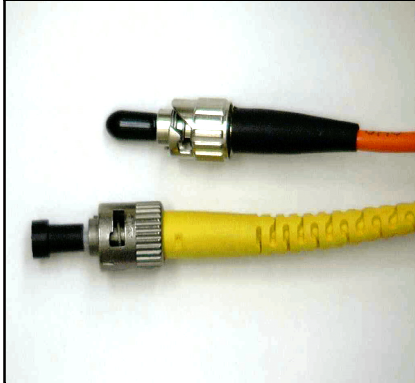


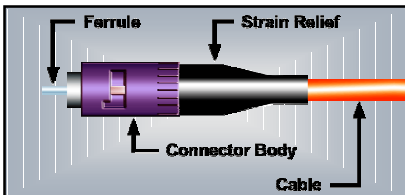
**FIBER OPTICS
FIBER OPTIC CABLE ASSEMBLIES**



FIBER OPTIC CABLE ASSEMBLIES

A fiber optic cable assembly consists of a prepared fiber optic cable, connector, and associated hardware.

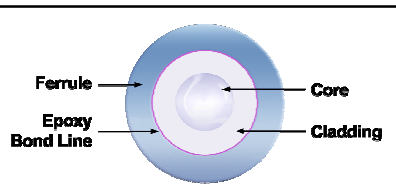
See Section 10.01 "Fiber Optics, General Requirements", for common accept / reject criteria.



**PREFERRED
CONNECTOR / CABLE CONFIGURATION**

The connector is properly assembled, clean and damage-free. Strain-relief is properly installed, straight, tight, and damage-free.

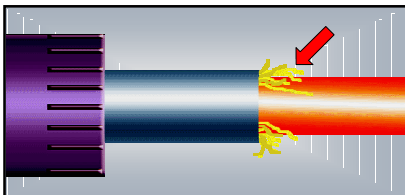
[NASA-STD-8739.5 \[10.2.7 \]](#)



**ACCEPTABLE
ENDFACE**

The endface is clean and free from cracks, scratches, edge chips, hackles, pits, and other anomalies. The fiber is concentric in the ferrule, and the epoxy ring is even. Ferrule and connector are damage-free.

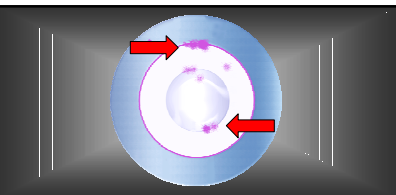
[NASA-STD-8739.5 \[10.2.7 \]](#)



**UNACCEPTABLE
STRENGTH MEMBER**

The strength member shall be uniformly distributed and securely attached to the connector. The protruding fibers are a visual indication that the strength member has not been properly crimped to the connector bayonet.

[NASA-STD-8739.5 \[10.2.7.a \]](#)



**UNACCEPTABLE
EPOXY**

Epoxy deposits on the core, cladding, or ferrule are rejectable. The deposits may be fixable by repolishing.

[NASA-STD-8739.5 \[10.2.7.e \]](#)

NASA WORKMANSHIP STANDARDS

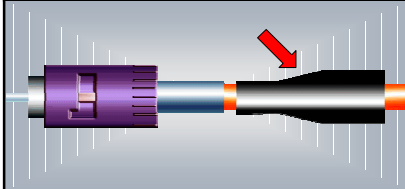


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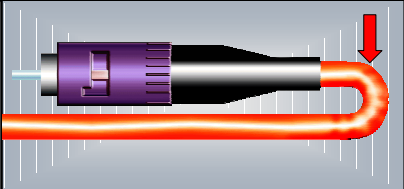
FIBER OPTICS
FIBER OPTIC CABLE ASSEMBLIES (cont.)



UNACCEPTABLE
IMPROPER STRAIN RELIEF

The strain relief shall be positioned and attached per engineering documentation. The strain relief boot has been installed backwards - a common assembly error that can only be corrected by removing and replacing the connector.

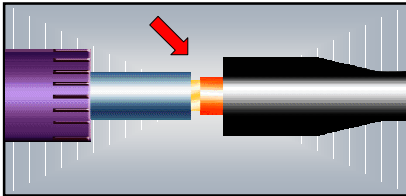
[NASA-STD-8739.5 \[10.2.7.f \]](#)



UNACCEPTABLE
IMPROPER CABLE ALIGNMENT

Axial alignment of the cable to the connector shall be maintained within 5 cm (2 in.) of the entry / exit from the connector body. This reduces strain on the connector assembly and minimizes signal attenuation effects.


[NASA-STD-8739.5 \[10.2.7.h \]](#)



UNACCEPTABLE
SHRINKAGE

Shrinkage of the buffer, outer jacket, or other cable components, which result in reduced mechanical strength, reduced performance, or attenuation losses in excess of engineering specification, shall be cause for rejection.

[NASA-STD-8739.5 \[10.3.3.d \]](#), [\[11.5.3.d \]](#)

NASA WORKMANSHIP STANDARDS				
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