

MTP®/MPO Trunk Cables Datasheet

IDEAL FOR DATA CENTER HIGH DENSITY CABLING SYSTEM

Designed for data center applications requiring quick infrastructure deployment such as main, horizontal, and zone distribution areas.



MTP®/MPO Trunk Cables

MTP®/MPO trunk multifiber 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. They are used to interconnect cassettes, panels or ruggedized MTP®/MPO fanouts, spanning MDA, HDA and EDA zones.

Standards Compliance

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

Features

- US Conec MTP® connector, Senko MPO Plus® premium connector
- SMF-28® Ultra optical fiber, Corning Clearcurve® OM3/OM4 fiber, YOFC Maxband® OM5 fiber
- OS2, OM3, OM4, OM5 available
- 0.35dB elite low loss connector
- Factory terminated and tested
- Allow easy migration from 10GbE to 40GbE or 100GbE
- Pulling eyes are provided as an option to protect the fiber ends during installation

Technical Specification

Construction	Description
Fiber Count	8-144 Fibers
Fiber Mode	Single Mode: OS2 9/125µm Multimode: OM3/OM4/OM5 50/125µm
Fiber Brand	OS2: SMF-28® Ultra optical fiber OM3/OM4: Corning ClearCurve® fiber OM5: YOFC Maxband® fiber
Connector Type	MTP® Female, Male; MPO Female, Male
Connector Brand	US Conec MTP®, Senko MPO Plus®
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 OM3: Aqua OM4: Magenta OM5: Lime Green	OS2: Yellow OM3: Aqua OM4: Magenta OM5: Lime Green
Connectors	OS2: Green OM3/OM4: Aqua OM5: Lime Green	OS2: Green OM3/OM4: Aqua OM5: Lime Green
Boots	8 Fibers: Grey 12 Fibers: Black 24 Fibers: Red	8/12/24 Fibers: Black

Technical Specification

Physical Properties	Description
Cable Diameter*	3.0mm
Breakout Length	0.5/0.3m
Minimum Bend Radius	Single Mode: 10.0mm, Multimode: 7.5mm
Operating Temperature	-10°C to +70°C
Storage Temperature	-40°C to +85°C

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

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

* 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).

Technical Specification

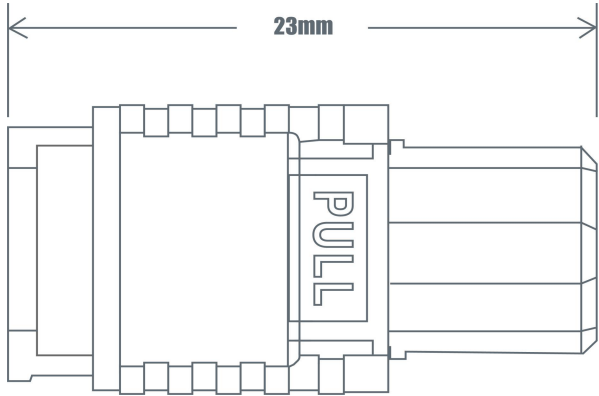
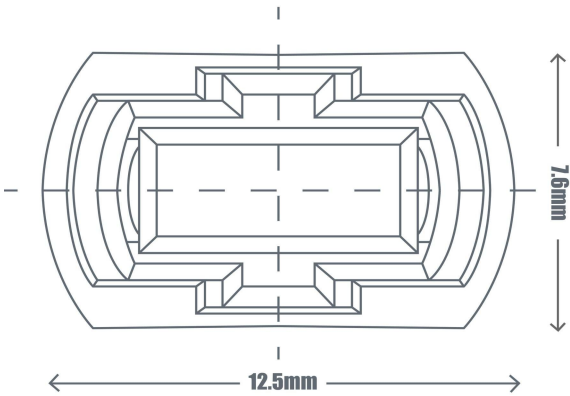
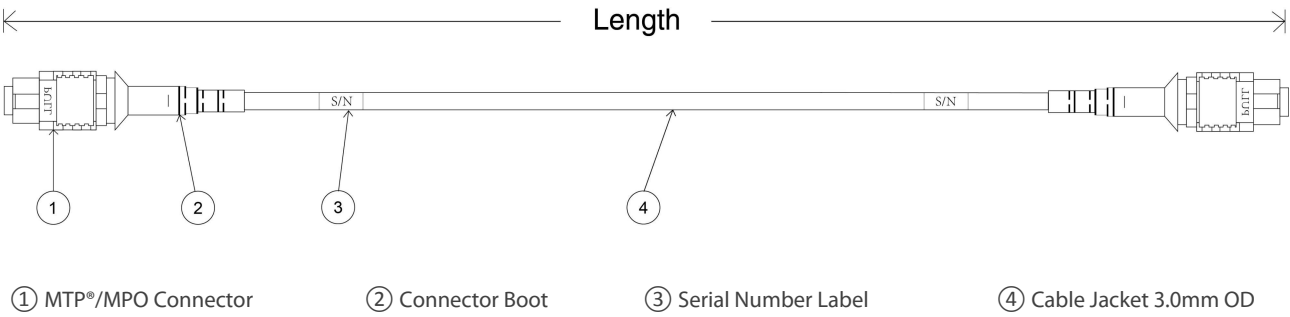
Optical Properties	Description
Attenuation (dB/km)	Single Mode: ≤0.32 at 1310nm, ≤0.18 at 1550nm OM3/OM4 Multimode: ≤2.3 at 850nm, ≤0.6 at 1300nm OM5 Multimode: ≤2.3 at 850nm, ≤1.7 at 953nm, ≤0.6 at 1300nm
Insertion Loss (dB)	Single Mode: ≤0.35, Multimode: ≤0.35
Return Loss (dB)	Single Mode: UPC Polish: ≥50, APC Polish: ≥60 Multimode: ≥20
Wavelength (nm)	Single Mode: 1310/1550, Multimode: 850/1300

Transmission Distance

Multimode fiber backbone cabling distances for 10 Gbps, 40 Gbps, and 100 Gbps applications.

Backbone Application	Standard Specified Max. Distance		
	OM3	OM4	OM5
10GBASE-SR (850nm)	300m (984ft)	400m (1312ft)	400m (1312ft)
40GBASE-SR4	100m (328ft)	150m (492ft)	150m (492ft)
40GBiDi	100m (328ft)	150m (492ft)	200m (689ft)
40GBASE-eSR4	300m (984ft)	400m (1312ft)	400m (1312ft)
40G SWDM4	240m (787ft)	350m (1148ft)	440m (1444ft)
100GBASE-SR10	100m (328ft)	150m (492ft)	150m (492ft)
100GBASE-SR4	70m (230ft)	100m (328ft)	100m (328ft)
100GBASE-eSR4	200m (689ft)	300m (984ft)	300m (984ft)
100G SWDM4	75m (246ft)	100m (328ft)	150m (492ft)

Technical Drawing



Fiber Optic Cleaning

US Conec IBC™ MPO Connectors Cleaner



Characteristics

- For cleaning ferrules pinned or non-pinned.
- Designed for cleaning the ferrule end-faces of MTP®/MPO connectors.
- Narrow design reaches tightly spaced MTP®/MPO adapters.
- Cost effective tool for cleaning fiber end-faces without the use of alcohol.

NEOCLEAN®-R2 Fiber Optic Cassette Cleaner



Characteristics

- Effective on a variety of contaminants including dust and oils.
- Widely used in optical network maintenance, engineering or equipment
- Cassette tapes are available for replacement after 400+ cleaning operations to ensure low cleaning cost.

ID	Description
#106327	US Conec IBC™ Brand Cleaner MPO II, for 8/12/24 Fibers MPO Connectors (525+ Times)
#106397	US Conec IBC™ Brand Cleaner MTP®-16, for 16 Fibers MPO Connectors (525+ Times)
#91449	NEOCLEAN®-R2 Fiber Optic Cassette Cleaner for SC/FC/ST/LC/MPO Connectors (400+ Times)

Test Center

Comprehensive performance testing system ensures more secure operation and keeps more stable and reliable data connection. 3D interferometer provides verification of MTP®/MPO polishing process, and making all parameters of the polished MT ferrule complies and exceeds industry standards. Clean optical connectors are paramount in providing a reliable, high-performance fiber optic infrastructure.

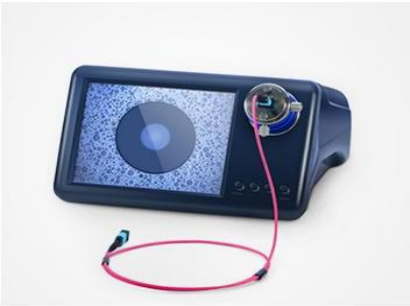
Professional Test Equipment



Test Assured Program



3D Interferometer Test



End-Face Inspection

12F MTP-MEP Trunk Cable

Serial

MTP-MEP Trunk Cable Type B

Lot No.

02000000000000000000

PIN

02000000000000000000

Manufacturer

FS

Wavelength

1310nm

1550nm

1625nm

1785nm

1935nm

2480nm

2500nm

2530nm

2590nm

2650nm

2710nm

2790nm

2830nm

2890nm

2950nm

3000nm

3050nm

3100nm

3150nm

3200nm

3250nm

3300nm

3350nm

3400nm

3450nm

3500nm

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3900nm

3950nm

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4050nm

4100nm

4150nm

4200nm

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16700nm

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17000nm

17050nm

17100nm

17150nm

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17250nm

17300nm

17350nm

17400nm

17450nm

17500nm

17550nm

17600nm

17650nm

17700nm

17750nm

17800nm

17850nm

17900nm

17950nm

18000nm

18050nm

18100nm

18150nm

18200nm

18250nm

18300nm

18350nm

18400nm

18450nm

18500nm

18550nm

18600nm

18650nm

18700nm

18750nm

18800nm

18850nm

18900nm

18950nm

19000nm

19050nm

19100nm

19150nm

19200nm

19250nm

19300nm

19350nm

19400nm

19450nm

19500nm

1955

Test Report of IL & RL

Hot Products

ID	Description
#68017	1m (3ft) MTP® Female, 12F OM4, Type B, Elite, Plenum (OFNP)
#68041	1m (3ft) MTP® Female, 24F OM4, Type A, Elite, Plenum (OFNP)
#116390	1m (3ft) MTP® Female, 12F OM5, Type B, Elite, Plenum (OFNP)
#68018	1m (3ft) MTP® Female, 12F OS2, Type B, Elite, Plenum (OFNP)
#72421	1m (3ft) MTP® Female, 24F OS2, Type A, Elite, Plenum (OFNP)



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