

MTP® Multi Tuff Trunk Assemblies

MTP® Multi-Tuff Trunk assemblies offer exceptional fibre counts from 48f up to 144f, all contained within one robust trunk link assembly.

Typical configurations of up to 12x 12f MTP $^{\circ}$ to 12x 12f MTP $^{\circ}$ or 6x 24f MTP $^{\circ}$ to 6x 24f MTP $^{\circ}$ assemblies can be provided. The Multi-Tuff trunk provides exceptional durability when compared to traditional MTP $^{\circ}$ trunk cable, with a crush resistance of 2000N and tensile strength in excess of 1500N.

The colour coded tails can either be left flush or staggered to fit a protection sock for prudent installation practices. The sock then fits to the break-out manifold ensuring the tensile loading is not on the fibres during or post installation.

The cable construction consists of up to 12x 12f tubes managed around a central strength member. The cable is packed with aramid yarn for added protection and an outer black LSZH universal jacket.

The manifold is fitted with a anti kink strain relief boot and with its threaded front, fits into a 20mm capillary much like a cable gland making these assemblies equally suitable for indoor and outdoor applications.

Manufactured within our state-of the-art termination facility where meticulous attention to detail provides assured quality and peace of mind. From our North Wales base, fast-manufacturing turnaround is our speciality with custom length assemblies made within days of ordering.



Features & Benefits

- Exceptionally High Density Connectors 12 or 24 fibre set in a SC
 Simplex Format
- Higher Density Population reduces the over 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 (seperate 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 provide greater fibre clearance and seats into the connector body eliminating possible trapping/breakages of bare fibre
- High Spring Force (HSF) MTP® 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® 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

Specification	
ELEMENT	CHARACTERISTIC
Fibre (ISO/IEC 60793)	OS2 = Black Cable - Yellow Tails OM3 + OM4 = Black Cable - Aqua Tails
Cable OD (LSZH)	Up to 60f = 10.4mm, 72f = 11.2mm 84f ~ 96f = 12.6mm, 108f ~ 144f = 16mm
Housing (US Conec)	Multimode Elite = Aqua, Single-mode Elite = Mustard
Crush Resistance	2000N
Operation Temperature	-40 ~ +80°C
Installation Temperature	-10 ~ +70°C

Industry Standards Compliance

- Colour coding compliant to TIA/EIA-568-C.3 & ISO/IEC11801
- MTP® Connector specification to IEC-61754-7 & EIA/TIA-604-5
- Jacket materials to IEC 60332
- 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









Optical Fibre Specifications

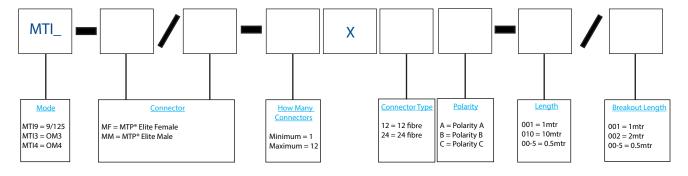
Multimode Fibres

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

Single-mode Fibres

Single-mode Fibres IEC 60793-2 ISO/IEC 11801 EN 50173 -1&2	Chromatic Dispersion ——— 1310nm 1550nm	Cut-off-Wave Length (cabled) (nm)	Point Discontinuity (dB)	_	dB/km)			Geometri roperties (um) Cladding	_
9/125 um									
OS2(ITU-T G.652.D)	≥3.5 ≥18.0	≥1260	≤0.1	≤0.34	≤0.31	<u><</u> 0.22	9.2 ±0.4	125 ±1	245 ±5
OS2 (G.657.A2)	≥3.7 ≥18.5	≥1260	<u><</u> 0.1	<u><</u> 0.38	≤0.35	<u><</u> 0.25	8.8 ±0.4	125 ±1	245 ±5

Part Numbering Format



 $E.G.\ 50mtr\ Multi\ Tuff\ Trunk\ MTP\ Elite\ Female -\ MTP\ Elite\ Male\ OM4\ Utilising\ 6\ x\ 24 fibre\ Connectors\ each\ tail/\ 1mtr\ Tails =\ MTI4-MF/MM-6X24A-050/01$





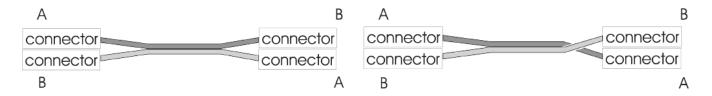




Connectivity Methods

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®	Key Up - A - Key Down	One A-to-B and One A-to-A
В	MTP®	Key Up - B - Key Up	A-to-B
С	MTP®	Key Up - A - Key Down	A-to-B



MTP® Connector Performance

Connector Mating	IL Typical	IL Max	Return Loss
MTP® MM Elite	0.10dB	0.35dB	N/A
MTP® SM 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® 1U CHASSIS



MTP® Cleaning Solutions



MTP® Modular Cassette



MTP® 3U CHASSIS











