

MIL-C-27072/73A
24 September 1987
SUPERSEDING
MIL-C-27072/73(USAF)
16 October 1969

MILITARY SPECIFICATION SHEET

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

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.

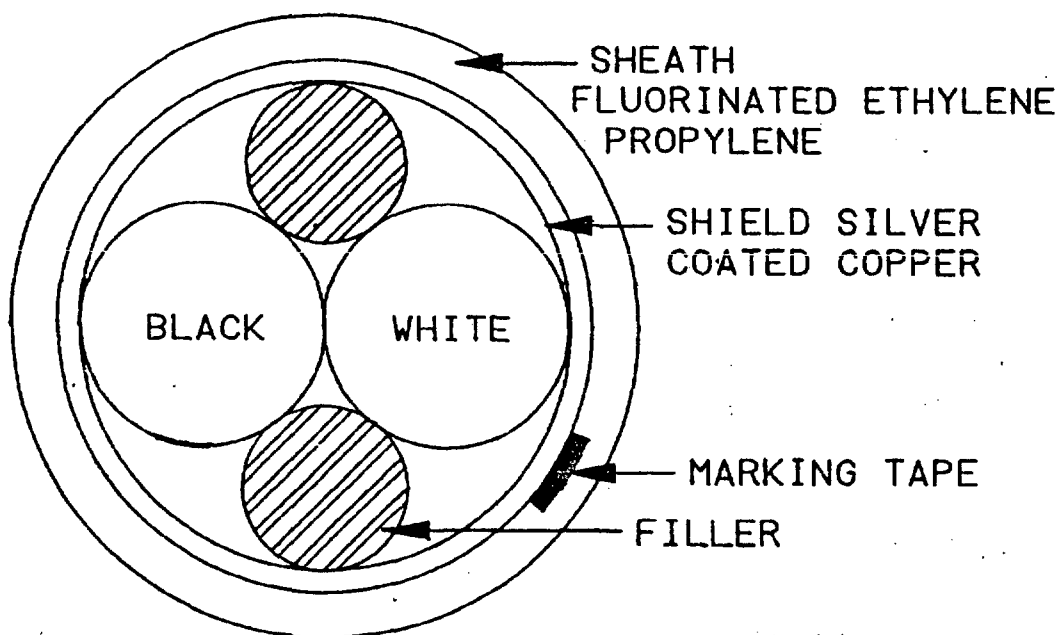


FIGURE 1. Cable configuration.

* Jacket compound is clear with no additional color coding.

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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 M16878/4BJE*.
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.

Shield:

Material: Silver coated copper.

Gauge: 36 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: .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 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 M27072/73	Conductor			Nominal diameter (in.)	Finished cable diameter (in.) ±10%	Basic wire M16878/4 M16878/21
	Wire size (AWG)	Number of strands	Strand size (AWG)			
FDDD*	16	19	29	.080	.250	BJE***

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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