Fiber Cable Assemblies

MPO Assemblies

Application

MPO Assemblies are multi-fiber cables terminated into multi-fiber connectors. These cables can be used in indoor or outdoor applications. MPO terminations offer great plug-and-play solutions. Using MPO multi-fiber assemblies can eliminate termination and splicing in the field, which in turn reduces the expense of deployment. MPO assemblies offer a very high density solution that reduces your network's overall footprint, which is especially beneficial in central office, headend and data center locations.



Description

Clearfield® offers singlemode and multimode MPO fiber assemblies that are manufactured to tight specifications that exceed industry standards. MPO Assemblies are used in a variety of carrier networks, private networks and data center environments. Clearfield's manufacturing process and quality control ensures a top-quality product for insertion loss and return loss.

Features and Benefits

Integrity

- Terminations are designed and tested to meet TIA/EIA and IEC intermateability standards
- Supports Singlemode and Multimode cables and connectors
- 4, 8, 12 and 24 fiber terminations available (custom configurations available)
- Assemblies terminated MPO to MPO, MPO to non-terminated stub and MPO to multi-fiber breakout terminated with industry standard SC, LC, FC and ST
- RoHS compliant

Protection

- Using outdoor and indoor plenum and riser rated fiber cables MPO assemblies can be installed just about anywhere
- MPO connectors can be terminated directly to bare fiber ribbon, loose-tube and up-jacketed cable
- Pulling-eye kits available to protect the terminated ends and will reduce deployment time and cost

Access

- Compact multi-fiber connectors reduce cabinet and panel size
- Factory terminated MPO assemblies eliminate the need for termination and splicing in the field
- Custom fiber pin-out configurations available upon request

Investment

- MPO Assemblies offer an economical solution for deploying fiber in any optical network
- Environmentally stable, low-insertion loss, minimal back reflection
- All assemblies are 100% tested

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Technical Specifications

MPO Assemblies	
Core Size and Type	Singlemode and multimode
Fiber Count	4, 6, 8, 12 and 24-fiber MPO terminations on multi-fiber cables
Jacket O.D.	Bare ribbon, flat and round jacketed ribbon or loose tube
Cable Types	Indoor (Riser/Plenum), Outdoor (Riser/Non-Rated)
Connector Types	SC/UPC, SC/APC, LC/UPC, LC/APC, FC/UPC, FC/APC, ST/UPC, MPO (male and female)
Operating Temperature	-40°C to 85°C (-40°F to 185°F)
Breakout Length	Half meter, one meter, pulling eye, custom

Minimum Performance Specifications for Terminated MPO Connectors

Fiber	Connector Type	Polish Type	Ins. Loss, Typical	Max. Ins. Loss	Min. Ret. Loss
Singlemode	MPO 12 Fiber	Angled	0.25 dB	0.35 dB	55.00 dB
Singlemode	MPO 24 Fiber	Angled	0.75 dB	1.00 dB	55.00 dB
Multimode	MPO 12 Fiber	Flat	0.40 dB	0.50 dB	25.00 dB
Multimode	MPO 24 Fiber	Flat	0.75 dB	1.00 dB	25.00 dB

Configured Part Numbers

D ___ ___ - ___ ___ ___ - ___ ___ Z - ___ ___ ___ XXXM or XXXF

1 2 3 4 5 6 7 8

1 Select Jacket Construction

A = Indoor, riser rated (IFC)
C = Indoor, plenum (IFC)

2 Select Mode / Type

1 = Singlemode
A = Singlemode – bend insensitive
3 = Multimode (62.5 µm)
5 = Multimode (50 µm)
7 = Multimode (50 µm) laser opt.
9 = Multimode (50 µm) OM4

3 Select Fiber Count

004 = 4
008 = 8
024 = 24
006 = 6
012 = 12

4 Select Connector #1

5 = MPO male
6 = MPO female
N = Pushable MPO male
P = Pushable MPO female

5 Select Breakout #1

C = 0.5 meters
Z = None

6 Select Connector #2

5 = MPO male
A = SC/UPC
E = LC/UPC
J = FC/UPC
M = ST/UPC
P = Pushable MPO female
6 = MPO female
C = SC/APC
G = LC/APC
K = FC/APC
N = Pushable MPO male
Z = Pigtail

7 Select Breakout #2

B = 1 meter
C = 0.5 meter
Z = None

8 Select Upjacketing #2

A = 900 µm
B = 2 mm
Z = Pigtail

XXXM or XXXF

XXXM = Length in meters
XXXF = Length in feet