

MIL-C-27072/17B  
24 September 1987  
~~SUPERSEDING~~  
MIL-C-27072/17A(USAF)  
21 June 1965

MILITARY SPECIFICATION SHEET

CABLE, SPECIAL PURPOSE, ELECTRICAL, MULTICONDUCTOR,  
(2 CONDUCTORS) AND SINGLE SHIELDED  
M27072/17LACA\*

This specification is approved by all Depart-  
ments and Agencies of the Department of Defense.

The requirements for acquiring the cable described herein shall  
consist of this specification and the latest issue of MIL-C-27072.

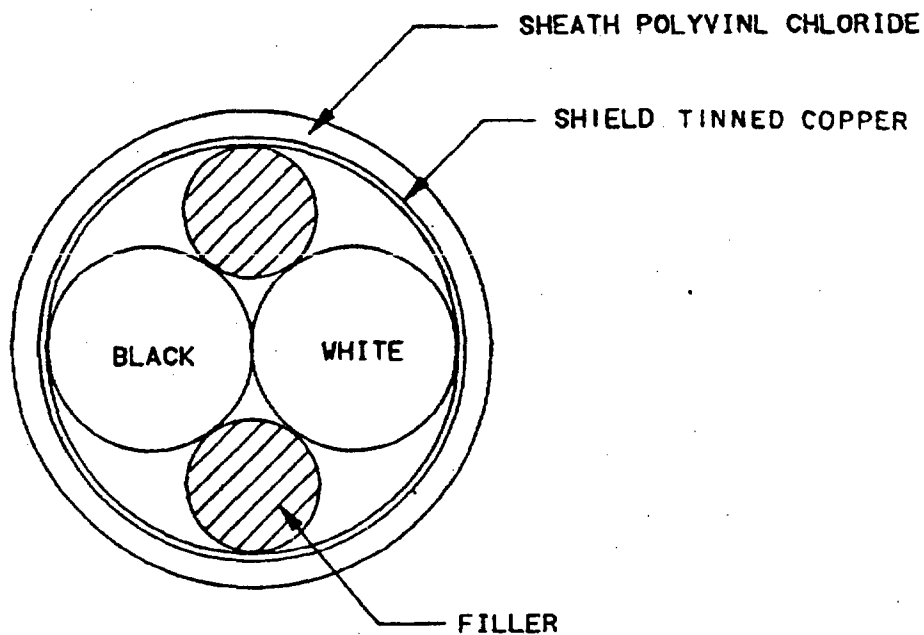


FIGURE 1. Cable configuration.

\* The complete part number requires a color code designator (see table I).

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DESIGN DATA:

Design and construction: See figure 1..

Number of conductors: Two.

Conductor size/stranding: See table I.

Wire: M16878/17BFE\*\*\* (see table I).

Jacket undershield: Not applicable.

Shielding: Tinned copper.

Sheath: Polyvinyl chloride.

Temperature rating: 105°C.

REQUIREMENTS:

Visual and dimensional:

Components:

Basic wire: Tinned copper.

Dimension: See table I.

Primary insulation:

Material: Polyvinyl chloride.

Wall thickness: .010 ±.002 inch (0.25 ±0.05 mm).

Colors:

Black.

White.

Spark test voltage: 3,400 V rms.

Inspection test voltage: 2,000 V rms.

Impulse dielectric test: 8,000 V peak.

Jacket over insulation: Polyamide.

Color: Natural.

Filler: Required.

Material: In accordance with MIL-C-27072.

Lay: 1 inch (25.4 mm).

Tape material: Not applicable.

Shield:

Material: Tinned copper.

Gauge: 36 AWG.

Braid angle: 20 to 40 degrees.

Workmanship: In accordance with MIL-C-27072.

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## Sheath:

Material: Polyvinyl chloride.  
 Wall thickness: .030 inch (0.76 mm) nominal.  
 Tensile strength: In accordance with table V of MIL-C-27072.  
 Elongation: In accordance with table V of MIL-C-27072.  
 Tension set: Not applicable.  
 Tear strength: Not applicable.  
 Accelerated aging: In accordance with table V of MIL-C-27072.  
 Oil resistance: Not applicable.  
 Color: See table IV of MIL-C-27072.

## Finished cable:

Weight: For future consideration.  
 Diameter: See table I.  
 Conductor resistance: In accordance with MIL-W-16878/17.  
 Dielectric strength: In accordance with MIL-W-16878/17.  
 Cold bend: Mandrel size in accordance with table XIII of MIL-C-27072.  
 Ozone: Mandrel size in accordance with table XIV of MIL-C-27072.  
 Marking durability: In accordance with MIL-C-27072.  
 Heat stability: Not applicable.

TABLE I. Construction data.

Part number	Conductor			Nominal diameter (in.)	Finished cable diameter (in.) ±10%	Basic wire M16878/17
	Wire size (AWG)	Number of strands	Strand size (AWG)			
M27072/17						
LACA*	22	19	34	.056	.191	BFE***

Asterisks (\*) shall be replaced by the appropriate color designator.

Revision letters are not used to denote changes due to the extensiveness of the changes.

Custodians:  
 Army - CR  
 Navy - SH  
 Air Force - 85

Review activities:  
 Air Force - 99  
 DLA - ES, IS

Preparing activity:  
 Air Force - 85

Agent:  
 DLA - ES

(Project 6145-0909-6)