

MIL-C-27072/5B
24 September 1987
SUPERSEDING
MIL-C-27072/5A(USAF)
21 June 1965

MILITARY SPECIFICATION SHEET

CABLE, SPECIAL PURPOSE, ELECTRICAL, MULTICONDUCTOR,
(2 CONDUCTORS) AND SINGLE SHIELDED
M27072/5NDDD*

This specification is approved 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.

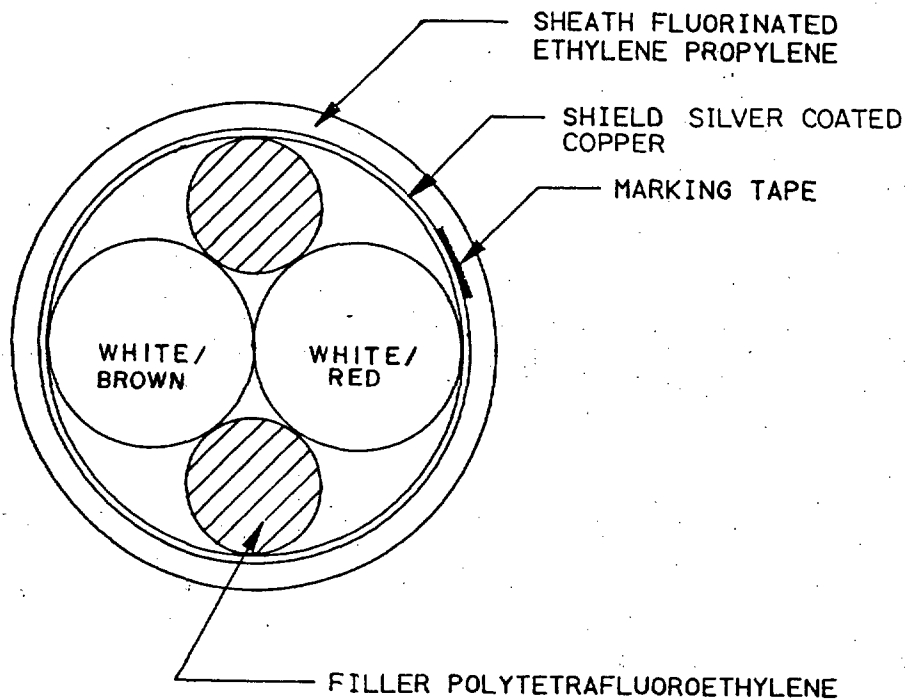


FIGURE 1. Cable configuration.

* Jacket compound is clear with no additional color coding.

MIL-C-27072/5B

DESIGN DATA:

Design and construction: See figure 1.

Number of conductors: Two.

Conductor size/stranding: See table I.

Wire: M16878/4BEF*** (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.

Dimension: See table I.

Primary insulation:

Material: Polytetrafluoroethylene.

Colors:

White/brown.

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:

Material: Polytetrafluoroethylene.

Lay: 2 inches (50.8 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.

MIL-C-27072/5B

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 M27072/5	Conductor				Finished cable diameter (in.) ±10%	Basic wire M16878/4 M16878/21
	Wire size (AWG)	Number of strands	Strand size (AWG)	Nominal diameter (in.)		
NDDD*	24	19	36	.042	.160	BEE***

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 6145-0908-2)