

INCH-POUND

MIL-DTL-27500H  
AMENDMENT 1  
26 November 1999

DETAIL SPECIFICATION

CABLE, POWER, ELECTRICAL AND CABLE SPECIAL PURPOSE, ELECTRICAL  
SHIELDED AND UNSHIELDED, GENERAL SPECIFICATION FOR

This amendment forms a part of MIL-DTL-27500H, dated 10 December 1997, and is approved for use by all Departments and Agencies of the Department of Defense.

PAGE 1

1.2.1.1, Identification method of cable wire (with shield coverage): Add the following:

“P’ for optional identification method E.  
“S’ for optional identification method F.”

PAGE 2

Following, “When a minimum shield coverage of 90 percent is required, specify;”: Add the following:

“R’ for optional identification method E.  
“T’ for optional identification method F.”

PAGE 5

TABLE I B, Temperature limit for jacket material (information only) column, last value:  
Delete “200°C (392°F)” and substitute “260°C (500°F)”.

PAGE 8

Add the following new paragraphs:

“3.4.6 Optional identification method E. The insulation on each wire shall be white with the same colored helical stripe. The color of the stripe shall denote the wire size in accordance with table IIIC. In order to identify each wire in the cable, color bands shall be applied in accordance with table IIID. Color of the bands shall be a contrasting color to the base color of the insulation. The narrow bands shall be 0.030 to 0.120 inch (0.76 to 3.05 mm) wide. The wide bands shall be twice the width of the narrow bands and spaced 0.030 to 0.120 inch apart in a group. Group separation shall be 0.38 to 1.50 inch (9.7 to 38.1 mm). The distance between the beginning of one group and the end of the next group shall be 3.0 inches (76.2 mm) maximum.

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“3.4.7 Optional identification method F. The insulation on each wire shall be white. In order to identify each wire in the cable, color bands shall be applied in accordance with table IIID. Color of the bands shall be a contrasting color to the base color of the insulation. The narrow bands shall be 0.030 to 0.120 inch (0.76 to 3.05 mm) wide. The wide bands shall be twice the width of the narrow bands and spaced 0.030 to 0.120 inch apart in a group. Group separation shall be 0.38 to 1.50 inches (9.7 to 38.1 mm). The distance between the beginning of one group and the end of the next group shall be 3.0 inches (76.2 mm) maximum.”

Delete “3.9.4 Optional identification method C.” and substitute: “3.4.4 Optional identification method C.”

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3.9.1.2, at end of sentence: Add: “or can be imprinted on the insulation of wire number 1.”

3.9.1.3, Jacketed cable (2 to 15 wires), following the first sentence: Add: “For jacket styles 24 and 74, the cable product identification can be on either the outer jacket or insulation of wire number 1.”

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3.9.1.3, Shielded jacketed cable (2 to 15 wires), following the first sentence: Add: “For jacket styles 24 and 74, the cable product identification can be on either the outer jacket or insulation of wire number 1.”

PAGE 16

TABLE III A, title, before MIL-W-22759: Add: “MIL-W-8777.”

PAGE 17

TABLE III B, title: Delete and substitute: “Circuit identification colors for basic wires in accordance with MIL-W-5086 and associated replacement wire and cable specifications. 1/”

TABLE III C: Add: “3/” in the second column after “2/” for wire size 18 and color white. Add to the bottom of the table: “3/ For MIL-W-22759/80-/92, the color purple (violet) may be used on basic wire constructions.”

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TABLE VI: Delete and substitute as follows:

TABLE VI. Thermal shock and aging stability. 1/

Jacket materials	Thermal shock and aging stability temperature
01	136°
02, 03, 04, 10	150°
08, 14, 15, 17, 18	180°
05, 09, 11, 12, 16, 22, 23	230°
06, 07, 20, 21, 24	285°

1/ Double Jacketed cable will be tested to the same temperatures as the corresponding single layer jacket material listed.

PAGE 29

6.3, Cable designation, at the end of the sentence: Delete: "(see 3.3.1)" and substitute "(see 3.4.1)".

PAGE 30

TABLE XI, at the end of the third column, after "MR 1/ or," add: "ML".

PAGE 31

TABLE XI, at the top of the third column: Delete "ML", and move "MR 1/ or RC, and MH" up one row, respectively.

## CONCLUDING MATERIAL

## Custodians:

Army - CR  
Navy - AS  
Air Force - 11  
DLA - CC

## Preparing activity:

DLA -CC

(Project 6145-2187)

## Review activity:

Army - AR, MI  
Air Force - 99

## Industry Associations:

NEMA  
SAE