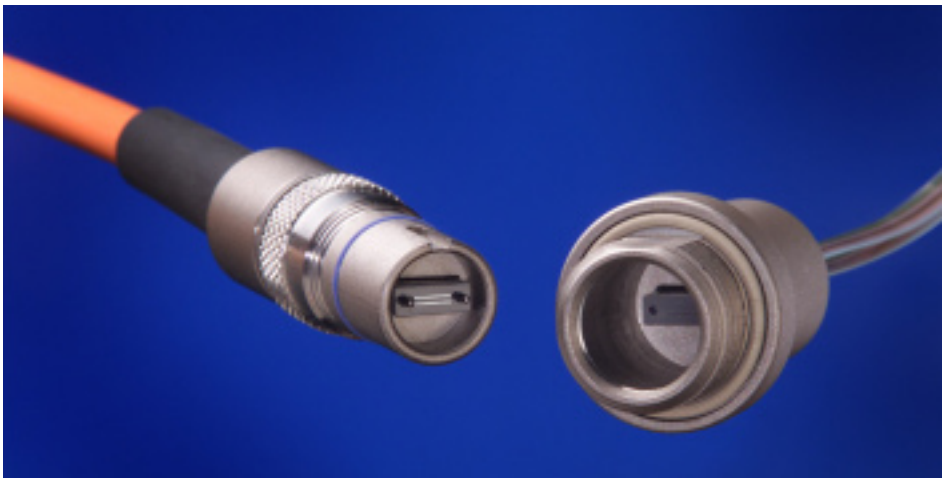
Circular MT Cable Assemblies

106277

High-density Circular MT Cable Assemblies are designed for critical, high-reliability applications

Molex's rugged, high-density circular MT cable assemblies meet today's escalating performance requirements mandated by telecommunication, military, medical and many other industries. Utilizing the low-profile Circular MT connector, these cable assemblies are designed to meet or exceed the mechanical specifications of traditional datacommunication and telecommunication inter-chassis connections.

The Circular MT assemblies use a single MT ferrule housed in a nickel-plated, metal-connector shell. Fiber counts range from 12 to 72 fibers. The metal housing and stainless steel push-pull locking ring provide a more robust design than the current industry standard MPO connector polymer housings and latches. The MT ferrule is recessed in both the circular connector and receptacle housings, providing an additional improvement over traditional MT connectors. Recessing the ferrule ensures it is scoop-proof, preventing damage to the precise MT alignment pins and ferrule endface during handling and mating of the connector.



The circular MT receptacle housing features a deep, polarized mating cavity which will reduce alignment-pin hole damage that may occur during the mating process with traditional MT connector systems.

Molex's circular MT cable assemblies offer a more robust MT ferrule-based interface versus ribbon-based optical interfaces, which have traditionally been rectangular. This new design ensures improved alignment benefits, increased pull strength and the use of new round, ribbon-cable constructions. Circular MT connectors will be sold only as terminated cable assemblies.

Circular MT Cable Assemblies complement Molex's existing line of MT products. For more information on Molex's extensive optical product offering, please visit: www.molex.com/fiber.

Features and Benefits

- MT ferrules are recessed in the connector and receptacle housings ensuring scoop-proof mating which prevents damage to alignment pins and ferrule endface
- Aluminum connector and receptacle housings provide a robust interconnect with exceptional pull strength
- O-ring and Electro Magnetic Interference (EMI) gasket provide environmental seals that isolate dust, moisture and EMI
- Designed for round, multi-fiber jackets providing improved fiber management
- Standard MT ferrules which provide an industry-standard interface with high density and reliable performance
- 19.05mm (.750") diameter receptacle features a small footprint and similar size to industry standard MPO connector

SPECIFICATIONS

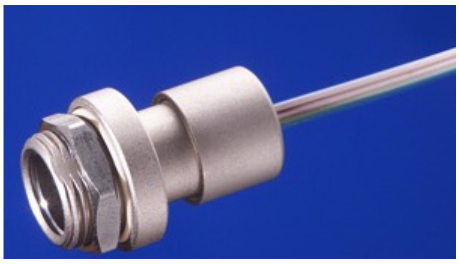
Reference Information
Packaging: Custom per assembly

Optical
Ferrule Type: MT Ferrule
Fiber Density: 12 to 72 fibers
Fiber Type:
Single mode: 9/125µm
Multimode: 50/125µm or 62.5/125µm
Insertion Loss:
Single mode:
8 Fiber: 0.12 dB typical <0.5dB max.
12 Fiber: 0.15 dB typical <0.75dB max.
24 Fiber: 0.20 dB typical <0.75dB max.
Multimode
12 Fiber: 0.15 dB typical <0.5dB max.
24 Fiber: 0.22 dB typical <0.75dB max.
36 Fiber: 0.30 dB typical <1.0dB max.
72 Fiber: 0.35 dB typical <1.0dB max.

Mechanical
Operating Temperature Range: -5 to +75°C
Durability: 200 matings

Physical
Housing: Nickel-plated aluminum

Circular MT connector



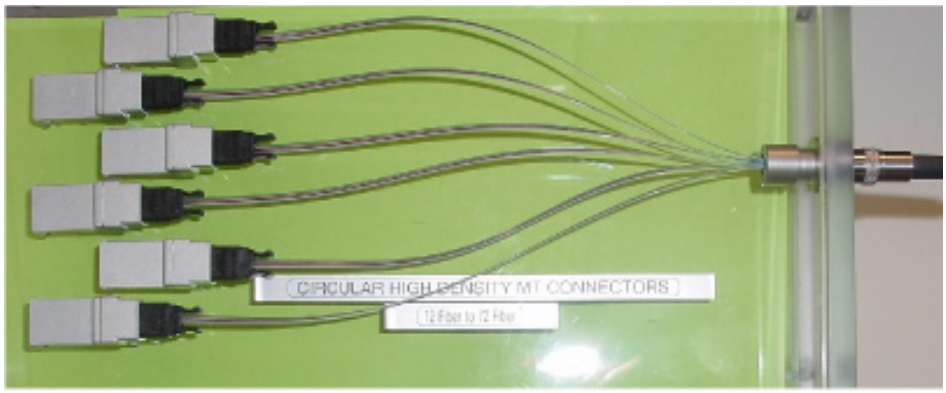
Circular MT receptacle

APPLICATIONS

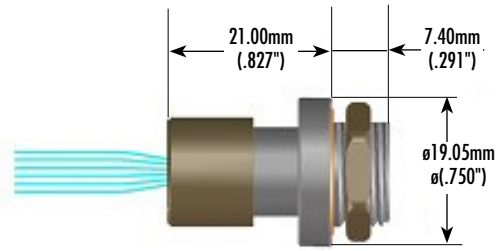
Circular MT Cable Assemblies

106277

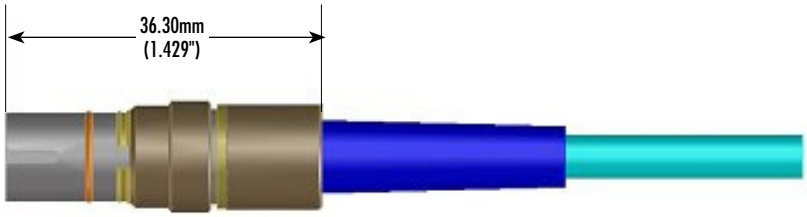
- Telecommunication Equipment
  - Hubs, routers, data centers
- Instrumentation and Medical Equipment
  - Test equipment, switches, video systems



ORDERING INFORMATION



Receptacle



Connector

Order Numbers Supplied as Example Only

Order No.	Component	Component Width	Component Length	Cable Length†	Fiber Density‡
106277-0001*	Connector, Double-Ended Assembly	12.70mm (.500")	36.30mm (1.429")	3.00m (9.840')	24 Fiber
106277-1001*	Receptacle, Single-Ended Assembly	19.05mm (.750")	28.70mm (1.130")	3.00m (9.840')	24 Fiber
106277-0000*	Connector and Receptacle System Cable Assembly	N/A	N/A	3.00m (9.840')	24 Fiber

*Only sold as terminated cable assemblies. Circular connector and receptacle components will not be sold separately. Part numbers and sales drawings will be established based on specific customer design requirements.
†Cable Length: Dependent upon customer design requirement
‡Fiber Density: Fiber counts range from 12 to 72 fibers, dependent upon customer design requirement

Printed in USA/JI/2006.03
©2006 Molex