

MTP/MPO FirstLight™ Prime Loose Tube Trunk

FirstLight™ Prime LT is a special design platform for Loose Tube multifibre optical cable assemblies. It utilizes the patented FirstLight™ Prime transition module which guarantees superior tensile strength and crushing resistance. The high density design can scale up to 144 fibres and can feature both MTP/MPO and discrete interface. It is perfect solution for trunks requiring MTP/MPO interface and Universal or External applications.



Features

- Available in OS1/2, G.657A1, OM1, OM2, OM3, OM4
- Up to 144 fibre core count
- Available with Multifibre MTP/MPO and discrete connectors
- Internal/External Application - LSZH or PE cable jacket available
- OFNP, OFNR Jacket Available
- Factory terminated and tested
- Loose Tube (LT), Dry Loose Tube (DLT) or Loose Tube Armoured (STA) cable selection
- Very High Density** FirstLight™ Prime LT can scale up to 144 fibres for very high density Data Centre or Central Office application.
- Hybrid MTP/MPO and Discrete Connector Interface** FirstLight™ Prime LT can be used as high density multifibre MTP/MPO ruggedized trunk or ruggedized MTP/MPO to LC or SC fanouts.
- Rapid Deployment** Factory terminated cabling saves installation and reconfiguration time eliminating field deployment variables.
- Optimised Performance** Low loss MTP/MPO Elite, discrete Premium connectors and OM4 fibre assures low insertion losses and power penalties in tight power budget high speed network environment.
- Compact Size** Small dimension of breakout module and multifibre assemblies improves space management in high density applications.

Applications

- Data Centre Infrastructure
- Central Office, Access Points or CATV hubs
- Internal and Backbone Application

Specification

ELEMENT	CHARACTERISTIC
Fibre	OS1/OS2, G.657A1, OM1, OM2, OM3, OM4 (IEC 60793)
Cable	(Gel Filled Loose Tube) OD MAX 24 Cores 6.7 ± 0.3 OD MD MAX 144 cores 15.6 ± 0.4mm (Dry Loose Tube) OD MAX 24 Cores 6.4 ± 0.3 OD Max 144 Cores 14.2 ± 0.4mm Jacket material: LSZH, PE; OFNP, OFNR, Jacket color: Black
Operating Temperature	-20 ~ +60°C
Storage Temperature	-40 ~ +70°C

Connector Performance

CONNECTOR MATING	IL AVERAGE	IL MAX	RETURN LOSS
MTP® Elite (MM)	0.10dB	0.35dB	N/A
MTP® Elite (SM)	0.10dB	0.35dB	>60dB
MTP® (MM)	0.20dB	0.60dB	N/A
MTP® (SM)	0.25dB	0.75dB	>60dB
LC, SC, FC, ST (MM)	0.15dB	0.30dB	N/A
LC, SC, FC, ST (SM)	0.18dB	0.30dB	>55/65dB*
LC, SC, FC, ST Premium (MM)	0.08dB	0.15dB	N/A
LC, SC, FC, ST Premium (SM)	0.12dB	0.15dB	>55/65dB*

*(UPC/APC)

Cable Performance

FIBRETYPE (ISO/IEC 11801)	OS1/OS2	OM1	OM2	OM3	OM4
Attenuation Coefficient [dB/km]	≤ 0.38 Max (1310nm) ≤ 0.25 Max (1550nm) ≤ 0.34 Typ (1310nm) ≤ 0.19 Typ (1550nm)	≤ 3.5 Max (850nm) ≤ 1.5 Max (1300nm) ≤ 2.9 Typ (850nm) ≤ 1.2 Typ (1300nm)	≤ 3.5 Max (850nm) ≤ 1.5 Max (1300nm) ≤ 2.7 Typ (850nm) ≤ 0.9 Typ (1300nm)	≤ 3.5 Max (850nm) ≤ 1.5 Max (1300nm) ≤ 2.7 Typ (850nm) ≤ 0.9 Typ (1300nm)	≤ 3.5 Max (850nm) ≤ 1.5 Max (1300nm) ≤ 2.7 Typ (850nm) ≤ 0.9 Typ (1300nm)
Minimum Bandwidth: Overfilled Launch [Mhz-km]	N/A	≥ 200 (850nm) ≥ 500 (1300nm)	≥ 500 (850nm) ≥ 500 (1300nm)	≥ 1500 (850nm) ≥ 500 (1300nm)	≥ 3500 (850nm) ≥ 500 (1300nm)
Minimum Bandwidth: Laser Effective Modal Bandwidth [Mhz-km]					

Standards Compliance

- TIA/EIA-568-C.3 and IEC 11801
- ISO/IEC 60793 and ISO/IEC 60794
- ISO/IEC 61753, IEC 61754 and IEC 61755
- ISO/IEC 60332-1, IEC 61034-1/2 and IEC 61754-1/2
- Compliant to Directive 2002/95/EC (RoHS) and REACH SvHC

Ordering Information

PRE	Fibre Count		Connector End A		Connector End B				Fibre Type		Cable Construction		Jacket type		Cable Length		Polarity
	12	12	MTPF	Standard MTP® Female	LC	LC	MTPF	Standard MTP® Female	9	OS1/OS2	LTR	Loose Tube		LSZH	1	1 metre	A
	24	24	MTPEF	Elite MTP® Female	LC APC	LC APC	MTPEF	Elite MTP® Female	OM3	OM3	STAR	Loose Tube Steel Tape Armoured	PE	PE	5	5 meter	B
	48	48	MTPM	Standard MTP® Male	SC	SC	MTPM	Standard MTP® Male	OM4	OM4			OFNR	PE	10	10 meter	C
	72	72	MTPEM	Elite MTP® Male	SC APC	SC APC	MTPEM	Elite MTP® Male	A1	G.657A1			OFNP	PL*	xx	Specify	
	96	96	M2F	Standard MTP® Female 24 fibre ferrule	ST	ST	M2F	Standard MTP® Female 24 fibre ferrule									
	144	144	M2EF	Elite MTP® Female 24 fibre ferrule	FC	FC	M2EF	Elite MTP® Female 24 fibre ferrule									
			M2M	Standard MTP® Male 24 fibre ferrule	FC APC	FC APC	M2M	Standard MTP® Male 24 fibre ferrule									
			M2EM	Elite MTP® Male 24 fibre ferrule	E2000 APC	E2	M2EM	Elite MTP® Male 24 fibre ferrule									
					E2000 APC	E2A											

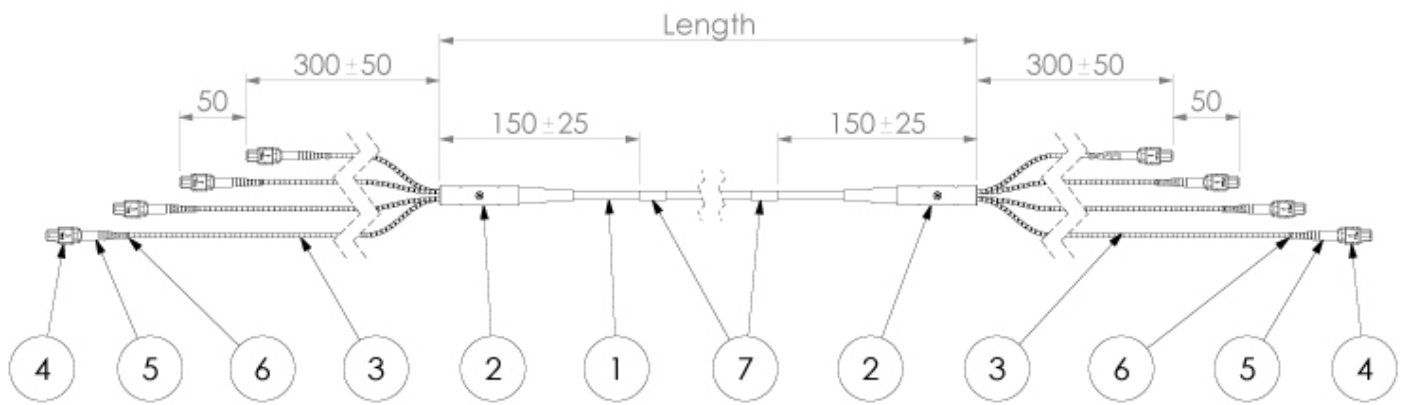
*For Riser and Plenum length is measured in feet

Example Part Number

PRE	24	MTPF	LC	OM4	LTR	PE	16	A
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PRE24MTPFLCOM4LTRPE16 has created a 16 metre 24 Core MTP® female to LC OM4 PE jacket, colour Aqua MTP® FirstLight Prime Trunk Cable Assembly, polarity A.

Technical Drawing



No.	Description	Qty.
1	Loose Tube Cable (See Sheet 2)	1
2	Ruggedised Breakout Module*	-
3	3mm Miniflex Tubing (White)	-
4	MTP Connector (See Sheet 2)	-
5	MTP Round Connector Boot (Black)	-
6	Tail Identification Marker (C-Clip)	-
7	Serial Number Label (Wrap Around)	2

Length Tolerances:

-0/+150mm (Length<5m)
 -0/+200mm (5m≤Length<20m)
 ±1% (Length≥20m)