

DETAIL SPECIFICATION SHEET

CABLE, SPECIAL PURPOSE, ELECTRICAL, MULTICONDUCTOR
(21 CONDUCTORS) AND SINGLE SHIELDED,
M27072/68KACA*

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:

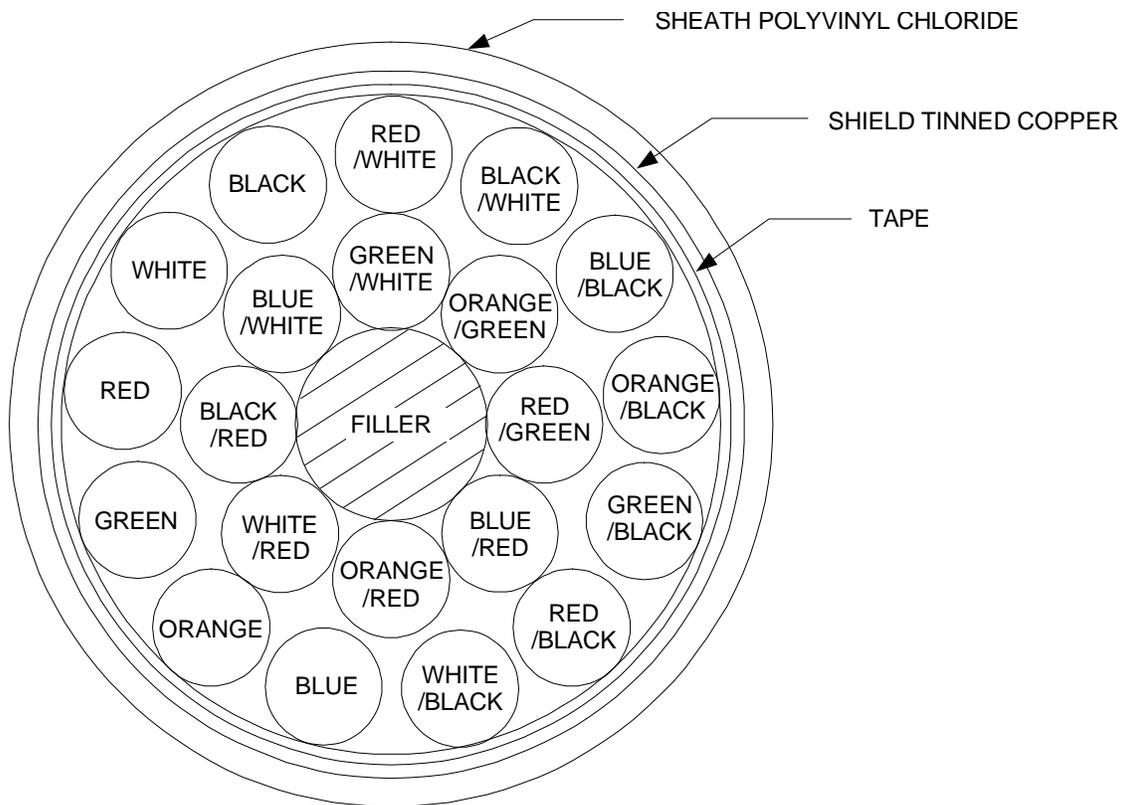


FIGURE 1. Cable configuration.

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

MIL-DTL-27072/68B

Design and construction:	See figure 1
Number of conductors:	21
Temperature rating:	200 °C
Components:	
Basic wire:	M16878/17BGB* (See table I.)
Conductor:	Tinned copper
Primary insulation:	Polyvinyl Chloride
Colors:	Black White Red Green Orange Blue White with black tracer Red with black tracer Green with black tracer Orange with black tracer Blue with black tracer Black with white tracer Red with white tracer Green with white tracer Blue with white tracer Black with red tracer White with red tracer Orange with red tracer Blue with red tracer Red with green tracer Orange with green tracer
Jacket over insulation:	Polyamide
Color:	Natural
Filler:	See below
Cabling:	
Core:	
Number of conductors:	Filler
Material:	In accordance with MIL-DTL-27072
Pitch or lay:	Pull in straight
First layer:	
Number of conductors:	8
Pitch or lay:	1.5 inches maximum
Second layer:	
Number of conductors:	13
Pitch or lay:	1.5 inches maximum
Binder tape material:	In accordance with MIL-DTL-27072
Shield:	
Material:	Tinned copper
Gauge:	34 AWG
Braid angle:	20 to 40 degrees
Jacket undershield:	Not applicable

Sheath:
 Material: Polyvinyl chloride
 Wall thickness: .040 inch maximum
 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 27072/68	Basic wire except color M16878/17BGB*** (reference)				Finished cable diameter (in.) ±10%
	Wire size (AWG)	Number of strands	Strand size	Nominal diameter (inch)	
KACA	20	7	28	.064	.520

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

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

Preparing activity:
 DLA - CC
 (Project 6145-2262-016)