

# MTP® Multi Lite Trunk Assemblies

MTP® Multi-Lite Trunk assemblies are a neat solution for providing up to four MTP®-MTP® links within a compact, high density ruggedised cable. The cable construction consists of four ruggedized 12f tubes over-sheathed with a LSZH jacket. Two layers of Kevlar® form the reinforcement and provide ample mechanical resistance beyond expected installation handling. The benefit becomes the ease of installation with managing one cable rather than four cables. Also, with an outer diameter of 9mm, installing an MTP® Multi-Tuff trunk saves space with cable routing.

### QSFP Cable Harnesses

The Multi-Lite Trunks can be configured not only as permanent links but also for QSFP cable links for SR4 and CXP parallel optics applications. As these style of assemblies cater for up to 48f, the MTP® PRO connectors can be split into: 4x 12f MTP® to 4x 12f MTP®, 2x 24f MTP® to 2x 24f MTP®, 2x 24f MTP® to 4x 12f MTP®, 2x 24f MTP® to 3x 16f MTP®.

Hybrid assemblies from multi-MTP® PRO connectors at one end to LC connectors at the opposite end are also available, for example 2x 24f MTP® to 48 LC Connectors.

Manufactured within our state-of-the-art termination facility where meticulous attention 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 – 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 (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 = Black Cable - Yellow Tails OM3 + OM4 = Black Cable - Aqua Tails
Cable (LSZH)	24f = 9mm OD, 48f = 10-11mm OD
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
- 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)		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
<b>50/125 um</b>								
OM3	≥1500	≥500	1000	600	300	300	≤2.7	≤0.7
OM4 Laser Optimised	≥3500	≥500	1000	600	550	300	≤2.7	≤0.7

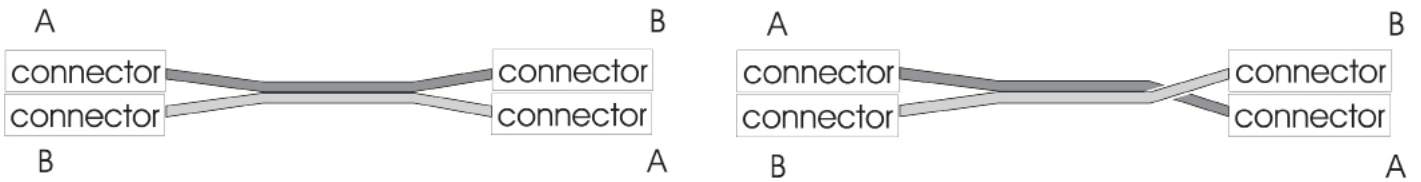
### Single-mode Fibres

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
<b>9/125 um</b>										
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

## 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 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 Multimode Elite	0.10dB	0.35dB	N/A
MTP® PRO Single-mode Elite	0.10dB	0.35dB	>60dB

## Certificates

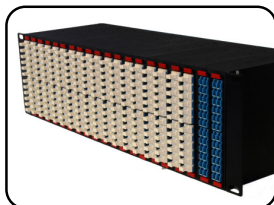


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 Kevlar® is a Registered Trademark of Dupont™

## Available Accessories



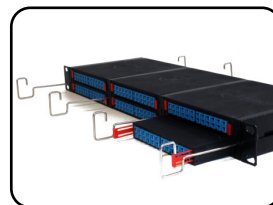
MTP® Modular Cassette



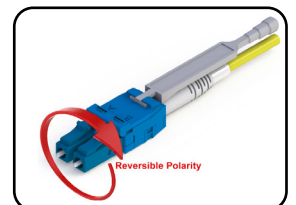
MTP® 3U CHASSIS



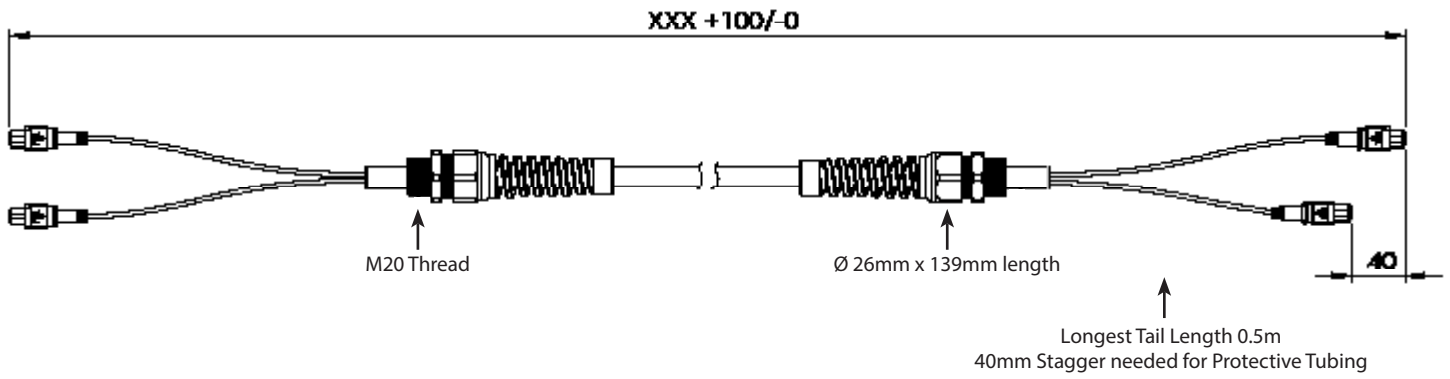
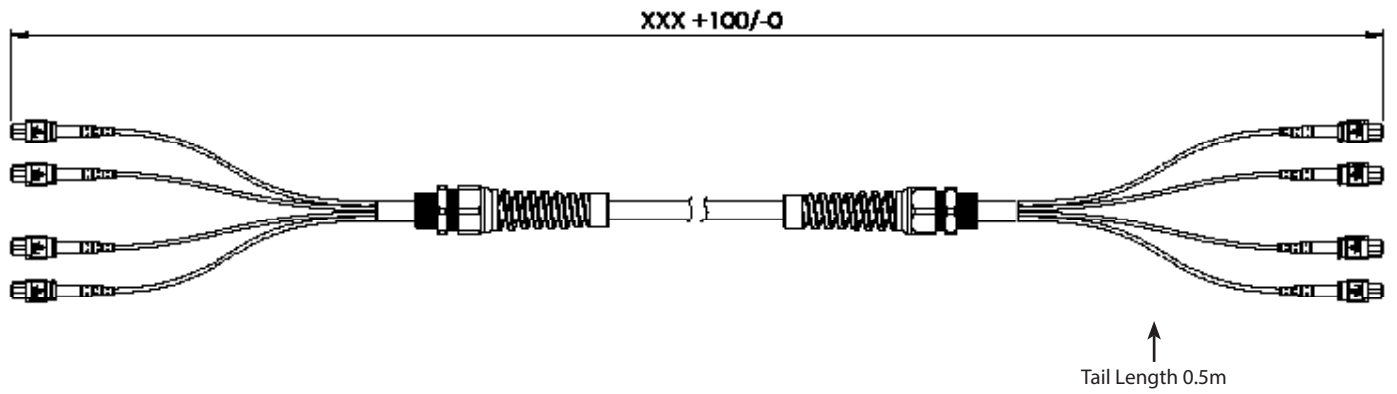
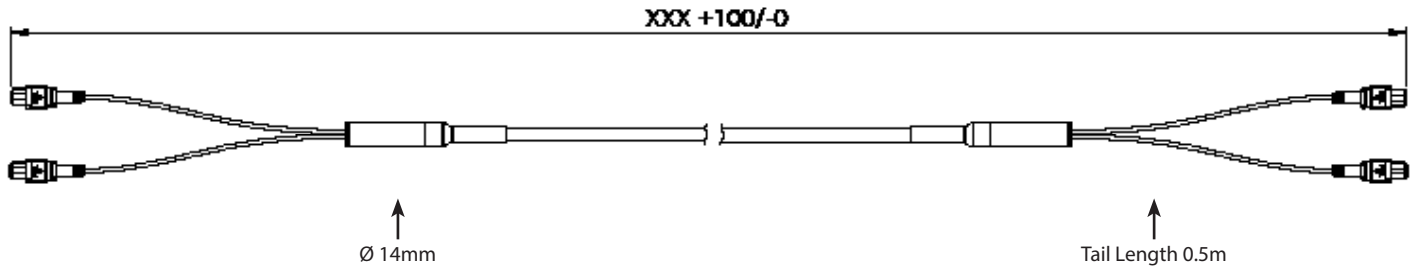
EXFO Probe



MTP 1U Chassis



LC HD Switchable Uniboot



Lite Linke Standard Configuration  
Staggered Tails and Protective Tube

