

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 Departments 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.

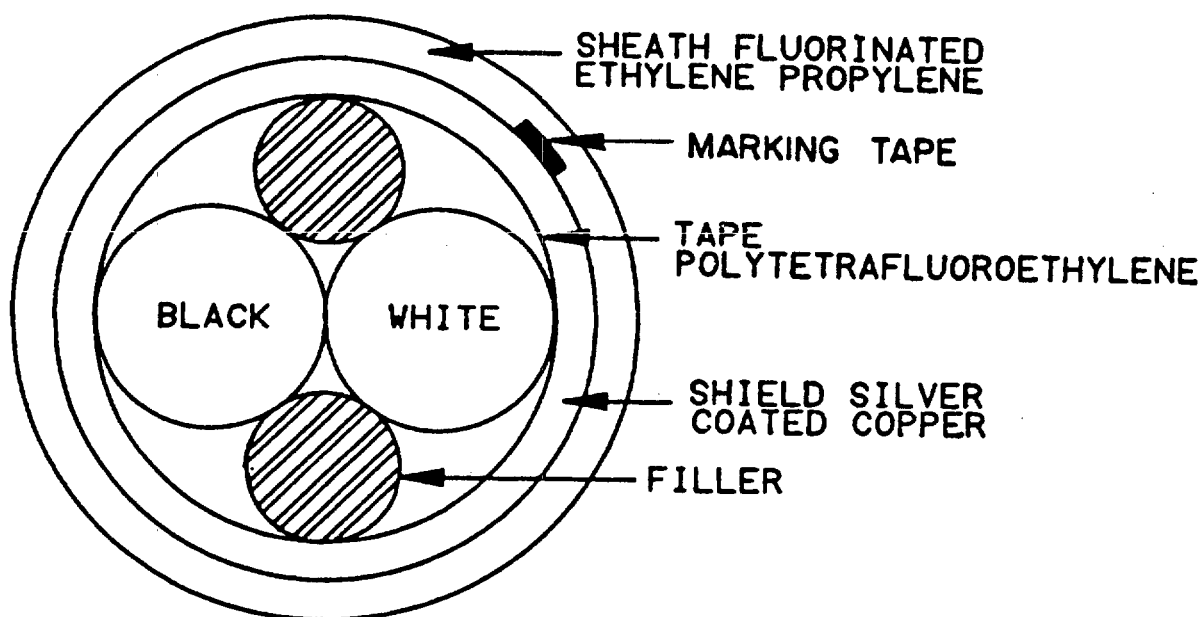


FIGURE 1. Cable configuration.

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

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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.

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## 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

(Project 6145-0908-14)