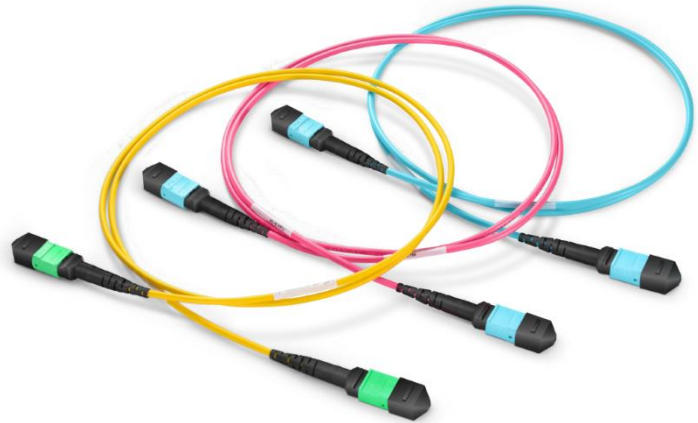# MTP/MPO Trunk Cable

MTP/MPO Series

- **MPO Plus premium connector, MTP® connector**
- **Single mode, Multimode fiber**
- **OS2, OM3, OM4 available**
- **0.35 dB elite low loss connector or 0.5 dB standard loss connector**
- **Allows easy migration from 10GbE to 40GbE or 100GbE Easy installation**

Ascent MTP/MPO trunk multi-fiber cable assemblies facilitate rapid deployment of high-density backbone cabling in data centers and other high fiber environments, reducing network installation or reconfiguration time and cost.

These MTP/MPO trunk multi-fiber cable are used to interconnect cassettes, panels or ruggedized MTP/MPO fan-outs, spanning MDA, HDA and EDA zones. Typically, these cables consist of OM3/OM4 multimode cables terminated with MTP/MPO connectors on both ends. The MTP/MPO connectors can be male (with guide pin on the contact interface) or female (without guide pin on the contact interface).

MTP/MPO trunk cables are typically available in 8, 12, 24, 48, or 72 fibers. These fibers are connected between two connectors in three different methods that are called method A, method B, and method C. While in method A fibers are straight through, in method B fibers are reversed connected. In method C, the fibers are pairs flipped. They use a simple push/pull latching mechanism for easy insertion and removal. This allows shorter installation time and lowers overall cost.
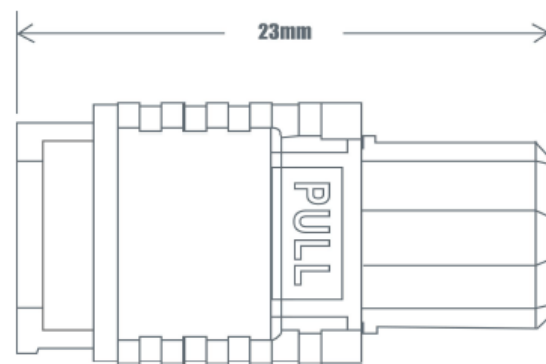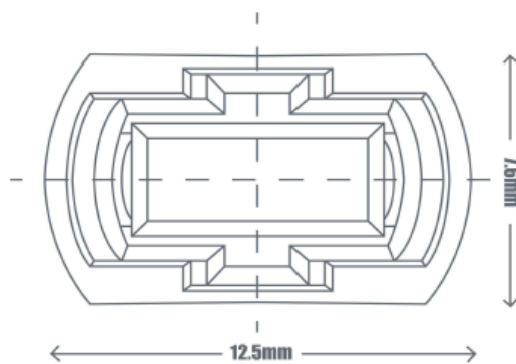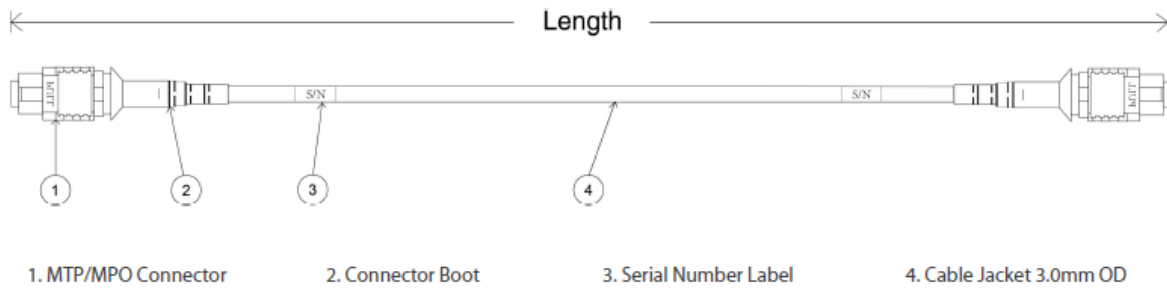
Key Features

- MTP® connector, MPO Plus premium connector

- Multimode fiber, SMF Ultra optical fiber

- OS2, OM3, OM4 available

- 0.35 dB elite low loss connector, 0.5 dB standard loss connector

- Factory terminated and tested

- Supports 40G ,100G,200G,400G and 800G network applications

- Pulling eyes are provided as an option to protect the fiber ends during installation

- Cable Jacket material: LSZH, OFNR, OFNP available

Standards Compliance

- RoHS, CE (EN50575 CPR) and ISO9001 compliant

- EIA/TIA, Telcordia GR-326-CORE standards

- IEC61754-7

- TIA 605-4 (FOCIS 5)

- YD/T1272.5

Technical Drawing

Length

1. MTP/MPO Connector   2. Connector Boot   3. Serial Number Label   4. Cable Jacket 3.0mm OD

7.6mm

12.5mm

23mm

PULL

Specifications

Construction

Fiber Count	8-144 Fibers
Fiber Mode	Single-mode: OS2 9/125 µm
	Multi-mode: OM4 50/125 µm, OM3 50/125µm
Fiber Brand	Corning ClearCurve® multimode fiber and SMF-28® Ultra optical fiber or equivalent
Connector Type	MTP Female, Male; MPO Female, Male
Connector Brand	US Conec MTP®, Senko MPO or equivalent brand
Polarity	Type A, Type B, Type C
Cable Jacket Ratings	Plenum (OFNP)
	Low Smoke Zero Halogen (LSZH) Riser (PVC)
Cable Type	Bunch

Color Codes	**MTP**	**MPO**
Cable Jackets	OS2: Yellow	OS2: Yellow
	OM4: Magenta	OM4: Magenta
	OM3: Aqua	OM3: Aqua
Connectors	OS2: Green	OS2: Green
	OM4/OM3: Aqua	OM4/OM3: Aqua
Boots	8 Fibers: Grey	8/12/24 Fibers: Black
	12 Fibers: Black	
	24 Fibers: Red	

Physical Properties

Cable Diameter*	3.0 mm
Breakout Length	0.5/0.3 m
Minimum Bend Radius	Single-mode: 10.0 mm
	Multi-mode: 7.5 mm
Operating Temperature	-10 °C to +70 °C
Storage Temperature	-40 °C to +85 °C

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

Bundle Count	MTP/MPO-12	MTP/MPO-24	Trunk Diameter
2 Bundles*	24 Fibers	48 Fibers	6.0 mm
3 Bundles	36 Fibers	72 Fibers	8.0 mm
4 Bundles	48 Fibers	96 Fibers	8.0 mm
6 Bundles	72 Fibers	144 Fibers	8.0 mm
8 Bundles	96 Fibers	/	10.0 mm
12 Bundles	144 Fibers	/	10.0 mm

* "Bundle" means a combination of several fibers. For example, for MTP/MPO-12 cables, 2 bundles means 24 fibers (2x12); for MTP/MPO-24 cables, 2 bundles means 48 fibers (2x24).

Optical Properties

Attenuation	Single Mode: ≤0.32 dB/km at 1310 nm, ≤0.18 dB/km at 1550 nm
	Multi-mode: ≤2.3 at 850 nm, ≤0.6 at 1300 nm
Insertion Loss	Single-mode: ≤0.35 dB
	Multi-mode: ≤0.35 dB
Return Loss	Single-mode: UPC polish: ≥50 dB, APC polish: ≥60 dB
	Multi-mode: ≥25 dB
Wavelength	Single-mode: 1310/1550 nm
	Multi-mode: 850/1300 nm
Transmission Distance	OM4: 150 m at 40/100G, 400 m at 10G
	OM3: 100 m at 40/100G, 300 m at 10G

Ordering Information

References Part Numbers*

Contact your local sales representatives for more configuration

MPO12-UF-UF-OM4-8LSZH-B-100   MPO12 Female UPC to MPO12 Female UPC, OM4 50/125 Multimode, 8 Fibers, LSZH, Type B, 100m

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