

## 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® to 12x 12f MTP® or 6x 24f MTP® to 6x 24f MTP® assemblies can be provided. The Multi-Tuff trunk provides exceptional durability when compared to traditional MTP® 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.

Multi Tuff Trunks are robust and therefore suitable for pulling into position by way of Draw Wires or Duct Rods.



### Features & Benefits

- Exceptionally High Density Connectors Up to 24f 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 (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 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 = 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 (MTP® PRO)	OM3 = Aqua, OM4 = Heather Violet Single-mode = Green		
Crush Resistance (cable)	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 PRO® 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	for 1	k Length GBit/s n) 1300nm (1000Base-LX)	for 10 (r ——— 850nm	k Length GBit/s m) 1300nm (10GBase-LX4)	(dl	ttenuation B/km) n 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

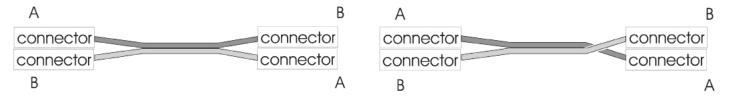
Single-mode Fibres  IEC 60793-2 ISO/IEC 11801 EN 50173 -1&2	Chromatic Dispersion ————————————————————————————————————	Cut-off-Wave Length (cabled) (nm)	Point Discontinuity (dB)	Fibre Attenuation (dB/km) 1310nm 1380-1386nm 1550nm		Fibre Geometrical Properties (um) Mode-field Cladding Coating		
9/125 um								
OS2(ITU-T G.652.D)	<u>≥</u> 3.5 <u>≥</u> 18.0	<u>≥</u> 1260	<u>&lt;</u> 0.1	≤0.34 ≤0.3	31 <u>&lt;</u> 0.22	9.2 ±0.4	125 ±1	245 ±5
OS2 (G.657.A2)	>3.7 >18.5	>1260	<0.1	<0.38 <0.3	35 <0.25	8.8 ±0.4	125 ±1	245 ±5



### **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	
В	MTP PRO®	Key Up - B - Key Up	A-to-B	
С	MTP PRO®	Key Up - A - Key Down	A-to-B	



<sup>\*</sup>Retro Polarity change from A-B or B-A is only applicable for MTP multimode connector due to MTP Single-mode connectors are Angle Polished

### MTP® PRO Connector Performance

CONNECTOR MATING	INSERTION LOSS TYPICAL	INSERTION LOSS MAX	RETURN LOSS	
MTP® PRO MM Elite	0.10dB	0.35dB	N/A	
MTP® PRO 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® Harness Assemblies



MTP® 1U CHASSIS



MTP® Cleaning Solutions



MTP® Modular Cassette



MTP® 3U CHASSIS



