

# MTP/MPO

## Pre-terminated Trunk Cable



MTP/MPO trunk cables connect MTP/MPO modules together as a permanent link. They facilitate rapid deployment of high density backbone cabling in data centers and other high density fiber environments, reducing network installation or reconfiguration time and cost. Its efficient plug-and-play structure greatly reduces the initial installation and routine maintenance costs. Pre-terminated trunk cables can also be used with plug and play modules or MTP/MPO connector panels to achieve multi-level connection. Pre-terminated trunk cable can also be extended by MTP/MPO panel with plug-and play module. They are used to interconnect module cassettes, panels or ruggedized MTP/MPO fanouts, spanning MDA, HDA and EDA zones.

### Applications

- Data Centers
- 40/100G applications
- Storage area network- fiber channel
- Parallel optics
- InfiniBand
- The internal connector application in fiber equipment

### Features

- Low loss performance
- Up to 384 fibers – ideal for high density applications
- Available in G.652, G.657, OM1, OM2, OM3, OM4 fiber
- Option for LSZH, OFNR or OFNP cable jacket
- Option for A, B or C polarity
- 100% factory terminated and tested
- Pulling eyes are provided as an option to protect the fiber ends during installation
- Save installation and reconfiguration time

## Standards Compliance

- TIA/EIA-568.3-D and ISO/IEC 11801
- IEC-61754-7 & EIA/TIA-604-5&GR-1435-CORE
- Compliant to Directive 2002/95/EC (RoHS) and REACH SvHC
- InfiniBand Compliant

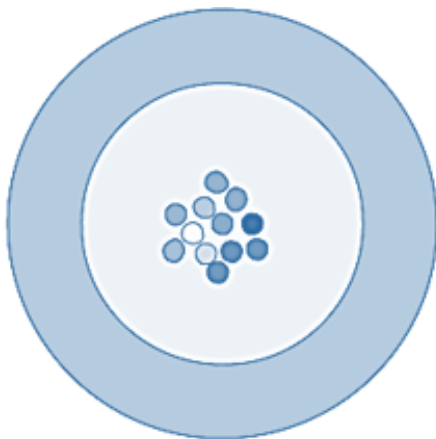
## General Specification

Construction	Description					
Fiber Count	4-384 Fibers					
Fiber Mode	Single mode: OS2/G.657 (9/125um) Multimode: OM3(50/125um); OM4(50/125um)					
Fiber Brand	Corning SMF-28® Ultra optical fiber Corning ClearCurve® multimode fiber					
Cable Jacket Ratings	Low Smoke Zero Halogen (LSZH) Riser (OFNR) Plenum (OFNP)					
Cable Jacket Color	OS2/G.657: Yellow OM3: Aqua OM4: Aqua/Magenta or Customized					
Polarity	Type A, Type B, Type C (TIA-568.3-D)					
Connector Ferrule	12F/16F/ 24F/32F/48F					
Connector Type	Male; Female					
Connector Brand	US Conec MTP, Senko MPO, Nissin MPO, Sanwa MPO, FURUKAWA MPO					
Connector Color	Low Loss	SM(APC) Yellow	SM(PC) Yellow	OM3 Aqua	OM4 Magenta	or customized
	Standard	Green	Blue	Aqua	Magenta	
Connector Boot Color	Green/Black/Red/Gray or Customized					
Pulling eye	Customized					
Operating Temperature	-20°C to + 70°C					
Storage Temperature	-40°C to + 85°C					

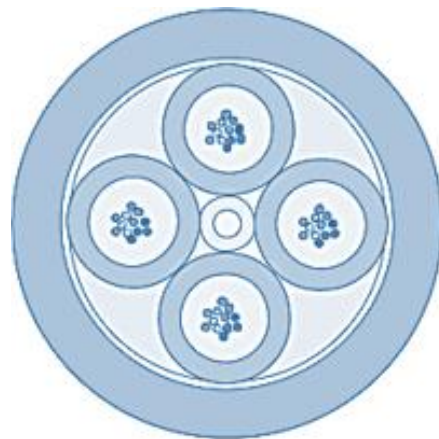
## Technical Specification

Optical Properties	Singlemode	Multimode
Insertion Loss (dB)	Low loss≤ 0.35 (Typical:≤ 0.25 )	Low loss≤ 0.35 (Typical:≤ 0.2 )
	Standard Loss≤0.75 (Typical:≤ 0.4 )	Standard Loss≤ 0.6 (Typical:≤ 0.35 )
Return Loss (dB)	PC≥50; APC≥60	PC≥20; APC≥40
Durability	≤0.2 dB typical change, 50 matings	
Wavelength (nm)	Singlemode: 1310/1550, Multimode: 850/1300	
Fiber Attenuation (dB/km)	Singlemode: ≤0.35 at 1310nm, ≤0.2 at 1550nm	
	Multimode: ≤2.3 at 850nm, ≤0.6 at 1300nm	
Transmission Distance	OM4: 150m at 40/100G, 550m at 10G	
	OM3: 100m at 40/100G, 300m at 10G	

## Typical Cable Structures



12F Structure



(12 x N) F Structure

Fiber Count	OD(mm)	Nominal Weight(kg/km)	Max. Tension (N)		Max. Crushing Resistance (N/100)	
			Short Term	Long Term	Short Term	Long Term
12	3.0±0.20	8.1	150	80	500	150
24	3.0±0.20	8.5	160	80	500	150
24	9.0±0.5	72	500	180	1000	300
36	9.0±0.5	78	500	180	1000	300
48	9.0±0.5	79	600	200	1000	300
60~72	11.2±0.5	126	1000	300	1000	300
96	13.5±0.5	178	1000	300	1000	300
144	17.5±0.5	285	1000	300	1000	300

**Remark:** More cables of other structures and types are available upon request.

**Trunk Cables of Different Structures**



**Pulling Elements**



**Spool Packaging**

