30NK1T05	26NK1T11
M83519/1-2	24SB1T23	18SB1T23
	24TG1T14	18TG1T14
	24NK1T05	18NK1T11
M83519/1-3	18SB1T23	20SB3T23
	18TG1T14	20TG3T14
	18NK1T05	20NK3T11
M83519/1-4	22SB4T23	16SB4T23
	22TG4T14	16TG4T14
	22NK4T05	16NK4T11
M83519/1-5	18SB4T23	16SB6T23
	18TG4T14	16TG6T14
	M2750018NK4T05	M2750016NK6T11

APPLICATION NOTES:

1. WHEN PERFORMING END STRIPPED CABLE SEALING, THE BEST RESULTS ARE OBTAINED WHEN THE SMALLEST SIZE TERMINATION FOR THE CABLE/LEAD WIRE COMBINED IS USED. SEALING ABILITY ON CABLES WITH MORE THAN THREE PRIMARIES OF 22 AWG AND LARGER REQUIRES SPECIAL PRECAUTIONS.
2. THE SPLICE IS RECOMMENDED FOR CABLES RATED AT 105 °C (221 °F) IF SPECIAL PRECAUTIONS ARE TAKEN TO ISOLATE THE HEAT SOURCE FROM THE INSULATION.
3. COMPATIBLE CABLE JACKETS: WHEN INSTALLED ON CABLES LISTED BELOW, BUT NOT LIMITED TO, THESE TERMINATIONS SHALL PROVIDE ENVIRONMENTAL RESISTANCE:
  - a. NEMA-WC27500 JACKET TYPES: 05, 08, 09, 10, 11, 12, 14, 15, 23, AND THEIR DOUBLE JACKET EQUIVALENTS.
  - b. NEMA-WC27500 /1, /3, /8, /9, /10.

NOTE: THE ABOVE CABLE LIST IS A LEGACY LIST FROM THE MILITARY SPECIFICATIONS. THERE ARE OTHER CABLE JACKETS THE SPLICE PROVIDES ENVIRONMENTAL RESISTANCE. THE USERS ARE ADVISED TO VERIFY THE ENVIRONMENTAL RESISTANCE IN THEIR SPECIFIC APPLICATION, CABLE JACKET, AND SPLICE OF CHOICE.

	<b>AEROSPACE STANDARD</b>	<b>AS83519™/1</b> SHEET 2 OF 3	<b>REV.</b> <b>C</b>
	(R) SHIELD TERMINATION, SOLDER STYLE, INSULATED, HEAT-SHRINKABLE, ENVIRONMENT RESISTANT FOR CABLES HAVING TIN OR SILVER PLATED SHIELDS (CLASS I)		