

INCH-POUND

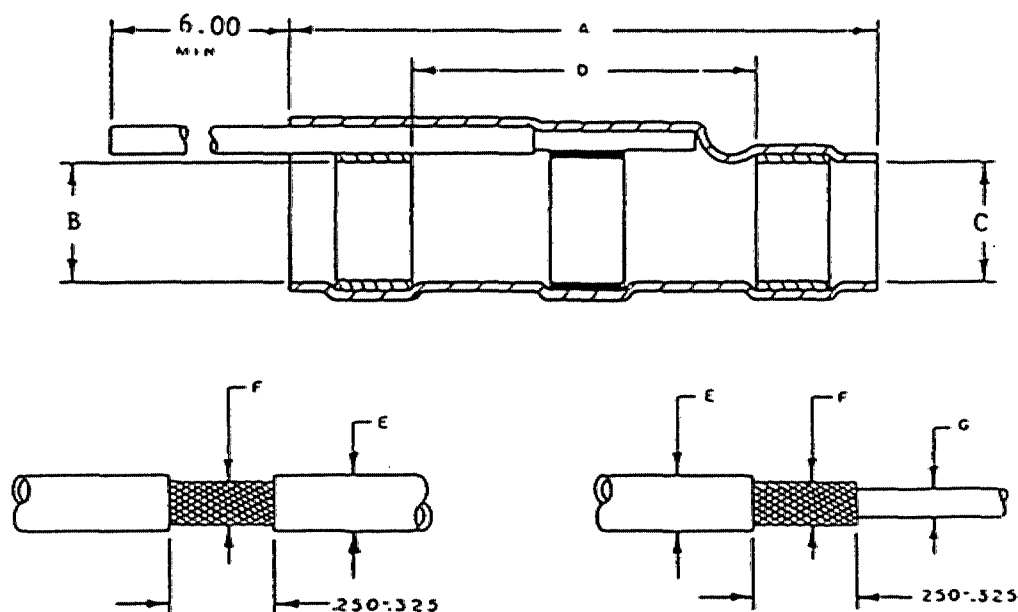
MIL-S-83519/2B  
 4 AUGUST 1995  
 SUPERSEDING  
 MIL-S-83519/2A  
 21 JUNE 1984

## MILITARY SPECIFICATION SHEET

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

This specification is approved for use by all Department and Agencies of the Department of Defense.

The requirements for acquiring the product described herein shall consist of this specification sheet and the issue of the following specification listed in that issue of Department of Defense Index of Specifications and Standards (DODISS) specified in the solicitation: MIL-S-83519.



AMSC N/A

1 of 5

FSC 5940

DISTRIBUTION STATEMENT A. Approved for public release: distribution is unlimited.

## MIL-S-83519/2B

## CABLE DIAMETER RANGE AND PREPARATION MEASUREMENTS

TABLE I. Constructions details.

Part No.	Marking Code	Lead Wire	A ±.07	B Min	C Min	D Min	E Max	F Min	G Min
M83519/2- 1	S0201X	M22759/32-20	.650	.075	.105	.325	.105	.035	.020
M83519/2- 2	S0202X	M22759/32-20	.650	.105	.145	.325	.145	.055	.030
M83519/2- 3	S0203X	M22759/32-20	.650	.170	.200	.325	.200	.085	.050
M83519/2- 4	S0204X	M22759/32-20	.750	.235	.255	.325	.255	.130	.070
M83519/2- 5	S0205X	M22759/32-20	.750	.275	.300	.325	.300	.170	.100
M83519/2- 6	S0206X	M22759/32-22	.650	.075	.105	.325	.105	.035	.020
M83519/2- 7	S0207X	M22759/32-22	.650	.105	.145	.325	.145	.055	.030
M83519/2- 8	S0208X	M22759/32-22	.650	.170	.200	.325	.200	.085	.050
M83519/2- 9	S0209X	M22759/32-22	.750	.235	.255	.325	.255	.130	.070
M83519/2- 10	S0210X	M22759/32-22	.750	.275	.300	.325	.300	.170	.100
M83519/2- 11	S0211X	M22759/32-24	.650	.075	.105	.325	.105	.035	.020
M83519/2- 12	S0212X	M22759/32-24	.650	.105	.145	.325	.145	.055	.030
M83519/2- 13	S0213X	M22759/32-24	.650	.170	.200	.325	.200	.085	.050
M83519/2- 14	S0214X	M22759/32-24	.750	.235	.255	.325	.255	.130	.070
M83519/2- 15	S0215X	M22759/32-24	.750	.275	.300	.325	.300	.170	.100
M83519/2- 16	S0216X	M22759/32-26	.650	.075	.105	.325	.105	.035	.020
M83519/2- 17	S0217X	M22759/32-26	.650	.105	.145	.325	.145	.055	.030
M83519/2- 18	S0218X	M22759/32-26	.650	.170	.200	.325	.200	.085	.050
M83519/2- 19	S0219X	M22759/32-26	.750	.235	.255	.325	.255	.130	.070
M83519/2- 20	S0220X	M22759/32-26	.750	.275	.300	.325	.300	.170	.100

Note: Dimensions are in inches.

**Qualification:** For qualification and periodic testing part numbers M83519/2-1 through M83519/2-5 and M83519/2-16 through M83519/2-20 shall be installed. The cables shall be in accordance with Table II. The terminations shall be installed per the "ASSEMBLY TO CABLE" paragraph in MIL-S-83519 using the applicable convection and infrared heat sources.

**Material:** Insulation sleeve: Heat shrinkable transparent polyvinylidene fluoride per the performance requirements of MIL-I-23053/8.  
Solder preform and flux: Type Sn63SRMAP per QQ-S-571.  
Thermal indicator: Color to colorless.  
Pre installed lead: Per Table I.  
Color: White with black stripe (90)

**Temperature Rating:** -55 ° C to +150 ° C

**Compatible Cable Jackets:** These terminations will provide environmental resistance when installed on cables conforming to:

1. MIL-C-27500 jacket types: 05, 08, 09, 10, 11, 12, 14, 15, 23 and their double jacket equivalents.
2. MIL-C-7078 /1, /3, /8, /9, /10

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## 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. Sealability on cables with more than three primaries of AWG 22 and larger requires special precautions.
2. The splice is recommended for cables rated at 105 ° C, if special precautions are taken to isolate the heat source from the insulation.

TABLE II. Qualification test cables.

Part No.	Minimum	Maximum
M83519/2-1, 16	M2750030SB1T23	M2750026NK1T11
M83519/2-2, 17	M2750026NK1T05	M2750018TG1T14
M83519/2-3, 18	M2750018TG1T14	M2750020SB3T23
M83519/2-4, 19	M2750020SB3T23	M2750016NK4T11
M83519/2-5, 20	M2750016NK4T11	M2750016SB6T14

TABLE III. Supersession and Cross-reference.

Military part number	Superseded numbers			Cancelled Military P/N M83519/2		
	CAGE I/ 06090					
M83519/2-1				-21 & -41		
M83519/2-2	D-100-13 D-100-14 D-100-35 D-100-36 D-146-22	D-100-0090 D-100-17 D-100-19 D-100-03 D-146-0145			-22 & -42	
M83519/2-3	D-101-13 D-101-14 D-101-35 D-101-36 D-101-23	D-101-17 D-101-19 D-101-03 D-101-0146 D-101-0090			-23 & -43	
M83519/2-4	D-107-35 D-107-36 D-146-0147				-24 & -44	
M83519/2-5	D-103-13 D-103-14 D-103-35 D-103-36 D-146-24	D-103-17 D-103-19 D-103-03 D-146-0148 D-103-0090			-25 & -45	
M83519/2-6				-26 & -46		
M83519/2-7	D-146-0158 D-146-0125 D-100-0083 D-100-10 D-100-11 D-100-12 D-100-33	D-100-34 D-146-00 D-100-15 D-100-16 D-146-78 D-100-0088 D-146-81	D-142-72 D-142-12			-27 & -47

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TABLE III. Supersession and cross-reference - Continued.

	Superseded numbers				
Military part number	CAGE 1/ 06090				Cancelled Military P/N M83519/2
M83519/2-8	D-146-0159 D-146-0126 D-101-0083 D-101-10 D-101-11 D-101-12 D-101-33	D-101-34 D-146-01 D-101-15 D-101-16 D-146-79 D-101-0088 D-146-82	D-142-73		-28 & -48
M83519/2-9	D-146-0128 D-107-0083 D-107-33 D-107-34				-29 & -49
M83519/2-10	D-146-0160 D-146-0127 D-103-0083 D-103-10	D-103-11 D-103-12 D-103-33 D-103-34	D-146-02 D-103-15 D-103-16 D-146-80	D-103-0088 D-146-83 D-142-74 D-142-15	-30 & -50
M83519/2-11					-31 & -51
M83519/2-12	D-100-0089 D-146-0133 D-100-0095 D-146-03	D-100-0093 D-146-0181 D-146-90 D-100-0106	D-146-0142		-32 & -52
M83519/2-13	D-101-0089 D-146-0134 D-101-0095 D-146-04	D-101-0093 D-146-0182 D-146-91 D-101-0106	D-146-0143		-33 & -53
M83519/2-14					-34 & -54
M83519/2-15	D-103-0089 D-146-0135 D-103-0095 D-146-05	D-103-0093 D-146-0183 D-146-92 D-103-0106	D-146-0144		-35 & -55
M83519/2-16					-36 & -56
M83519/2-17	D-146-0136 D-100-0104 D-100-0096 D-146-06	D-100-0094 D-146-12 D-146-0203 D-100-0107			-37 & -57
M83519/2-18	D-146-0137 D-101-0104 D-101-0096 D-146-07	D-101-0094 D-146-13 D-146-0204 D-101-0107			-38 & -58
M83519/2-19					-39 & -59
M83519/2-20	D-103-0104 D-146-0138 D-103-0096 D-146-08	D-103-0094 D-146-14 D-146-0205 D-103-0107			-40 & -60

1/ CAGE is the federal supply code for manufacturers in accordance with supply handbooks H4-1 and H4-2.

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CONCLUDING MATERIAL

Custodians:

Navy - AS  
Air Force - 85  
Army - ER

Preparing Activity:

Air Force - 85

Review Activities:

Air Force - 99  
DLA - GS  
Navy - SA, MC  
Army - MI

(Project 5940-1154)