Multifibre FirstLight Cable Assemblies

V.3.7

Description

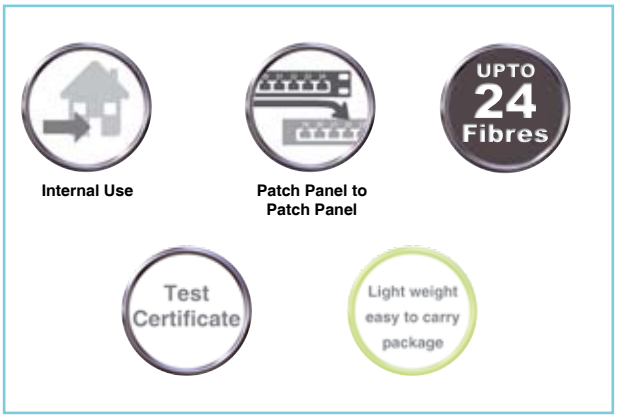
The FirstLight factory made, quality controlled fibre optic assembly is specified for short internal optical links. The 900µm tight buffer presentation lends itself to installation within a patch panel, wall box or Optical Distribution Frame (ODF).

Crush resistant protective tubing assures secure transportation and installation.

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

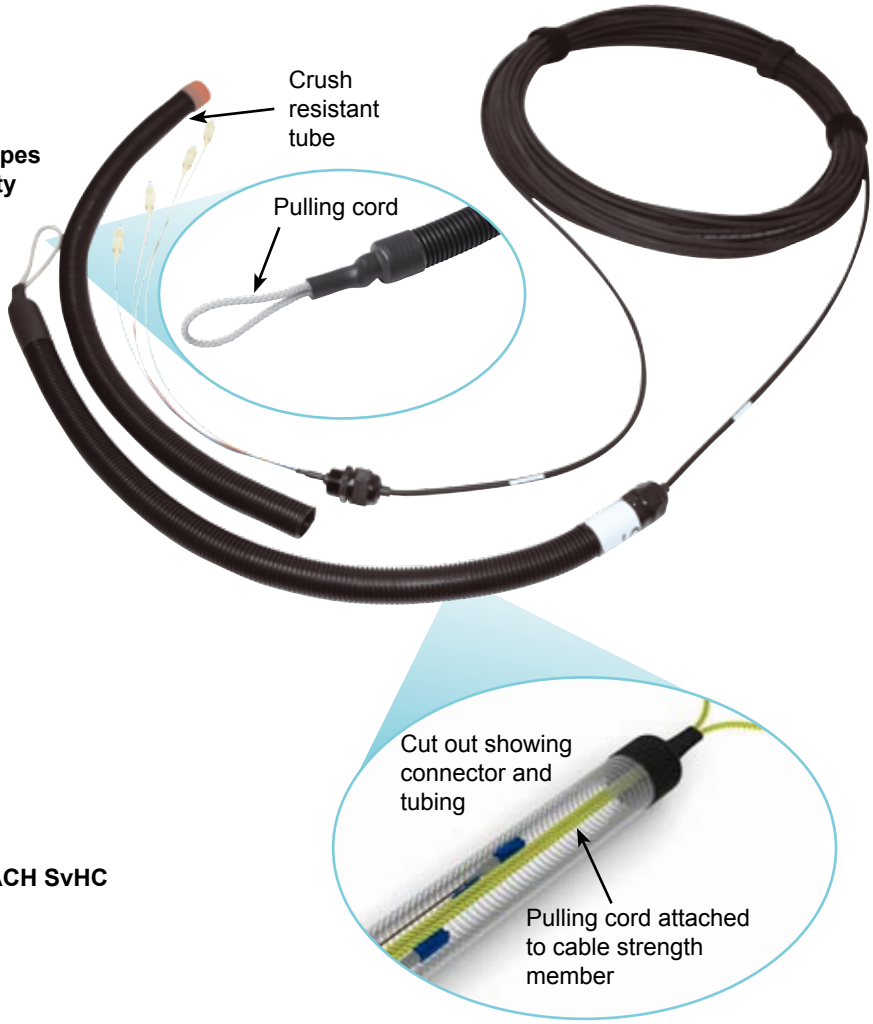
The overall assembly and packing are light and compact, reducing transport cost and storage space. Installation waste is also reduced.

A unique FibreFab link loss certificate accompanies all FirstLight multifiber assemblies.



Features

- **Available in OM1, OM2, OM3, OM4 (ISO/IEC) and G.652D(OS1/OS2), G657A1 fibre types**
- **Available with SC, LC, FC, ST, and E2000 connector types**
- **2 - 24 core tight buffer cable with standard connectivity**
- **Fast installation plug and play system**
- **No splicing or connector termination required**



Benefits

- **Robust crush resistant protection tube**
- **High tensile strength pulling element**
- **Economical, light and compact assembly**
- **Low waste packaging**
- **User friendly link loss test certificate**
- **Installation guide supplied**

Applications

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

Standards Compliance

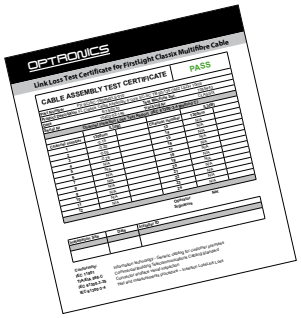
- **TIA/EIA-568-C.3 and ISO/IEC 11801**
- **ISO/IEC 60793 and ISO/IEC 60794**
- **ISO/IEC 61753, IEC 61754 and IEC 61755**
- **ISO/IEC 60332-1, IEC 61034-1/2 and IEC 61754-1/2**
- **Compliant to Directive 2002/95/EC (RoHS) and REACH SvHC**

Technical Specification

Specification	Value
Fibre grade	OS1/OS2, G.657A1, OM1, OM2, OM3, OM4 (ISO/IEC
Cable specification	Tight buffer 4, 8, 12 and 24 cores (ISO/IEC 60794) Max OD 24 cores 8.5 ± 0.3 mm
Connectors	IEC 61753, IEC 61754, IEC 61755
Pulling element	a) No pulling element: length < 20mtr b) A side pulling element: length ≥ 20mtr
Packaging	Length ≤ 100 Coil in heavy duty polymer bag Length > 100 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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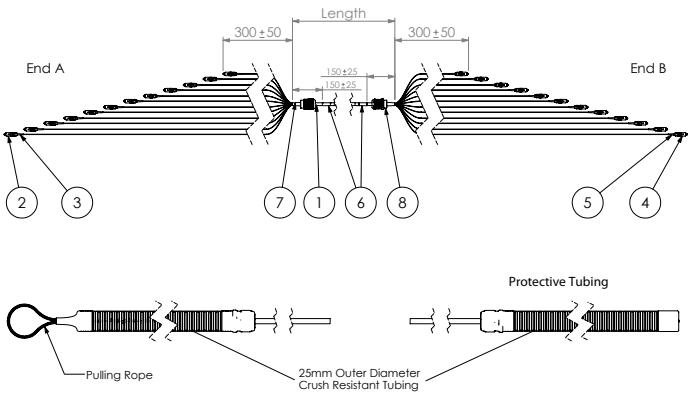
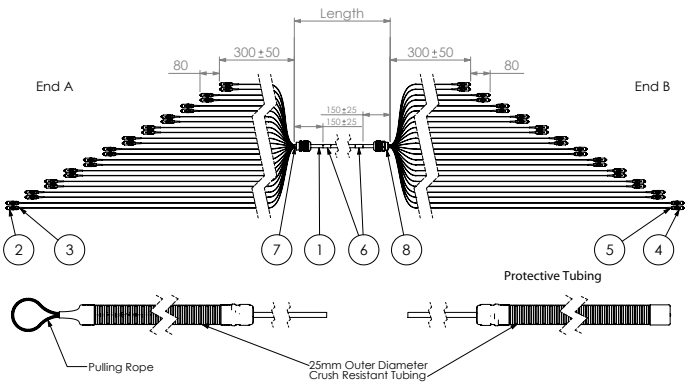
Technical Drawing

Core count ≤ 12 cores



Core count > 12 cores



1 Tight Buffered 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

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]	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)

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	0.15dB	NA
Singlemode	0.18dB	0.30dB	0.12dB	0.15dB	>55/65dB

Part Number Generator

PRE

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)	09 (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)			