**METRIC** 

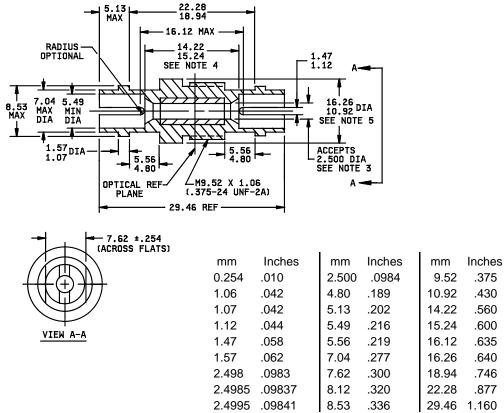
MIL-C-83522/17B w/AMENDMENT 1 26 May 2005 SUPERSEDING MIL-C-83522/17B 11 May 1995

### MILITARY SPECIFICATION SHEET

CONNECTOR, FIBER OPTIC, SINGLE TERMINUS, ADAPTER, BAYONET COUPLING (ST STYLE), 2.5 MILLIMETER DIAMETER FERRULE, BULKHEAD PANEL MOUNT

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-C-83522.



# NOTES:

- 1. Dimensions are in millimeters.
- 2. Inch equivalents are given for general information only.
- 3. The adapter is shown with an alignment sleeve which will accept a ferrule diameter of 2.498 to 2.500 mm for MM and 2.4985 to 2.4995 mm for MM/SM.
- 4. This dimension is the shoulder-to-shoulder distance inside the adapter. This dimension does not apply to the adapter key slot.
- 5. Adapter may be supplied with a square flange. The dimensions for the sides of the square flange are the same as the diameter of the round flange.

FIGURE 1. <u>Dimensions and configuration</u>.

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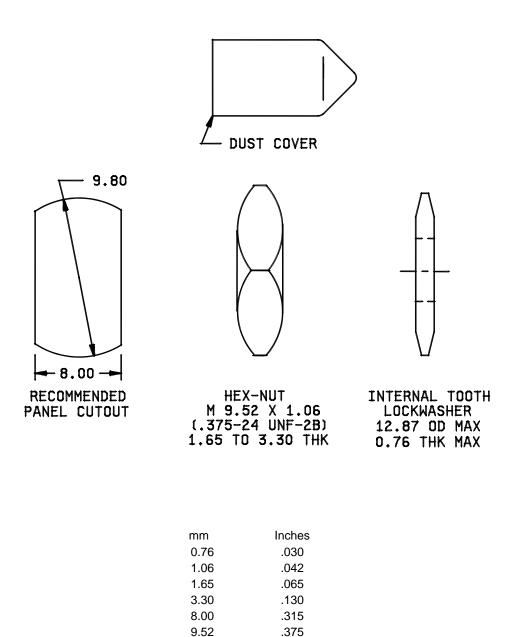


FIGURE 2. Recommended panel cutout and accessories dimensions.

.385

.507

9.80

12.87

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#### **REQUIREMENTS:**

Metals: The adapter housing and other metal components shall be of corrosion resistant steel in accordance with SAE-AMS-QQ-S-763, class 303/316L or ASTM A-276, designation S31803, or nickel-plated brass, alloy 345 or 360, in accordance with ASTM B-16.

Alignment sleeve material: Ceramic (zirconia).

Dust covers: Shall be thermoplastic and shall be provided on each end of the adapter.

Hex nut and internal tooth lockwasher: Stainless steel or nickel-plated brass.

Dimensions and configuration: See figures 1 and 2.

Optical requirements:

Optical loss (attenuation): Not applicable.

Nuclear radiation: Not applicable.

Weight: 20 grams maximum.

Safety wire holes: Not applicable.

Force to engage and disengage:

Longitudinal force: Not applicable.

Torque: Not applicable.

Coupling mechanism retention force: Not applicable.

Water submersion: Not applicable.

Fiber optical cable: Not applicable.

Ozone exposure: Not applicable.

Fluid immersion: Not applicable.

High impact shock: Applicable to all adapters. For adapters tested with connectors assembled on single-mode fiber, signal discontinuity is not applicable during shock. For adapters tested with connectors assembled on multimode fiber, signal discontinuity is applicable during shock.

Residual magnetism: Not applicable.

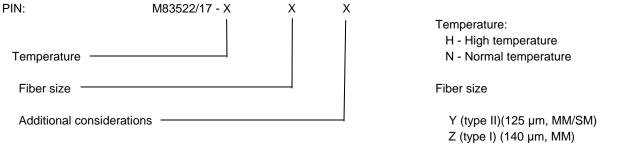
Adapter accessories: Each adapter shall be packaged with a minimum of one hex nut, one internal tooth lockwasher, and two dust covers.

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Group A inspection: During group A inspection, all dimensions may be verified on a sampled basis. Weight may also be verified on a sampled basis. The qualifying activity shall be notified of all failures during any sampled inspections.

The adapter mates with two MIL-C-83522/16 plug connectors.

Part or Identifying Number (PIN) is a new term encompassing previous terms used in specifications such as part number, type designator, or identification number.



Additional considerations:

S - Qualified to space flight requirements.

TABLE I. PIN supersession data.

Superseded PIN	Superseding PIN
M83522/17 - HX	M83522/17 - HY
M83522/17 - NX	M83522-17 - NY

Note: M83522/17-NX may be supplied for 6 months from the date of this specification sheet amendment to allow manufacturers suppliers to be depleted.

Referenced documents. In addition to MIL-C-83522, this document references the following:

MIL-C-83522/16 ASTM B-16

ASTM A-276 SAE-AMS-QQ-S-763

<u>Changes from previous issue</u>. The margins of this specification are marked with vertical lines to indicate where changes from the previous issue were made. This was done as a convenience only and the Government assumes no liability whatsoever for any inaccuracies in these notations. Bidders and contractors are cautioned to evaluate the requirements of this document based on the entire content irrespective of the marginal notations and relationship to the last previous issue.

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Custodians:

Preparing activity: DLA - CC

Army - CR

Navy - SH

Air Force - 11 DLA - CC

NASA - NA

(Project 6060-0171)

Review activities:

Navy - AS

Air Force - 13, 19, 93, 99

NOTE: The activities listed above were interested in this document as of the date of this document. Since organizations and responsibilities can change, you should verify the currency of the information above using the ASSIST Online database at <a href="http://assist.daps.dla.mil">http://assist.daps.dla.mil</a>.