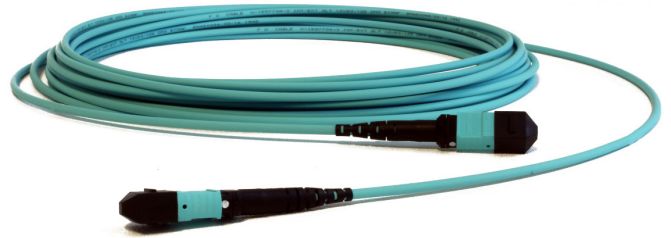


MTP® Lite Trunk Cable Assemblies

MTP® Lite Trunk Cable Assemblies are of a lightweight single jacket construction, designed to optimise space saving of trunk patching. The 12 fibre cable and the 24 fibre cable are both at 3mm. These compact cables are packed with Kevlar® which provides the necessary endurance for routing and patching purposes, though best used within a Comms Room or Data Suite environment.



Only genuine US Conec branded MTP® PRO connectors are fitted to our cables with Elite MT ferrule for those applications requiring the highest performance. These connectors provide exceptional benefits over the conventional MPO connectors, including patented floating ferrule design, patented elliptical, high precision guide pins, allowing rapid gender change and reversing polarity out in the field. Tuff Trunk assemblies are manufactured in our state-of-the-art facility utilising equipment recommended by and personnel trained by US Conec.

The MTP® Lite Trunk assemblies facilitate rapid deployment of high density backbone cabling in data centres and other high fibre count environments, reducing network installation or reconfiguration time and cost. They are used to interconnect cassettes, panels or ruggedised MTP® Harness links.

Features & Benefits

- Exceptionally High Density Connectors – Up to 24 fibre in a traditional SC Simplex adapter footprint
- Higher Density Population reduces the overall cost of 1U Spacing
- Rapid deployment modular system saving overall installation and maintenance time
- Multimode OM3, enhanced OM4 and OS2 fibre grades with a LSZH jacket
- Removable housing for field change of polarity and gender (separate tool required)
- MTP® patented elliptical guide pins are key to accurate mating alignment and determine the gender or the connector; male or female
- The oval spring provides greater fibre clearance and seats into the connector body eliminating possible trapping/breakages of bare fibre
- High Spring Force (HSF) MTP® PRO connectors ensuring uniform alignment across 24x lanes and optimising the physical contact
- Choosing MTP® Elite provides performance for the most stringent of optical loss budget environments
- 100% interferometric testing for all MTP® PRO Connectors to verify end-face geometry conformity and subsequent low losses
- Fully compatible with all MPO connectivity and QSFP+ mated interface solutions with the same fibre count

MTP® PRO Enhancements

- Field Polarity change
- Debris Reduction
- Field friendly gender configuration

Specification

ELEMENT	CHARACTERISTIC
Fibre (ISO/IEC 60793)	OS2 = Yellow OM3 = Aqua OM4 = Heather Violet/Aqua
Cable (LSZH)	12F - 3mm Outer Jacket 24F - 3mm Outer Jacket
Housing (MTP® PRO)	OM3= Aqua, OM4 = Heather Violet/Aqua Single-mode = Green
Polarity	A, B or C / Straight or Crossed
Operation Temperature	-40 ~ +80°C
Installation Temperature	-10 ~ +70°C

Industry Standards Compliance

- Colour coding compliant to TIA/EIA-568-C.3 & ISO/IEC11801
- Connector specification to IEC-61754-7 & EIA/TIA-604-5
- LSZH jacket materials to IEC 60332 Parts 1 & 3
- Compliant to Directive 2002/95/EC (RoHS) and REACH SvHC
- The geometrical characteristics compliant to IEC-60793
- End Face Cleanliness compliant to IEC 61300-3-35

Application

- Data Centre Infrastructure
- Storage Area Network – Fibre Channel
- Parallel Optics
- 40Gbps, 100Gbps and emerging 400Gbps Protocols

*Please note, product specifications are subject to change in line with availability

Optical Fibre Specifications

Multimode Fibres

Multimode Fibres IEC 60793-2 ISO/IEC 11801 EN 50173 -1&2	Overall Bandwidth (MHz x km)		Max. Link Length for 1 GBit/s (m)		Max. Link Length for 10 GBit/s (m)		Fibre Attenuation (dB/km)	
	850nm	1300nm	850nm (1000Base-SX)	1300nm (1000Base-LX)	850nm (10GBase-SR) (10GBase-SW)	1300nm (10GBase-LX4)	850nm	1300nm
50/125 um								
OM3	≥1500	≥500	1000	600	300	300	≤2.7	≤0.7
OM4 Laser Optimised	≥3500	≥500	1000	600	550	300	≤2.7	≤0.7

Single-mode Fibres

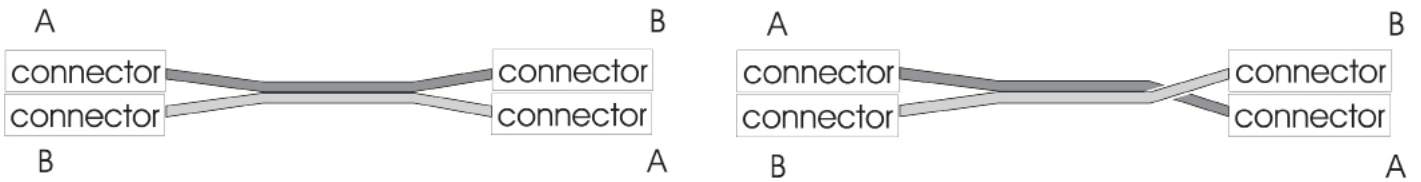
Single-mode Fibres IEC 60793-2 ISO/IEC 11801 EN 50173 -1&2	Chromatic Dispersion		Cut-off-Wave Length (cabled) (nm)	Point Discontinuity (dB)	Fibre Attenuation (dB/km)			Fibre Geometrical Properties (um)		
	1310nm	1550nm			1310nm	1380-1386nm	1550nm	Mode-field	Cladding	Coating
9/125 um										
OS2(ITU-T G.652.D)	≥3.5	≥18.0	≥1260	≤0.1	≤0.34	≤0.31	≤0.22	9.2 ±0.4	125 ±1	245 ±5
OS2 (G.657.A2)	≥3.7	≥18.5	≥1260	≤0.1	≤0.38	≤0.35	≤0.25	8.8 ±0.4	125 ±1	245 ±5

*Please note, product specifications are subject to change in line with availability

Connectivity Methods

All the connectivity methods shown here have the same purpose: to ensure that the transmit port of one device is connected to the receive port on another device. Each method requires a specific combination for components to maintain the system polarity. These are outlined in the below table.

Method	Connector Type	Adapter Type	Patch Cord Type
A	MTP® PRO	Key Up - A - Key Down	One A-to-B and One A-to-A
B	MTP® PRO	Key Up - B - Key Up	A-to-B
C	MTP® PRO	Key Up - A - Key Down	A-to-B



*Retro Polarity change from A-B or B-A is only applicable for MTP® Pro multimode connector due to MTP® PRO Single-mode connectors are Angle Polished.

MTP® PRO Connector Performance

CONNECTOR MATING	INSERTION LOSS TYPICAL	INSERTION LOSS MAX	RETURN LOSS
MTP® PRO Multimode Elite	0.10dB	0.35dB	N/A
MTP® PRO Single-mode Elite	0.10dB	0.35dB	>60dB

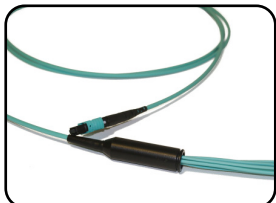
Certificates



MTP® is a Registered Trademark of US Conec

Kevlar® is a Registered Trademark of Dupont™

Available Accessories



MTP® Harness Assemblies



MTP® Containment Solutions



MTP® Cleaning Solutions



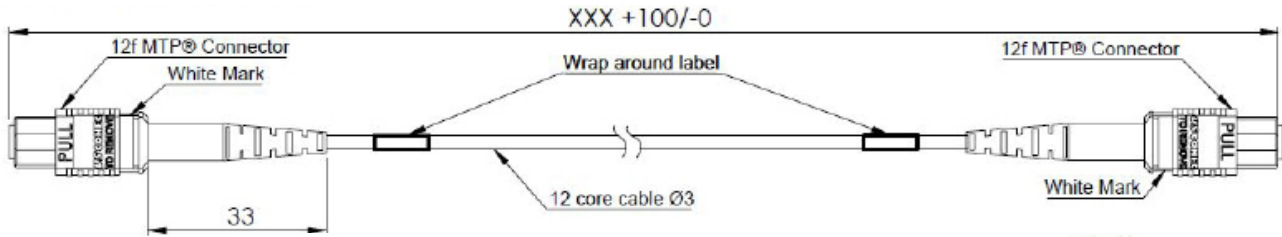
MTP® Testing Assemblies



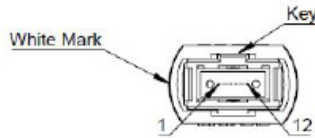
MTP® Housing Removal Tool

*Please note, product specifications are subject to change in line with availability

MTP® Lite Trunk 12f Methods

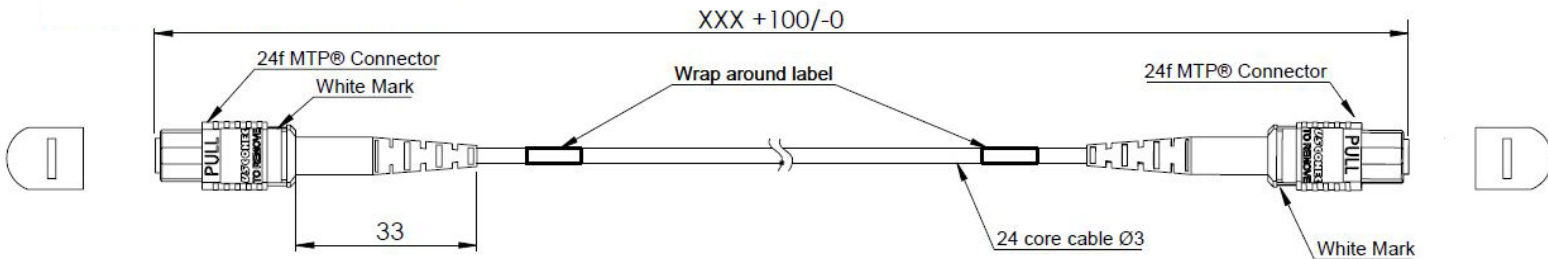


MTP® Trunk Assembly Methods

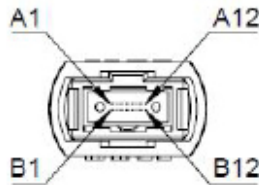


Method A			Method B			Method C		
Colour	Fibre #	Colour	Colour	Fibre #	Colour	Colour	Fibre #	Colour
Blue	1	Blue	Blue	1	Aqua	Blue	1	Orange
Orange	2	Orange	Orange	2	Pink	Orange	2	Blue
Green	3	Green	Green	3	Violet	Green	3	Brown
Brown	4	Brown	Brown	4	Yellow	Brown	4	Green
Slate	5	Slate	Slate	5	Black	Slate	5	White
White	6	White	White	6	Red	White	6	Slate
Red	7	Red	Red	7	White	Red	7	Black
Black	8	Black	Black	8	Slate	Black	8	Red
Yellow	9	Yellow	Yellow	9	Brown	Yellow	9	Violet
Violet	10	Violet	Violet	10	Green	Violet	10	Yellow
Pink	11	Pink	Pink	11	Orange	Pink	11	Aqua
Aqua	12	Aqua	Aqua	12	Blue	Aqua	12	Pink

MTP® Lite Trunk 24f Methods



(Crossed)		
End A	Colour	End B
A1	Blue	B1
A2	Orange	B2
A3	Green	B3
A4	Brown	B4
A5	Slate	B5
A6	White	B6
A7	Red	B7
A8	Black	B8
A9	Yellow	B9
A10	Violet	B10
A11	Pink	B11
A12	Aqua	B12
B1	- Blue -	A1
B2	- Orange -	A2
B3	- Green -	A3
B4	- Brown -	A4
B5	- Slate -	A5
B6	- White -	A6
B7	- Red -	A7
B8	- Black -	A8
B9	- Yellow -	A9
B10	- Violet -	A10
B11	- Pink -	A11
B12	- Aqua -	A12



(Straight)		
End A	Colour	End B
A1	Blue	A1
A2	Orange	A2
A3	Green	A3
A4	Brown	A4
A5	Slate	A5
A6	White	A6
A7	Red	A7
A8	Black	A8
A9	Yellow	A9
A10	Violet	A10
A11	Pink	A11
A12	Aqua	A12
B1	- Blue -	B1
B2	- Orange -	B2
B3	- Green -	B3
B4	- Brown -	B4
B5	- Slate -	B5
B6	- White -	B6
B7	- Red -	B7
B8	- Black -	B8
B9	- Yellow -	B9
B10	- Violet -	B10
B11	- Pink -	B11
B12	- Aqua -	B12

*Please note, product specifications are subject to change in line with availability