INCH-POUND

MIL-DTL-27072/7D
8 August 2006
SUPERSEDING
MIL-DTL-27072/7C
8 December 2000

DETAIL SPECIFICATION SHEET

CABLE, SPECIAL PURPOSE, ELECTRICAL, MULTICONDUCTOR, (2 CONDUCTORS) AND SINGLE SHIELDED, M27072/7MDDD*

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-27072.

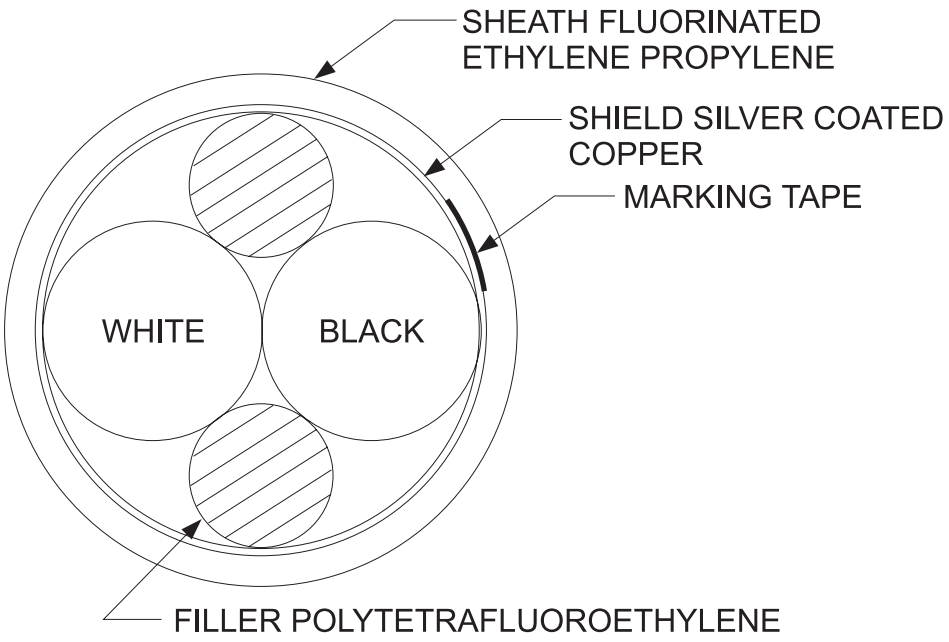

FIGURE 1. Cable configuration.

Note: Sheath compound is clear with no additional color coding.

REQUIREMENTS:

Design and construction:	See figure 1
Number of conductors:	2
Temperature rating:	200 °C
Components:	
Basic wire:	NEMA HP3-EXBFB* or NEMA HP3-EWBFB* (see table I)
Conductor:	Silver-coated copper
Primary insulation:	Polytetrafluoroethylene
Colors:	Black White
Jacket over insulation:	Not applicable
Filler:	
Material:	Polytetrafluoroethylene
Lay:	3.0 inches maximum
Cabling:	Not applicable
Binder tape material:	Not applicable
Shield:	
Material:	Silver coated copper
Gauge:	38 AWG
Braid angle:	20 to 40 degrees
Jacket undershield:	Not applicable
Sheath:	
Material:	Fluorinated ethylene propylene
Wall thickness:	.010 inch (.254 mm) nominal
Tensile strength:	In accordance with MIL-DTL-27072
Ultimate elongation:	In accordance with MIL-DTL-27072
Accelerated aging:	Not applicable
Color:	See MIL-DTL-27072
Finished cable:	See table I
Cold bend:	Mandrel size in accordance with MIL-DTL-27072
Dielectric withstanding voltage:	2,000 V rms
Conductor resistance:	In accordance with basic wire specification

TABLE I. Construction data.

PIN M27072/7 1/	Basic wire except color NEMA HP3-EXBFB* 2/ or NEMA HP3-EWBFB* (reference)				Finished cable diameter inch (mm) ±10%
	Wire size (AWG)	Number of strands	Strand size	Nominal diameter Inch (mm)	
MDDD*	22	7	30	.050 (1.27)	.140 (3.56)

1/ Part or Identifying Number (PIN).
2/ Asterisk (*) shall be replaced by the appropriate color designator.

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

Referenced document. This document references MIL-DTL-27072.

CONCLUDING MATERIAL

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

Preparing activity:
DLA - CC

(Project 6145-2006-005)

NOTE: The activities listed above were interested in this document as of the date of this document. Since organization and responsibilities can change, please verify the currency of the information above using the ASSIST Online database at http://assist.daps.dla.mil