

MIL-C-27072/63A  
24 September 1987  
~~SUPERSEDING~~  
MIL-C-27072/63(USAF)  
30 January 1969

MILITARY SPECIFICATION SHEET

CABLE, SPECIAL PURPOSE, ELECTRICAL, MULTICONDUCTOR,  
(2 CONDUCTORS) AND SINGLE SHIELDED  
M27072/63SDDD\*

This specification is approved for use 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.

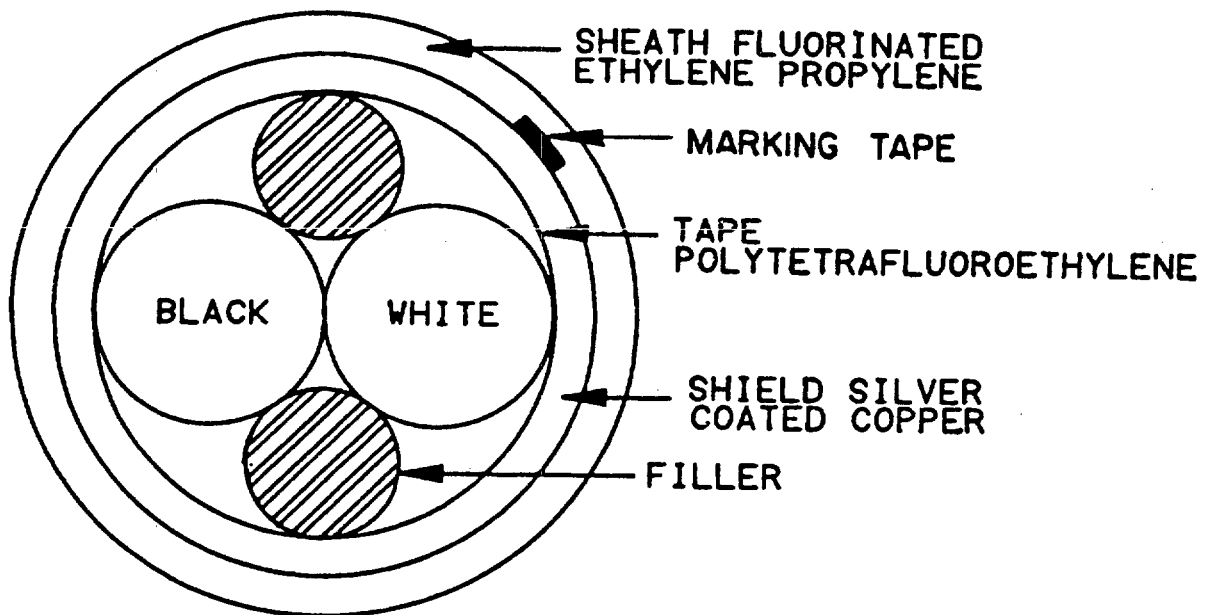


FIGURE 1. Cable configuration.

\* Jacket compound is clear with no additional color coding.

MIL-C-27072/63A

DESIGN DATA:

Design and construction: See figure 1.  
Number of conductors: Two.  
Conductor size and stranding: See table I.  
Wire: In accordance with M16878/4BDB\* (see table I).  
Jacket undershield: Not applicable.  
Shielding: Silver plated copper.  
Sheath: Fluorinated ethylene propylene.  
Temperature rating: 200°C.

REQUIREMENTS:

Visual and dimensional:

Components:

Basic wire: Silver plated copper.

Dimension: See table I.

Primary insulation:

Material: Polytetrafluoroethylene.

Colors:

Green.

Yellow.

Spark test voltage: 3,400 V rms.

Inspection test voltage: 2,000 V rms.

Impulse dielectric test: 6,500 V peak.

Jacket over insulation: Not applicable.

Wall thickness: Not applicable.

Color: Not applicable.

Filler:

Material: When used, shall be in accordance with MIL-C-27072.

Lay: 1.25 inches maximum.

Tape material: Polytetrafluoroethylene.

Shield:

Material: Silver plated copper.

Gauge: 38 AWG.

Braid angle: 20 to 40 degrees.

Workmanship: In accordance with MIL-C-27072.

## MIL-C-27072/63A

## Sheath:

Material: Fluorinated ethylene propylene.  
 Wall thickness: 0.012 inch nominal.  
 Tensile strength: See table V of MIL-C-27072.  
 Elongation: See table V of MIL-C-27072.  
 Tension set: Not applicable.  
 Tear strength: Not applicable.  
 Accelerated aging: Not applicable.  
 Oil resistance: Not applicable.  
 Color: See table IV of MIL-C-27072.

## Finished cable:

Diameter: See table I.  
 Conductor resistance: In accordance with MIL-W-16878/4 or MIL-W-16878/21.  
 Dielectric strength: In accordance with MIL-W-16878/4 or MIL-W-16878/21.  
 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.  
 Heat stability: Not applicable.

TABLE I. Construction data.

Part number M27072/63	Conductor				Finished cable diameter (in.) ±10%	Basic wire M16878/4 M16878/21
	Wire size (AWG)	Number of strands	Strand size (AWG)	Nominal diameter (in.)		
SDDD*	26	7	34	.039	.125	BDB***

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

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