

INCH-POUND

MIL-DTL-27072/61B  
8 December 2000  
SUPERSEDING  
MIL-C-27072/61A  
24 September 1987

DETAIL SPECIFICATION SHEET

CABLE, SPECIAL PURPOSE, ELECTRICAL, MULTICONDUCTOR  
(3 CONDUCTORS) AND SINGLE SHIELDED,  
M27072/61GEDD\*

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:

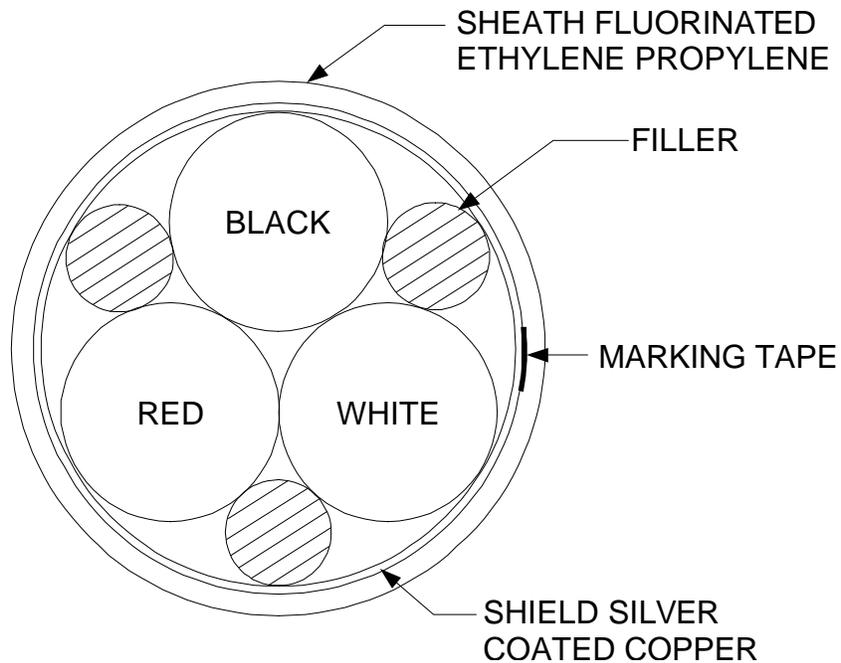


FIGURE 1. Cable configuration.

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

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Design and construction: See figure 1  
 Number of conductors: 3  
 Temperature rating: 200 °C

Components:

Basic wire: M22759/9-18\* (formerly M16878/5 BHE\*\*\*) or NEMA HP3-EEWBHE\* (formerly M16878/22BHE\*\*\*)(See table I.)

Conductor: Silver-coated copper  
 Primary insulation: Polytetrafluoroethylene  
 Colors: Black  
 Red  
 White

Jacket over insulation: Not applicable

Filler:

Material: In accordance with MIL-DTL-27072  
 Lay: 3.0 inches maximum

Cabling: Not applicable

Binder tape material: Not applicable

Shield:

Material: Silver-coated copper  
 Gauge: 36 AWG  
 Braid angle: 20 to 40 degrees

Jacket undershield: Not applicable

Sheath:

Material: Fluorinated ethylene propylene  
 Wall thickness: .010 inch  
 Tensile strength: In accordance with table V of MIL-DTL-27072  
 Ultimate elongation: In accordance with table V of MIL-DTL-27072  
 Accelerated aging: Not applicable  
 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: 3,000 V rms  
 Conductor resistance: In accordance with basic wire specification

Table I. Construction data.

PIN 27072/61	Basic wire except color (reference) M22759/9-18* <sup>1/</sup> or NEMA HP3-EEWBHE*				Finished cable diameter (in.) ±10%
	Wire size (AWG)	Number of strands	Strand size	Nominal diameter (inch)	
GEDD	18	19	30	.079	.213

NOTE: <sup>1/</sup> MIL-W-22759/9-18\* color code is in accordance with MIL-STD-681. 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 6145-2262-013)