

MILITARY SPECIFICATION SHEET

CABLE, FIBER OPTIC, FIBER OPTIC CABLE  
CONFIGURATION TYPE B (PIGTAIL),  
OPTICAL FIBER TYPE MM (GRADED INDEX, GLASS CORE AND  
GLASS CLADDING, MULTIMODE) (METRIC)

This specification is approved for use by the Department of the Navy, and is available 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 the issue of the following specification listed in that issue of the Department of Defense Index of Specifications and Standards (DoDISS) specified in the solicitation: DOD-C-85045.

CLASSIFICATION

Fiber optic cable configuration type: B (OFCC).

Optical fiber type: MM (graded-index, glass core / glass cladding, multimode).

DESIGN AND CONSTRUCTION

Fiber: In accordance with MIL-F-49291/02.

Color code: N/A.

Dimensions and configuration: See figure 1.

Waterblocking: N/A.

Number of optical fibers: 1.

Cable configuration: 1 OFCC (loose tube construction) surrounded by strength members and outer jacket.

Mass per unit length:  $\leq 15$  kg/km.

Cable continuous length:  $\geq 1.1$  km.

AMSC N/A

FSC 6015

DISTRIBUTION STATEMENT A. Approved for public release; distribution is unlimited.

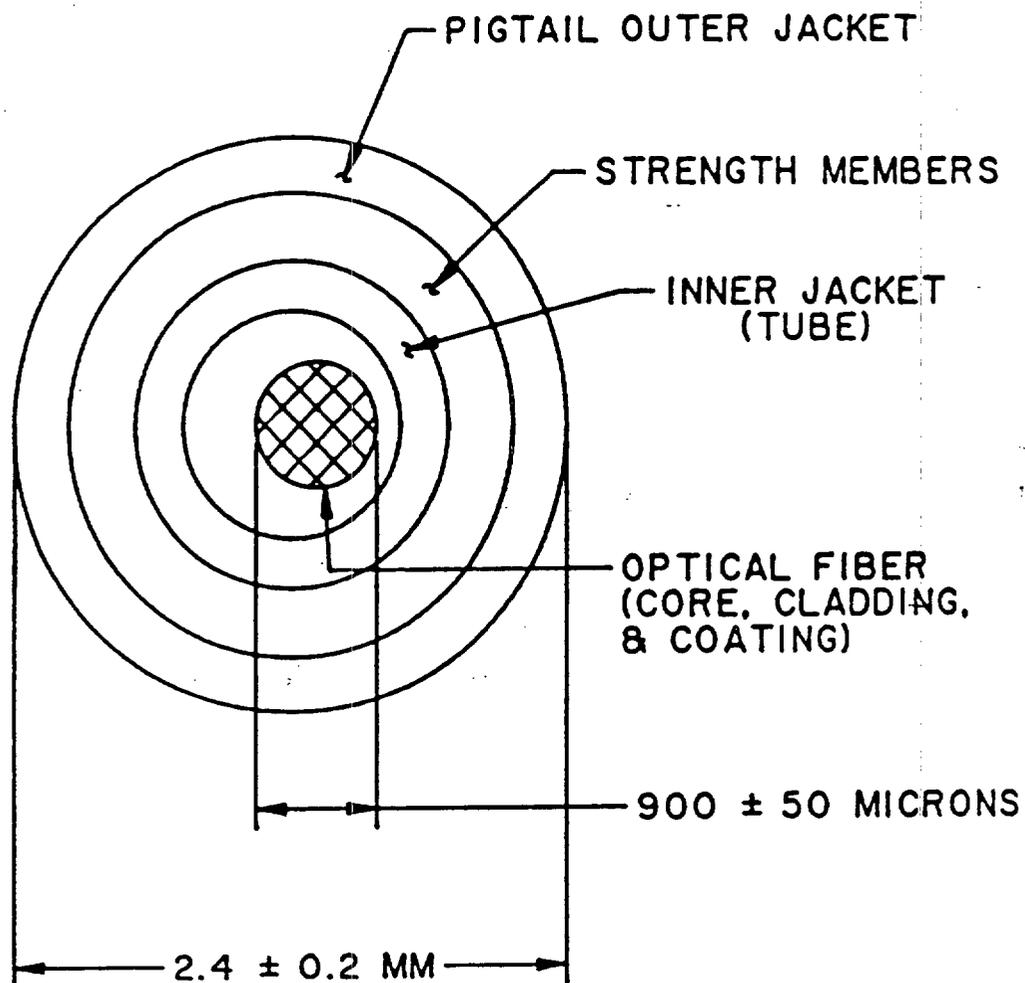


FIGURE 1. Single fiber optical cable pigtail.

PERFORMANCE REQUIREMENTS

OPTICAL PROPERTIES

Maximum attenuation rate: 2.0 dB/km.

Crosstalk: N/A.

Cut-off wavelength: N/A.

ENVIRONMENTAL PROPERTIES

Temperature range: 4 (Operating: minus 28 to plus 85°C  
Storage: minus 62 to plus 85°C).

Gas flame: N/A.

Weathering: N/A.

Ultraviolet radiation: N/A.

Oxygen pressure exposure: N/A.

MECHANICAL PROPERTIES

Tensile loading:  $\geq$  250 newtons.

Dynamic bend: N/A.

Torsion: N/A.

Flexure: N/A.

Twist bending: The test load shall be 10 newtons.

Crush: The test load shall be 250 newtons at a rate of 250 N/min.

Radial compression: N/A.

Impact: N/A.

Corner bend: N/A.

Pressure cycling: N/A.

Hydrostatic pressure: N/A.

Dripping: N/A.

Waterblocking: N/A.

CHEMICAL PROPERTIES:

Flame propagation: N/A.

Smoke generation:  $\leq$  225 when tested in accordance with ASTM E 662.

PART IDENTIFYING NUMBER: M85045/14-002.

PART DESIGNATOR: BMM001.

INTENDED USE: These cables are intended to be used as pigtails for other fiber optic components.

Review activities:  
Navy - EC, YD

Preparing activity:  
Navy - SH  
(Project 6015-N012-2)