

MIL-C-27072/12B
24 September 1987
~~SUPERSEDING~~
MIL-C-27072/12A(USAF)
21 June 1965

MILITARY SPECIFICATION SHEET

CABLE, SPECIAL PURPOSE, ELECTRICAL, MULTICONDUCTOR,
(3 CONDUCTORS) AND SINGLE SHIELDED
M27072/12M0DD*

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.

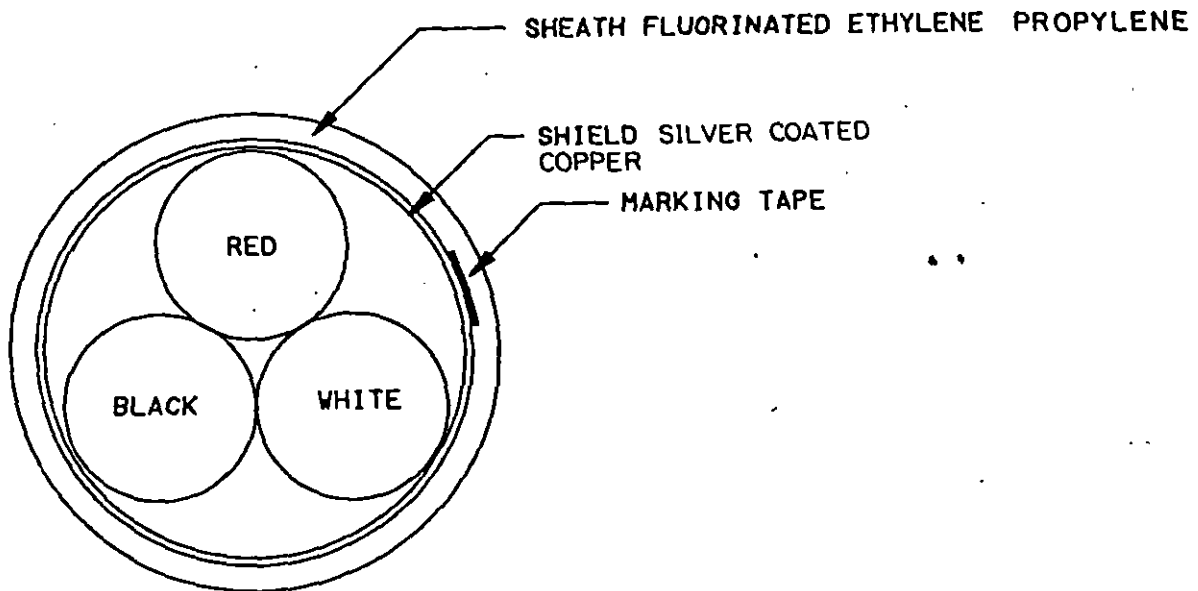


FIGURE 1. Cable configuration.

* Jacket compound is clear with no additional color coding.

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DESIGN DATA:

Design and construction: See figure 1.
Number of conductors: Three.
Conductor size/stranding: See table I.
Wire: M16878/4BFB*** (see table I).
Jacket undershield: Not applicable.
Shielding: Silver coated copper.
Sheath: Fluorinated ethylene propylene.
Temperature rating: 105°C.

REQUIREMENTS:

Visual and dimensional:

Components:

Basic wire: Silver coated.

Dimension: See table I.

Primary insulation:

Material: Polytetrafluoroethylene.

Colors:

Black.

White.

Red.

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.

Color: Not applicable.

Filler: Not applicable.

Material: Not applicable.

Lay: 3 inches (76.2 mm) maximum.

Tape material: Not applicable.

Shield:

Material: Silver coated 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: .010 inch (0.25 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: Not applicable.
 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-16878/4 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 M27072/12	Conductor				Finished cable diameter (in.) ±10%	Basic wire M16878/4 M16878/21
	Wire size (AWG)	Number of strands	Strand size (AWG)	Nominal diameter (in.)		
MDDD*	22	7	30	.050	.165	BFB***

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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