

### MTP® Fan-Out Cable Assemblies

Optronics MTP® ruggedized fan-out assemblies route multifibre MTP® connection into discreet connectors. They are used to directly interconnect MTP® cassettes, panels or backbone MTP® assemblies with the active equipment, saving costly data centre rack space and easing fibre management.

MTP® fan-out assemblies are offered in fibre types in standard 12, 24 or 48 core versions using a compact and rugged microcable structure. The compact cables optimize cableway use and improve airflow.

Optronics MTP® fan-out are built with highest quality components. Standard MTP® as well low loss Elite versions are offered featuring low insertion loss for demanding high speed networks where power budgets are critical.

#### Features

- > **OS1/2, OM3, OM4 fibre versions (OM1 and OM2 available)**
- > **12, 24 and 48 core microcable trunk assemblies**
- > **LSZH, OFNP cable jacket**
- > **Female or Male MTP® connectors**
- > **Factory terminated and tested**

#### Benefits

- > **MTP® Interface-** MTP® US Conec brand components feature superior optical and mechanical properties.
- > **Optimised Performance -** low loss MTP® Elite, discreet Premium connectors and OM4 fibre assures low insertion losses and power penalties in tight power budget high speed network environment.
- > **High Density-** ruggedized fan-out allows for direct connection between backbone and active equipment eliminating rack space usage
- > **Rapid Deployment-** factory terminated modular system saves installation and reconfiguration time during moves, adds and changes.
- > **Reliability-** 100% tested- combination of high quality components and Optronics manufacturing quality control guarantees product to the highest standards.

#### Technical Specification

- > **Data Centre Infrastructure**
- > **Storage Area Network- Fibre Channel**
- > **Parallel Optics & Infiniband**
- > **Emerging 40 and 100Gbps Protocols**

#### Standards Compliance

- > **TIA/EIA-568-C.3 and ISO/IEC 11801**
- > **IEC-61754-7 & EIA/TIA-604-5**
- > **NFPA 262 (OFNP) or IEC 60332 (LSZH)**
- > **IEC-61754-20 (LC) & IEC-61754-14 (SC)**
- > **IEC-60793**
- > **Compliant to Directive 2002/95/EC (RoHS) and REACH SvHC**

#### Connector Performance

CONNECTOR MATING	IL AVERAGE	IL MAX	RETURN LOSS
MTP® Elite (MM)	0.10 dB	0.35 dB	NA
MTP® (MM)	0.20 dB	0.60 dB	NA
LC, SC (MM)	0.15dB	0.30dB	NA
LC, SC Premium (MM)	0.08dB	0.15dB	NA

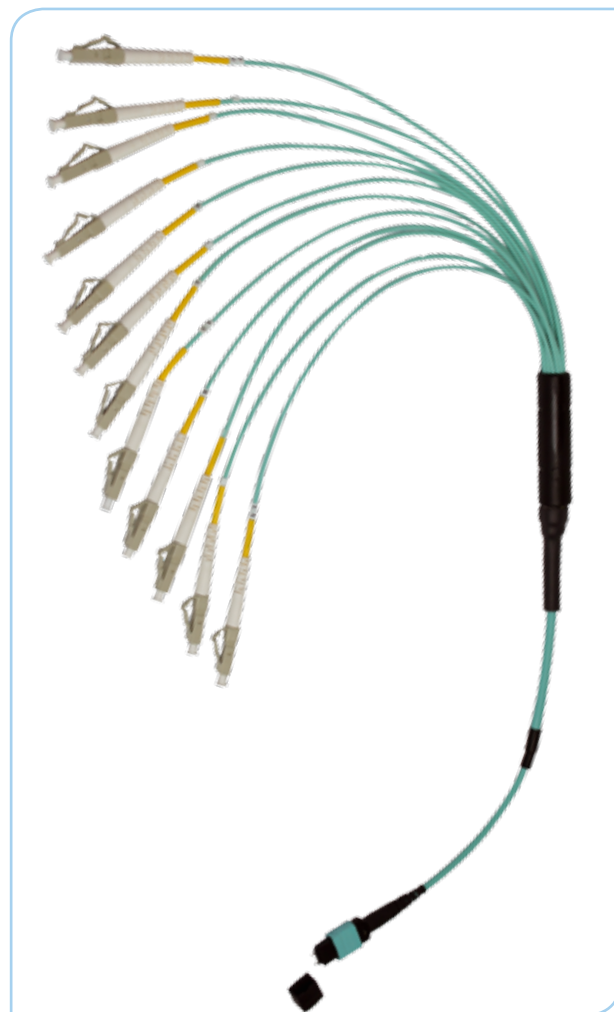
\* UPC/APC

CONNECTOR MATING	IL AVERAGE	IL MAX	RETURN LOSS
MTP® Elite (SM)	0.10 dB	0.35 dB	>60dB
MTP® (SM)	0.25 dB	0.75 dB	>60dB
LC, SC (SM)	0.18dB	0.25dB	>55/65dB*
LC, SC Premium (SM)	0.12dB	0.30dB	>55/65dB*

#### Cable Performance

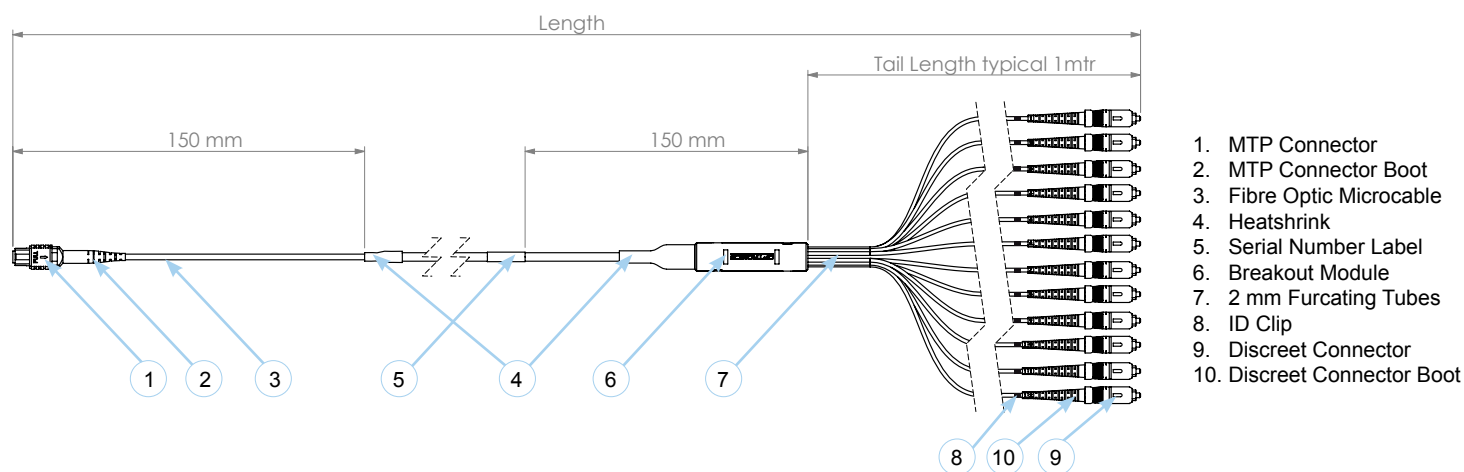
FibreType (ISO/IEC 11801)	OS1/OS2	OM1	OM2	OM3	OM4
Attenuation Coefficient [dB/km]	≤ 0.38 Max (1300nm) ≤ 0.25 Max (1300nm)	≤ 3.5 Max (850nm) ≤ 1.5 Max (1300nm)	≤ 3.5 Max (850nm) ≤ 1.5 Max (1300nm)	≤ 3.5 Max (850nm) ≤ 1.5 Max (1300nm)	≤ 3.5 Max (850nm) ≤ 1.5 Max (1300nm)
	≤ 0.34 Typ (1550nm) ≤ 0.19 typ (1550nm)	≤ 2.9 Typ (850nm) ≤ 1.2 typ (1300nm)	≤ 2.7 Typ (850nm) ≤ 0.9 typ (1300nm)	≤ 2.7 Typ (850nm) ≤ 0.9 typ (1300nm)	≤ 2.7 Typ (850nm) ≤ 0.9 typ (1300nm)
Minimum Bandwidth: Overfilled Launch [Mhz-km]	NA	≥ 200 (850nm) ≥ 500 (1300nm)	≥ 500 (850nm) ≥ 500 (1300nm)	≥ 1500 (850nm) ≥ 500 (1300nm)	≥ 3500 (850nm) ≥ 500 (1300nm)
Minimum Bandwidth: Laser Effective Modal Bandwidth [Mhz-km]	NA	NA	NA	≥ 2000 (850nm)	≥ 4700 (850nm)

MTP is a registered trademark of US Conec Ltd



### Technical Specification

Element	Characteristic
Fibre	OS1/OS2, OM1*, OM2*, OM3, OM4 (ISO/IEC 60793)
Cable	Microcable- 12, 24, 48 cores (ISO/IEC 60794) MAX OD: Max OD 12 cores 4.5 ± 0.3mm / Max OD 24 cores 4.5 x 7.4 ± 0.3mm Jacket material: LSZH, OFNP Jacket colour: Violet (OM3), Aqua (OM3, OM4), Yellow (OS1/OS2)
Connectors	MTP® US Conec (IEC-61754-7 & EIA/TIA-604-5) Boot Colour: Black Body Sleeve Colour: MM (Beige), MM Elite (Aqua), SM (Green), SM Elite (Yellow) LC or SC (IEC 61754-20) Boot Colour: White Housing Color: Beige (MM), Blue (SM), Green (SM/APC)
Packaging	Length< 50m- PE bag / Length> 50m- Drum
Operating Temperature	-10 ~ +60°C
Storage Temperature	-40 ~ +70°C



### Part Number Generator

Connector END A		Gender A		Fibre count	Connector END B		Fibre type		DF	Cable length (m)		Colour		Jacket Type		/Z
MTP® standard	MTP	Female	F	12	LC	LC	OS1/OS2	09		XX	Aqua	AQ	LSZH	-		
MTP® Elite®	MTPE	Male	M	24	SC	SC	OM1	62			Purple	PU	OFNP	PL		
				48			OM2	50			Orange	OR				
							OM3	OM3								
							OM4	OM4								

Example Part Number

TPF12LCOM3DF16AQ/Z

This part number has created a 16 metres 12 core MTP female LC OM3, Jacket colour Aqua LSZH ruggedized fan-out.

### Example Part Number

**MTPF12LCOM3DF16AQ/Z**

This part number has created a 16 metres 12 core MTP female to LC OM3, Jacket colour Aqua LSZH ruggedized fan-out.

### MTP® Trunk Cable Assemblies

Optronics MTP® trunk multicore cable assemblies facilitate rapid deployment of high density backbone cabling in data centres and other high fibre environments reducing network installation or reconfiguration time and cost. They are used to interconnect cassettes, panels or ruggedized MTP® fanouts, spanning MDA, HDA and EDA zones.

MTP® trunk assemblies are offered in fibre types in standard 12, 24 or 48 core versions using a compact and rugged microcable structure. The compact cables optimize cableway use and improve airflow.

Optronics MTP® trunks are built with highest quality components. Standard MTP® as well low loss Elite versions are offered featuring low insertion loss for demanding high speed networks where power budgets are critical.

#### Features

- > OS1/2, OM3, OM4 fibre grades (OM1 and OM2 available)
- > 12, 24 and 48 core microcable trunk
- > LSZH, OFNP cable jacket
- > Female (standard) and Male MTP® connectors
- > Polarity A (standard), B or C
- > Factory terminated and tested

#### Benefits

- > **MTP® Interface-** MTP® US Conec brand components feature superior optical and mechanical properties.
- > **Optimised Performance-** low loss MTP® Elite, discreet Premium connectors and OM4 fibre assures low insertion losses and power penalties in tight power budget high speed network environment.
- > **High Density-** multifibre connector and compact dimension of ruggedized Microcable ease space in costly data centre environments.
- > **Rapid Deployment-** factory terminated modular system saves installation and reconfiguration time during moves, adds and changes.
- > **Reliability-** 100% tested- combination of high quality components and Optronics manufacturing quality control guarantees product to the highest standards.
- > **Next Generation Network Proof-** emerging high speed protocol are going to use MTP interface- your cabling infrastructure remains unchanged.

#### Application

- > Data Centre Infrastructure
- > Storage Area Network- Fibre Channel
- > Parallel Optics
- > Infiniband
- > Emerging 40 and 100Gbps Protocols

#### Connector Performance

CONNECTOR MATING	IL AVERAGE	IL MAX	RETURN LOSS
MTP® Elite (MM)	0.10 dB	0.35 dB	NA
MTP® (MM)	0.20 dB	0.60 dB	NA
MTP® Elite (SM)	0.10dB	0.35dB	>60dB
MTP® (SM)	0.25dB	0.75dB	>60dB

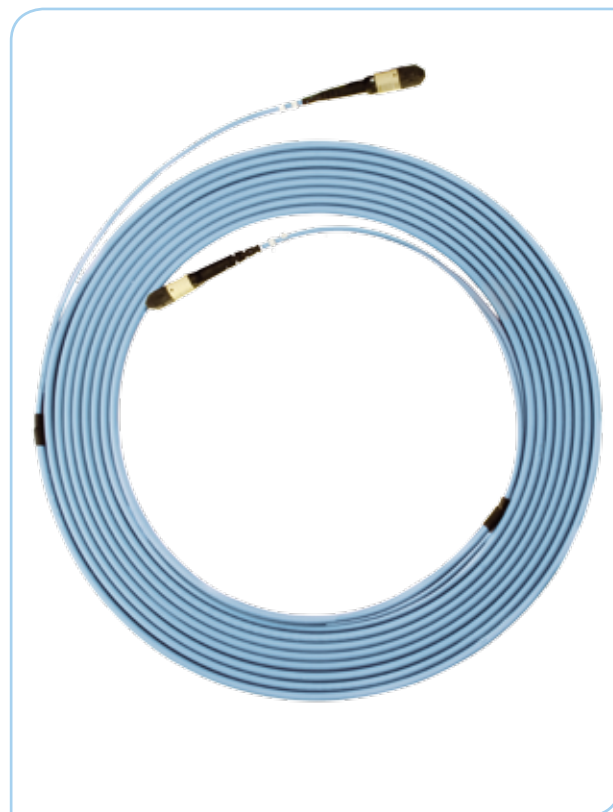
#### Cable Performance

FibreType (ISO/IEC 11801)	OS1/OS2	OM1	OM2	OM3	OM4
Attenuation Coefficient [dB/km]	≤ 0.38 Max (1300nm) ≤ 0.25 Max (1300nm)	≤ 3.5 Max (850nm) ≤ 1.5 Max (1300nm)	≤ 3.5 Max (850nm) ≤ 1.5 Max (1300nm)	≤ 3.5 Max (850nm) ≤ 1.5 Max (1300nm)	≤ 3.5 Max (850nm) ≤ 1.5 Max (1300nm)
	≤ 0.34 Typ (1550nm) ≤ 0.19 typ (1550nm)	≤ 2.9 Typ (850nm) ≤ 1.2 typ (1300nm)	≤ 2.7 Typ (850nm) ≤ 0.9 typ (1300nm)	≤ 2.7 Typ (850nm) ≤ 0.9 typ (1300nm)	≤ 2.7 Typ (850nm) ≤ 0.9 typ (1300nm)
Minimum Bandwidth: Overfilled Launch [Mhz-km]	NA	≥ 200 (850nm) ≥ 500 (1300nm)	≥ 500 (850nm) ≥ 500 (1300nm)	≥ 1500 (850nm) ≥ 500 (1300nm)	≥ 3500 (850nm) ≥ 500 (1300nm)
Minimum Bandwidth: Laser Effective Modal Bandwidth [Mhz-km]	NA	NA	NA	≥ 2000 (850nm)	≥ 4700 (850nm)

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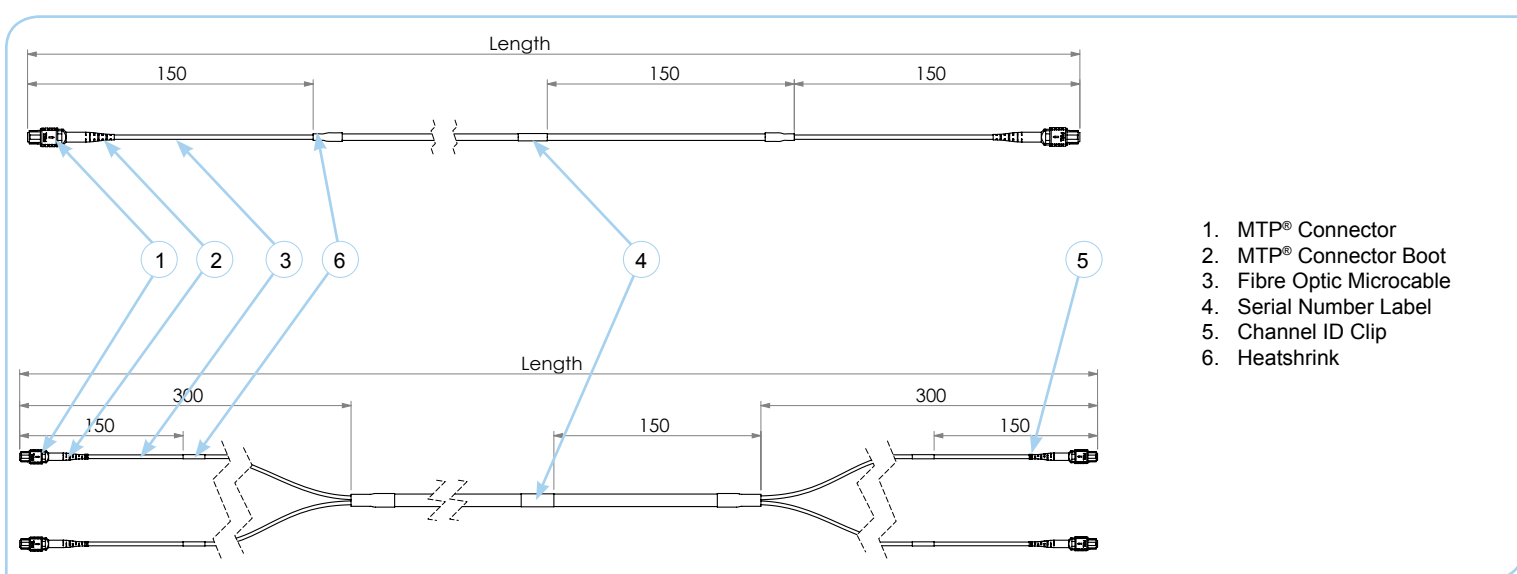
#### Standards Compliance

- > TIA/EIA-568-C.3 and ISO/IEC 11801
- > IEC-61754-7 & EIA/TIA-604-5
- > NFPA 262 (OFNP) or IEC 60332 (LSZH)
- > IEC-61754-20 (LC) & IEC-61754-14 (SC)
- > Compliant to Directive 2002/95/EC (RoHS) and REACH SvHC
- > IEC-60793



### Technical Specification

Element	Characteristic
Fibre	OS1/OS2, OM1*, OM2*, OM3, OM4 (ISO/IEC 60793)
Cable	Microcable- 12, 24, 48 cores (ISO/IEC 60794) MAX OD: Max OD 12 cores 4.5 ± 0.3mm / Max OD 24 cores 4.5 x 7.4 ± 0.3mm Jacket material: LSZH (IEC 60332), OFNP (NFPA 262) Jacket colour: Violet (OM3), Aqua (OM3, OM4), Yellow (OS1/OS2), Orange (OM1, OM2)
Connectors	MTP® US Conec (IEC-61754-7 & EIA/TIA-604-5) Boot Colour: Black / Body Sleeve Colour: MM (Beige), MM Elite (Aqua), SM (Green), SM Elite (Yellow)
Packaging	Length< 50m- PE bag / Length> 50m- Drum
Operating Temperature	-10 ~ +60°C
Storage Temperature	-40 ~ +70°C



### Part Number Generator

Connector END A	Gender A	Connector END B	Gender B	Fibre type	Fibre count	Cable length (m)	Polarity	Colour	Jacket Type
MTP® standard	Female	MTP® standard	Female	OS1/OS2	12	XX	A	Aqua	LSZH standard
MTP® Elite®	Male	MTP® Elite®	Male	OM1	24		B	Purple	OFNP
				OM2	48		C	Orange	
				OM3					
				OM4					

### Example Part Number

**MTPFMTPFOM31216AAQLS**

This part number has created a 16 metre 12 Core MTP female to MTP female OM3 polarity method A, Jacket colour Aqua LSZH trunk assembly.

### Multifibre FirstLight LT Loose Tube Assemblies

Optronics Multifibre FirstLight Loose Tube Assemblies feature improved mechanical and optical properties for use in external cabling environments. Assembly tails are protected by reinforced tubing. Cable strength members are attached directly to the pulling element, assuring safe and effective assembly installation. 900µm fibre presentation is ideal for installation inside patch panels, ODFs or distribution boxes.

The factory terminated assemblies assure rapid network deployment, contributing to installation cost savings, reduced connector contamination and elimination of unforeseen field installation variables. Optronics quality control guarantees optimised assembly performance and reliability.

#### Features

- > Available in OM1, OM2, OM3, OM4 and OS1/OS2 fibre types
- > 2 - 24 core loose tube cable
- > 900µm presentation tails
- > Universal LSZH & external PE cable jacket
- > Available with all standard connectivity
- > Steel Tape Armoured (STA) version available
- > Factory terminated and tested

#### Benefits

- > **Rapid Easy Deployment**- factory terminated cabling saves installation and reconfiguration time eliminating field termination/splicing variables
- > **High Performance and Reliability**- 100% tested- combination of high quality components and Optronics manufacturing quality control guarantees product to the highest standards
- > **Cost Savings**- Installation time involving costly highly qualified workforce is reduced to the minimum

#### Application

- > Universal Internal/External Optical Links
- > Long Backbone Interconnections

#### Standards Compliance

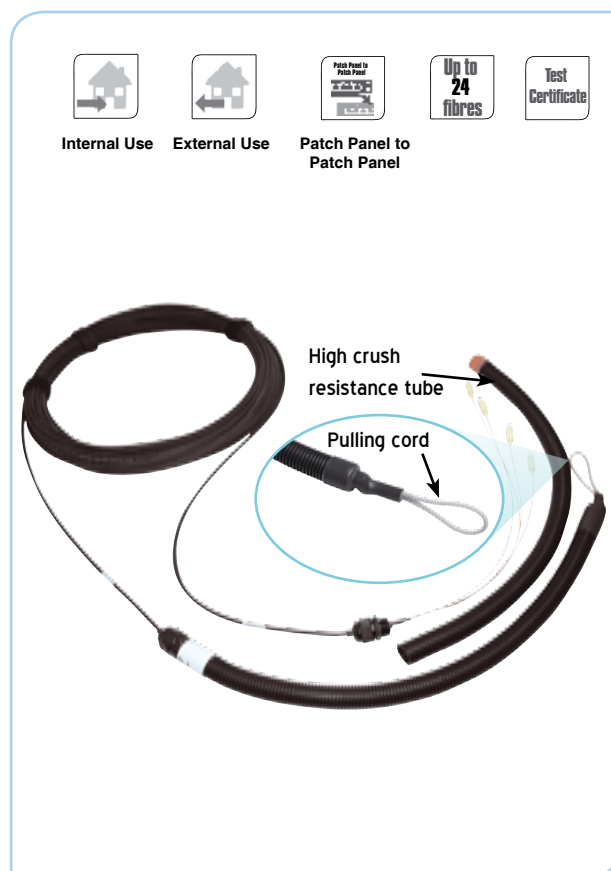
- > TIA/EIA-568-C.3 and ISO/IEC 11801
- > ISO/IEC 60793 and ISO/IEC 60794
- > ISO/IEC 61753, IEC 61754 and IEC 61755
- > ISO/IEC 60332-1, IEC 61034-1/2 and IEC 61754-1/2
- > Compliant to Directive 2002/95/EC (RoHS) and REACH SvHC

#### Connector Performance

CONNECTOR MATING	IL Average Standard	IL MAX Standard	IL Average Premium	IL MAX Premium	RETURN LOSS
MM	0.15 dB	0.30 dB	0.08 dB	0.15 dB	NA
SM	0.18dB	0.30dB	0.12dB	0.15dB	>55/65dB

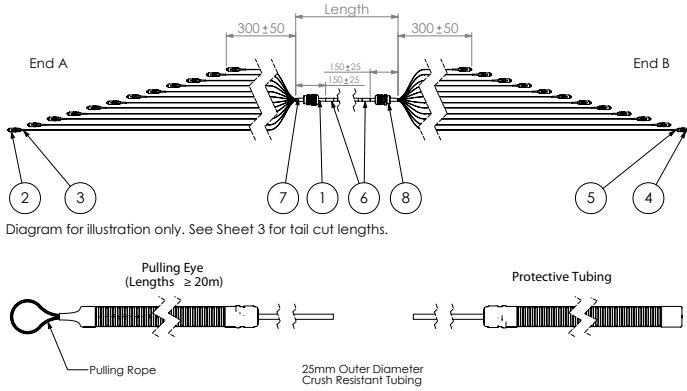
#### Cable Performance

FibreType (ISO/IEC 11801)	OS1/OS2	OM1	OM2	OM3	OM4
Attenuation Coefficient [dB/km]	≤ 0.38 Max (1300nm) ≤ 0.25 Max (1300nm)	≤ 3.5 Max (850nm) ≤ 1.5 Max (1300nm)	≤ 3.5 Max (850nm) ≤ 1.5 Max (1300nm)	≤ 3.5 Max (850nm) ≤ 1.5 Max (1300nm)	≤ 3.5 Max (850nm) ≤ 1.5 Max (1300nm)
	≤ 0.34 Typ (1550nm) ≤ 0.19 typ (1550nm)	≤ 2.9 Typ (850nm) ≤ 1.2 typ (1300nm)	≤ 2.7 Typ (850nm) ≤ 0.9 typ (1300nm)	≤ 2.7 Typ (850nm) ≤ 0.9 typ (1300nm)	≤ 2.7 Typ (850nm) ≤ 0.9 typ (1300nm)
Minimum Bandwidth: Overfilled Launch [Mhz-km]	NA	≥ 200 (850nm) ≥ 500 (1300nm)	≥ 500 (850nm) ≥ 500 (1300nm)	≥ 1500 (850nm) ≥ 500 (1300nm)	≥ 3500 (850nm) ≥ 500 (1300nm)
Minimum Bandwidth: Laser Effective Modal Bandwidth [Mhz-km]	NA	NA	NA	≥ 2000 (850nm)	≥ 4700 (850nm)

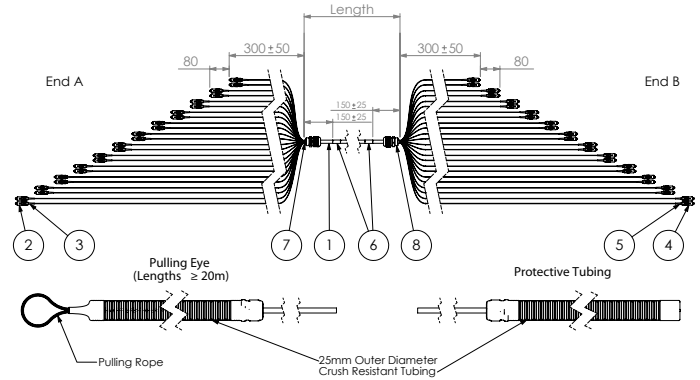


### Technical Drawing

Core count ≤ 12 cores



Core count > 12 cores



- |                                  |                                 |
|----------------------------------|---------------------------------|
| 1 Loose Tube Cable (4 - 24 core) | 5 Connector 900 µm Boot - End B |
| 2 Connector - End A              | 6 Serial Number Label           |
| 3 Connector 900 µm Boot - End A  | 7 Split Retainer                |
| 4 Connector - End B              | 8 Gland                         |

### Technical Specification

ELEMENT	CHARACTERISTIC
Fibre	OS1/OS2, OM1, OM2, OM3, OM4 (ISO/IEC 60793)
Cable	Loose Tube 2- 24 cores (ISO/IEC 60794) OD MAX 24 cores 6.7 ± 0.3mm OD MAX 24 cores (Steel Tape Armored) 9.2 ± 0.3mm Jacket material: LSZH, PE, OFNP Jacket Colour: Black Strength member: E-Glass
Connectors	IEC 61753, IEC 61754, IEC 61755
Packaging	Length <100mtr: HD PE Bag coil Length >100mtr: Drum
Operating Temperature	-20 ~ +60°C
Storage Temperature	-40 ~ +70°C

### Part Number Generator

PRE														/Z
Fibre Count	Connector End A				Connector End B*				Fibre Type		Cable Construction		Cable Length (Mtr)	
2	LC	LC	FC	FC	LC	LC	FC	FC	OS1/OS2	09	Loose Tube	LT	XX	
4	LC/APC	LCA	FC/APC	FCA	LC/APC	LCA	FC/APC	FCA	OM1	62	Loose Tube Steel Tape Armoured	STA		
6	SC	SC	E2000	E2	SC	SC	E2000	E2	OM2	50	Loose Tube PE	LTPE		
8	SC/APC	SCA	E2000/APC	E2A	SC/APC	SCA	E2000/APC	E2A	OM3	OM3	Loose Tube Steel Tape Armoured	STAPE		
12	ST	ST			ST	ST			OM4	OM4				
16														
24														

\* If end B differ from end A

Example Part Number: PRE12SCOM3LT50/Z

This part number has created 12 cores OM3 SC to SC Multifibre FirstL

Example Part Number: **PRE12SCOM3LT50/Z**

This part number has created 12 cores OM3 SC to SC Multifibre FirstLight Classix Loose Tube Assembly.

### Multifibre FirstLight Prime LT Cable Assemblies

#### Description

FirstLight Prime LT is a special design platform for Loose Tube multifibre optical cable assemblies. It utilizes the patented First Light Prime transition module and guarantees superior tensile strength and crushing resistance. The high density design can scale from 2 up to 144 fibres and can feature both 900µm and ruggedized 2mm tail leads. Assemblies can comprise of both multifibre MTP and discrete connectors, making the FirstLight Prime a flexible hybrid solution for diverse applications.

#### Features

- ▶ Available in OS1/2, G.657A1, OM1, OM2, OM3, OM4
- ▶ Up to 144 fibre core count
- ▶ Available with Multifibre MTP® and discrete connectors
- ▶ 900µm or 2mm ruggedized tails
- ▶ Internal/External Application
- ▶ Factory terminated and tested
- ▶ Steel tape armoured version available

#### Benefits

- ▶ **Very High Density**- First Light Prime LT can scale up to 144 fibres for very high density Data Centre or Central Office application
- ▶ **Hybrid MTP and Discrete Connector Interface**- FirstLight Prime LT can be used as high density multifibre MTP® ruggedized trunk or ruggedized MTP® to LC or SC fanouts
- ▶ **Tails Selection**- 2mm ruggedized tails can be used for a direct front panel or equipment connections whereas 900µm tails can be used for installation inside fibre management
- ▶ **Rapid Deployment**- Factory terminated cabling saves installation and reconfiguration time eliminating field deployment variables
- ▶ **Optimised Performance**- low loss MTP® 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

#### Standards Compliance

- ▶ TIA/EIA-568-C.3 and ISO/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

#### Connector Performance

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

\*(UPC/APC)

#### Cable Performance

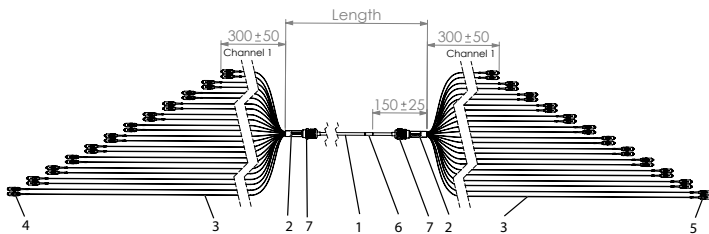
FibreType (ISO/IEC 11801)	OS1/OS2	OM1	OM2	OM3	OM4
Attenuation Coefficient [dB/km]	≤ 0.38 Max (1310nm) ≤ 0.25 Max (1550nm)	≤ 3.5 Max (850nm) ≤ 1.5 Max (1300nm)	≤ 3.5 Max (850nm) ≤ 1.5 Max (1300nm)	≤ 3.5 Max (850nm) ≤ 1.5 Max (1300nm)	≤ 3.5 Max (850nm) ≤ 1.5 Max (1300nm)
	≤ 0.34 Typ (1310nm) ≤ 0.19 Typ (1550nm)	≤ 2.9 Typ (850nm) ≤ 1.2 Typ (1300nm)	≤ 2.7 Typ (850nm) ≤ 0.9 Typ (1300nm)	≤ 2.7 Typ (850nm) ≤ 0.9 Typ (1300nm)	≤ 2.7 Typ (850nm) ≤ 0.9 Typ (1300nm)
Minimum Bandwidth: Overfilled Launch [Mhz-km]	NA	≥ 200 (850nm) ≥ 500 (1300nm)	≥ 500 (850nm) ≥ 500 (1300nm)	≥ 1500 (850nm) ≥ 500 (1300nm)	≥ 3500 (850nm) ≥ 500 (1300nm)
Minimum Bandwidth: Laser Effective Modal Bandwidth [Mhz-km]	NA	NA	NA	≥ 2000 (850nm)	≥ 4700 (850nm)

## Technical Specification

Element	Characteristic
Fibre	OS1/OS2, G.657A1, OM1, OM2, OM3, OM4 (ISO/IEC 60793)
Cable	Loose Tube 2-48 cores (ISO/IEC 60794) OD MAX 24 cores $6.4 \pm 0.3\text{mm}$ / OD MAX 48 cores $9.7 \pm 0.4\text{mm}$ / OD Max 24,48 cores (Steel Tape Armoured) $10.9 \pm 0.4\text{mm}$ Jacket material: LSZH, PE; OFNP, OFNR, Jacket color: Black
Packaging	Lengths 100m– Heavy Duty PE bag / Length> 100m– Drum
Operating Temperature	-20 ~ +60°C
Storage Temperature	-40 ~ +70°C

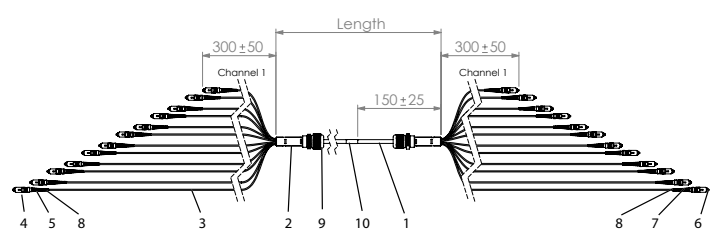
## Technical Drawing

900µm Pre-Term



No.	Description	Qty.
1	Loose Tube Cable	1
2	Breakout Module	2
3	900µm Solid Coloured Oversleeve Tubing	-
4	900µm Connector Assembly End 1	-
5	900µm Connector Assembly End 2	-
6	Serial Number Label (Wrap around)	1
7	Gland	2

2mm Pre-Term



No.	Description	Qty.
1	Loose Tube Cable	1
2	Breakout Module	2
3	2mm Furcation Tubing	-
4	Connector End 1	-
5	Connector End 1 2mm Boot	-
6	Connector End 2	-
7	Connector End 2 2mm Boot	-
8	Channel Identification Marker (C-Clip)	-
9	Gland	2
10	Serial Number Label (Sheath)	1

## Part Number Generator

PRE								/Z			
Fibre Count	Connector A (Pulling Eye)		Connector B (Apply If End A ≠ B)		Fibre Type		Cable Construction		Jacket Type		Length (m*)
2	LC	LC	LC	LC	OS1/OS2	9	Loose Tube (900um tails)	LT	LSZH	leave blank	XX
4	LC/APC	LCA	LC/APC	LCA	OM1	62					
6	SC	SC	SC	SC	OM2	50	Loose Tube (2mm tails)	LTR	PE	PE	
8	SC/APC	SCA	SC/APC	SCA	OM3	OM3					
12	ST	ST	ST	ST	OM4	OM4	LT Steel Tape Armoured (900um tails)	STA	OFNR	RI*	
16	FC	FC	FC	FC	G.657A1	A1					
24	FC/APC	FCA	FC/APC	FCA			LT Steel Tape Armoured (2mm tails)	STAR	OFNP	PL*	
48	E2000	E2	E2000	E2							
	E2000/APC	E2A	E2000/APC	E2A			*For Riser and Plenum length is measured in feet				
	MTP-Male	MTPM	MTP-Male	MTPM							
	MTP Elite-Male	MTPM	MTP Elite-Male	MTPM							
	MTP-Female	MTPF	MTP-Female	MTPF							
	MTP Elite-Female	MTPF	MTP Elite-Female	MTPF							

\*For Riser and Plenum length is measured in feet

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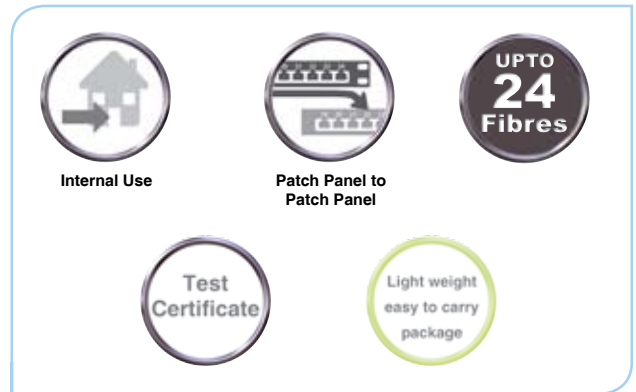
### Multifibre FirstLight Classix Base Cable Assemblies

The FirstLight Classix Base factory made, quality controlled fibre optic assembly is specified for short internal optical links. The 900µm tight buffer presentation lends itself to installation within a patch panel, wall box or Optical Distribution Frame (ODF).

Crush resistant protective tubing assures secure transportation and installation.

The high strength pulling element allows fast, safe and effective pulling.

The overall assembly and packing are light and compact, reducing transport cost and storage space. Installation waste is also reduced.



### Features

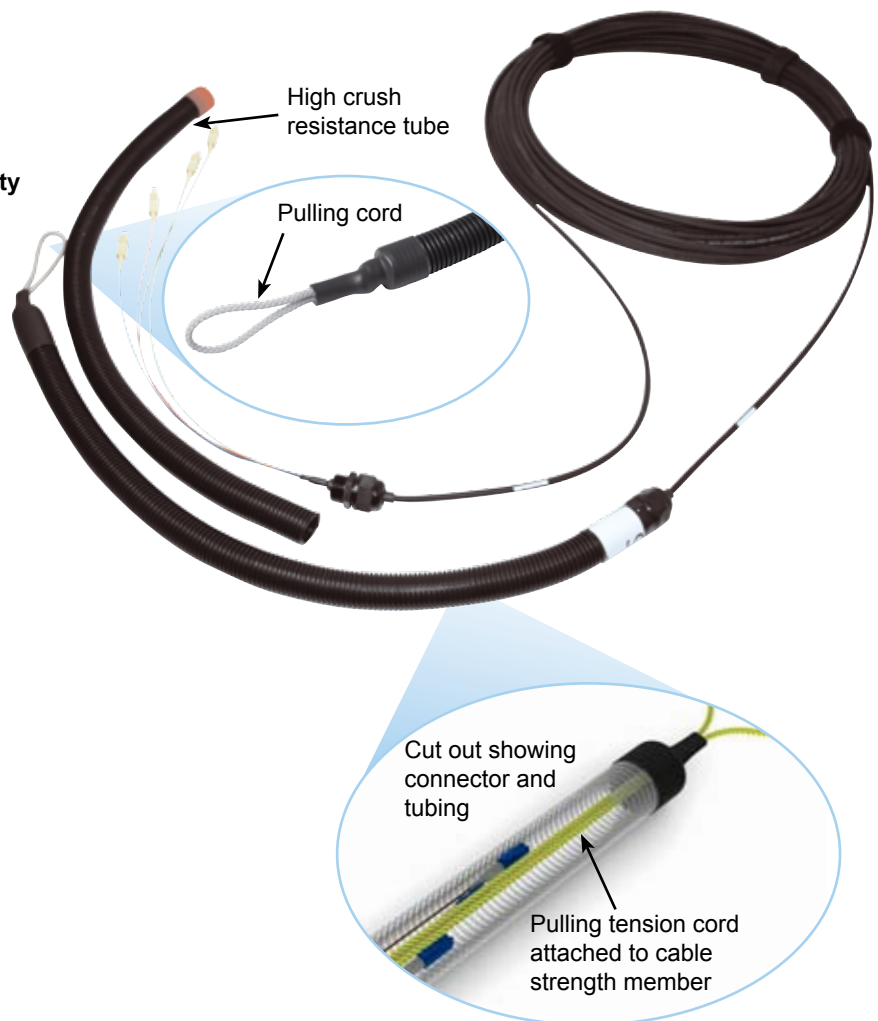
- ▶ Available in OM1, OM2 and OM3 fibre types
- ▶ Available with SC, LC, FC, ST connector types
- ▶ 2 - 24 core tight buffer cable with standard connectivity
- ▶ Fast installation plug and play system
- ▶ No splicing or connector termination required

### Benefits

- ▶ High crush resistance robust protection tube
- ▶ High tensile strength pulling element
- ▶ Economical, light and compact assembly
- ▶ Low waste packaging
- ▶ Simplified test certificate
- ▶ Installation guide supplied

### Applications

- ▶ Internal horizontal and backbone cabling
- ▶ Ideal for data centre use



### Technical Drawing

Core count ≤ 12 cores

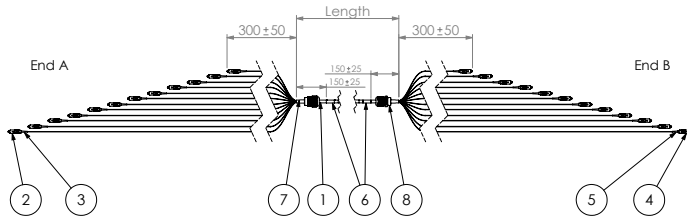
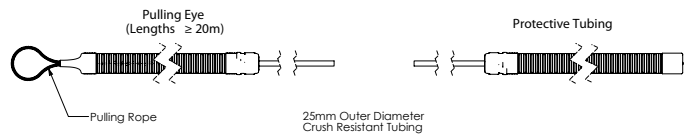
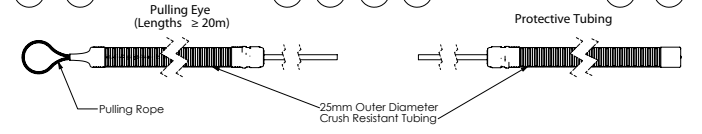
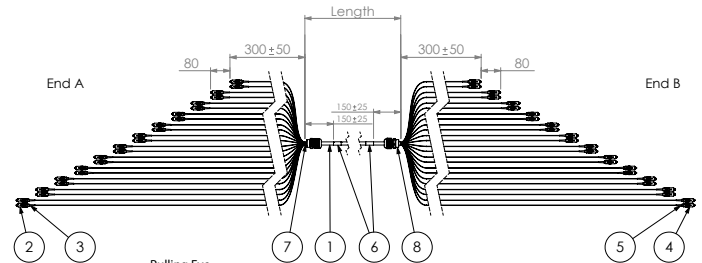


Diagram for illustration only. See Sheet 3 for tail cut lengths.



- |                                      |                                 |
|--------------------------------------|---------------------------------|
| 1 Tight Buffered Cable (4 - 24 core) | 5 Connector 900 µm Boot - End B |
| 2 Connector - End A                  | 6 Serial Number Label           |
| 3 Connector 900 µm Boot - End A      | 7 Split Retainer                |
| 4 Connector - End B                  | 8 Gland                         |

Core count ≥ 12 cores



### Technical Specification

Specification	Value
Fibre grade	OS1/OS2, G.657A, OM1, OM2, OM3, OM4 (ISO/IEC 60793)
Cable specification	Tight bufer 4, 8, 12 and 24 cores (ISO/IEC 60794)
Connectors	IEC 61753, IEC 61754, IEC 61755
Pulling element	a) No pulling element: length ≤ 20mtr      b) A side pulling element: length ≥ 20 mtr
Packaging	Length ≤ 100 Coil in heavy duty polymer bag      EU pallet compatible box
	Length ≥ 100 Drum
Operating Temperature	-20 ~ +60°C
Storage Temperature	-40 ~ +70°C

### Part Number Generator

PRE						BASE/Z
Terminated Fibre Count	Connector A (Pulling Eye)	Connector B (Apply If End A ≠ B)	Fibre Type	Cable Construction	Length (Mtr)	
02	SC	Open end (XX)	62 (OM1)	TB (Tight Buffer)	Gland to Gland	
04	SCA (SC/APC)	SC	50 (OM2)			
06	LC	SCA (SC/APC)	OM3 (OM3)			
08	LCA (LC/APC)	LC	OM4 (OM4)			
12	FC	LCA (LC/APC)	9 (OS1/OS2)			
16	FCA (FC/APC)	FC	A1 (G657A)			
24	ST	FCA (FC/APC)				
48*	E2 (E2000)	ST				
	E2A (E2000 APC)	E2 (E2000)				
		E2A (E2000 APC)				

### Multifibre FirstLight Prime Cable Assemblies

First Light Prime is a special design platform for multifibre optical cable assemblies. It utilizes the patented First Light Prime transition module and guarantees superior tensile strength and crushing resistance. The high density design can scale from 4 up to 144 fibres and can feature both 900µm and ruggedized 2mm tail leads. Assemblies can comprise of both multifibre MTP and discreet connectors, making the FirstLight Prime a flexible hybrid solution for diverse applications.

#### Features

- > OS1/2, OM1, OM2, OM3, OM4 Fibre Grade
- > Up to 144 Fibres Core Count
- > Available with Multichannel MTP and Discreet Connectors
- > Ruggedized 2mm or 900µm Tails
- > Internal/External Application
- > Factory terminated and tested

#### Benefits

- > **Very High Density**- First Light Prime can scale up to 144 fibres for very high density Data Centre or Central Office application.
- > **Hybrid MTP and Discreet Connector Interface**- FirstLight Prime can be used as high density multifibre MTP ruggedized trunk or ruggedized MTP to LC or SC fanouts.
- > **Tails Selection**- 2mm ruggedized tails can be used for a direct front panel or equipment connections whereas 900µm tails can be used for installation inside fibre management.
- > **Rapid Deployment**- factory terminated cabling saves installation and reconfiguration time eliminating field deployment variables.
- > **Optimised Performance**- low loss MTP Elite, discreet 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 application.

#### Applications

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

#### Connector Performance

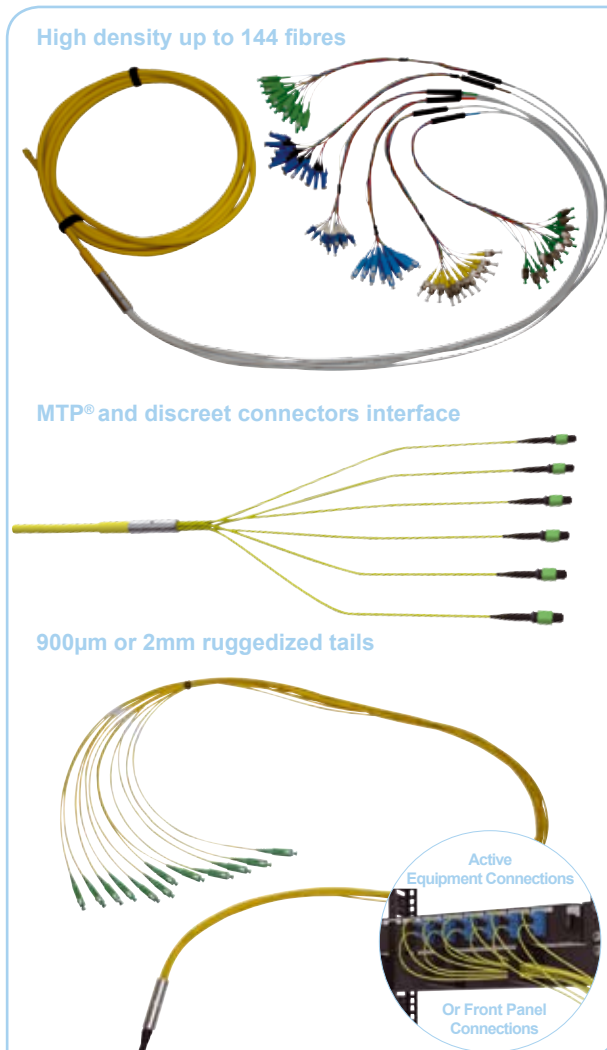
CONNECTOR MATING	IL AVERAGE	IL MAX	RETURN LOSS
MTP Elite (MM)	0.20 dB	0.35 dB	NA
MTP (MM)	0.35 dB	0.60 dB	NA
Discreet (MM)	0.15dB	0.30dB	NA
Discreet Premium (MM)	0.08dB	0.15dB	NA

#### Standards Compliance

- > TIA/EIA-568-C.3 and ISO/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

#### Cable Performance

FibreType (ISO/IEC 11801)	OS1/OS2	OM1	OM2	OM3	OM4
Attenuation Coefficient [dB/km]	≤ 0.38 Max (1300nm) ≤ 0.25 Max (1300nm)	≤ 3.5 Max (850nm) ≤ 1.5 Max (1300nm)	≤ 3.5 Max (850nm) ≤ 1.5 Max (1300nm)	≤ 3.5 Max (850nm) ≤ 1.5 Max (1300nm)	≤ 3.5 Max (850nm) ≤ 1.5 Max (1300nm)
	≤ 0.34 Typ (1550nm) ≤ 0.19 typ (1550nm)	≤ 2.9 Typ (850nm) ≤ 1.2 typ (1300nm)	≤ 2.7 Typ (850nm) ≤ 0.9 typ (1300nm)	≤ 2.7 Typ (850nm) ≤ 0.9 typ (1300nm)	≤ 2.7 Typ (850nm) ≤ 0.9 typ (1300nm)
Minimum Bandwidth: Overfilled Launch [Mhz-km]	NA	≥ 200 (850nm) ≥ 500 (1300nm)	≥ 500 (850nm) ≥ 500 (1300nm)	≥ 1500 (850nm) ≥ 500 (1300nm)	≥ 3500 (850nm) ≥ 500 (1300nm)
Minimum Bandwidth: Laser Effective Modal Bandwidth [Mhz-km]	NA	NA	NA	≥ 2000 (850nm)	≥ 4700 (850nm)

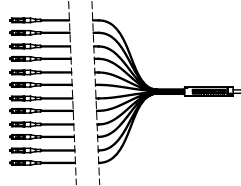


### Technical Specification

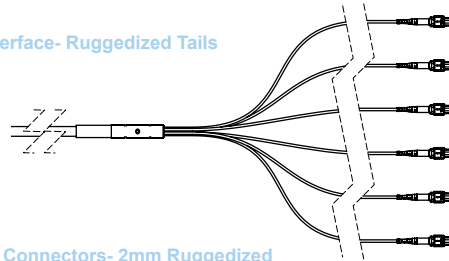
Element	Characteristic
Fibre	OS1/OS2, OM1, OM2, OM3, OM4 (ISO/IEC 60793)
Cable	Loose Tube 2-144 cores (ISO/IEC 60794) OD MAX 24 cores 6.4 ± 0.3mm / OD MAX 144 cores 14.2 ± 0.3mm Jacket material: LSZH, PE, OFNP* Jacket color: Black
Connectors	MTP US Conec (IEC-61754-7 & EIA/TIA-604-5) Boot Colour: Black Body Sleeve Colour: MM (Beige), MM Elite (Aqua), SM (Green), SM Elite (Yellow) Discreet Connector (IEC 61754-20) Boot Colour: White Housing Color: Beige (MM), Blue (SM), Green (SM/APC)
Packaging	Length< 50m– Heavy Duty PE bag / Length> 50m– Drum
Operating Temperature	-10 ~ +60°C
Storage Temperature	-40 ~ +70°C

### Assembly Configuration Options

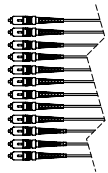
Discreet Connectors- 900µm Tails



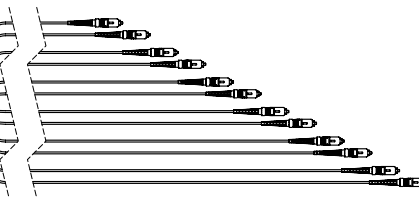
MTP® Interface- Ruggedized Tails



Discreet Connectors- 2mm Ruggedized Fan Out Tails



Discreet Connectors- 2mm Ruggedized Staggered Tails



### Product Configurator

FLP										/Z
Connector END A		Connector Class A	Tail A	Fibre Type	Fibre Count	Jacket Type	Cable length	Connector END B		Connector Class B
LC	FC	Standard	900µm	OS1/OS2	2 to 144	LSZH	Mtrs	LC	FC	Standard
LC/APC	FC/APC	Premium/Elite	2/3mm	OM1		PE		LC/APC	FC/APC	Premium/Elite
SC	SC/APC			OM2		OFNP		SC	SC/APC	
E2000	E2000/APC			OM3				E2000	E2000/APC	
ST	MTP Male			OM4				ST	MTP® Male	
MTP Female				G.657A1 (A1)				MTP® Female		

MTP is a registered trademark of US Conec Ltd

### Multifibre Full Breakout Cable Assemblies

Optronics multicore full breakout cable assemblies are ideal for short cable runs where a direct connection to equipment or panels is required. The 2mm patch lead style cable subunits are ruggedized, to protect the optical fibre in the demanding environments outside the patch panel or ODF. The network topology can be reduced and simplified by direct connection; bypassing wall boxes, ODFs or fibre patch panels. The end result is greatly improved fibre management.

#### Features

- > Available in OM1, OM2, OM3, OM4 and OS1/OS2 fibre types
- > 2 - 24 core full breakout cable
- > 2mm ruggedized tails
- > Internal LSZH cable jacket
- > Available with all standard connectivity
- > Factory terminated and tested

#### Benefits

- > **Rapid Deployment**- factory terminated cabling saves installation and reconfiguration time eliminating field termination variables
- > **High Performance and Reliability**- 100% tested- combination of high quality components and Optronics manufacturing quality control guarantees product to the highest standards
- > **Cost Savings**- Installation time involving costly highly qualified workforce is reduced to the minimum
- > **Direct Connection to Equipment/Panel**- direct connection to active equipment is possible bypassing wall boxes, ODFs and panels reducing fibre management and easing racking space

#### Application

- > Internal Short Links
- > Front Panel/Equipment Connections
- > Data Centre Infrastructure

#### Standards Compliance

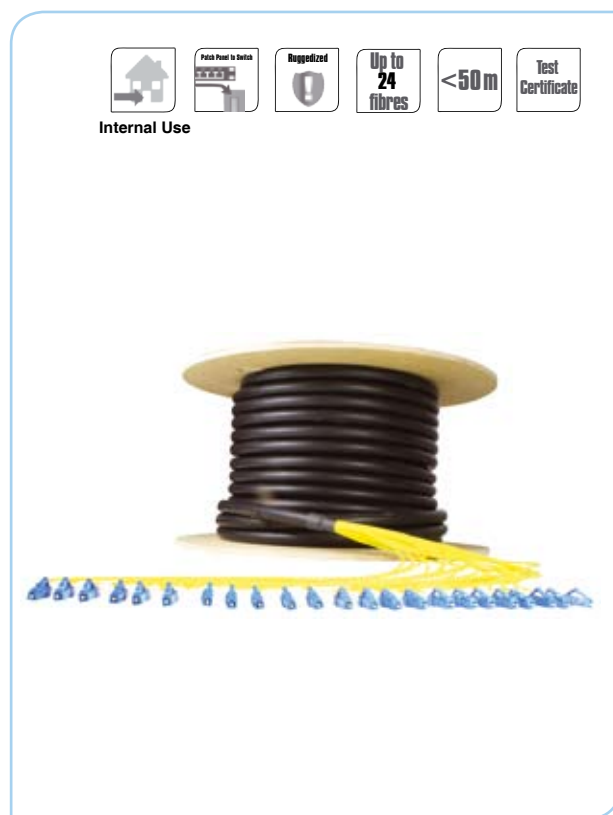
- > TIA/EIA-568-C.3 and ISO/IEC 11801
- > ISO/IEC 60793 and ISO/IEC 60794
- > ISO/IEC 61753, IEC 61754 and IEC 61755
- > ISO/IEC 60332-1, IEC 61034-1/2 and IEC 61754-1/2
- > Compliant to Directive 2002/95/EC (RoHS) and REACH SvHC

#### Connector Performance

CONNECTOR MATING	IL Average Standard	IL MAX Standard	IL Average Premium	IL MAX Premium	RETURN LOSS
LC, SC MM	0.15 dB	0.30 dB	0.08 dB	0.15 dB	NA
LC, SC SM	0.18dB	0.25dB	0.12dB	0.15dB	>55/65dB

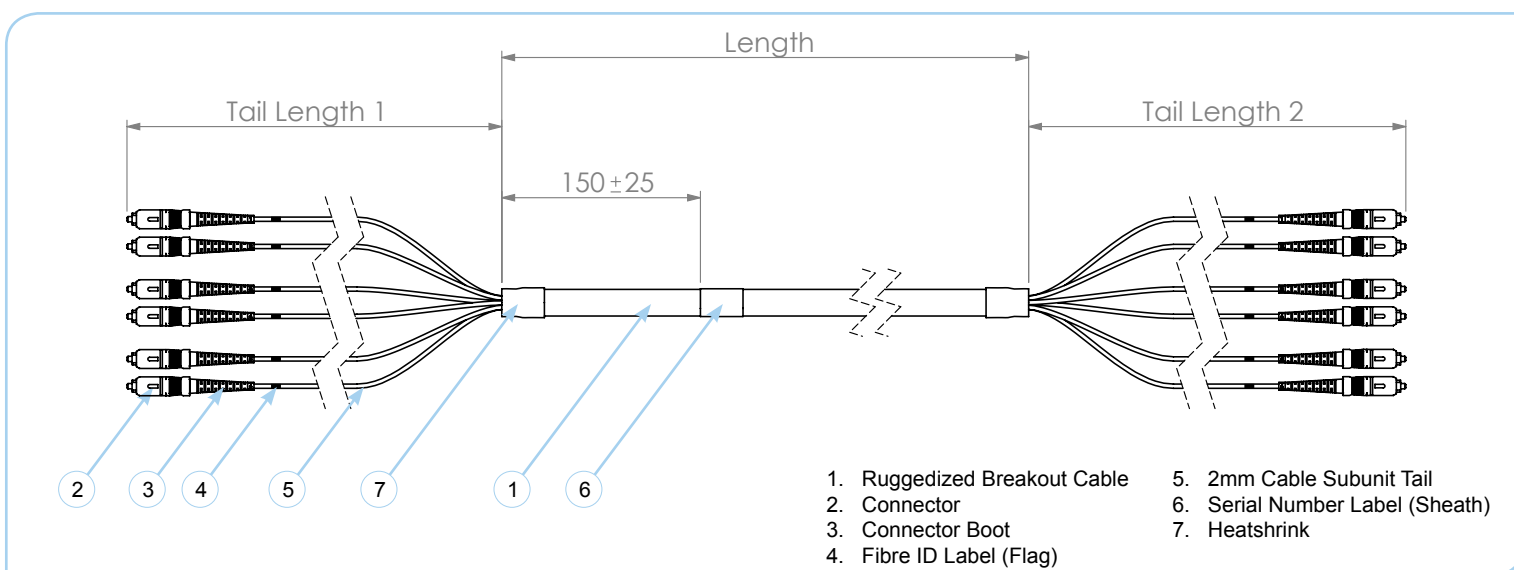
#### Cable Performance

FibreType (ISO/IEC 11801)	OS1/OS2	OM1	OM2	OM3	OM4
Attenuation Coefficient [dB/km]	≤ 0.38 Max (1300nm) ≤ 0.25 Max (1300nm)	≤ 3.5 Max (850nm) ≤ 1.5 Max (1300nm)	≤ 3.5 Max (850nm) ≤ 1.5 Max (1300nm)	≤ 3.5 Max (850nm) ≤ 1.5 Max (1300nm)	≤ 3.5 Max (850nm) ≤ 1.5 Max (1300nm)
	≤ 0.34 Typ (1550nm) ≤ 0.19 typ (1550nm)	≤ 2.9 Typ (850nm) ≤ 1.2 typ (1300nm)	≤ 2.7 Typ (850nm) ≤ 0.9 typ (1300nm)	≤ 2.7 Typ (850nm) ≤ 0.9 typ (1300nm)	≤ 2.7 Typ (850nm) ≤ 0.9 typ (1300nm)
Minimum Bandwidth: Overfilled Launch [Mhz-km]	NA	≥ 200 (850nm) ≥ 500 (1300nm)	≥ 500 (850nm) ≥ 500 (1300nm)	≥ 1500 (850nm) ≥ 500 (1300nm)	≥ 3500 (850nm) ≥ 500 (1300nm)
Minimum Bandwidth: Laser Effective Modal Bandwidth [Mhz-km]	NA	NA	NA	≥ 2000 (850nm)	≥ 4700 (850nm)



### Technical Specification

Element	Characteristic
Fibre	OS1/OS2, OM1, OM2, OM3, OM4 (ISO/IEC 60793)
Cable	Full Breakout 2- 24 cores (ISO/IEC 60794) OD 12 cores 11.8 ± 0.3mm OD 24 cores 14.1 ± 0.3mm Jacket material: LSZH, OFNP*
Connectors	IEC 61753, IEC 61754, IEC 61755
Packaging	Length <50mtr: HD PE Bag    Length >50mtr: Drum
Operating Temperature	-10 ~ +60°C
Storage Temperature	-40 ~ +70°C



### Part Number Generator

PRE							/Z						
Fibre Count	Connector END A				Connector END B*				Fibre type		Cable Construction		Cable length (Mtr)  <

### Example Part Number

**PRE4LC09BO20**

This part number has created 4 cores OS1/OS2 LC to LC full breakout multifibre cable assembly.

### Fan Out Kits

Indoor Buffer Tube Fan-Out Kits are specifically designed for the termination of 6 and 12 Fibre loose tube cables. These fan-out kits provide the ultimate solution for those users who wish to field-install connectors. The kits provide the most compact, easy-to-install fan-out solution which requires no additional hardware or space than that required for terminating tight-buffered cables.

The Fan-Out Kit features a 900 micron fan-out assembly that is colour coded to match the fibres you are terminating. The Fan-Out assembly is available for 6 or 12 fibre units in a length of 1.2m.

### Application

- > Field termination of loose tube cables into indoor cross-connects.

### Features

- > Coloured fan-out tubing
- > Compact design
- > 900µm tails
- > Internal/External application
- > Bend radius protection

### Benefits

- > Cost effective
- > Time saving on site
- > Makes loose tube fibre easier to work with

### Technical Specification

TUBING SPECIFICATION	
I.D	0.5 +/- 0.05mm
O.D	0.9 +/- 0.05mm
Max Tensile Load	45N
Min Bend Radius	13mm
Crush Resistance	52N/cm Max
Temperature Range	-45°C to +85°C

### Ordering Information

DESCRIPTION	PART NO.
Fan Out Kit Loose Tube. 6 Fibre 1.2m	KFO6LT1/Z
Fan Out Kit Loose Tube. 12 Fibre 1.2m	KFO12LT1/Z

6 Fibre Loose Tube



12 Fibre Loose Tube



900µm Tube Assembly



### Multifibre FirstLight Micro Cable Assemblies

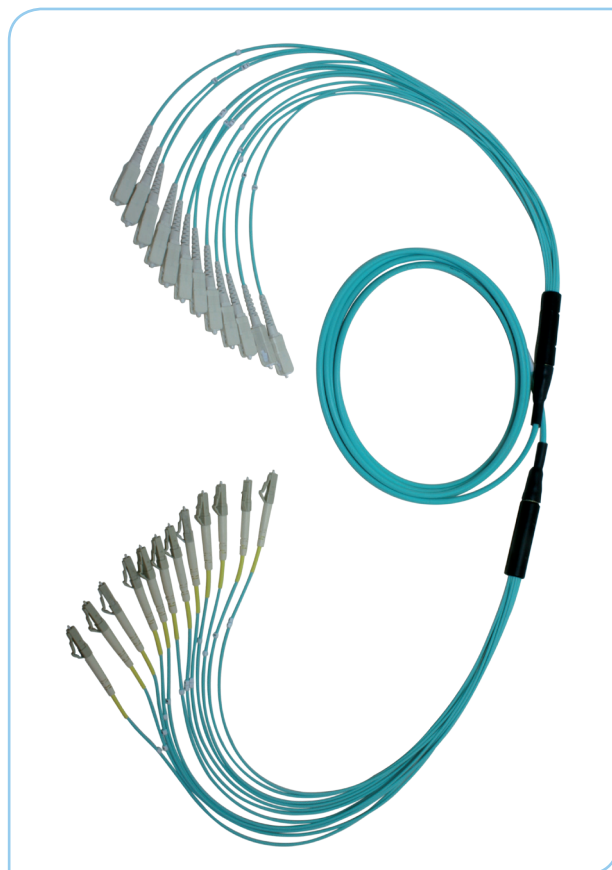
The FirstLight Micro cable assembly perfectly complements traditional full breakout assembly offering smaller, more flexible and compact product providing the same time improved optical performance of micro cable structure. The 2mm patch lead style tails are ruggedised, to protect the optical fibre in the demanding environments outside the patch panel or ODF. The network topology can be reduced and simplified by direct connection; by passing wall boxes, ODFs or fibre patch panels, the end result is greatly improved fibre management.

#### Features

- > Available in OM1, OM2, OM3, OM4 and OS1/OS2 fibre types
- > 12 and 24 cores (other core counts available upon special request)
- > 2mm ruggedised tails
- > LSZH cable jacket
- > Available with all standard connectivity
- > Factory terminated and tested

#### Benefits

- > Compact small dimension flexible Micro cable applied
- > Improved optical performance of loose tube structure
- > Reduced weight and carriage costs



#### Application

- > Internal Short Optical Links
- > Front Panel/Equipment Connections
- > Data Centre Infrastructure
- > Storage Area Network (SAN)

#### Standards Compliance

- > TIA/EIA-568-C.3 and ISO/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

#### Connector Performance

CONNECTOR MATING	IL Average Standard	IL MAX Standard	IL Average Premium	IL MAX Premium	RETURN LOSS
MM	0.15 dB	0.30 dB	0.08 dB	0.15 dB	NA
SM	0.18dB	0.30dB	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 (1300nm) ≤ 0.25 Max (1300nm)	≤ 3.5 Max (850nm) ≤ 1.5 Max (1300nm)	≤ 3.5 Max (850nm) ≤ 1.5 Max (1300nm)	≤ 3.5 Max (850nm) ≤ 1.5 Max (1300nm)	≤ 3.5 Max (850nm) ≤ 1.5 Max (1300nm)
	≤ 0.34 Typ (1550nm) ≤ 0.19 typ (1550nm)	≤ 2.9 Typ (850nm) ≤ 1.2 typ (1300nm)	≤ 2.7 Typ (850nm) ≤ 0.9 typ (1300nm)	≤ 2.7 Typ (850nm) ≤ 0.9 typ (1300nm)	≤ 2.7 Typ (850nm) ≤ 0.9 typ (1300nm)
Minimum Bandwidth: Overfilled Launch [Mhz-km]	NA	≥ 200 (850nm) ≥ 500 (1300nm)	≥ 500 (850nm) ≥ 500 (1300nm)	≥ 1500 (850nm) ≥ 500 (1300nm)	≥ 3500 (850nm) ≥ 500 (1300nm)
Minimum Bandwidth: Laser Effective Modal Bandwidth [Mhz-km]	NA	NA	NA	≥ 2000 (850nm)	≥ 4700 (850nm)



### Multifibre FirstLight Nano Cable Assemblies with 900µm Tails

The ultra tough FirstLight Nano Cable assembly features a small, compact size of Nano Cable providing flexible though ruggedized product with extreme crush resistance and the improved optical performance of Nano Cable structure.

#### Features

- ▶ Available in OM1, OM2, OM3, OM4 and G.657A1 fibre and RBS (Reduced Bend Sensitivity)
- ▶ Up to 24 cores
- ▶ 900µm tails
- ▶ Available with all standard connectivity
- ▶ Factory terminated and tested

#### Standards Compliance

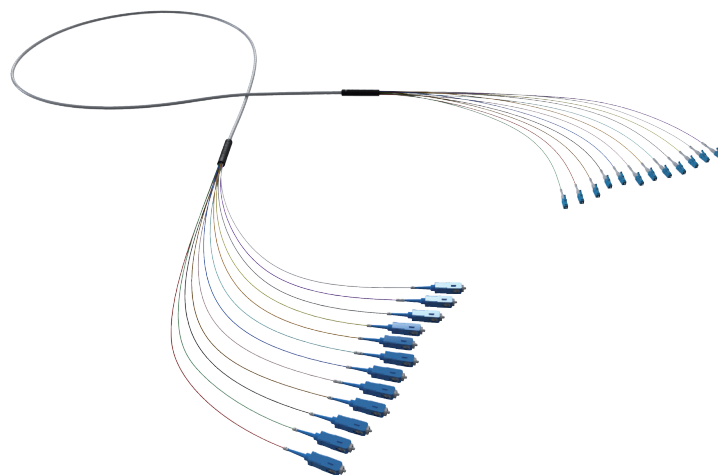
- ▶ TIA/EIA-568-C.3 and ISO/IEC 11801
- ▶ ISO/IEC 60793
- ▶ ISO/IEC 61753, IEC 61754 and IEC 61755
- ▶ Compliant to Directive 2002/95/EC (RoHS) and REACH SvHC

#### Benefits

- ▶ Extremely small size
- ▶ High crushing resistance - up to 1500N
- ▶ Can be bent around tight corners
- ▶ 900µm tails for installation inside fibre management - ODFs, panels
- ▶ Ideal for FTTH application - small size and ruggedized for drop cable applications
- ▶ Ideal for data centre - small size in high density environment
- ▶ Secure and rugged FirstLight Prime breakout module
- ▶ Improved optical performance of loose tube structure
- ▶ Reduced weight and carriage costs

#### Applications

- ▶ Internal Short Optical Links
- ▶ Data Centre Infrastructure
- ▶ Storage Area Network (SAN)
- ▶ FTTH / FTTX
- ▶ Telecoms



#### Connector Performance

Connector Mating	IL Average Standard	IL MAX Standard	IL Average Premium	IL MAX Premium	Return Loss
MM	0.15dB	0.30dB	0.08dB	0.15dB	NA
SM	0.18dB	0.30dB	0.12dB	0.15dB	>55/65dB (UPC/APC)

#### Technical Specification

Element	Characteristic
Fibre	G.657A1, OM1, OM2, OM3, OM4 (ISO/IEC 60793)
Cable	Nanocable: 12, 24 cores MAX OD: 12 cores 3mm 24 cores 5mm Material: PA12 (LSZH) Colour: Black, Yellow, Aqua
Packaging	Length ≤100mtr: HD Bag, Length >100mtr: Drum
Operating Temperature	-40 ~ +70°C
Installation Temperature	-10 ~ +70°C

#### Fibre 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]	NA	≥ 200 (850nm) ≥ 500 (1300nm)	≥ 500 (850nm) ≥ 500 (1300nm)	≥ 1500 (850nm) ≥ 500 (1300nm)	≥ 3500 (850nm) ≥ 500 (1300nm)
Minimum Bandwidth: Laser Effective Modal Bandwidth [Mhz-km]	NA	NA	NA	≥ 2000 (850nm)	≥ 4700 (850nm)



### Multifibre FirstLight Nano Cable Assemblies with 2mm Tails

The FirstLight Nano Cable assembly features the small, compact size of Nano Cable providing a flexible though ruggedized product with the improved optical performance of Nano Cable structure. The 2mm patch lead style tails are ruggedized to secure the optical fibre in the non-protected environments outside the patch panel or Optical Distribution Frames (ODFs). The network topology can be reduced and simplified by direct connection to active equipment bypassing wall boxes or fibre patch panels. The end result is a greatly improved power budget and reduced fibre management space.

#### Features

- ▶ Available in OM1, OM2, OM3, OM4, G.657A1 fibre and RBS (Reduced Bend Sensitivity) fibre
- ▶ Up to 24 cores
- ▶ 2mm tails
- ▶ Available with all standard connectivity
- ▶ Factory terminated and tested

#### Standards Compliance

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

#### Benefits

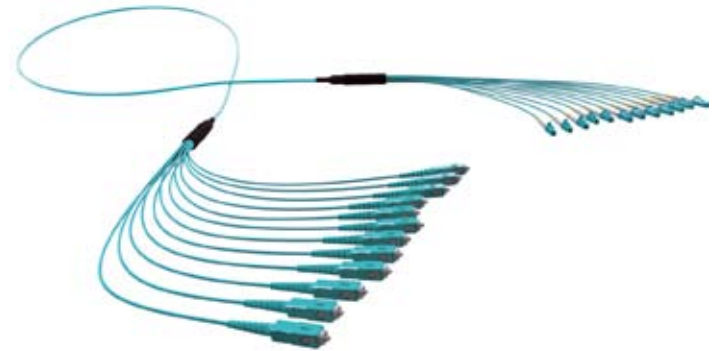
- ▶ Extremely small size
- ▶ High crushing resistance - up to 1500N
- ▶ Can be bent around tight corners
- ▶ 2mm ruggedized tails can be used for direct front panel or equipment connections.
- ▶ Ideal for FTTH application - small size and ruggedized for drop cable applications
- ▶ Ideal for data centre - small size in high density environment
- ▶ Secure and rugged FirstLight Prime breakout module
- ▶ Improved optical performance of loose tube structure
- ▶ Reduced weight and carriage costs

#### Applications

- ▶ Internal Short Optical Links
- ▶ Data Centre Infrastructure
- ▶ Storage Area Network (SAN)
- ▶ FTTH / FTTx
- ▶ Telecoms
- ▶ Front panel/equipment connections

#### Fibre Performance

FibreType (ISO/IEC 11801)	OS1/OS2	OM1	OM2	OM3	OM4
Attenuation Coefficient [dB/km]	$\leq 0.38$ Max (1310nm) $\leq 0.25$ Max (1550nm)	$\leq 3.5$ Max (850nm) $\leq 1.5$ Max (1300nm)	$\leq 3.5$ Max (850nm) $\leq 1.5$ Max (1300nm)	$\leq 3.5$ Max (850nm) $\leq 1.5$ Max (1300nm)	$\leq 3.5$ Max (850nm) $\leq 1.5$ Max (1300nm)
	$\leq 0.34$ Typ (1310nm) $\leq 0.19$ Typ (1550nm)	$\leq 2.9$ Typ (850nm) $\leq 1.2$ Typ (1300nm)	$\leq 2.7$ Typ (850nm) $\leq 0.9$ Typ (1300nm)	$\leq 2.7$ Typ (850nm) $\leq 0.9$ Typ (1300nm)	$\leq 2.7$ Typ (850nm) $\leq 0.9$ Typ (1300nm)
Minimum Bandwidth: Overfilled Launch [Mhz-km]	NA	$\geq 200$ (850nm) $\geq 500$ (1300nm)	$\geq 500$ (850nm) $\geq 500$ (1300nm)	$\geq 1500$ (850nm) $\geq 500$ (1300nm)	$\geq 3500$ (850nm) $\geq 500$ (1300nm)
Minimum Bandwidth: Laser Effective Modal Bandwidth [Mhz-km]	NA	NA	NA	$\geq 2000$ (850nm)	$\geq 4700$ (850nm)



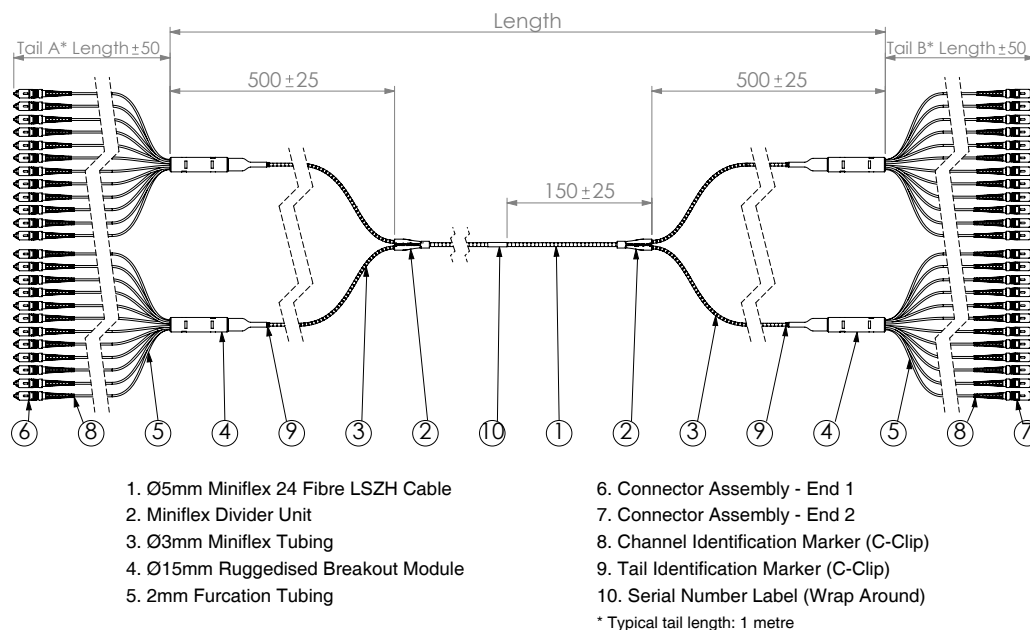
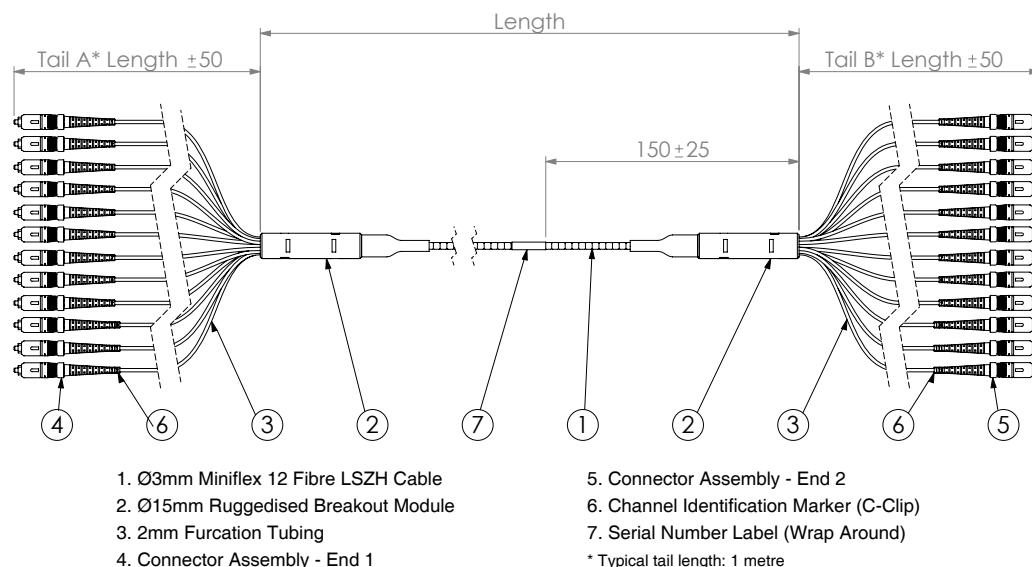
#### Connector Performance

Connector Mating	IL Average Standard	IL MAX Standard	IL Average Premium	IL MAX Premium	Return Loss
MM	0.15dB	0.30dB	0.08dB	0.15dB	NA
SM	0.18dB	0.30dB	0.12dB	0.15dB	>55/65dB (UPC/APC)

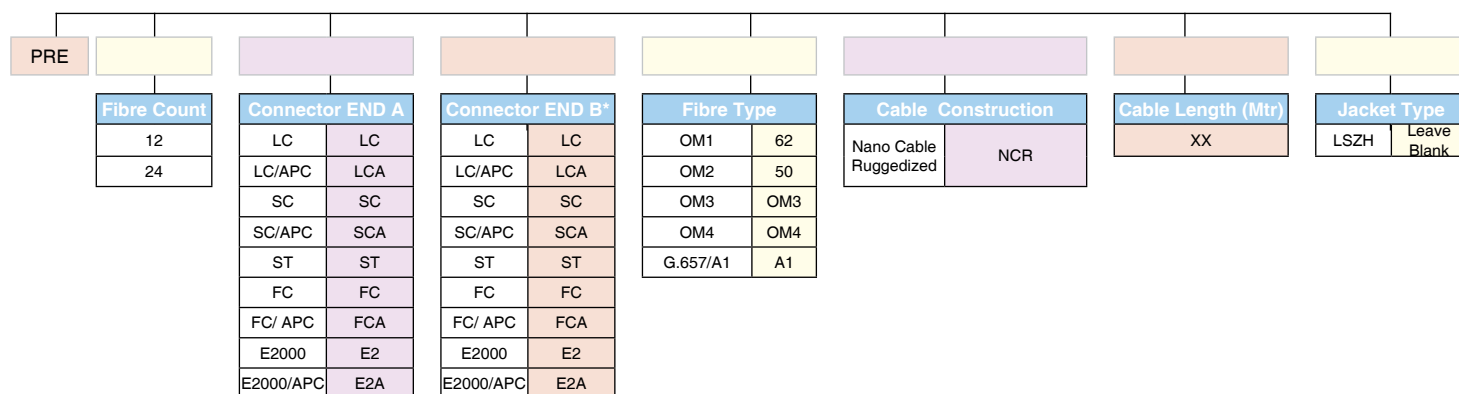
#### Technical Specification

Element	Characteristic
Fibre	G.657A1, OM1, OM2, OM3, OM4 (ISO/IEC 60793)
Cable	Nanocable: 12, 24 cores MAX OD: 12 cores 3mm 24 cores 5mm Material: PA12 (LSZH) Colour: Black, Yellow, Aqua
Packaging	Length $\leq 100$ mtr: HD Bag, Length >100mtr: Drum
Operating Temperature	-40 ~ +70°C (GR326)
Installation Temperature	-10 ~ +70°C (GR326)

## Drawings



## Part Number Generator



\* If end B differs from end A

### Example Part Number

PRE24LCOM3NCR20

PRE24LCOM3NCR20 configures a 20 metre, 24 core OM3 LC to LC multifibre Nano Cable assembly with a LSZH jacket and 2mm tails.