

INCH-POUND

MIL-C-27072/4C
10 May 1994
SUPERSEDING
MIL-C-27072/4B
24 September 1987

MILITARY SPECIFICATION

Ⓒ

CABLE, SPECIAL PURPOSE, ELECTRICAL, MULTICONDUCTOR
(2 CONDUCTORS) AND SINGLE SHIELDED
M27072/4JDD*

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.

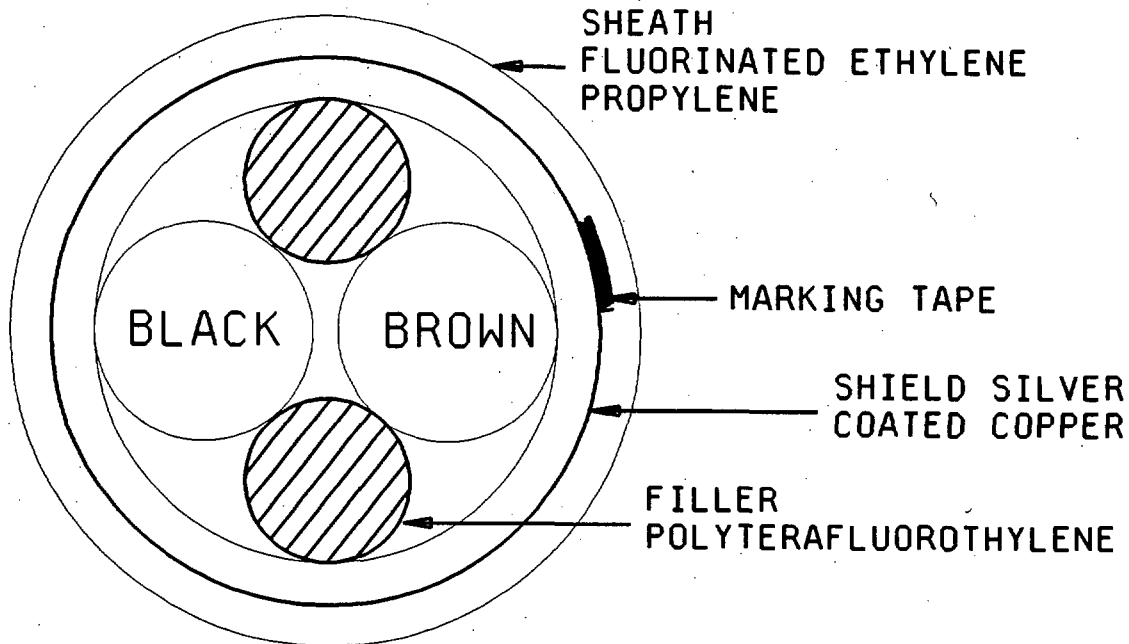


FIGURE 1. Cable configuration.

*The complete part number requires a color code designator see table I.

Ⓒ denotes changes

MIL-C-27072/4C

DESIGN DATA:

Design and construction: See figure 1.

Number of conductors: Two.

Conductor size and stranding: See table I.

Ⓒ Wire: In accordance with M16878/4BGE* (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.

Brown.

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: Polytetrafluoroethylene.

Lay: 1.38 inches ±.38.

Tape material: Not applicable.

MIL-C-27072/4C

Shield:

Material: Silver coated copper.

Gage: 38 AWG.

Braid angle: 20 to 40 degrees.

Workmanship: In accordance with MIL-C-27072.

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.

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.

Dielectric strength: In accordance with MIL-W-16878/4.

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 M27072/4	Conductor				Finished cable diameter (in.) ±10%	Basic wire MIL-W-16878/4
	Wire size (AWG)	Number of strands	Strand size (AWG)	Nominal diameter (inches)		
JDDD*	20	19	32	.058	.185	BGE***

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

MIL-C-27072/4C

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 6145-2067-01)