## mildtary specification sheet

CABLE, SPECIAL PURPOSE, ELECTRICAL, MULTICONDUCTOR,
( 3 CONDUCTORS) AND SINGLE SHIELDED M27072/56MAQA*

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 l).

```
DESIGM DATA:
    Destgn and construction: See figure 1.
    Wumber of conductors: Six.
    Conductor size/stranding: See table l.
    Mire: M16878/17BFB* (see table l).
    Jacket undershield: Not applicable.
    Shielding: Tinned copper.
    Sheath: Polyvinyl chloride.
    Temperature rating: 105*
REQUIREMENTS:
Visual and dimensional:
    Components:
        Basic wire: Tinned copper.
            Dimenston: See table I.
            Primary insulation:
                Material: Polyvinyl chloride.
                    Ha!l thickness: .010 inch *.003.
                    Colors:
                    Group I: Brown/white.
                    Group 1l: Orange/white.
                    Group.III: Red/white.
                    Spark test voitage: 3,400 V rms.
                    Inspection test voltage: 2,000 V rms.
                    Impulse dielectric test: 8,000 V peak.
        Jacket over insulation: Polyamide.
            Wall thickness: .003 tnch %.001.
            Color: Natural.
            Filler: Optfonal.
                    Material: In accordance with MIL-C-27072.
    Cabling of conductors:
            Number of conductors per group: Two.
            Pitch or lay: l inch maximum.
            Fillers: Mone.
    Cabling of wire groups:
```

Pitch or lay: 3 inches maximuf.
Tape over cable assembly:
Material: Polyethylene terephthalate.
Shield:
Material: Tinned copper.
Gauge: 36 ANG.
Braid angle: 20 to 40 degrees.
Workmanship: In accordance with MIL-C-27072.
Sheath:
Material: Polyvinyl chloride.
Wall thickness: . 040 tnch nominal.
Tensile strength: In accordance with table $Y$ of MIL-C-27072.
Elongation: In accordance with table $Y$ of MIL-C-27072.
Tension set: Not applicable.
Tear strength: Not applicable.
Accelerated aging: In accordance with table $V$ of MIL-C-27072.
0!? reststance: Mot applicable.
Color: See table IV of MIL-C-27072.
Finished cable:
Height: For future consideration.
Diameter: See tablel.
Conductor resistance: In accordance with MIL-K-16878/17.
Dielectric strength: In accordance with MIL-H-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.


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
        Mavy - SH
        Mir Force - 85
Preparing activity:
Agent:
    DLA - ES
Reviem activities:
    A1r Force - 99
    DLA - ES; IS
```

