

INCH-POUND

MIL-DTL-27072/76B
8 December 2000
SUPERSEDING
MIL-C-27072/76A
24 September 1987

DETAIL SPECIFICATION SHEET

CABLE, SPECIAL PURPOSE, ELECTRICAL, MULTICONDUCTOR
(1 SHIELDED PAIR AND 8 WIRES UNDER A DOUBLE SHIELD),
M27072/76SACA*

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 sheet and
MIL-DTL-27072C.

REQUIREMENTS:

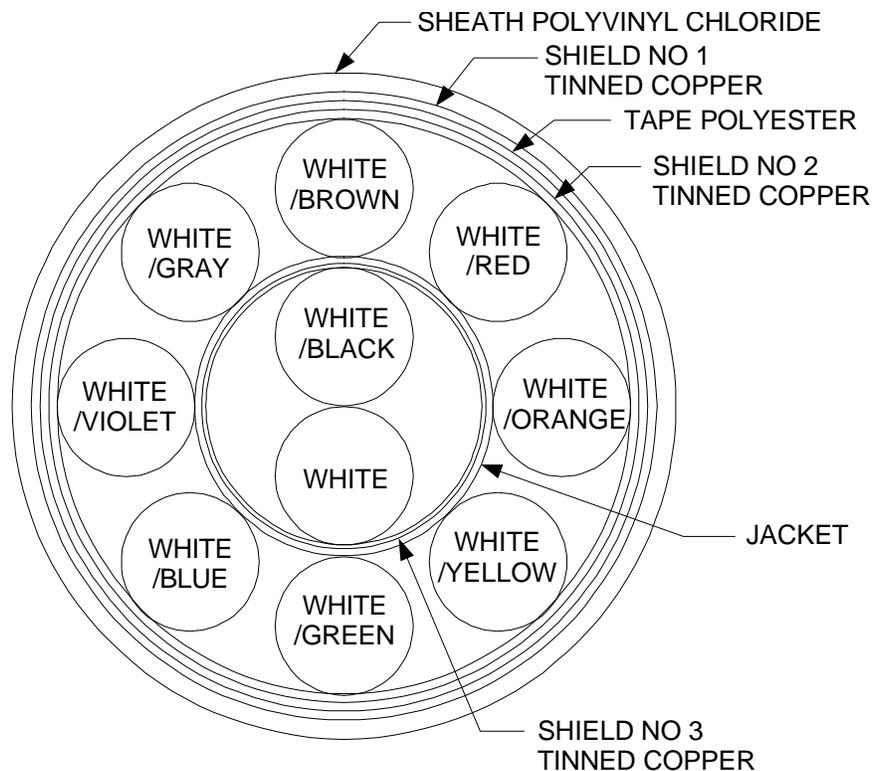


FIGURE 1. Cable configuration.

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

MIL-DTL-27072/76B

Design and construction:	See figure 1
Number of conductors:	10
Temperature rating:	105°C
Components:	
Basic wire:	M16878/17BDB* (See table I)
Conductor:	Tinned copper
Primary insulation:	Polyvinyl chloride
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
Jacket over insulation:	Polyamide
Color:	Natural
Filler:	Not applicable
Cabling:	
Core:	
Number of conductors:	2 (1 twisted pair)
Pitch or lay:	1.50 inches nominal
Shield Number 3:	
Material:	Tinned copper
Gauge:	36 AWG
Braid angle:	20 to 40 degrees
First layer:	
Number of conductors:	8
Pitch or lay:	3.0 inches nominal
Shield Number 2:	
Material:	Tinned copper
Gauge:	36 AWG
Braid angle:	20 to 40 degrees
Binder tape material:	Polyester (over shield number 2)
Shield Number 1:	
Material:	Tinned copper
Gauge:	36 AWG
Braid angle:	20 to 40 degrees
Jacket undershield:	Not applicable

MIL-DTL-27072/76B

Sheath:
 Material: Polyvinyl chloride
 Wall thickness: .040 inch (1.0 mm) nominal
 Tensile strength: In accordance with table V of MIL-DTL-27072
 Ultimate elongation: In accordance with table V of MIL-DTL-27072
 Accelerated aging: In accordance with table V of MIL-DTL-27072
 Color: See table IV of MIL-DTL-27072

Finished cable: See table I
 Cold bend: Mandrel size in accordance with table XIII of MIL-DTL-27072
 Dielectric withstanding voltage: 2,000 V rms
 Conductor resistance: In accordance with basic wire specification

Table I. Construction data.

PIN 27072/76	Basic wire except color M16878/17BDB*** (reference)				Finished cable diameter (in.) ±10%
	Wire size (AWG)	Number of strands	Strand size	Nominal diameter (inch)	
SACA	26	7	34	.044	.297

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

CHANGES FROM PREVIOUS ISSUE: Marginal notations are not used in this revision to identify changes with respect to the previous issues due to the extensiveness of the changes.

CONCLUDING MATERIAL

Custodian:
 Army - CR
 Navy - SH
 Air Force - 11
 DLA - CC

Preparing activity:
 DLA - CC
 (Project 6145-2262-018)