

MIL-C-27072/27A
 24 September 1987
 SUPERSEDING
 MIL-C-27072/27(USAF)
 12 August 1965

MILITARY SPECIFICATION SHEET

CABLE, SPECIAL PURPOSE, ELECTRICAL,
 MULTICONDUCTOR, (20 CONDUCTORS)
 M27072/27JDAB*

This specification is approved for use 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.

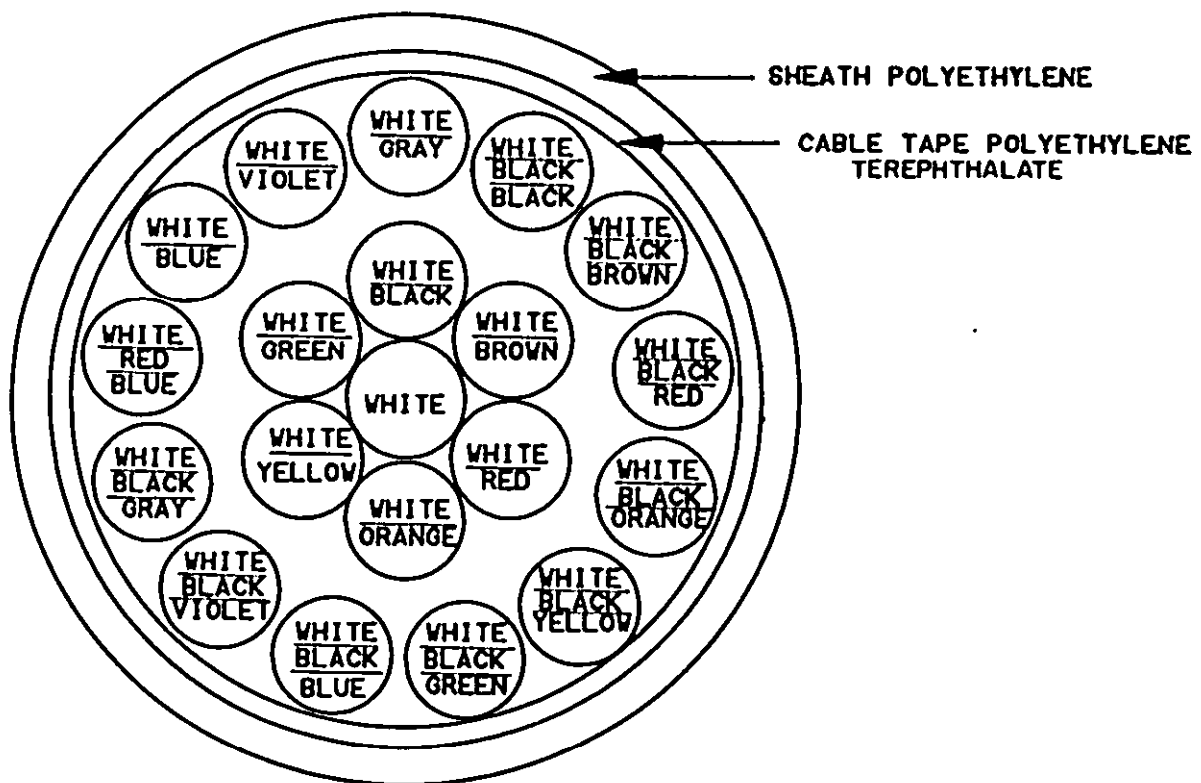


FIGURE 1. Cable configuration.

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

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DESIGN DATA:

Design and construction: See figure 1.
Number of conductors: Twenty.
Conductor size and stranding: See table I.
Wire: M16878/4BGE* (see table I).
Jacket undershield: Not applicable.
Shielding: Not applicable.
Sheath: Polyethylene.
Temperature rating: 80°C.

REQUIREMENTS:

Visual and dimensional:

Components:

Basic wire: Silver-coated copper.

Dimensions: See table I.

Primary insulation:

Material: Polytetrafluoroethylene.

Wall thickness: .009 ±.002 inch.

Colors:

White.

White with black tracer.

White with brown tracer.

White with red tracer.

White with orange tracer.

White with yellow tracer.

White with green tracer.

White with blue tracer.

White with violet tracer.

White with gray tracer.

White with two black tracers.

White with black and brown tracers.

White with black and red tracers.

White with black and orange tracers.

White with black and yellow tracers.

White with black and green tracers.

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White with black and blue tracers.

White with black and violet tracers.

White with black and gray tracers.

White with red and blue tracers.

Impulse dielectric test: 6,500 V peak.

Spark test voltage: 3,400 V rms.

Inspection test voltage: 2,000 V rms.

Filler: Not applicable.

Material: Not applicable.

Cabling:

Core:

Number of conductors: One.

Maximum pitch or lay: Pull-in straight.

First layer:

Number of conductors: Six.

Maximum pitch or lay: 1.92 inches.

Second layer:

Number of conductors: Thirteen.

Maximum pitch or lay: 4.8 inches.

Tape material: Polyethylene terephthalate.

Workmanship: In accordance with MIL-C-27072.

Sheath:

Material: Polyethylene.

Wall thickness: .040 inch.

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.

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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.

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

Heat stability: Not applicable.

TABLE I. Construction data.

Part number M27072/27	Conductor				Finished cable diameter (in.) +10%	Basic wire M16878/4 M16878/21
	Wire size (AWG)	Number of strands	Strand size (AWG)	Nominal diameter (in.)		
JDAB*	20	19	32	.058	.405	BGE***

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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