

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  
M27072/12MDD\*

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.

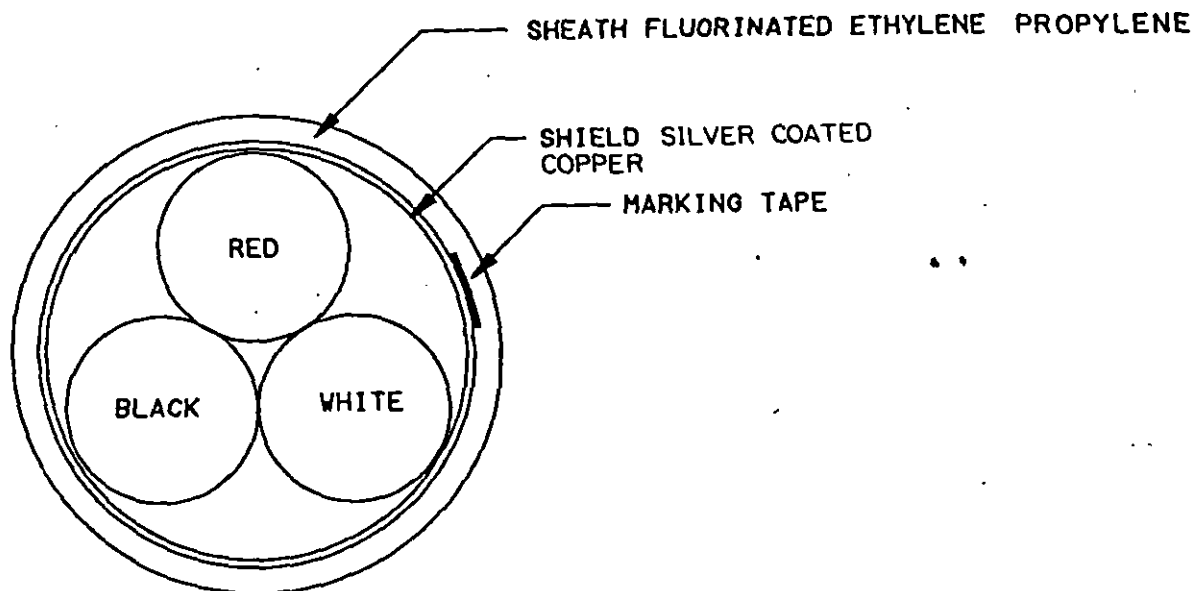


FIGURE 1. Cable configuration.

\* Jacket compound is clear with no additional color coding.

MIL-C-27072/12B

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.

## MIL-C-27072/12B

## 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

(Project 6145-0908-4)