FibreFab
Fibre Optic & Networking Products

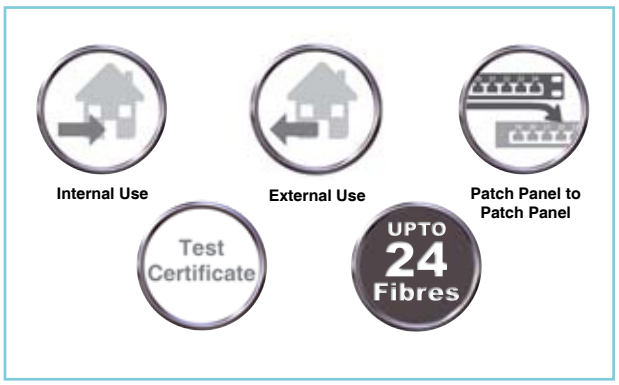
Multifibre FirstLight LT Loose Tube Assemblies

V.3.5

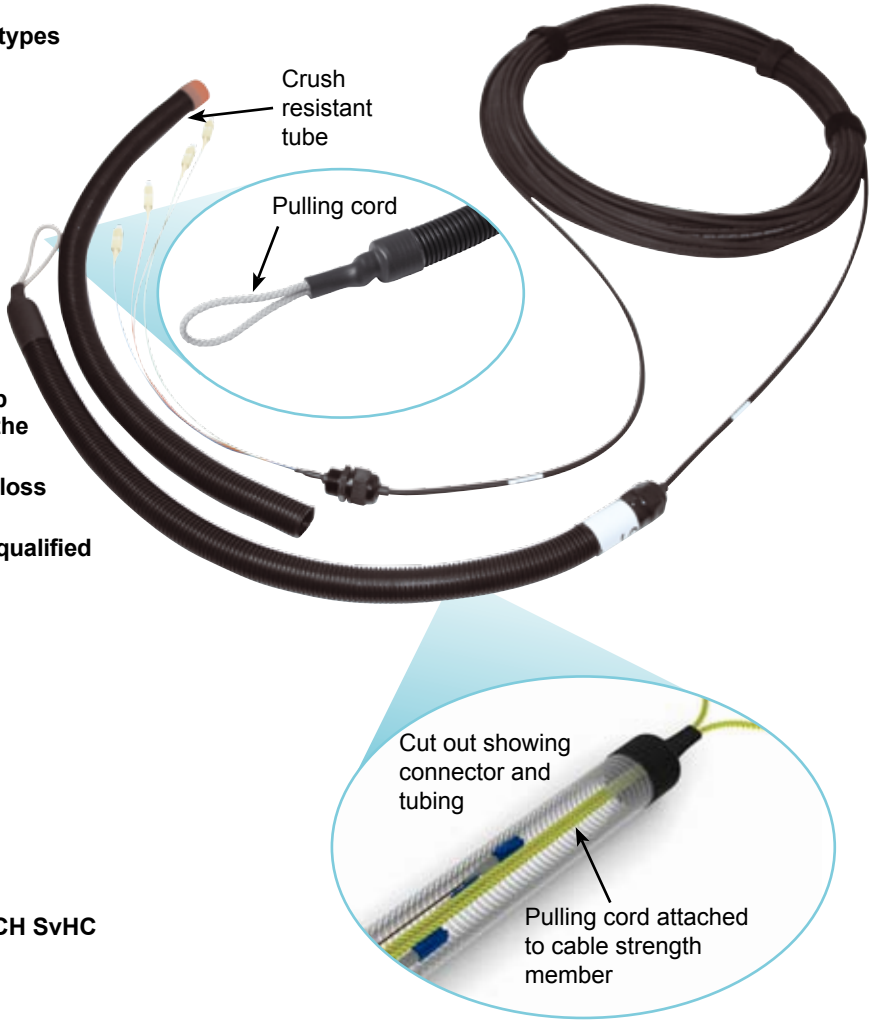
Description

FibreFab 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. FibreFab quality control guarantees optimised assembly performance and reliability.



- **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 FibreFab manufacturing quality control guarantees product to the highest standards**
- **Individual Test Certificate - Indicating expected optical loss performance when installed**
- **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

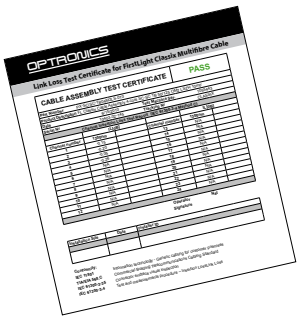
- **TIA/EIA-568-C.3 and ISO/IEC 11801**
- **ISO/IEC 60793 and ISO/IEC 60794**
- **ISO/IEC 61753, IEC 61754 and IEC 61755**
- **ISO/IEC 60332-1, IEC 61034-1/2 and IEC 61754-1/2**
- **Compliant to Directive 2002/95/EC (RoHS) and REACH SvHC**

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

Unique to FibreFab

Every assembly is supplied with a link loss test certificate, indicating expected optical performance when installed



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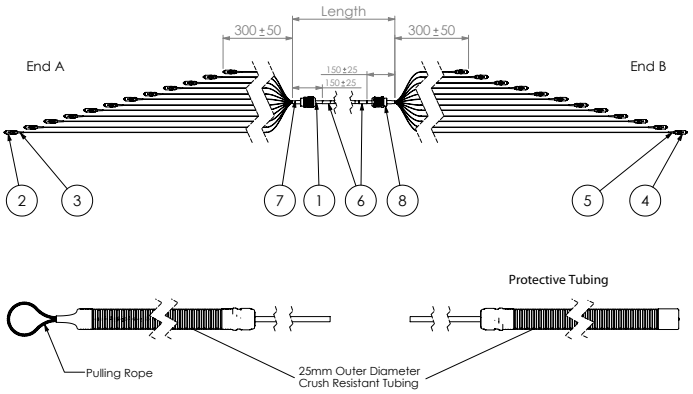
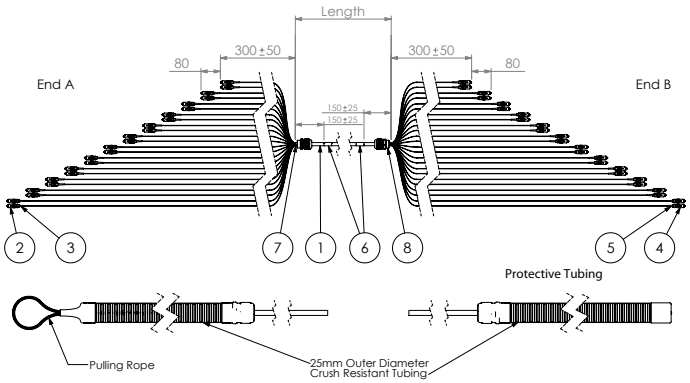
Technical Drawing

Core count ≤ 12 cores



Core count > 12 cores



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

Connector Performance

CONNECTOR MATING	IL Average Standard	IL MAX Standard	IL Average Premium	IL MAX Premium	RETURN LOSS
Multimode	0.15 dB	0.30 dB	0.08 dB	0.15 dB	NA
Singlemode	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) ≤ 0.34 Typ (1550nm) ≤ 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)

Part Number Generator

PRE

Fibre Count
2
4
6
8
12
16
24

Connector End A			
LC	LC	FC	FC
LC/ APC	LCA	FC/ APC	FCA
SC	SC	E2000	E2
SC/ APC	SCA	E2000/ APC	E2A
ST	ST		

Connector End B*			
LC	LC	FC	FC
LC/APC	LCA	FC/APC	FCA
SC	SC	E2000	E2
SC/APC	SCA	E2000/ APC	E2A
ST	ST		

Fibre Type	
OS1/OS2	09
OM1	62
OM2	50
OM3	OM3
OM4	OM4

Cable Construction	
Loose Tube	LT
Loose Tube Steel Tape Armoured	STA
Loose Tube PE	LTPE
Loose Tube Steel Tape Armoured	STAPE

Cable Length (Mtr)
XX