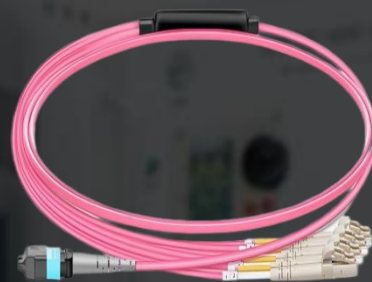


Product Specification

MPO/MTP® Breakout Cables

IDEAL FOR DATA CENTER HIGH DENSITY CABLING SYSTEM



Features

- US Conec MTP® connector
- Senko MPO Plus® premium connector
- Corning SMF-28® Singlemode fiber
- Corning Clearcurve® multimode fiber
- LC, MDC, SC, FC, ST connectors available
- OS2, OM4, OM3 available
- 0.35dB elite low loss connector
- Factory terminated and tested
- Pulling eyes are provided as an option to protect the fiber ends during Installation
- Custom staggering options available on tails

Compliance

- RoHS, CE (EN 50575 CPR) and ISO9001 Compliant
- EIA/TIA, Telecocardia GR-326-CORE Standards
- IEC61754-7
- TIA 605-4 (FOCIS 5)
- YD/T1272.5

MPO/MTP® Breakout Cables Description

MPO/MTP® breakout cables are utilized in parallel optics and duplex transmission cross-connect systems to enhance cable density between switch and server cabinets. Designed for high-density fiber patching in data centers, they ensure optimal performance across local area networks. These cables enable quick deployment of high-density, multi-port connectivity, making them ideal for Storage Area Network (SAN) applications and other demanding environments requiring reliable, high-speed fiber optic solutions.

Technical Specification

1. Basic Characteristics

Parameter	Description
Fiber Count	8-144Fibers
Fiber Mode	Single Mode: OS2 9/125μm
	Multimode: OM3/OM4/OM5 50/125μm
Fiber Brand	Corning ClearCurve® multimode fiber and SMF-28® Ultra optical fiber
Connector A	MTP® Female, Male; MPO Female, Male
Connector Brand	US Conec MTP®, Senko MPOPlus®
Connector B	LC, MDC, SC, FC, ST
Polarity	Type A, Type B, Type C
Cable Jacket	Plenum (OFNP)
	Low Smoke Zero Halogen (LSZH)
	Riser(PVC)

2. Color Characteristics

Parameter	MTP®	MPO	LC	MDC
Cable Jackets	OS2:Yellow,Black	OS2:Yellow	OS2:Yellow	OS2:Yellow
	OM4:Magenta	OM4:Magenta	OM4:Magenta	
	OM3:Aqua	OM3:Aqua	OM3:Aqua	
Connectors	OS2:Green	OS2:Green	Single Mode:UPC Blue,APC Green	Single Mode:UPC Blue
	OM4/OM3:Aqua	OM4/OM3:Aqua	Multimode:Beige	
Boots	8Fibers:Grey	8/12/24Fibers:Black	Single Mode:UPC White,APC Green	Single Mode:UPCBlack
	12 Fibers:Black		Multimode:Beige	
	24 Fibers:Red			

3. Physical Characteristics

Parameter	Description
Cable Diameter	3.0mm
Breakout Leg	Duplex: 2.0mm, Simplex: 0.9/2.0mm
Breakout Length	0.3/0.5m
Minimum Bend Radius	Single Mode: 10.0mm, Multimode: 7.5mm
Operating Temperature	-10°C to 70°C (14 to 158°F)
Storage Temperature	-40°C to 85°C (-40 to 185°F)

Note: Please kindly note that the cable diameter of standard single MPO/MTP® cable is 3.0mm, and as for cables with different bundles, the trunk diameter is different, as shown below.

4. Shape Characteristics

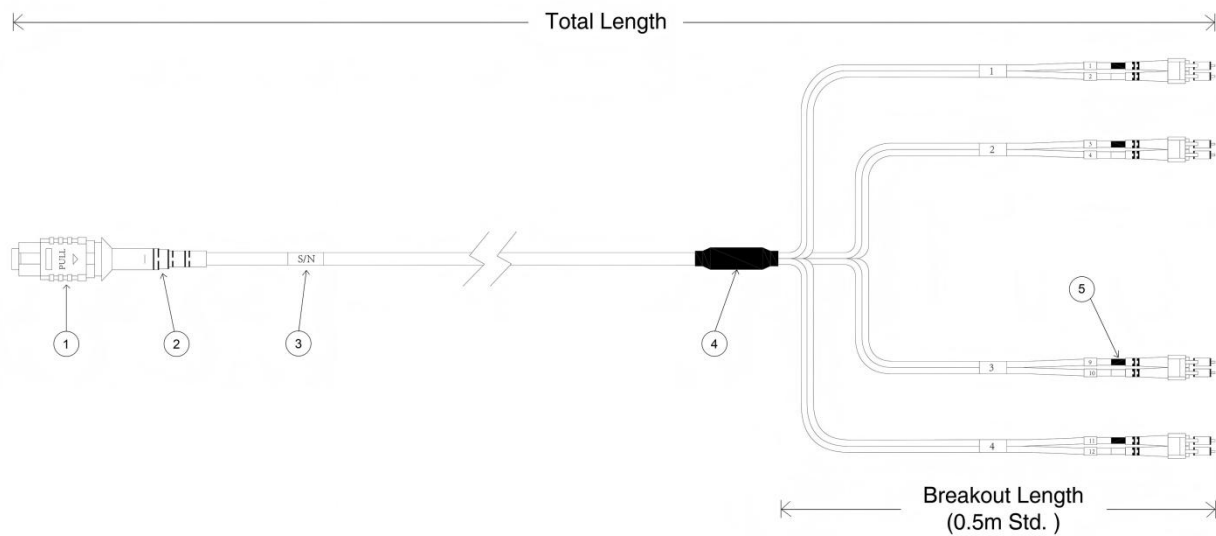
Bundle Count	MTP®/MPO-12	MTP®/MPO-24	Trunk Diameter
2 Bundles	24 Fibers	48 Fibers	7.2mm
3 Bundles	36 Fibers	72 Fibers	9.3mm
4 Bundles	48 Fibers	96 Fibers	9.5mm
6 Bundles	72 Fibers	144 Fibers	11.7mm
8 Bundles	96 Fibers	/	12.01mm
12 Bundles	144 Fibers	/	17.3mm

Note: The "bundle" means a combination of several fibers. For example, as for MTP®/MPO-12 cables, 2 bundles mean 24 Fibers(2x 12F) ; for MTP®/MPO-24 cables, 2 bundles mean 48 Fibers(2x 24F).

5. Optical Characteristics

Parameter	Description		
Wavelength (nm)	Single Mode: 1310/1550nm		
	Multimode: 850/1300nm		
Transmission Distance	OM4: 150m at 40/100G, 400m at 10G		
	OM3: 100m at 40/100G, 300m at 10G		
Connector: MTP®/MPO			
Fiber Mode	Single Mode		Multimode
Attenuation (dB/km)	≤0.32 at 1310nm		≤2.3 at 850nm
	≤0.18 at 1550nm		≤0.6 at 1300nm
Insertion Loss (dB)	≤0.35dB		≤0.35dB
Return Loss (dB)	APC: ≥60dB, UPC: ≥50dB		UPC: ≥20dB
Connector: LC/SC/FC/ST/MDC			
Fiber Mode	Single Mode	Multimode	Single Mode
Insertion Loss (dB)	APC: ≤0.3dB	UPC: ≤0.2dB	UPC: ≤0.3dB
	UPC: ≤0.2dB		
Return Loss (dB)	APC: ≥60dB	UPC: ≥30dB	UPC: ≥50dB
	UPC: ≥50dB		

Technical Drawing



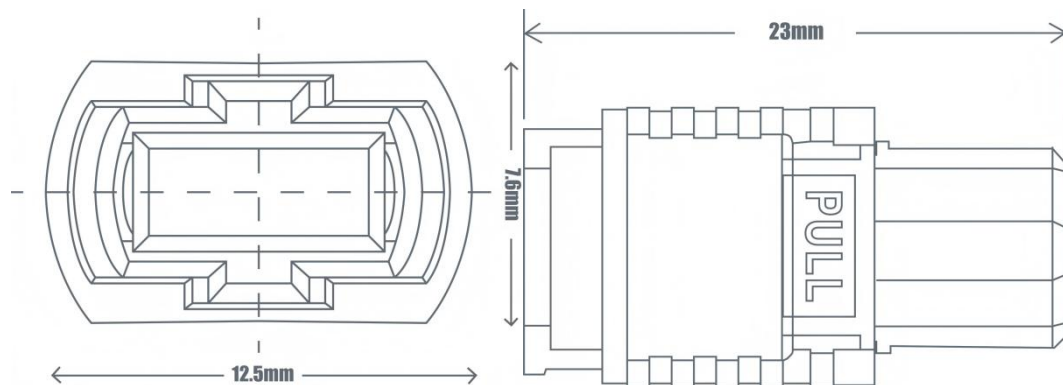
1. MTP®/MPO Connector

2. Connector Boot

3. Serial Number Label

4. Fan Out Kit

5. LC Connector



Note:

- $L \leq 1\text{m}$, tolerance $\pm 0.05\text{m}$; $1 < L < 20\text{m}$, tolerance $\pm 0.10\text{m}$; $L \geq 20\text{m}$, tolerance $\pm L * 1\%$.
- The connector types in the figure are for reference only. MTP/MPO® (Male/Female) are optional.
- The total length of this cable is the distance from the connector ferrule at one end to the ferrule at the other end.

Production Center

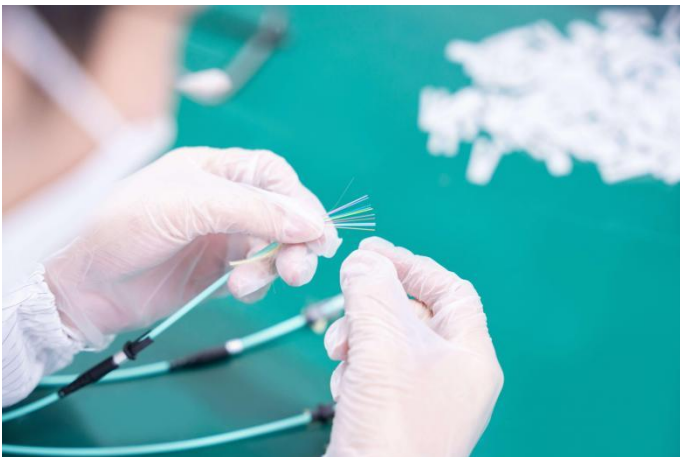
Each fiber is fully verified and tested under the LSOLINK Assurance Program, which features the world's most advanced analytical equipment to ensure our transceivers comply with international common protocol standards while still operating flawlessly in your facility.



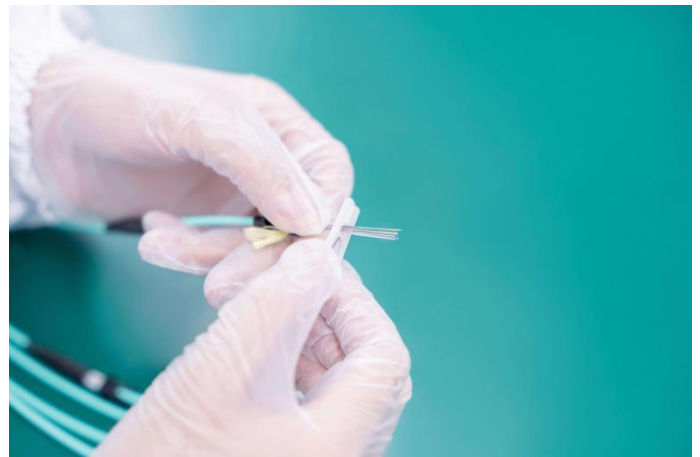
Optical Fiber Stripping



Optical Fiber Ferrule



Optical Fiber Paralleling



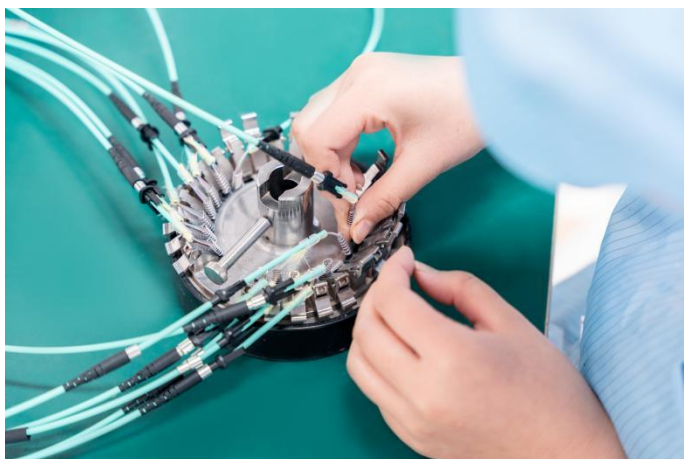
Optical Fiber Fixed



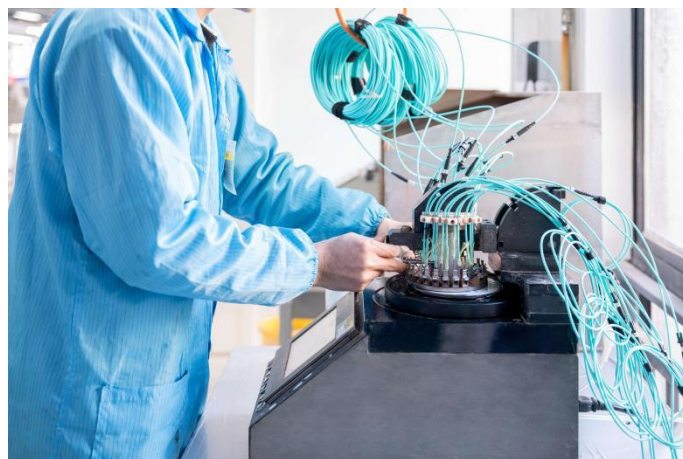
Glue Solidifies



Plug-in Installation



Installation Fixture



Optical Fiber Polishing



End Face Inspection



Crimp Connector



Polarity Detection



Install Label


Order Information

Part Number	Description
OS2-B-MPO8FA-4DLCU	MPO-8 (Female UPC) to 4 LC UPC Duplex OS2 Single Mode Elite Breakout Cable,8 Fibers, Type B,Plenum (OFNP) ,Yellow
OM4-B-MPO8FA-4DLCU	MPO-8 (Female UPC) to 4 LC UPC Duplex OM4 Multimode Elite Breakout Cable,8 Fibers, Type B,Plenum (OFNP) ,Magenta
OM3-B-MPO8FA-4DLCU	MPO-8 (Female UPC) to 4 LC UPC Duplex OM3 Multimode Elite Breakout Cable,8 Fibers, Type B,Plenum (OFNP) ,Aqua

Further Information

 | Lighting the Path to Global Links

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Disclaimer

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