

MIL-C-27072/45A
24 Sep 1987
~~SUPERSEDED~~
MIL-C-27072/45(USAF)
8 September 1966

MILITARY SPECIFICATION SHEET

CABLE, SPECIAL PURPOSE, ELECTRICAL, MULTICONDUCTOR,
(2 CONDUCTORS) AND SINGLE SHIELDED
M27072/45HACA*

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.

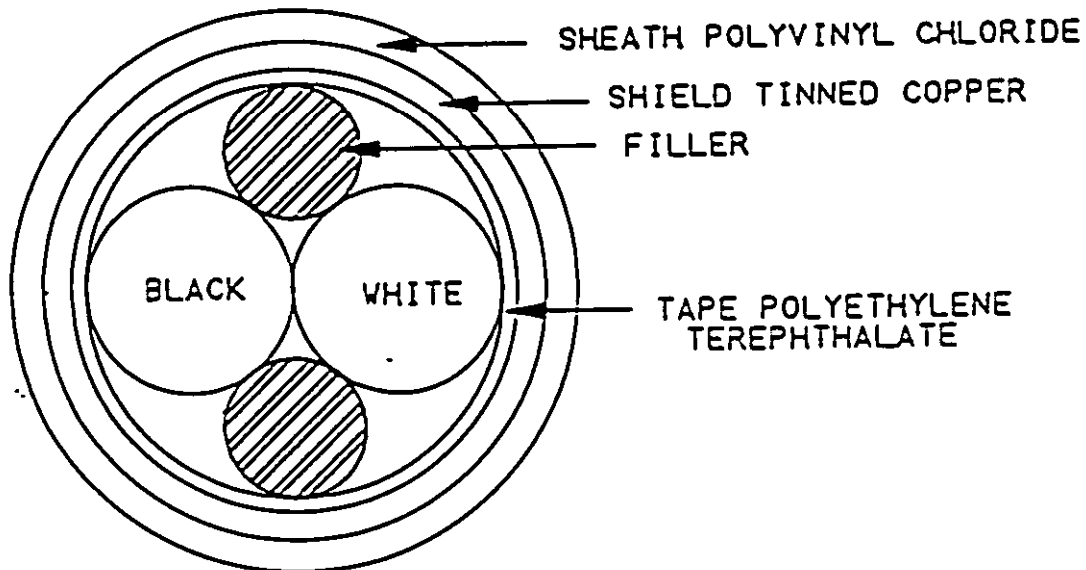


FIGURE 1. Cable configuration.

* The complete part number requires a color code designator (see table 1)..

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DESIGN DATA:

Design and construction: See figure 1.

Number of conductors: Two.

Conductor size/stranding: See table I.

Wire: M16878/179HB* (see table I).

Jacket undershield: Not applicable.

Shielding: Tinned copper.

Sheath: Polyvinyl chloride.

Temperature rating: 105°C.

REQUIREMENTS:

Visual and dimensional:

Components:

Basic wire: Tinned copper.

Dimension: See table I.

Primary insulation:

Material: Polyvinyl chloride.

Wall thickness: .011 inch \pm .005.

Colors:

White.

White with red tracer.

Spark test voltage: 3,400 V rms.

Inspection test voltage: 2,000 V rms.

Impulse dielectric test: 8,000 V peak.

Jacket over insulation: Polyamide.

Color: Natural.

Filler: Required.

Material: In accordance with MIL-C-27072.

Lay: 2.25 inches maximum.

Tape material: Polyethylene terephthalate.

Shield:

Material: Tinned copper.

Gauge: 36 AWG.

Braid angle: 20 to 40 degrees.

Workmanship: In accordance with MIL-C-27072.

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Sheath:

Material: Polyvinyl chloride.

Wall thickness: .025 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: In accordance with table V of MIL-C-27072.

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-16878/17.

Dielectric strength: In accordance with MIL-W-16878/17.

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.

Marking durability: In accordance with MIL-C-27072.

Heat stability: Not applicable.

TABLE I. Construction data.

Part number M27072/45	CONDUCTOR			Nominal diameter (in.)	Finished cable diameter (in.) +10%	Basic wire M16878/17
	Wire size (AWG)	Number of strands	Strand size (AWG)			
HACA*	18	7	26	.075	.230	SHB***

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 6145-0909-19)