

INCH-POUND

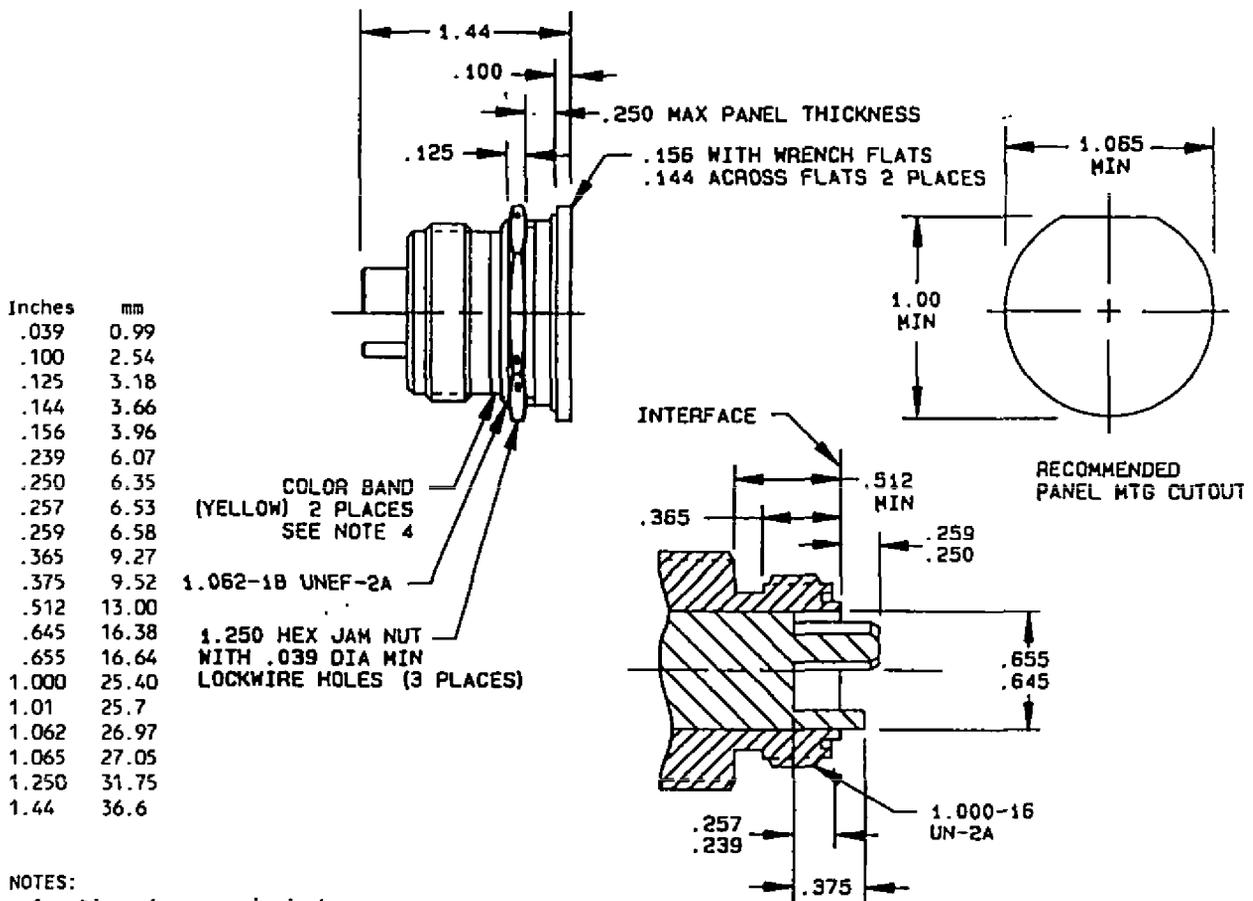
MIL-C-83526/11B
 14 Oct 1993
 SUPERSEDING
 MIL-C-83526/11A
 30 June 1989

MILITARY SPECIFICATION SHEET

CONNECTORS, RECEPTACLE, FIBER OPTIC, CIRCULAR, HERMAPHRODITIC,
 JAM-NUT MOUNTING, WITHOUT STRAIN RELIEF, 2 AND 4 POSITIONS

This specification is approved for use by all Departments and Agencies of the Department of Defense.

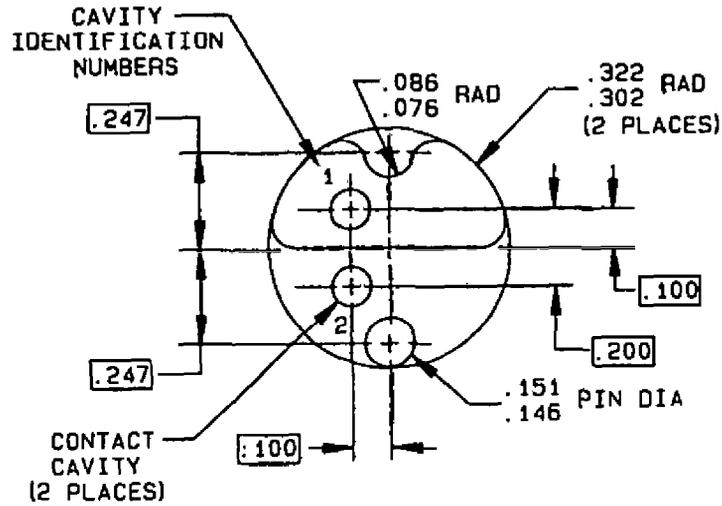
The requirements for acquiring the product described herein shall consist of this specification sheet and the issue of the following specification listed in that issue of the Department of Defense Index of Specifications and Standards (DODISS) specified in the solicitation: MIL-C-83526.



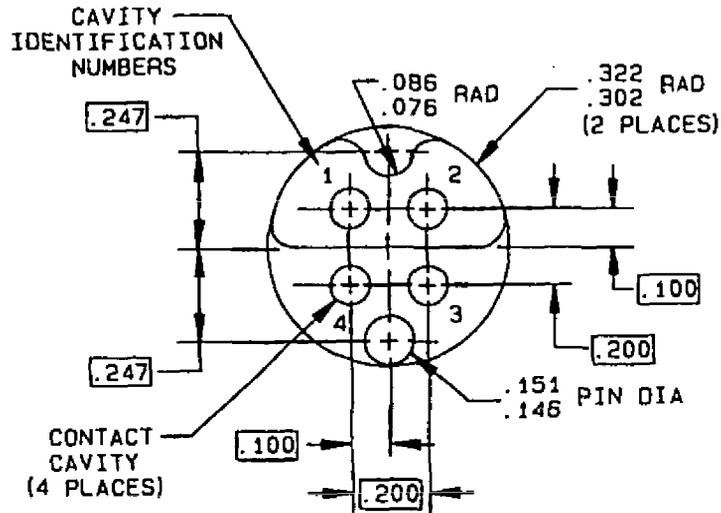
NOTES:

1. Dimensions are in inches.
2. Metric equivalents are given for general information only.
3. Unless otherwise specified, tolerances are ± 0.010 (0.25 mm) for three place decimals and ± 0.03 (0.8 mm) for two place decimals. Angular tolerances are $\pm 0^\circ 30'$.
4. The phrase "Fiber-Optic" must be included within the yellow band.
5. Unless otherwise specified, dimensions are symmetrical about centerlines.

FIGURE 1. Jam-nut connector.



2 Terminal connector type 11-01



4 Terminal connector type 11-02

NOTES:

1. Dimensions are in inches.
2. Metric equivalents are given for general information only.

FIGURE 2. Terminal configuration face view.

REQUIREMENTS:

Design and construction:

Dimensions and configuration: See figures 1 and 2.

Fiber optic cable:

Cable diameter: In accordance with MIL-C-85045.

Cable configuration: In accordance with MIL-C-85045.

Fiber diameter: In accordance with MIL-F-49291.

Fiber numerical aperture: In accordance with MIL-F-49291.

Fiber type: Multimode.

Fiber class: Graded index.

Fiber composition: Glass/glass.

Materials: The material requirements are listed in table I.

Connector termination and assembly tools: As specified in MIL-K-83533.

Cleaning procedures: The cleaning procedures for the connector shall be included with the assembly instructions of the connector.

Termini: The required number of termini shall be supplied with each connector unless otherwise specified. Style P(pin) or S(socket), see MIL-T-29504/11 and MIL-T-29504/12. For dummy terminus, see MIL-T-29504/3.

Weight: 4 ounces maximum.

Coupling forces: 11.0 pounds.

Coupling torques: 5 inch-pounds minimum.

Fiber optic cable requirements: See MIL-C-85045.

TABLE I. Material description.

Parts description	Material	Finish
O-rings	Fluorosilicone rubber MIL-R-25988, type I, class I	None
Dowel pin	CRES 303 Se condition in accordance with ASTM-A581 or ASTM-A582	Passivated QQ-P-35
Compression nut	Aluminum alloy 2011-T3 QQ-A-225/3	Iridite in accordance with MIL-C-5541
Jam nut		Anodized MIL-A-8625, type II, class 2 Color: Gray
Insert		
Connector shell		

For quality conformance and periodic inspection, dummy termini shall be used in all unused cavities.

Patent notice: The Government does not have a royalty-free license under the following listed patents for the benefit of manufacturers of the item either for the Government or for use in equipment to be delivered to the Government.

<u>Patent number</u>	<u>Patent expiration date</u>
US 3,994,564	11/30/1993
US 4,054,366	10/18/1994
US 4,060,308	11/29/1994

Part or Identifying Number (PIN):

	<u>M83526/11</u>	X	X	X	X
Basic specification sheet					
Number of terminus positions required					
	<u>Quantity</u>	<u>Designator</u>			
	2	A			
	4	B			
Cable size <u>1/</u>					
	<u>Cable OD in inches</u>	<u>Designator</u>			
	0.178 - 0.216	1			
	0.217 - 0.256	2			
Terminus supplied for actual fiber size <u>2/</u>					
	<u>Fiber OD in microns</u>	<u>Designator</u>			
	123.0 - 124.4	A			
	124.5 - 127.0	B			
	138.0 - 139.6	C			
	139.7 - 142.0	D			
	No termini supplied	E			
Keying position for terminus insert arrangement					
	<u>Position</u>	<u>Designator</u>			
	No alternate keying position required	3			

Revision letters are not used to denote changes due to the extensiveness of the changes.

1/ Select cable size and type in accordance with MIL-C-85045.

2/ Select fiber sizes and tolerances in accordance with MIL-F-49291.

CONCLUDING MATERIAL

Custodians:

Army - CR
Navy - EC
Air Force - 85

Review activities:

Army - MI
Navy - AS, SH
Air Force - 17
DLA - ES

User activities:

Navy - MC, OS, YD
Air Force - 13, 82

Preparing activity:

Air Force - 85

Agent:

DLA - ES

(Project 6060-0100-06)