

INCH-POUND

MIL-C-27072/73B  
10 May 1994  
SUPERSEDING  
MIL-C-27072/73A  
24 September 1987

MILITARY SPECIFICATION

CABLE, SPECIAL PURPOSE, ELECTRICAL, MULTICONDUCTOR  
(2 CONDUCTORS) AND SINGLE SHIELDED  
M27072/73FDDD\*

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

The requirements for acquiring the product described herein shall consist of this specification and the latest issue of the following specification listed in that issue of the Department of Defense Index of Specifications and Standards (DODISS) specified in the solicitation: MIL-C-27072.

Inactive for new design.  
For new design use MIL-C-55021/2.

(B)

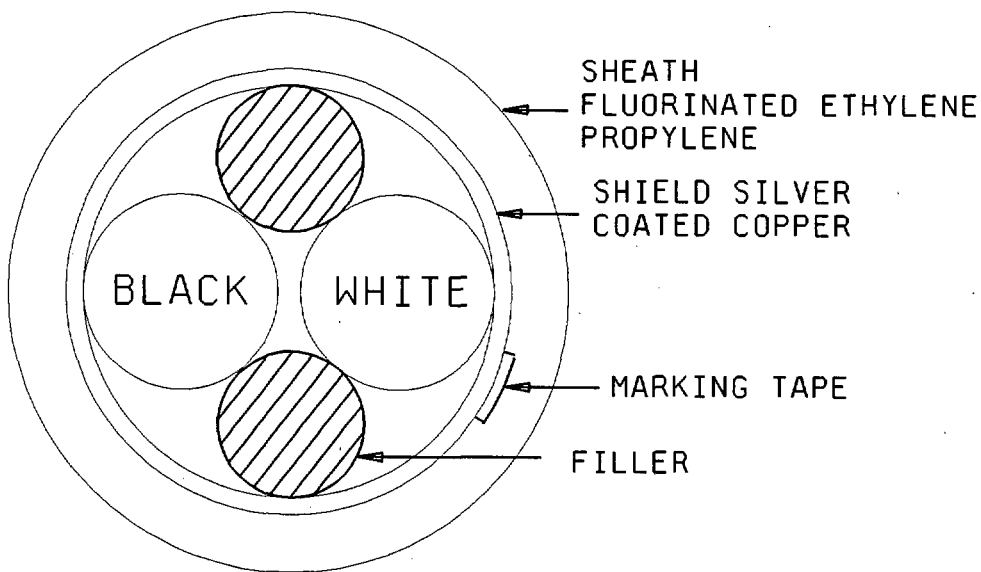


FIGURE 1. Cable configuration.

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

(B) denotes changes

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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 MIL-W-16878/4BJE\* or MIL-W-16878/21BJE\*(see table I).

Jacket undershield: Not applicable.

Shielding: Silver coated copper.

Sheath: Fluorinated ethylene propylene.

Temperature rating: 200°C.

REQUIREMENTS:

Visual and dimensional:

Components:

Basic wire: Silver coated copper.

Dimension: See table I.

Primary insulation:

Material: Polytetrafluoroethylene.

Colors:

Black.

White.

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: Applicable.

Material: In accordance with MIL-C-27072.

Lay: 3.00 inches maximum.

Tape material: Not applicable.

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## Shield:

Material: Silver coated copper.

Gauge: 36 AWG.

Braid angle: 20 to 40 degrees.

Workmanship: In accordance with MIL-C-27072.

## Sheath:

Material: Fluorinated ethylene propylene.

Wall thickness: .010 inch 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: Not applicable.

Oil resistance: Not applicable.

Color: See table IV of MIL-C-27072.

## Finished cable:

Diameter: In accordance with 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 and speed 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.

PIN M27072/73	Conductor				Finished cable diameter (in.) $\pm 10\%$	Basic wire MIL-W-16878/4 MIL-W-16878/21
	Wire size (AWG)	Number of strands	Strand size (AWG)	Nominal diameter (inches)		
FDDD*	16	19	29	.080	.250	BJE***

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

Marginal notations are not used in this revision to identify changes with respect to the previous issue due to the extensiveness of the changes.

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CONCLUDING MATERIAL

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 6145-2067-08)