

# Fibre Optic Cable

Catalogue

# About The FibreFab Group

## FibreFab

Established in 1992, FibreFab is a leading provider of fibre optic connectivity products used in data communications and Telecommunication networks. The Company designs, develops, manufactures and sells fibre optic cabling, connectivity, management and systems solutions. It offers a broad range of products directly and through distributors, installers and OEM partners.

FibreFab's growth has been founded on quality products, rapid response and excellent customer service. The Company is ISO9001:2000 approved and provides products conformant to international standards. FibreFab is dedicated to value and continuous improvement of all its products and services.

With headquarters in Milton Keynes (UK), FibreFab has manufacturing activities in the UK, India, China and US operations in Baltimore MD. The Company has both volume and quick response manufacturing capabilities and is able to support the global logistics requirements of its customers. FibreFab provides customised and customer branded products for OEM customers.

## OPTRONICS

In 1994 FibreFab acquired Optronics Ltd, a company with over 20 years experience in fibre optic manufacturing. Optronics products are available directly from FibreFab or from our worldwide distribution partners.

The Optronics fibre optic cable range includes simplex, duplex and flat ribbon patchcords, tight buffered, single loose tube and multi-loose tube distribution cables for internal and external applications as well as many variations of armoured, aerial, rodent resistant and water blocked cables.

The FibreFab Optronics range has the solution for almost any application and can offer a cut to length service for specific fibre optic cables. Please call the sales team for more information.



UK Warehouse Facility



Cut to Length



Wide Range Available



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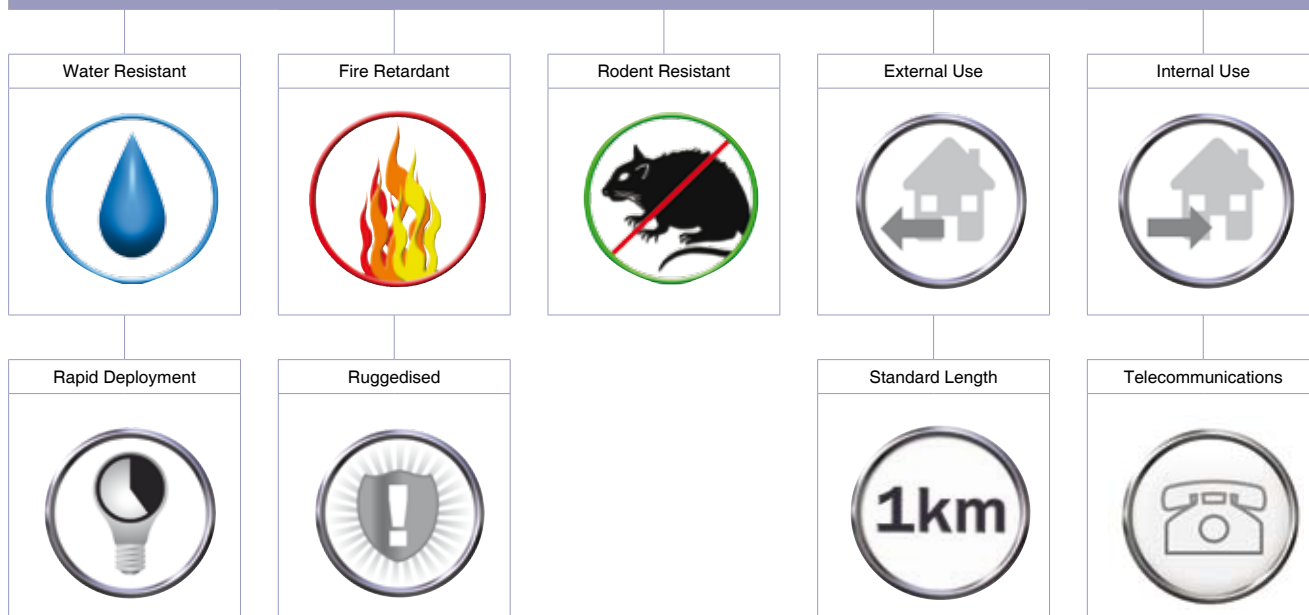
# Labelling Conventions

The following icons are used throughout this catalogue to represent the fibre optic cable specification, features and value added services that FibreFab can offer:

## Fibre Specifications



## Fibre Cable Features



## LSZH (Low Smoke Zero Halogen) Performance Requirements

- ▶ IEC 61034-1 & 2 Smoke Emission
- ▶ IEC 60332-1 Flammability
- ▶ IEC 60754- 1 Toxicity
- ▶ IEC 60754- 2 Acid Gas Emission
- ▶ Limiting Oxygen Index (LOI) not less than 30 in accordance with ISO 4589-2 or equivalent.

# Secondary Coated 900µm Fibre - Ideal for Pigtails

Optronics secondary coated 900µm fibres are ideal for use within splice trays or in other protected environments. These fibres are available in either standard or easy-strip formats and in twelve different colours for easy identification.

## Technical Specifications

DESCRIPTION		1-CORE
Outer Diameter	mm	0.9
Weight	kg/km	0.9
Max. Load (installation)	N	6
Max. Load (installed)	N	3
Min. Bend Radius (installation)		30mm
Min. Bend Radius (installed)		30mm
Temperature Range	°C	-20~+70

## Part Number Generator

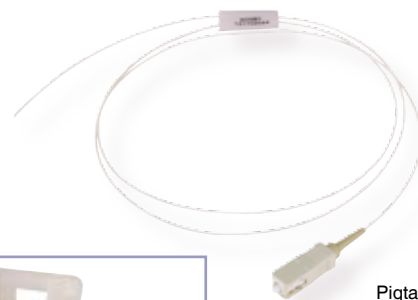
Fibre Type	Colour	Strip Option
OM1 = OM1B OM2 = OM2B OS1/OS2 = OS1/ OS2 B	RD = RED GN = GREEN BL = BLUE OR = ORANGE BR = BROWN GY = GREY YE = YELLOW PK = PINK WH = WHITE BK = BLACK AQ = AQUA PU = PURPLE	-C = TIGHT BUFFERED EASY-C = EASY STRIP

\*OM3 also available on application

Example:

OM1B	PU	EASY-C
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(OM1 Purple 1-Core Easy Strip)



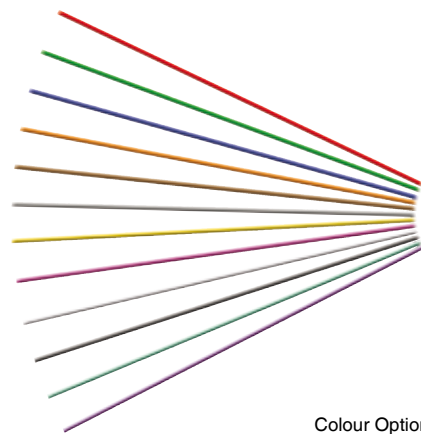
Pigtail



Plastic Storage Case



Plastic Reel



Colour Options

## 900µm Buffered Pigtail Fibre

900µm OM1 62.5/125, OM2 50/125, OM3 50/125 multimode or OS1/OS2 (ITU-T G.652D) singlemode 900µm buffered pigtail range.

- ▶ Choice of fibre types
- ▶ Choice of buffering material and stripping options
- ▶ Robust 900µm secondary coated fibres for ease of termination
- ▶ Standard white buffer colour
- ▶ Also available in 12 standard colours on request

## Applications

- ▶ Pigtails
- ▶ Internal interconnect
- ▶ Ideal for a wide range of telecoms, datacoms and process control applications where ruggedisation is required
- ▶ Data centres
- ▶ Suitable for repeated handling in patch panels and racks
- ▶ Suitable for all standard connector types.



# Primary Buffered 250µm Optical Fibres

## G.652 D OS1/OS2 Singlemode Optical Fibre

**Optronics specification for ITU-T G.652 D 9/125 singlemode optical fibre exceeds the OS2 singlemode requirement(s).** Low Water Peak (LWP) singlemode optical fibre with doped silica core and silica cladding; dual layer UV cured acrylic resin primary coatings. All fibre parameters meet or exceed the following LWP singlemode requirements.

Detailed technical specifications are available on request:

- ITU-T G.652 D
- IEC 60793-2-50 type B1.3
- ISO/IEC 11802 OS1/OS2
- TIA/EIA 492-CAAB
- Telcordia GR-20-CORE



## Applications

- ▶ Operational in the entire 1260nm to 1625nm wavelength range
- ▶ Low chromatic dispersion in the 1310nm operating window
- ▶ Low attenuation at the 1383 nm water peak region
- ▶ Operational in the 1360nm to 1460 nm wavelength extended band
- ▶ All OS2 Optronics cable constructions including tight buffered, loose tube and ribbon
- ▶ Supports 1 Gb/s up to an indicative 5 km in data networks
- ▶ Supports high speed multi channel video, data and voice services in metropolitan and access networks
- ▶ ATM, SONET and WDM, CWDM

## 62.5/125 OM1 Multimode Optical Fibre

**Optronics specifications for standard OM1 62.5/125 graded-index multimode optical fibre with doped silica core and silica cladding.** Dual layer UV cured acrylic resin primary coatings. All fibre parameters meet or exceed the following 62.5/125 requirements.

Detailed technical specifications are available on request:

- ITU-T G.651
- IEC 60793-2-10 type A1b
- ISO/IEC 11802 OM-1
- TIA/EIA-492AAAA
- Telcordia GR-20-CORE



## Applications

- ▶ Gigabit Ethernet in high speed LAN networks, over an indicative 275m link length at 850 nm wavelength
- ▶ Legacy networks including Ethernet, Fast Ethernet and FDDI
- ▶ All OM1 Optronics cable constructions, including tight buffered, loose tube and ribbon
- ▶ Data centres
- ▶ Premises cabling in data networks including backbone, riser and horizontal
- ▶ Supports video, data and voice services

## 50/125 OM2, OM3 & OM4 Multimode Optical Fibre

**Optronics specification for standard OM2, OM3 and OM4, 50/125 graded-index multimode optical fibre with doped silica core and silica cladding.** Dual layer UV cured acrylic resin primary coatings. All fibre parameters meet or exceed the following generic and laser-optimised 50/125 requirements.

Detailed technical specifications are available on request:

- ITU-T G.651
- OM2 to IEC 60793-2-10 type A1a.1. OM3 to IEC 60793-2-10 type A1a.2. OM4 to IEC 60793-2-10 type A1a.3.
- ISO/IEC 11801
- OM2 to TIA/EIA-492AAAB. OM3 to TIA / EIA-492AAAC. OM4 to TIA / EIA-492AAD
- Telcordia GR-20-CORE



## Applications

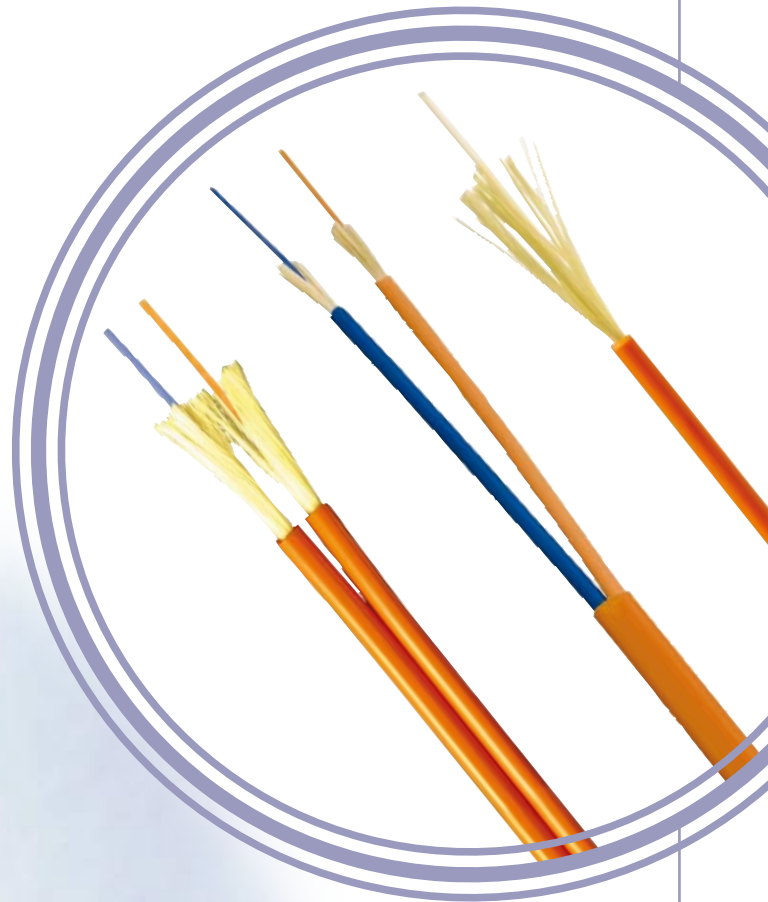
- ▶ OM2 for use in 1 Gb/s high speed LAN networks over a 550m indicative link length at 850nm wavelength using a laser launch
- ▶ OM3 for use in 10 Gb/s high speed LAN networks over a 300m indicative link length at 850nm wavelength using a laser launch
- ▶ OM3 for use in 1 Gb/s high speed LAN networks over a 1000m indicative link length at 850 nm wavelength using a laser launch
- ▶ OM4 for use in 10 Gb/s high speed LAN networks over a 550m indicative link length at 850nm wavelength using a laser launch
- ▶ OM4 for use in 1 Gb/s high speed LAN networks over a 1000m indicative link length at 850 nm wavelength using a laser launch
- ▶ High speed and legacy networks including Gigabit Ethernet, Fast Ethernet and Ethernet
- ▶ All OM2, OM3 & OM4 Optronics cable constructions including tight buffered, loose tube and ribbon
- ▶ Data centres
- ▶ Premises cabling in data networks including backbone, riser and horizontal
- ▶ Supports video, data and voice services

## Cable for Patchcords

The cables are jacketed in a Low Smoke Zero Halogen material to reduce the emission of toxic fumes in the event of fire and to comply with international fire regulations.

Optronics fibre optic patch cables are ideal for patchcords and pigtails which are utilised in equipment rooms, data cabinets and at user outlets.

*“Our Optronics fibre optic patchcables meet the demands posed by the equipment cabinet environment. We offer connectivity ready cables to achieve maximum fibre density with the latest specification optical fibres and fire hazard resistance.”*



# Simplex Fibre Optic Patch Cable

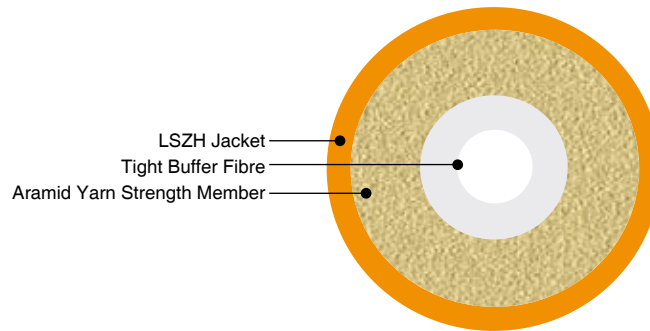
Optronics simplex fibre optic patch cable is ideal for use in office LAN connections, patchcords, pigtails and internal point-to-point links where frequent handling is likely (e.g. data cabinets, equipment rooms, user outlets). Utilising 600µm or 900µm buffered fibre, the cable is suitable for use with industry standard connectors and can be easily made into a patchcord.

## Applications

- ▶ Patchcords
- ▶ Pigtails
- ▶ Internal inter-connections

## Features

- ▶ Choice of fibre types
- ▶ Choice of cable outer diameters
- ▶ High strength aramid yarn strength members for ease of handling
- ▶ Robust 600µm tight buffered fibres for ease of termination
- ▶ Easy stripping
- ▶ LSZH jacket for internal use



## Technical Specifications

DESCRIPTION		1-CORE LSZH	1-CORE LSZH	1-CORE LSZH	1-CORE LSZH	1-CORE LSZH
Outer Diameter	mm	1.6	1.8	2.0	2.4	3.0
Weight	kg/km	2.9	3.2	3.5	5.0	6.8
Max. Load (installation)	N	80	80	100	100	150
Max. Load (installed)	N	40	40	60	60	80
Min. Bend Radius (installation)	Times diameter	20	20	20	20	20
Min. Bend Radius (installed)	Times diameter	10	10	10	10	10
Fire Performance		LSZH	LSZH	LSZH	LSZH	LSZH
Operating Temp.	°C	-20~+60	-20~+60	-20~+60	-20~+60	-20~+60
Storage Temp.	°C	-20~+70	-20~+70	-20~+70	-20~+70	-20~+70
Installation Temp.	°C	-20~+60	-20~+60	-20~+60	-20~+60	-20~+60
Crush Resistance	N/100mm	500	500	500	500	500

## Ordering Information

PRODUCT DESCRIPTION	PART NO.	PRODUCT DESCRIPTION	PART NO.
OM1 62.5/125 µm Multimode		OM3 50/125 µm Multimode	
1-Core 2.0mm	OM1SIMOR2MM6-C	1-Core 2.0mm	OM3SIMAQ2MM6-C
1-Core 3.0mm	OM1SIMOR-C	1-Core 3.0mm	OM3SIMAQ-C
OM2 50/125 µm Multimode		OM4 50/125 µm Multimode	
1-Core 2.0mm	OM2SIMOR2MM6-C	1-Core 2.0mm	OM4SIMAQ2MM6-C
1-Core 3.0mm	OM2SIMOR-C	1-Core 3.0mm	OM4SIMAQ-C
OS1/OS2 /OS2 9/125 µm Singlemode		Other diameters are available upon request.	
1-Core 2.0mm	OS1/OS2 SIMY-E2MM6-C		
1-Core 3.0mm	OS1/OS2 SIMYE-C		

Fire Retardant

Internal Use

Standard Length

**2km**

Pre-terminated cables are available in a wide range of lengths.

Please call the sales team on 44 (0)870 127 3330 for more details. Alternatively download a copy of our pre-terminated cable catalogue from [www.fibrefab.com](http://www.fibrefab.com)

**FOR MORE INFORMATION CALL +44 (0)870 127 3330**



# Zip Duplex Fibre Optic Patch Cable

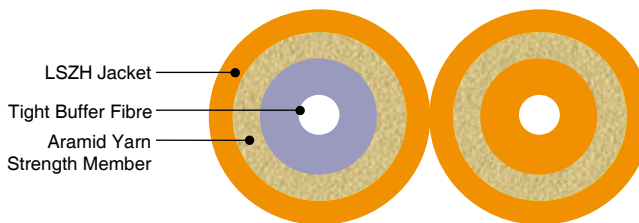
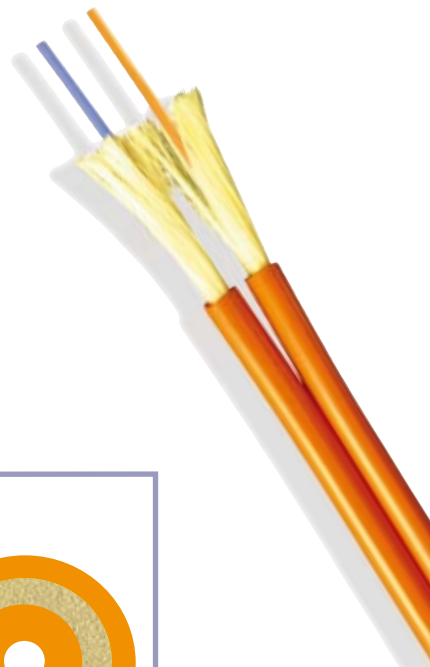
**Optronics zip duplex fibre optic patch cable is constructed with two simplex units joined together with a central web.** Ideal for use in office LAN connections, patchcords, pigtails and internal point-to-point links where frequent handling is likely (e.g. data cabinets, equipment rooms, user outlets). Utilising 600µm or 900µm buffered fibre, the cable is suitable for use with industry standard connectors and can be easily made into a patchcord.

## Applications

- ▶ Patchcords
- ▶ Pigtails
- ▶ Internal inter-connections

## Features

- ▶ Choice of fibre type
- ▶ Choice of outer diameter
- ▶ High strength aramid yarn strength members for ease of handling
- ▶ Easy to strip
- ▶ LSZH jacket



## Technical Specifications

DESCRIPTION		2-CORE LSZH	2-CORE LSZH	2-CORE LSZH	2-CORE LSZH
Outer Diameter	mm	1.6*3.3	1.8*3.7	2.0*4.1	2.8*5.7
Weight	kg/km	5.7	6.7	8.2	13.2
Max. Load (installation)	N	160	160	200	300
Max. Load (installed)	N	80	80	100	160
Min. Bend Radius (installation)	Times diameter	20	20	20	20
Min. Bend Radius (installed)	Times diameter	10	10	10	10
Fire Performance		LSZH	LSZH	LSZH	LSZH
Operating Temp.	°C	-20~+60	-20~+60	-20~+60	-20~+60
Storage Temp.	°C	-20~+70	-20~+70	-20~+70	-20~+70
Installation Temp.	°C	-20~+60	-20~+60	-20~+60	-20~+60
Crush Resistance	N/100mm	1000	1000	1000	1000

Fire Retardant

Internal Use

Standard Length

## Ordering Information

PRODUCT DESCRIPTION	PART NO.	PRODUCT DESCRIPTION	PART NO.
OM1 62.5/125 µm Multimode		OM3 50/125 µm Multimode	
2-Core 2.0mm	OM1ZIPOR2MM6-C	2-Core 2.0mm	OM3ZIPAQ2MM6-C
2-Core 2.8mm	OM1ZIPOR-C	2-Core 2.8mm	OM3ZIPAQ-C
OM2 50/125 µm Multimode		OM4 50/125 µm Multimode	
2-Core 2.0mm	OM2ZIPOR2MM6-C	2-Core 2.0mm	OM4ZIPAQ2MM6-C
2-Core 2.8mm	OM2ZIPOR-C	2-Core 2.8mm	OM4ZIPAQ-C
OS1/OS2 /OS2 9/125 µm Singlemode		Other diameters are available upon request.	
2-Core 2.0mm	OS1/OS2 ZIPYE2MM6-C		
2-Core 2.8mm	OS1/OS2 ZIPYE-C		

# Flat Duplex Fibre Optic Patch Cable

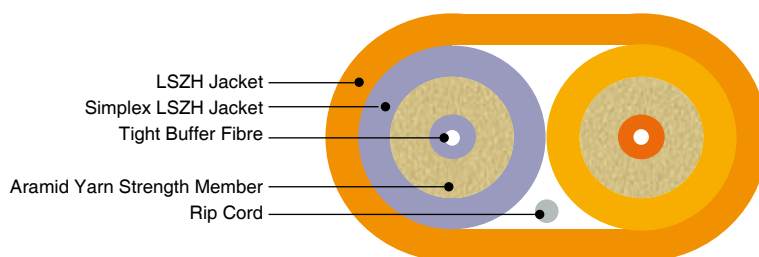
**Optronics flat duplex fibre optic patch cable is constructed with two simplex units held together with an overall LSZH jacket.** Ideal for use in office LAN connections, patchcords, pigtailed and internal point-to-point links where frequent handling is likely (e.g. data cabinets, equipment rooms, user outlets). Utilising 900µm buffered fibre, the cable unit is suitable for use with industry standard connectors and can be easily made into a patchcord.

## Applications

- ▶ Patchcords
- ▶ Pigtailed
- ▶ Internal inter-connections

## Features

- ▶ Choice of fibre type
- ▶ Choice of outer diameter
- ▶ High strength Aramid yarn strength members for ease of handling
- ▶ Easy to strip
- ▶ LSZH jacket
- ▶ LSZH overall jacket



## Technical Specifications

DESCRIPTION		2-CORE LSZH	2-CORE LSZH
Outer Diameter	mm	3.0 x 5.0	3.8 x 6.6
Weight	kg/km	11	24
Max. Load (installation)	N	250	250
Max. Load (installed)	N	125	125
Min. Bend Radius (installation)	Times diameter	20	20
Min. Bend Radius (installed)	Times diameter	10	10
Fire Performance		LSZH	LSZH
Operating Temp.	°C	-20~+60	-20~+60
Storage Temp.	°C	-20~+70	-20~+70
Installation Temp.	°C	-20~+60	-20~+60
Crush Resistance	N/100mm	200	200

## Ordering Information

PRODUCT DESCRIPTION	PART NO.	PRODUCT DESCRIPTION	PART NO.
<b>OM1 62.5/125 µm Multimode</b>		<b>OM3 50/125 µm Multimode</b>	
2-Core 2.0mm	OM1FLATORANGE2-C	2-Core 2.0mm	OM3FLATAQUA2-C
2-Core 2.8mm	OM1FLATORANGE-C	2-Core 2.8mm	OM3FLATAQUA-C
<b>OM2 50/125 µm Multimode</b>		<b>OM4 50/125 µm Multimode</b>	
2-Core 2.0mm	OM2FLATORANGE2-C	2-Core 2.0mm	OM4FLATAQUA2-C
2-Core 2.8mm	OM2FLATORANGE-C	2-Core 2.8mm	OM4FLATAQUA-C
<b>OS1/OS2 /OS2 9/125 µm Singlemode</b>			
2-Core 2.0mm	OS1/OS2 FLATYEL-LOW2-C	Other diameters are available upon request.	
2-Core 2.8mm	OS1/OS2 FLATYEL-LOW-C		

Fire Retardant



Internal Use



Standard Length



Pre-terminated cables are available in a wide range of lengths.



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**FOR MORE INFORMATION CALL +44 (0)870 127 3330**

# Round Duplex Fibre Optic Patch Cable

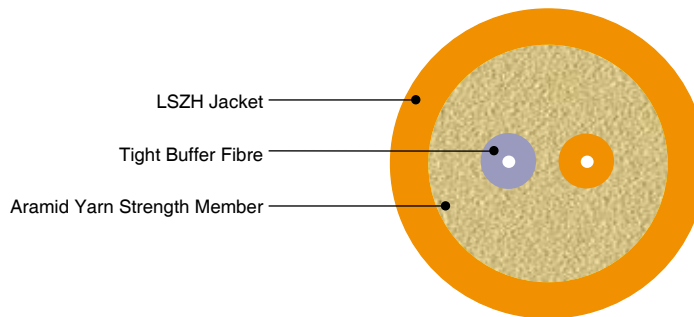
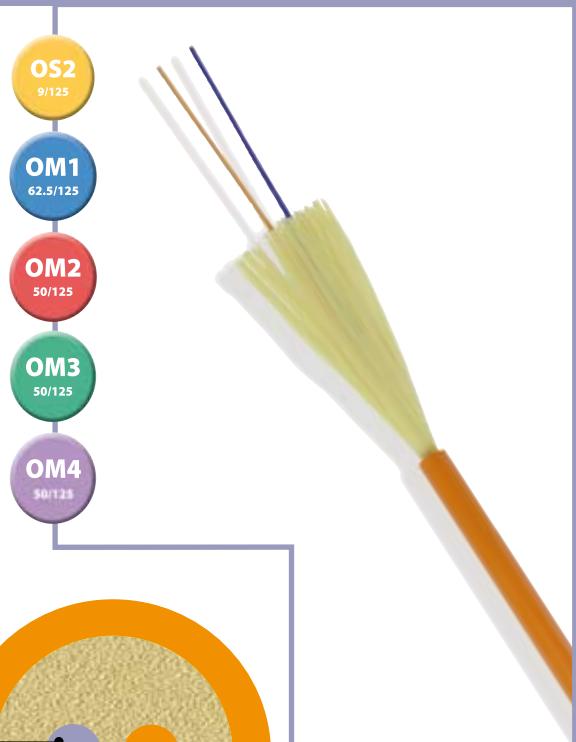
Optronics round duplex fibre optic patch cable is constructed with two tight buffered fibres protected by aramid yarns and an LSZH jacket. Ideal for use in office LAN connections, patchcords, pigtails and internal point-to-point links where frequent handling is likely (e.g. data cabinets, equipment rooms, user outlets). Utilising 600µm or 900µm buffered fibre, the cable unit is suitable for use with industry standard connectors and can be easily made into a patchcord.

## Applications

- ▶ Patchcords
- ▶ Pigtails
- ▶ Internal inter-connections

## Features

- ▶ Choice of fibre type
- ▶ Choice of outer diameter
- ▶ High strength aramid yarn strength members for ease of handling
- ▶ Easy to strip
- ▶ LSZH jacket



## Technical Specifications

DESCRIPTION		2-CORE LSZH	2-CORE LSZH
Outer Diameter	mm	3.0	5.0
Weight	kg/km	8	20.9
Max. Load (installation)	N	190	160
Max. Load (installed)	N	80	80
Min. Bend Radius (installation)	Times diameter	20	20
Min. Bend Radius (installed)	Times diameter	10	10
Fire Performance		LSZH	LSZH
Operating Temp.	°C	-20~+60	-20~+60
Storage Temp.	°C	-20~+60	-20~+70
Installation Temp.	°C	-20~+60	-20~+60
Crush Resistance	N/100mm	1000	1000

Fire Retardant

Internal Use

Standard Length

## Ordering Information

PRODUCT DESCRIPTION	PART NO.	PRODUCT DESCRIPTION	PART NO.
OM1 62.5/125 µm Multimode		OM3 50/125 µm Multimode	
2-Core 5mm	OM1ROUNDOR-C	2-Core 5mm	OM3ROUNDQAQ-C
OM2 50/125 µm Multimode		OM4 50/125 µm Multimode	
2-Core 5mm	OM2ROUNDOR-C	2-Core 5mm	OM4ROUNDQAQ-C
OS1/OS2 /OS2 9/125 µm Singlemode		Other diameters are available upon request.	
2-Core 5mm	OS1/OS2 ROUNDEYE-C		

# Flat Ribbon Fibre Optic Patch Cable (4-12 Fibres)

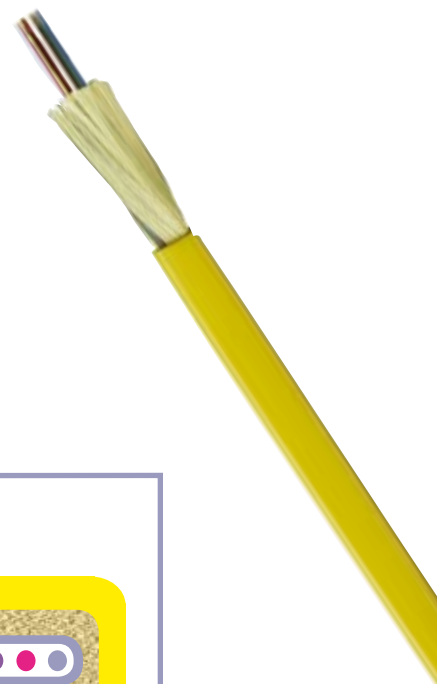
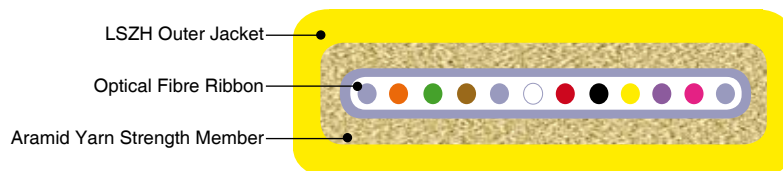
Optronics flat ribbon fibre optic patch cable is constructed with 4 - 12 ribbonised optical fibres protected by soft aramid yarns and an LSZH jacket. Ideal for use in office LAN connections, patchcords and internal point-to-point links where frequent handling is likely (e.g. data cabinets, equipment rooms, user outlets).

## Applications

- ▶ Internal inter-connections

## Features

- ▶ Choice of fibre type
- ▶ Choice of outer diameter
- ▶ High strength aramid yarn strength members for ease of handling
- ▶ Easy to strip
- ▶ LSZH jacket



## Technical Specifications

DESCRIPTION		4-CORE LSZH	6-CORE LSZH	8-CORE LSZH	12-CORE LSZH
Outer Diameter	mm	3.5*2.5	3.8*2.5	4.5*2.5	5.0*2.5
Weight	kg/km	14	15	17	19
Max. Load (installation)	N	200	200	200	200
Max. Load (installed)	N	80	80	80	80
Min. Bend Radius (installation)	Times diameter	35	35	35	35
Min. Bend Radius (installed)	Times diameter	25	25	25	25
Fire Performance		LSZH	LSZH	LSZH	LSZH
Operating Temp.	°C	-20~+60	-20~+60	-20~+60	-20~+60
Storage Temp.	°C	-20~+70	-20~+70	-20~+70	-20~+70
Installation Temp.	°C	-20~+60	-20~+60	-20~+60	-20~+60
Crush Resistance	N/100mm	500	500	500	500

## Ordering Information

PRODUCT DESCRIPTION	PART NO.
OM1	OM1RIBBONOR**-C
OM2	OM2RIBBONOR**-C
OM3	OM3RIBBONAQ**-C
OM4	OM4RIBBONAQ**-C
OS1/OS2	OS1/OS2 RIBBONYE**-C

Where \*\* is the fibre count between 4 & 12

Fire Retardant



Internal Use



Standard Length



Pre-terminated cables are available in a wide range of lengths.



Please call the sales team on 44 (0)870 127 3330 for more details.

Alternatively download a copy of our pre-terminated cable catalogue from [www.fibrefab.com](http://www.fibrefab.com)

# Tight Buffered Cables

Optronics tight buffered and breakout cables are manufactured using 900µm buffered fibres in a variety of constructions. Aramid or e-glass yarns are utilised to provide strength and to protect the fibres. The cables can be supplied with either Low Smoke Zero Halogen or PVC jackets, depending on the application.

Optronics tight buffered and breakout cables have a variety of applications. These include horizontal distribution, backbone and riser applications, patchcords, rack to rack links in equipment rooms and short run external inter-building links.

*“The Optronics tight buffered cable ranges provide a complete indoor cabling solution, offering the connectivity benefits of buffered optical fibres. If there is an indoor fibre cable requirement we have the ideal product with the very latest high performance optical fibres.”*



# Tight Buffered Distribution Cable (4-24 Fibres)

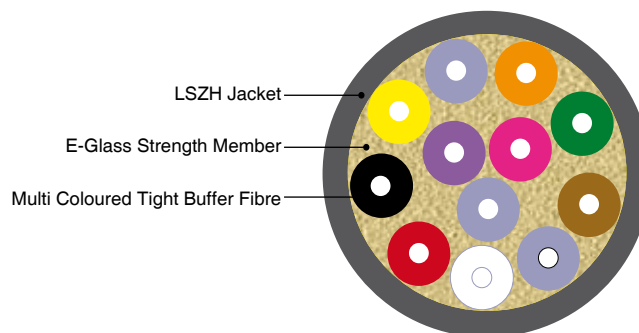
Optronics tight buffered internal distribution cables are constructed of 900µm buffered fibres surrounded by e-glass strength members jacketed in an LSZH outer jacket.

## Applications

- ▶ Internal cable for installation in trunking, under floor or ceiling spaces
- ▶ Fibre backbones in riser and horizontal configurations

## Features

- ▶ Choice of fibre type
- ▶ Colour coded fibres
- ▶ High strength E-Glass rodent resistant yarn strength members for ease of handling
- ▶ LSZH jacket
- ▶ Easy to strip



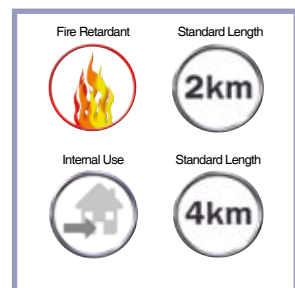
## Technical Specifications

DESCRIPTION		4-CORE LSZH	8-CORE LSZH	12-CORE LSZH	24-CORE LSZH
Outer Diameter	mm	4.8 ±0.3	5.8 ±0.3	6.5 ±0.3	7.5 ±0.3
Weight	kg/km	26	34	40	61
Max. Load (installation)	N	600	750	750	900
Max. Load (installed)	N	300	375	375	450
Min. Bend Radius (installation)	mm	96	116	130	150
Min. Bend Radius (installed)	mm	48	58	65	75
Fire Performance		LSZH	LSZH	LSZH	LSZH
Operating Temp.	°C	-20~+60	-20~+60	-20~+60	-20~+60
Storage Temp.	°C	-20~+60	-20~+60	-20~+60	-20~+60
Installation Temp.	°C	-20~+60	-20~+60	-20~+60	-20~+60
Crush Resistance	N/100mm	1000	1000	1000	1000

## Ordering Information

PRODUCT DESCRIPTION	PART NO.
OM1	OM1TB**UBK-C
OM2	OM2TB**UBK-C
OM3	OM3TB**UBK-C
OM4	OM4TB**UBK-C
OS1/OS2	OS1TB**UBK-C

Where \*\* is the fibre count between 4 & 24



Pre-terminated cables are available in a wide range of lengths.



Please call the sales team on 44 (0)870 127 3330 for more details.

Alternatively download a copy of our pre-terminated cable catalogue from [www.fibrefab.com](http://www.fibrefab.com)

# Tight Buffered Distribution Cable Multi-core (36-96 Fibres)

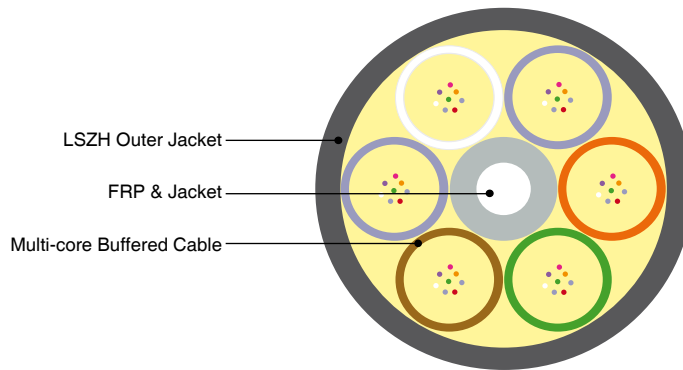
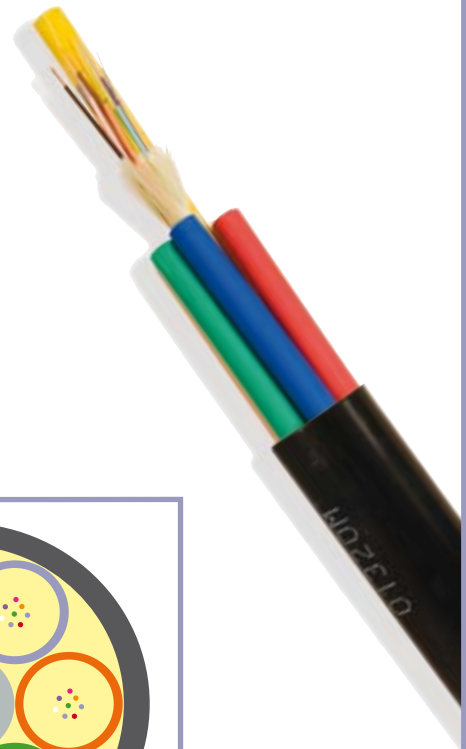
**36 to 96 fibre, stranded sub unit rodent resistant internal distribution cables consisting of 4 to 8, 12 fibre sub units and fillers when necessary.** Each sub unit consists of 12, 900 µm tight buffered optical fibres with e-glass non-metallic strength members and LSZH jacket. The individually coloured 6mm outside diameter (OD) sub units are helically stranded around an FRP central strength member with polyester wrapping tape, ripcord and Low Smoke Zero Halogen (LSZH) final jacket.

## Applications

- ▶ Internal cable for horizontal distribution or riser applications

## Features


- ▶ Choice of fibre type
- ▶ Colour coded fibres for easy identification
- ▶ High strength aramid yarn strength members for ease of handling
- ▶ Easy to use
- ▶ Lightweight and compact
- ▶ LSZH jacket




## Technical Specifications

DESCRIPTION		36-CORE LSZH	48-CORE LSZH	72-CORE LSZH	96-CORE LSZH
Outer Diameter	mm	17.4 ±0.5	17.4 ±0.5	21.6 ±0.5	25.5 ±0.5
Weight	kg/km	237	237	397	571
Max. Load (installation)	N	2800	2800	4600	5000
Max. Load (installed)	N	1500	1500	2000	2200
Min. Bend Radius (installation)	mm	350	350	440	500
Min. Bend Radius (installed)	mm	175	175	220	250
Fire Performance		LSZH	LSZH	LSZH	LSZH
Operating Temp.	°C	-20~+60	-20~+60	-20~+60	-20~+60
Storage Temp.	°C	-20~+60	-20~+60	-20~+60	-20~+60
Installation Temp.	°C	-20~+60	-20~+60	-20~+60	-20~+60
Crush Resistance	N/100mm	1500	1500	1500	1500


Fire Retardant




Standard Length



Internal Use



Standard Length



## Ordering Information

PRODUCT DESCRIPTION	PART NO.
OM1	OM1TBM**UBK-C
OM2	OM2TBM**UBK-C
OM3	OM3TBM**UBK-C
OM4	OM4TBM**UBK-C
OS1/OS2	OS1/OS2 TBM**UBK-C

Where \*\* is the fibre count between 36 & 96

# Breakout Fibre Optic Cable (4-24 Fibres)

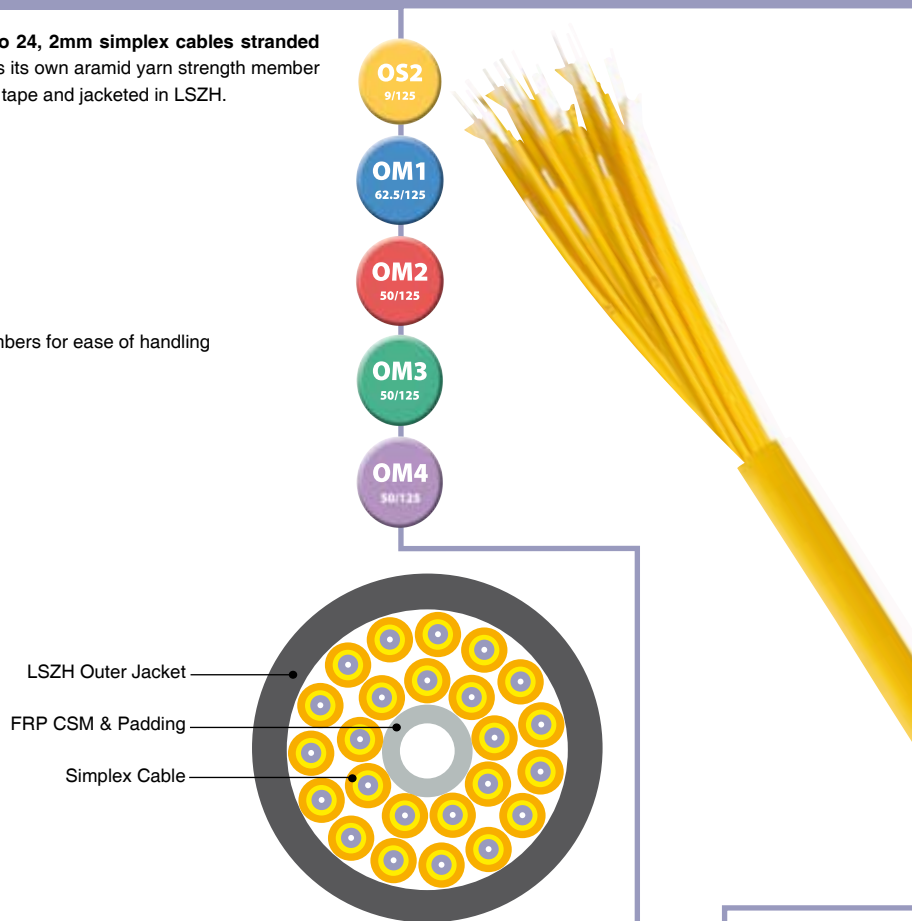
Optronics breakout cables are constructed of up to 24, 2mm simplex cables stranded around a central strength member. Each simplex has its own aramid yarn strength member and jacket. These sub units are wrapped in a polyester tape and jacketed in LSZH.

## Applications

- ▶ Internal breakout cable for horizontal distribution

## Features

- ▶ Choice of fibre type
- ▶ Individual high strength aramid yarn strength members for ease of handling
- ▶ Easy to use
- ▶ Lightweight and compact
- ▶ LSZH jacket



## Technical Specifications

DESCRIPTION		4 CORE LSZH	6 CORE LSZH	8 CORE LSZH	12 CORE LSZH	24 CORE LSZH
Outer Diameter	mm	7.0	8.2	9.4	11.8	14.1
Weight	kg/km	46	63	86	139	159
Max. Load (installation)	N	500	1000	1100	1400	2300
Max. Load (installed)	N	270	600	700	800	1100
Min. Bend Radius (installation)	mm	140	160	190	240	280
Min. Bend Radius (installed)	mm	70	80	95	120	140
Fire Performance					LSZH	LSZH
Operating Temp.	°C	-20~+60	-20~+60	-20~+60	-20~+60	-20~+60
Storage Temp.	°C	-20~+60	-20~+60	-20~+60	-20~+60	-20~+60
Installation Temp.	°C	-20~+60	-20~+60	-20~+60	-20~+60	-20~+60
Crush Resistance	N/100mm	1000	1000	1000	1000	1000

Fire Retardant



Internal Use



Standard Length



## Ordering Information

PRODUCT DESCRIPTION	PART NO.
OM1	OM1BO**UOR-C
OM2	OM2BO**UOR-C
OM3	OM3BO**UAQ-C
OM4	OM4BO**UAQ-C
OS1/OS2	OS1/OS2 BO**UYE-C

Where \*\* is the fibre count between 4 & 24

Other diameters are available upon request.

FOR MORE INFORMATION CALL **+44 (0)870 127 3330**



## Loose Tube Cables

Optronics loose tube cables are designed around 250µm fibres in either a single gel filled, or dry PBT loose tube, or several tubes stranded around a central strength member. The gel, where present, is to protect the fibres from water ingress. The central strength member can be either steel or FRP (Fibre Reinforced Plastic). The cables are available up to 144 fibres.

These cables can be supplied with armouring to protect against water ingress, rodents, insects and physical damage. They can be supplied with either PE (polyethylene) jackets for exterior applications or Low Smoke Zero Halogen jackets for internal/external use. Dry Loose Tube cables utilise super absorbent polymer waterblocking technology.

Optronics loose tube cables can be used internally for horizontal distribution or externally for short or long distance applications. They can be optimised for laying in ducts, direct underground burial, aerial applications or even underwater deployment.

*“A very versatile range of LAN cables for indoor/ outdoor and outdoor use. Pull or, blow it into ducts, immerse it in water, subject it to rodent or severe mechanical attack. We have the right cable for the job.”*



# Single Loose Tube Fibre Optic Cable (4-24 Fibres)

2 to 24 fibre OM1, OM2, OM3, OM4 multimode or OS1/OS2 (ITU-T G.652D singlemode) 250µm single loose tube external duct cables with e-glass strength members and polyethylene (PE) or Low Smoke Zero Halogen (LSZH) jacket.

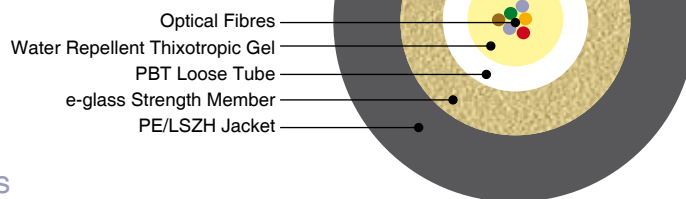
The single loose tube cables consist of 2 to 24, 250µm optical fibres in a single gel filled loose tube with e-glass non metallic strength members and black PE or LSZH jacket with ripcord.

## Applications

- ▶ Suitable for internal / external duct applications
- ▶ Suitable for environments where rodent resistance is required
- ▶ Ideal for intra building links in campus environments

## Features

- ▶ Choice of fibre types
- ▶ Colour coded fibres
- ▶ E-glass strength members for rodent resistance
- ▶ Flame retardant LSZH jacket option for enhanced fire performance
- ▶ Compact 250µm loose tube construction



## Technical Specifications

DESCRIPTION		2-12 CORE PE	14-24 CORE LSZH
Outer Diameter	mm	6.0 ±0.3	6.7 ±0.3
Weight	kg/km	40	47
Max. Load (installation)	N	1000	1000
Max. Load (installed)	N	500	500
Min. Bend Radius (installation)	Times diameter	20	20
Min. Bend Radius (installed)	Times diameter	10	10
Fire Performance		LSZH	LSZH
Operating Temp.	°C	-20~+60	-20~+60
Storage Temp.	°C	-20~+60	-20~+60
Installation Temp.	°C	-20~+60	-20~+60
Crush Resistance	N/100mm	1000	1000

## Ordering Information

PRODUCT DESCRIPTION	PART NO.
OM1 PE	OM1LT**PBK-C
OM1 LSZH	OM1LT**UBK-C
OM2 PE	OM2LT**PBK-C
OM2 LSZH	OM2LT**UBK-C
OM3 PE	OM3LT**PBK-C
OM3 LSZH	OM3LT**UBK-C
OM4 PE	OM4LT**PBK-C
OM4 LSZH	OM4LT**UBK-C
OS1/OS2 PE	OS1/OS2 LT**PBK-C
OS1/OS2 LSZH	OS1/OS2 LT**UBK-C

Where \*\* is the fibre count between 4 & 24

Fire Retardant



Water Resistant



Rodent Resistant



Internal Use



External Use



Standard Length



# Multi Loose Tube Fibre Optic Cable (24-144 Fibres)

Up to 144 fibre, 5 to 12 element dry core OM1, OM2, OM3, OM4 multimode or OS1/OS2 (ITU-T G.652D) singlemode 250µm multi loose tube rodent resistant external duct cables with e-glass strength members, and high density polyethylene (HDPE) or Low Smoke Zero Halogen (LSZH) jacket.

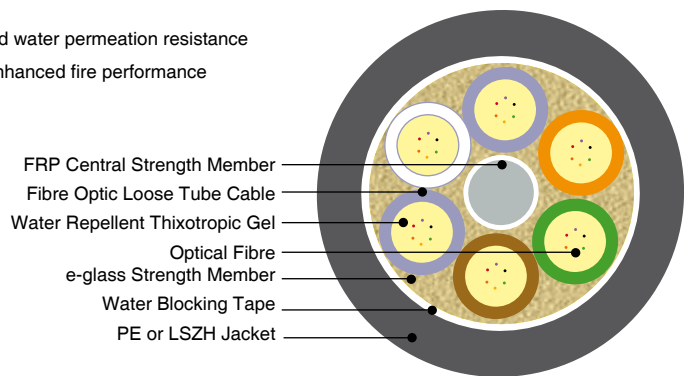
The multi loose tube cable construction consists of up to 144, 250µm optical fibres in 12 fibre gel filled loose tubes with fillers where appropriate, SZ stranded around a fibre reinforced plastic (FRP) central strength member with waterswellable threads and waterswellable tape. Helicly applied waterblocking e-glass non metallic strength members with ripcord and black high density polyethylene (HDPE) or Low Smoke Zero Halogen (LSZH) jacket.

## Applications

- ▶ Suitable for external duct applications
- ▶ Suitable for applications where environmental resistance is required

## Features

- ▶ Choice of fibre types
- ▶ Colour coded fibres
- ▶ Compact 250µm loose tube construction
- ▶ PE jacket for environmental protection and water permeation resistance
- ▶ Flame retardant LSZH jacket option for enhanced fire performance



## Technical Specifications

DESCRIPTION		24 TO 60-CORE	72-CORE	96-CORE	120-CORE	144-CORE
Outer Diameter	mm	10.5 ±0.4	11.1 ±0.4	12.6 ±0.4	14.1 ±0.4	15.6 ±0.4
Weight	kg/km	90	97	121	148	178
Max. Load (installation)	N	1500	1500	1500	1500	1500
Max. Load (installed)	N	600	600	600	600	600
Min. Bend Radius (installation)	mm	210	220	250	280	310
Min. Bend Radius (installed)	mm	105	110	125	140	155
Operating Temp.	°C	-40~+70	-40~+70	-40~+70	-40~+70	-40~+70
Storage Temp.	°C	-20~+60	-20~+60	-20~+60	-20~+60	-20~+60
Installation Temp.	°C	-20~+60	-20~+60	-20~+60	-20~+60	-20~+60
Crush Resistance	N/100mm	2000	2000	2000	2000	2000

## Ordering Information

PRODUCT DESCRIPTION	PART NO.
OM1 PE	OM1MLT**PBK-C
OM1 LSZH	OM1MLT**UBK-C
OM2 PE	OM2MLT**PBK-C
OM2 LSZH	OM2MLT**UBK-C
OM3 PE	OM3MLT**PBK-C
OM3 LSZH	OM3MLT**UBK-C
OM4 PE	OM4MLT**PBK-C
OM4 LSZH	OM4MLT**UBK-C
OS1/OS2 PE	OS1/OS2 MLT**PBK-C
OS1/OS2 LSZH	OS1/OS2 MLT**UBK-C

Where \*\* is the fibre count between 4 & 24

- Fire Retardant
- Water Resistant
- Rodent Resistant
- Internal Use
- External Use
- Standard Length
- 2km

# Single Loose Tube STA Fibre Optic Cable (2-24 Fibres)

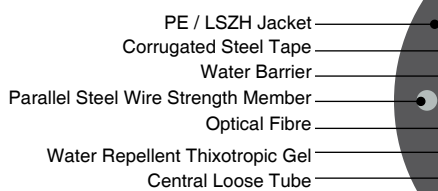
Optronics single loose tube corrugated steel tape armoured cables are constructed of 250µm fibres held in a gel filled central loose tube surrounded by water-blocking tape and corrugated, polyethylene laminated steel tape. The cable features two parallel steel wire strength members embedded in the PE / LSZH outer jacket.

## Applications

- ▶ Suitable for external applications in ducts, aerial applications or direct burial

## Features

- ▶ Choice of fibre type
- ▶ Colour coded fibres
- ▶ High crush resistance
- ▶ PE / LSZH jacket
- ▶ High tensile strength



## Technical Specifications

DESCRIPTION		2-12 CORE	14-24 CORE
Outer Diameter	mm	10.0 ±0.3	10.7 ±0.3
Weight	kg/km	106	122
Max. Load (installation)	N	1500	1500
Max. Load (installed)	N	600	600
Min. Bend Radius (installation)	Times diameter	20	20
Min. Bend Radius (installed)	Times diameter	10	10
Fire Performance		LSZH	LSZH
Operating Temp.	°C	-20~+60	-20~+60
Storage Temp.	°C	-20~+60	-20~+60
Installation Temp.	°C	-20~+60	-20~+60
Crush Resistance	N/100mm	2000	2000

## Ordering Information

PRODUCT DESCRIPTION	PART NO.
OM1 PE	OM1LTSTA**PBK-C
OM1 LSZH	OM1LTSTA**UBK-C
OM2 PE	OM2LTSTA**PBK-C
OM2 LSZH	OM2LTSTA**UBK-C
OM3 PE	OM3LTSTA**PBK-C
OM3 LSZH	OM3LTSTA**UBK-C
OM4 PE	OM4LTSTA**PBK-C
OM4 LSZH	OM4LTSTA**UBK-C
OS1/OS2 PE	OS1/OS2 LTSTA**PBK-C
OS1/OS2 LSZH	OS1/OS2 LTSTA**UBK-C

Where \*\* is the fibre count between 2 & 24

Fire Retardant



Water Resistant



Rodent Resistant



Internal Use



External Use



Standard Length



# Multi Loose Tube CST Fibre Cable (24-144 Fibres)

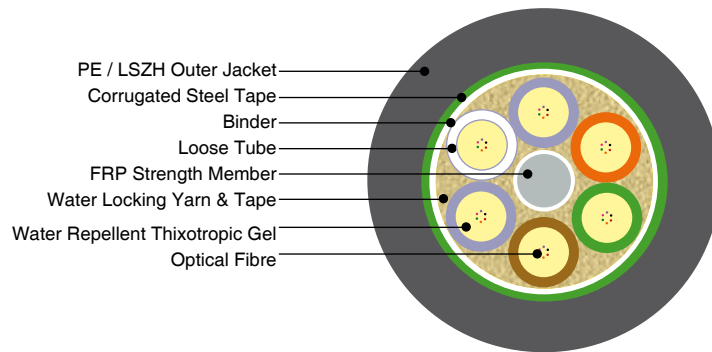
The multi loose tube cable construction consists of up to up to 12 elements and a maximum of 144, 250 µm optical fibres in 12 fibre gel filled loose tubes with fillers where appropriate, SZ stranded around a jacketed Fibre Reinforced Plastic (FRP) central strength member with waterswellable threads and waterswellable tape. Helically applied waterblocking e-glass non metallic strength members with ripcord. Corrugated Steel Tape (CST) armouring and black High Density Polyethylene (HDPE) or Low Smoke Zero Halogen (LSZH) jacket.

## Applications

- Suitable for external & aerial applications

## Features

- Choice of fibre type
- Colour coded fibres
- High water resistant
- High crush resistant
- PE / LSZH jacket



## Technical Specifications

DESCRIPTION		24 TO 60-CORE	72-CORE	96-CORE	120-CORE	144-CORE
Outer Diameter	mm	12.0 ±0.4	12.6 ±0.4	14.1 ±0.4	15.6±0.4	17.1 ±0.4
Weight	kg/km	166	173	207	243	284
Max. Load (installation)	N	1500	1500	1500	1500	1500
Max. Load (installed)	N	600	600	600	600	600
Min. Bend Radius (installation)	mm	240	252	280	320	340
Min. Bend Radius (installed)	mm	120	126	140	160	170
Operating Temp.	°C	-40~+70	-40~+70	-40~+70	-40~+70	-40~+70
Storage Temp.	°C	-20~+60	-20~+60	-20~+60	-20~+60	-20~+60
Installation Temp.	°C	-20~+60	-20~+60	-20~+60	-20~+60	-20~+60
Crush Resistance	N/100mm	3000	3000	3000	3000	3000

## Ordering Information

PRODUCT DESCRIPTION	PART NO.
OM1 PE	OM1MLTSTA***PBK-C
OM1 LSZH	OM1MLTSTA***UBK-C
OM2 PE	OM2MLTSTA***PBK-C
OM2 LSZH	OM2MLTSTA***UBK-C
OM3 PE	OM3MLTSTA***PBK-C
OM3 LSZH	OM3MLTSTA***UBK-C
OM4 PE	OM4MLTSTA***PBK-C
OM4 LSZH	OM4MLTSTA***UBK-C
OS1/OS2 PE	OS1/OS2 MLTSTA***PBK-C
OS1/OS2 LSZH	OS1/OS2 MLTSTA***UBK-C

Where \*\* is the fibre count between 24 & 144

- Fire Retardant
- Water Resistant
- Rodent Resistant
- Internal Use
- External Use
- 48 to 144-Core Standard Length
- 2km
- 4 to 36-Core Standard Length
- 4km

# Dry Single Loose Tube (2-24 Fibres)

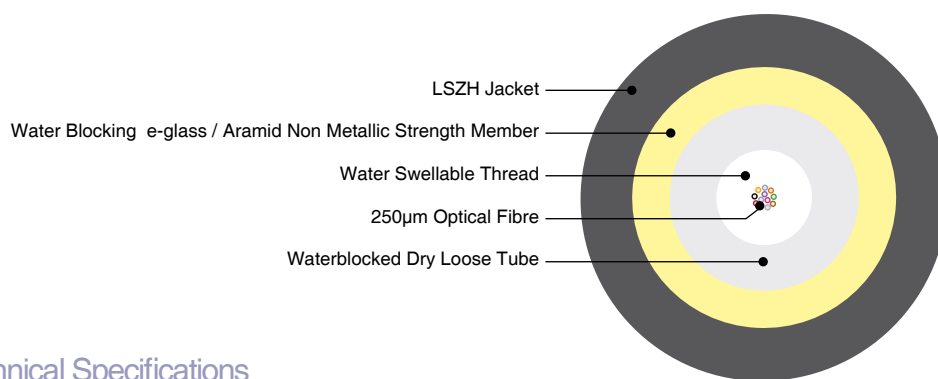
The indoor/outdoor single loose tube cables consist of 2 to 24, 250 µm individually coloured optical fibres in a single waterblocked dry loose tube with helically applied waterblocking rodent resistant e-glass or aramid non metallic strength members and Low Smoke Zero Halogen (LSZH) jacket.

## Applications

- ▶ Ideal for internal/external duct applications
- ▶ Suitable for one or both end pre termination

## Features

- ▶ Colour coded fibres
- ▶ Compact 250 µm dry loose tube construction
- ▶ E-glass yarn for rodent resistance
- ▶ LSZH jacket for optimised fire performance



## Technical Specifications

DESCRIPTION		2 to 24 CORE Aramid	2 to 24 CORE E-glass
Outer Diameter	mm	6.4 ±0.3	6.4 ±0.3
Weight	kg/km	48	50
Max. Load (installation)	N	1000	1000
Max. Load (installed)	N	500	500
Min. Bend Radius (installation)	mm	130	130
Min. Bend Radius (installed)	mm	65	65
Fire Performance		LSZH	LSZH
Operating Temp.	°C	-20~+60	-20~+70
Storage Temp.	°C	-20~+60	-20~+70
Installation Temp.	°C	-20~+60	-20~+70
Crush Resistance	N/100mm	2000	2000

## Ordering Information

PRODUCT DESCRIPTION	PART NO.
OM1 250m Single dry loose tube RR ULSZH	OM1DT**OOR
OM1 250m Single dry loose tube aramid ULSZH	OM1DTA**OOR
OM2 250m Single dry loose tube RR ULSZH	OM2DT**OOR
OM2 250m Single dry loose tube aramid ULSZH	OM2DTA**OOR
OM3 250m Single dry loose tube RR ULSZH	OM3DT**OAA
OM3 250m Single dry loose tube aramid ULSZH	OM3DTA**OAA
OM4 250m Single dry loose tube RR ULSZH	OM4DT**OAA
OM4 250m Single dry loose tube aramid ULSZH OM4DTA**OYE	OM4DTA**OAA
OS1/OS2 ITUT G.652D 250 m Single dry loose tube RR ULSZH	OS1/OS2 DT**OYE
OS1/OS2 ITUT G.652D 250 m Single dry loose tube aramid ULSZH	OS1/OS2 DTA**OYE
G.657A 250m Single dry loose tube RR ULSZH	57ADT**OYE
G.657A 250m Single dry loose tube aramid ULSZH	57ADTA**OYE

Where \*\* is the fibre count between 2 & 24  
Optional black jacket code is UBK

FOR MORE INFORMATION CALL **+44 (0)870 127 3330**

NEW



Fire Retardant



Water Resistant



Rodent Resistant



Internal Use



External Use



Standard Length



Rapid Deployment

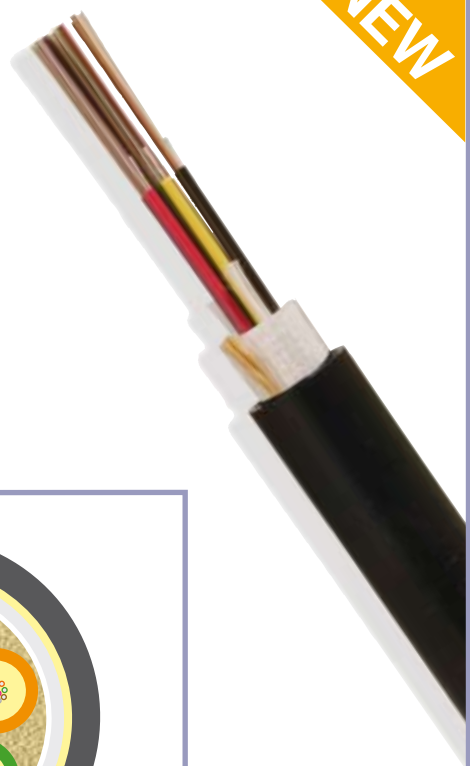


# Dry Multi Loose Tube (24-144 Fibres)

The up to 12 element internal/external multi loose tube cable construction consists of up to 144, 250 µm optical fibres in 12 fibre waterblocked dry loose tubes with fillers where appropriate. The tubes are SZ stranded around an LSZH jacketed fibre reinforced plastic (FRP) central strength member with waterswellable threads and waterswellable tape. Helically applied waterblocking E-glass or aramid non-metallic strength members with ripcord and LSZH jacket.

**NEW**

- OS2  
9/125
- OM1  
62.5/125
- OM2  
50/125
- OM3  
50/125
- OM4  
50/125

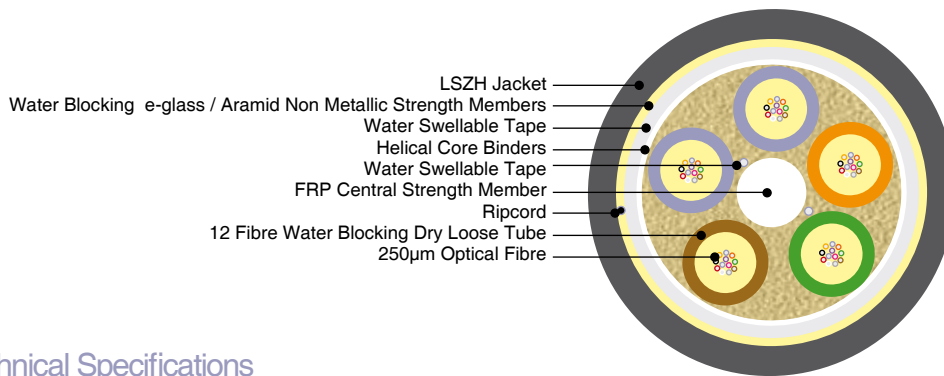


## Applications

- ▶ Ideal for internal/external duct applications
- ▶ Suitable for one or both end pre-termination

## Features

- ▶ Colour coded fibres
- ▶ Compact 250µm dry loose tube construction
- ▶ E-glass yarn for rodent resistance
- ▶ LSZH jacket option for optimised fire performance



## Technical Specifications

DESCRIPTION		24 to 60 CORE	72 CORE	96 CORE	144 CORE
Outer Diameter	mm	9.6 ±0.4	10.3 ±0.4	11.5 ±0.4	14.2 ±0.4
Weight	kg/km	96	104	127	190
Max. Load (installation)	N	1500	1500	1500	1500
Max. Load (installed)	N	600	600	600	600
Min. Bend Radius (installation)	mm	190	206	230	280
Min. Bend Radius (installed)	mm	95	103	115	140
Fire Performance		LSZH	LSZH	LSZH	LSZH
Operating Temp.	°C	-40~+70	-40~+70	-40~+70	-40~+70
Storage Temp.	°C	-20~+60	-20~+60	-20~+60	-20~+60
Installation Temp.	°C	-20~+60	-20~+60	-20~+60	-20~+60
Crush Resistance	N/100mm	2000	2000	2000	2000

## Ordering Information

PRODUCT DESCRIPTION	PART NO.
OM1 E-Glass	OM1MDLTE***UOR
OM1 Aramid	OM1MDLTA***UOR
OM2 E-Glass	OM2MDLTE***UOR
OM2 Aramid	OM2MDLTA***UOR
OM3 E-Glass	OM3MDLTE***UAQ
OM3 Aramid	OM3MDLTA***UAQ
OM4 E-Glass	OM4MDLTE***UAQ
OM4 Aramid	OM4MDLTA***UAQ
OS1/OS2 E-Glass	OS1/OS2 MDLTE***UYE
OS1/OS2 Aramid	OS1/OS2 MDLTA***UYE

Where \*\*\* is the fibre count between 24 & 144

- Fire Retardant
- Water Resistant
- Rodent Resistant
- Internal Use
- External Use
- Standard Length
- 4km
- Rapid Deployment

# Dry Core Blowing Cable (12-144 Fibres)

6, 8 & 12 element cable designs, consisting of up to 144, 250µm ITU-T G.652D individually coloured optical fibres in 12 fibre polymeric gel filled loose tubes, SZ stranded around an FRP central strength member with waterswellable thread, waterswellable core binders and polyethylene or nylon (polyamide) final jacket with ripcord.

OS2  
9/125

NEW

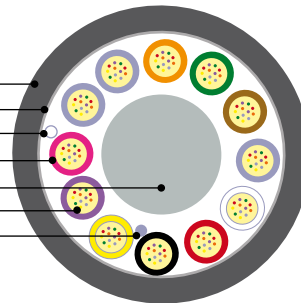
## Applications

- ▶ For use in external compact ducts by air blowing

## Features

- ▶ Compact construction offering minimised cable diameter
- ▶ Designed specifically for external air blown duct applications
- ▶ All dielectric construction with nylon jacket option for reduced installation friction
- ▶ FRP central strength member providing high tensile strength and kink resistance
- ▶ SZ reverse oscillated stranding for easy installation
- ▶ Black polyethylene or PA outer jacket for resistance to the environment
- ▶ Waterswellable dry core construction for ease of installation

Polyethylene Jacket  
Waterblocking Yarn Binders  
Ripcord  
12 Fibre Gel Filled Loose Tube  
FRP Central Strength Member  
250µm Optical Fibre  
Waterswellable Thread



## Technical Specifications

DESCRIPTION		6 Tube Elements	8 Tube Elements	12 Tube Elements
Max. fibre count	N	12 to 72	96	144
Outer Diameter	mm	5.6	6.4	8.2
Weight	kg/km	27	40	65
Tensile Rating (long & short term)	N	500/250	1200/600	1500/750
Crush Loads (long & short term)	N/100mm	800/400	800/400	800/400

## Ordering Information

### PART NO.

OS1/OS2 RDBD\*\*\*PBK-C

OS1/OS2 RDBD\*\*\*NOR-C

Where \*\*\* is the fibre count between 12 & 144

Water Resistant



Rodent Resistant



External Use



Standard Length



Rapid Deployment





# Multi Loose Tube Double Jacket Fibre Cable (24-144 Fibres)

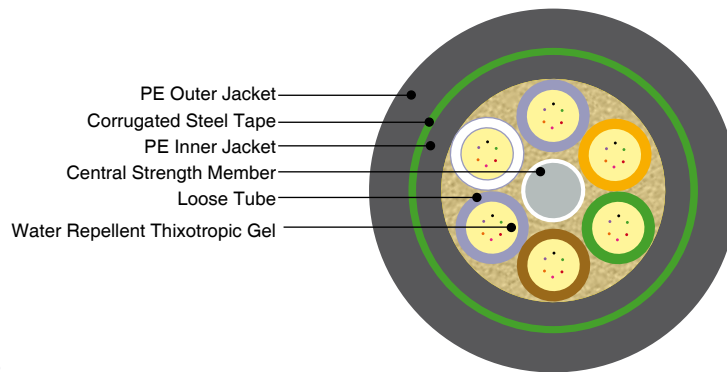
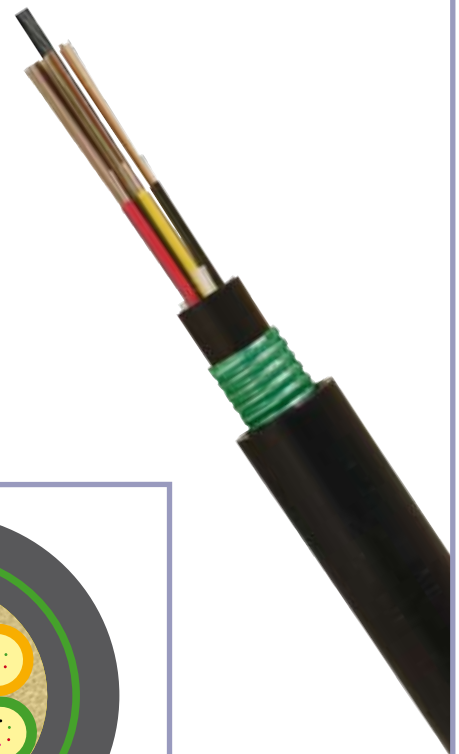
The multi loose tube cable construction consists of up to 12 elements and a maximum of 144, 250µm optical fibres in 12 fibre gel filled loose tubes with fillers where appropriate, SZ stranded around a fibre reinforced plastic (FRP) central strength member with water swellable threads and water swellable tape. Helicallly applied waterblocking e-glass non-metallic strength members with ripcord and PE inner jacket, corrugated steel tape (CST) armouring and black high density polyethylene (HDPE) final jacket with ripcord.

## Applications

- ▶ Suitable for external applications in ducts or for direct burial

## Features

- ▶ Choice of fibre type
- ▶ Colour coded fibres
- ▶ High water resistance
- ▶ Two PE jackets



## Technical Specifications

DESCRIPTION		24 to 60-CORE	72-CORE	96-CORE	120-CORE	144-CORE
Outer Diameter	mm	14.0 ±0.5	14.6 ±0.5	16.1 ±0.5	17.6 ±0.5	19.1 ±0.5
Weight	kg/km	210	219	257	298	343
Max. Load (installation)	N	1500	1500	1500	1500	1500
Max. Load (installed)	N	600	600	600	600	600
Min. Bend Radius (installation)	mm	280	290	320	350	380
Min. Bend Radius (installed)	mm	140	145	160	175	190
Operating Temp.	°C	-40~+70	-40~+70	-40~+70	-40~+70	-40~+70
Storage Temp.	°C	-20~+60	-20~+60	-20~+60	-20~+60	-20~+60
Installation Temp.	°C	-20~+60	-20~+60	-20~+60	-20~+60	-20~+60
Crush Resistance		4000	4000	4000	4000	4000

## Ordering Information

PRODUCT DESCRIPTION	PART NO.
OM1	OM1LTDST***PBK-C
OM2	OM2LTDST***PBK-C
OM3	OM3LTDST***PBK-C
OM4	OM4LTDST***PBK-C
OS1/OS2	OS1/OS2 LTDST***PBK-C

Where \*\* is the fibre count between 24 & 144

Water Resistant



Rodent Resistant



Internal Use



External Use



48 to 144-Core Standard Length



4 to 36-Core Standard Length



# Military Ruggedised Fibre Optic Cable

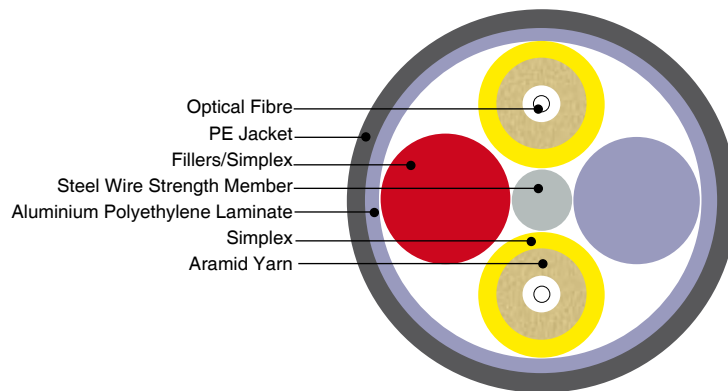
Optronics military ruggedised cables are constructed of 1-4 simplex cables, SZ stranded around steel wire strength member with aluminium polyethylene laminated (APL) tape as an additional water barrier and a PE outer jacket.

## Applications

- ▶ Suitable for industrial and military applications in tough environments

## Features

- ▶ Choice of fibre type
- ▶ High tension resistance
- ▶ High water resistance
- ▶ Easy to use
- ▶ PE outer jacket



## Technical Specifications

DESCRIPTION		2-CORE PE	2-CORE PE	4-CORE PE	4-CORE PE
Outer Diameter	mm	9.8	11.8	9.8	11.8
Weight	kg/km	83	110	83	110
Max. Load (installation)	N	1000	1000	1000	1000
Max. Load (installed)	N	600	600	600	600
Min. Bend Radius (installation)	Times diameter	20	20	20	20
Min. Bend Radius (installed)	Times diameter	10	10	10	10
Operating Temp.	°C	-40~+70	-40~+70	-40~+70	-40~+60
Storage Temp.	°C	-40~+60	-40~+60	-40~+60	-40~+60
Installation Temp.	°C	-40~+70	-40~+70	-40~+70	-40~+70

Ordering information available upon request.

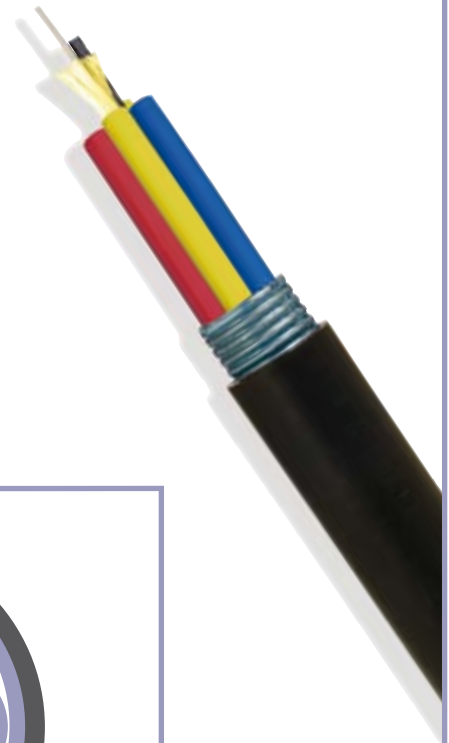
OS2  
9/125

OM1  
62.5/125

OM2  
50/125

OM3  
50/125

OM4  
50/125



Water Resistant



Rodent Resistant



Internal Use



External Use



Standard Length



# Aerial Cable, Direct Burial And Duct Fibre Optic Cable

Optronics offers a range of aerial fibre optic cables including figure of 8 and ADSS (All Dielectric Self Supporting) cables. These products can be a very cost effective way to establish an infrastructure network as they avoid the need for expensive ducting to dig trenches.

Optronics figure of 8 aerial cables can be used as a very cost effective aerial solution for spans usually up to 70 metres.

Optronics ADSS cables can be attached to power lines, hung between poles or between buildings in campus environments. These cables have no metal parts and their strength is provided by the use of aramid yarns and FRP (fibre reinforced plastic) central strength members. Optronics can offer ADSS cables with a span of up to 1200 metres.

The parameters covering aerial cables and their accessories are quite complex, involving issues such as length of span, temperature range, wind speed tolerance and other factors. Every project is likely to have differing demands. Further details can be provided on application. For this reason, the following pages are intended as a guide.

*“An extensive range of cables and accessories that provide a comprehensive telecomms cabling solution. The aerial and terrestrial cables are the products of Fibrefab’s extensive design experience, aerial analysis capabilities and optical fibre expertise.”*



# ADSS MLT Fibre Optic Cable (2-144 Fibres)

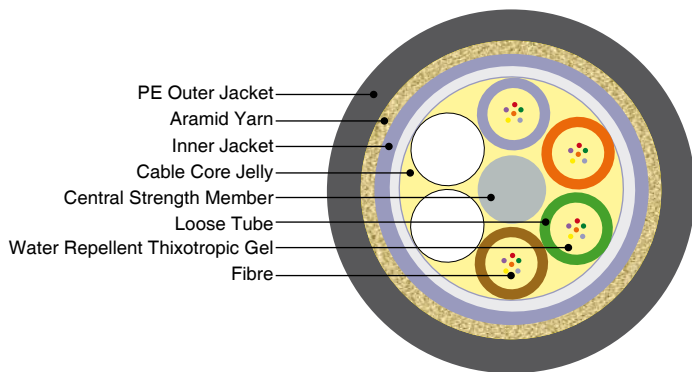
**Optronics All Dielectric Self-Supporting Multi Loose Tube (MLT) cables are constructed of fibres inside gel filled central loose tubes, wrapped around an FRP central strength member.** This is encased in a PE inner jacket, aramid yarns and a PE outer jacket.

## Applications

- ▶ Suitable for installation on poles and on the power distribution network

## Features

- ▶ Lightweight, all-dielectric construction is ideal for use near electrical power lines and in areas of frequent lightning strikes
- ▶ Round construction is ideal for minimum wind drag and ice build-up
- ▶ High tensile strength
- ▶ Wide operating temperature range: -40°C - +70°C



Water Resistant	Rodent Resistant	External Use	Standard Length	Standard Length

## Technical Specifications

DESCRIPTION		F3	F6	F8	F10	F12	F16	F18	F21	F24	F24	F31	
Span	m	100	200	300	400	500	600	700	800	900	1000	1200	
Outer Diameter	mm	11.6	12.0	12.3	12.5	12.8	13.8	14.2	14.5	14.8	15.1	15.5	
Weight	PE Jacket	kg/km	124.2	131.1	136.3	141.4	146.5	165.9	172.6	179.2	185.8	192.3	202.1
Cross Sectional Area	mm <sup>2</sup>	105.68	112.70	117.90	123.07	128.19	150.21	157.40	164.55	171.65	178.70	189.20	
Area Of Strength Member	mm <sup>2</sup>	5.67	10.20	13.62	17.02	20.43	26.10	30.64	35.18	39.72	44.26	51.07	
RTS	kN	8.50	15.30	20.40	25.50	30.60	39.10	45.90	52.70	59.50	66.30	76.50	
MOTS	kN	3.40	6.12	8.16	10.20	12.24	15.64	18.36	21.08	23.80	26.52	30.60	
EDS	kN	2.13	3.83	5.10	6.38	7.65	9.78	11.48	13.18	14.88	16.58	19.13	
Ultimate Exceptional Stress	kN	5.10	9.18	12.24	15.30	18.36	23.46	27.54	31.62	35.70	39.78	45.90	
Modulus	KN/ mm	8.44	12.52	15.27	17.79	20.11	21.71	24.02	26.13	28.07	29.86	32.31	
Thermal Expansion Coefficient	10 <sup>9</sup> /°C	9.32	5.28	3.78	2.80	2.12	1.42	0.99	0.67	0.41	0.20	-0.05	
Crush Strength	Operation	N/10cm	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	
	Installation	N/10cm	2200	2200	2200	2200	2200	2200	2200	2200	2200	2200	
Safety Factor		2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	
Min. Bend Radius	Operation	mm	174	180	185	188	192	207	213	218	222	233	
	Installation	mm	290	300	308	313	320	345	355	363	370	388	
Temperature	Installation	°C	-10~+60	-10~+60	-10~+60	-10~+60	-10~+60	-10~+60	-10~+60	-10~+60	-10~+60	-10~+60	
	Transport	°C	-40~+70	-40~+70	-40~+70	-40~+70	-40~+70	-40~+70	-40~+70	-40~+70	-40~+70	-40~+70	
	Operation	°C	-40~+70	-40~+70	-40~+70	-40~+70	-40~+70	-40~+70	-40~+70	-40~+70	-40~+70	-40~+70	
Sag (5mm inc load average 20°C)	PE Jacket	%	0.72	0.84	1.06	1.28	1.47	1.57	1.63	1.71	1.78	2.18	

Ordering information available upon request.

**FOR MORE INFORMATION CALL +44 (0)870 127 3330**

# Aerial Cable Figure 8 Fibre Optic Cable (2-60 Fibers)

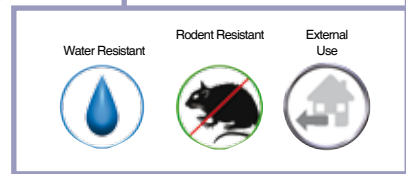
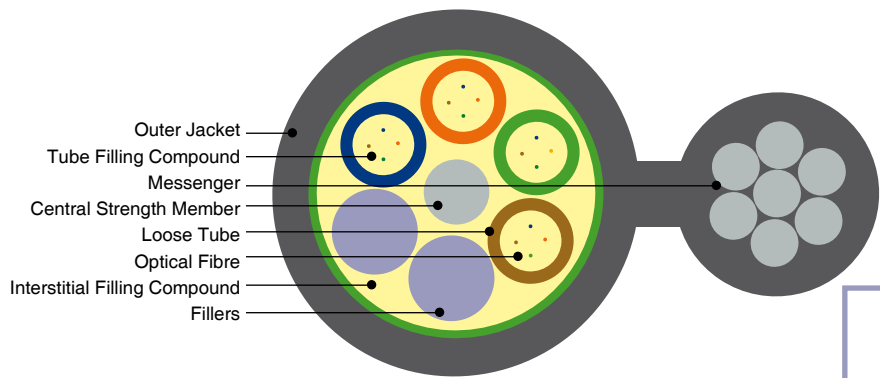
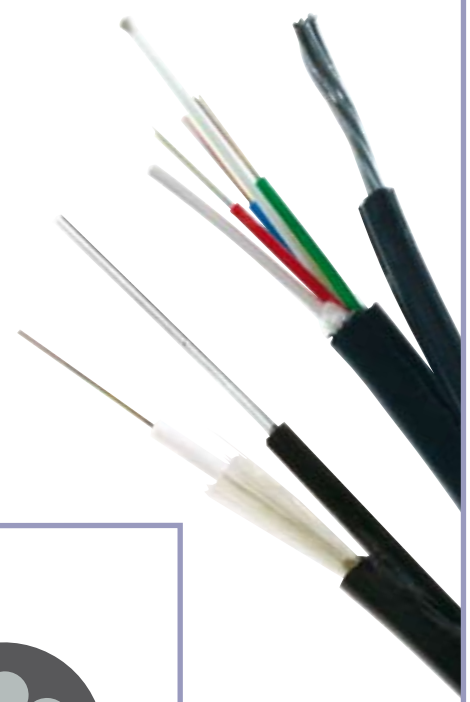
**Optronics figure of 8 aerial cable, for spans up to 70m, consists of 250µm optical fibres in gel filled loose tubes with interstitial gel. Water barrier aluminium tape or steel tape armouring options are available.** Tensile strength is provided by a steel messenger wire. The cable jacket is black high density polyethylene (HDPE).

## Applications

- ▶ The figure of 8 cables are suitable for installation in aerial environments for long haul communication

## Features

- ▶ Up to 144 fibres with single or multimode options available
- ▶ The loose tube stranding technology make the fibres have good secondary excess length and allow the fibres free movement in the tube, which keeps the fibre stress free while the cable is subjected to longitudinal stress
- ▶ Aluminium moisture barrier tape and corrugated steel tape options
- ▶ Stranded wires as self supporting member providing excellent strain performance and convenient installation



## Technical Specifications

DESCRIPTION		2-30	32-36	38-60	2-30	32-36	38-60	2-30	32-36	38-60	2-30	32-36	38-60
Stranded Wire		1x7-3.0	1x7-3.0	1x7-3.0	1.2x7-3.6	1.2x7-3.6	1.2x7-3.6	1.4x7-4.2	1.4x7-4.2	1.4x7-4.2	2.0x7-6.0	2.0x7-6.0	2.0x7-6.0
Cable Diameter	mm	10.1	10.8	11.6	10.1	10.8	11.6	10.1	10.8	11.6	10.1	10.8	11.6
Messenger Cable Diameter	mm	5.2	5.2	5.2	5.8	5.8	5.8	6.4	6.4	6.4	8.2	8.2	8.2
Cable Height	mm	18.3	19.0	19.9	18.9	19.6	20.5	19.5	20.2	21.1	21.3	22	22.9
Cable Weight	kg/km	127	147	152	130	150	155	132	152	158	140	160	165
Min. Bend Radius	Dynamic							10 times cable diameter					
	Static							20 times cable diameter					
Max. Running Tension	N	4950	4950	4950	7100	7100	7100	9700	9700	9700	19700	19700	19700
Safe Running Tension	N	2500	2500	2500	3500	3500	3500	4800	4800	4800	9800	9800	9800
Min. Breaking Tension	N	7990	7990	7990	10710	10710	10710	14580	14580	14580	27720	27720	27720
Max Crush Loading (N/100mm)	Short Term	2000	2000	2000	2000	2000	2000	2000	2000	2000	2000	2000	2000
	Long Term	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000

Ordering information available upon request.

# Non-Metallic Direct Burial Cable (12 -144 Fibres)

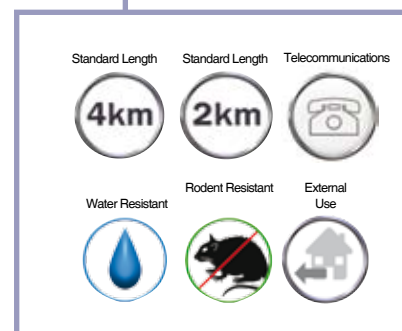
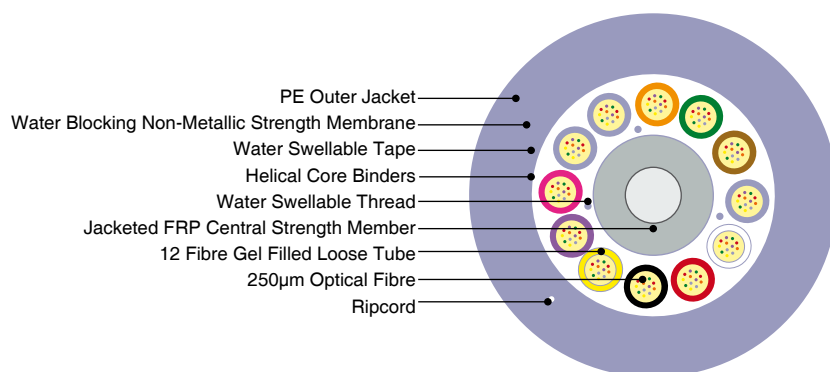
The Optronics 12 elements multi loose tube cable construction consists of up to 144, 250µm optical fibres in 12 fibre gel filled loose tubes with fillers where appropriate, SZ stranded around a fibre reinforced plastic (FRP) central strength member with waterswellable threads and waterswellable tape. Helically applied non metallic strength members with ripcord, corrugated steel tape (CST) armouring and black high density polyethylene (HDPE) jacket.

## Applications

- ▶ Suitable for external duct applications
- ▶ Suitable for concrete channels
- ▶ Can be pulled into duct system

## Features

- ▶ Multi-layered stranded construction (up to 144 fibres)
- ▶ Non-metallic construction
- ▶ Particularly light, thin and robust cable
- ▶ PE - jacket
- ▶ Fibre relevant standards - ITU-T G. 652, G. 655, G. 656 or combination
- ▶ Cable relevant standards - IEC 60793 and IEC 60794
- ▶ Wrapping is made of water blocking tape
- ▶ Dielectric central strength member



## Technical Specifications

DESCRIPTION		A-DQ(ZM) (SR)2Y 12	A-DQ(ZM) (SR)2Y 24	A-DQ(ZM) (SR)2Y 36	A-DQ(ZM) (SR)2Y 48	A-DQ(ZM) (SR)2Y 60	A-DQ(ZM) (SR)2Y 72	A-DQ(ZM) (SR)2Y 96	A-DQ(ZM) (SR)2Y 120	A-DQ(ZM) (SR)2Y 144
Maximum Fibre Count	Cores	12	24	36	48	60	72	96	120	144
Cable Diameter	mm	11.2	11.2	11.2	11.2	11.2	11.2	12.7	14.3	16.0
Cable Weight	kg/km	91	91	91	91	91	91	125	155	190
Max. Tensile Load during installation	N	2700	2700	2700	2700	2700	2700	2700	2700	2700
Fibres per loose tube		12	12	12	12	12	12	12	12	12
Number of loose buffer tube		1	2	3	4	5	6	8	10	12
Number of standing elements		6	6	6	6	6	6	8	10	12
Min. Bend Radius		20x cable outer diameter (during laying and installation) 15x cable outer diameter (installed)								
Installation Temperature Range	°C	-5~+50C	-5~+50C	-5~+50C	-5~+50C	-5~+50C	-5~+50C	-5~+50C	-5~+50C	-5~+50C
Temp. Range Transportation And Operation	°C	-40~+70C	-40~+70C	-40~+70C	-40~+70C	-40~+70C	-40~+70C	-40~+70C	-40~+70C	-40~+70C

Ordering information available upon request.

**FOR MORE INFORMATION CALL +44 (0)870 127 3330**

# Armoured Direct Burial Cable (12 -144 Fibres)

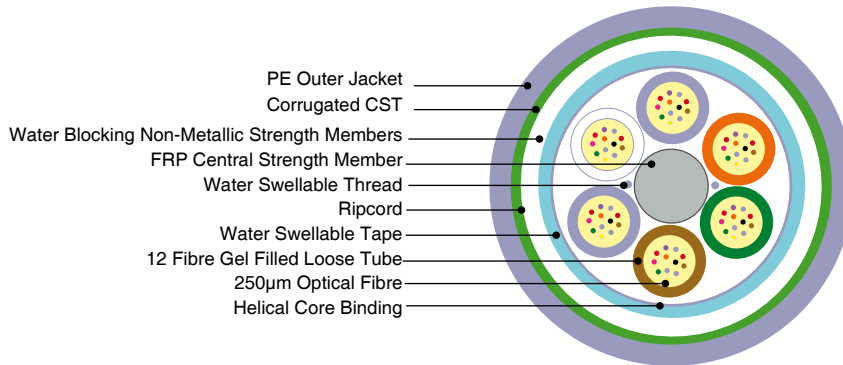
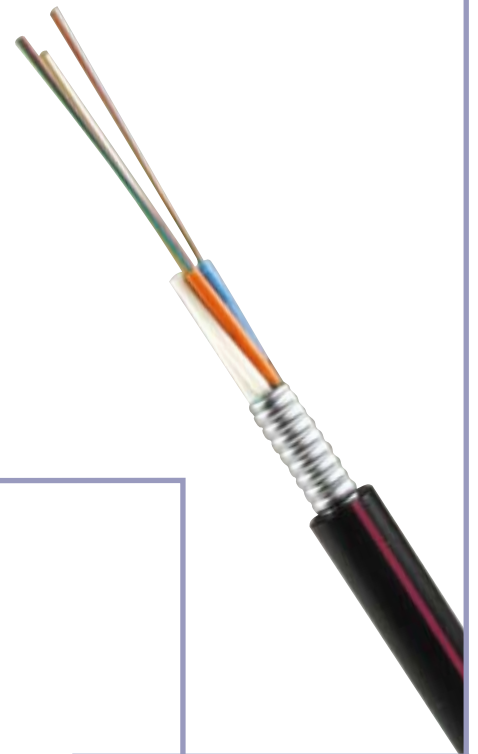
The Optronics multi element multi loose tube cable construction consists of up to 144, 250µm optical fibres in 12 fibre gel filled loose tubes with fillers where appropriate, SZ stranded around a fibre reinforced plastic (FRP) central strength member with water swellable threads and water swellable tape. Helically applied non-metallic strength members with ripcord. Corrugated steel tape (CST) armouring and black high density polyethylene (HDPE) jacket.

## Applications

- ▶ Direct burial
- ▶ Used in application with high mechanical loads

## Features

- ▶ Step layer stranded construction (up to 144 fibres)
- ▶ Corrugated steel tape as protection against rodents and mechanical damage
- ▶ Thin and robust cable
- ▶ Dry core construction
- ▶ PE- Jacket
- ▶ Wrapped in water blocking tape
- ▶ Filled loose tube
- ▶ Fibre relevant standards ITU-T G.652, G. 655, G. 656 or a combination
- ▶ Cable relevant standards IEC 60793 and IEC 60794



Standard Length

Standard Length

Telecommunications

Water Resistant

Rodent Resistant

External Use

## Technical Specifications

DESCRIPTION		A-DQ(ZM) (SR)2Y 12	A-DQ(ZM) (SR)2Y 24	A-DQ(ZM) (SR)2Y 36	A-DQ(ZM) (SR)2Y 48	A-DQ(ZM) (SR)2Y 60	A-DQ(ZM) (SR)2Y 72	A-DQ(ZM) (SR)2Y 96	A-DQ(ZM) (SR)2Y 120	A-DQ(ZM) (SR)2Y 144
Maximum Fibre Count	Cores	12	24	36	48	60	72	96	120	144
Cable Diameter	mm	12.3	12.3	12.3	12.3	12.3	12.3	13.8	15.4	17.1
Cable Weight	kg/km	91	91	91	91	91	91	125	155	190
Max Tensile Load during installation	N	2700	2700	2700	2700	2700	2700	2700	2700	2700
Fibres per loose tube		12	12	12	12	12	12	12	12	12
Number of loose buffer tube		1	2	3	4	5	6	8	10	12
Number of standing elements		6	6	6	6	6	6	8	10	12
Min. Bend Radius	20 x cable outer diameter (during laying and installation) 17.5 x cable outer diameter (installed)									
Installation Temperature Range	°C	-5~+50C	-5~+50C	-5~+50C	-5~+50C	-5~+50C	-5~+50C	-5~+50C	-5~+50C	-5~+50C
Operation Temperature Range	°C	-30~+70C	-30~+70C	-30~+70C	-30~+70C	-30~+70C	-30~+70C	-30~+70C	-30~+70C	-30~+70C
Transportation Temperature Range	°C	-40~+70C	-40~+70C	-40~+70C	-40~+70C	-40~+70C	-40~+70C	-40~+70C	-40~+70C	-40~+70C

Ordering information available upon request.

# Double Jacket Direct Burial Cable (12 -144 Fibres)

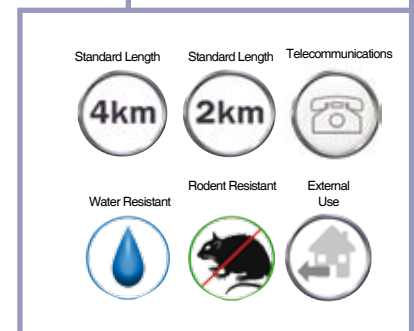
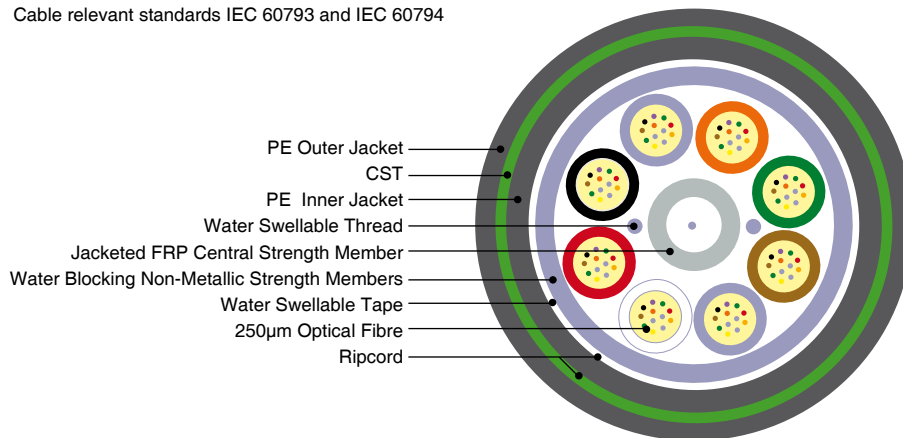
The Optronics multi element multi loose tube cable construction consists of up to 144, 250µm optical fibres in 12 fibre gel filled loose tubes with fillers where appropriate, SZ stranded around a fibre reinforced plastic (FRP) central strength member with waterswellable threads and waterswellable tape. Helically applied non metallic strength members with ripcord and PE inner Jacket, Corrugated steel tape (CST) armouring and black high density polyethylene (HDPE) final jacket with ripcord

## Applications

- ▶ Direct burial
- ▶ Used in application with particularly high mechanical loads

## Features

- ▶ Single layer stranded construction (up to 144 fibres)
- ▶ Corrugated steel tape as protection against rodents and mechanical damage
- ▶ Particularly robust cable, filled loose tube
- ▶ Inner and outer jacket are made of PE- Jacket
- ▶ Wrapped in water blocking tape
- ▶ Core- stranded loose tube, SZ technique
- ▶ Tensile strength elements - dielectric central strength member
- ▶ Fibre relevant standards ITU-T G.652, G. 655, G. 656 or a combination
- ▶ Cable relevant standards IEC 60793 and IEC 60794



## Technical Specifications

DESCRIPTION		A-DQ(ZM) (SR)2Y 12	A-DQ(ZM) (SR)2Y 24	A-DQ(ZM) (SR)2Y 36	A-DQ(ZM) (SR)2Y 48	A-DQ(ZM) (SR)2Y 60	A-DQ(ZM) (SR)2Y 72	A-DQ(ZM) (SR)2Y 96	A-DQ(ZM) (SR)2Y 120	A-DQ(ZM) (SR)2Y 144	
Maximum Fibre Count	Cores	12	24	36	48	60	72	96	120	144	
Cable Diameter	mm	14.7	14.7	14.7	14.7	14.7	14.7	16.2	17.8	19.5	
Cable Weight	kg/km	195	195	195	195	195	195	235	280	325	
Max.Tensile Load during installation	N	2700	2700	2700	2700	2700	2700	2700	2700	2700	
Fibres per loose tube		12	12	12	12	12	12	12	12	12	
Number of loose buffer tube		1	2	3	4	5	6	8	10	12	
Number of stranding elements		6	6	6	6	6	6	8	10	12	
Min. Bend Radius		20 x cable outer diameter (during laying and installation)					17.5 x cable outer diameter (installed)				
Installation Temperature Range	°C	-5~+50C	-5~+50C	-5~+50C	-5~+50C	-5~+50C	-5~+50C	-5~+50C	-5~+50C	-5~+50C	
Operation Temperature Range	°C	-30~+70C	-30~+70C	-30~+70C	-30~+70C	-30~+70C	-30~+70C	-30~+70C	-30~+70C	-30~+70C	
Transportation Temperature Range	°C	-40~+70C	-40~+70C	-40~+70C	-40~+70C	-40~+70C	-40~+70C	-40~+70C	-40~+70C	-40~+70C	

Ordering information available upon request.

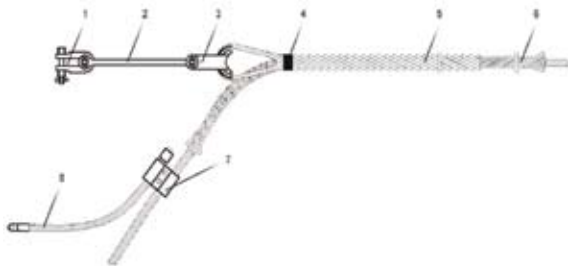
FOR MORE INFORMATION CALL +44 (0)870 127 3330



# Aerial Cable Accessories

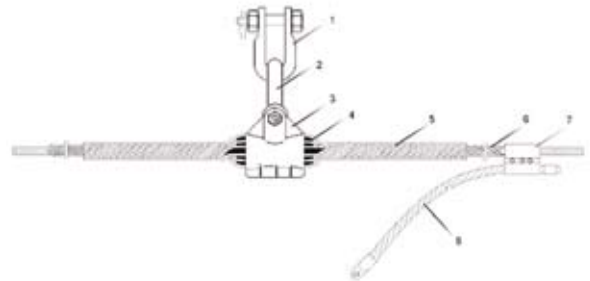
Optronics offers all the accessories required to suspend both OPGW and ADSS cables from electricity power pylons or poles. These include suspension clamps, tension clamps, joint boxes, vibration dampers, armour rods, cable trays and many other items. This page is intended to provide an overview of the product range. More details are available on request.

## TENSION CLAMP



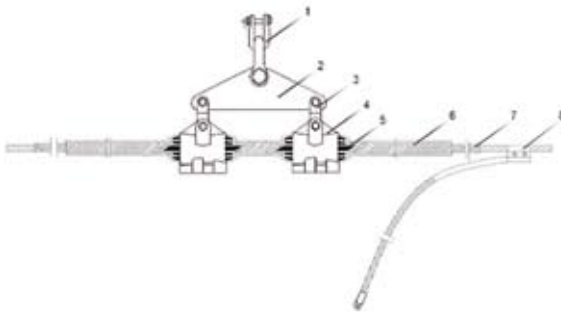
- 1. Clevis thimble (optional)
- 2. Extension link (optional)
- 3. Thimble eye
- 4. ID tag
- 5. Dead-end component
- 6. Structural reinforcing rods
- 7. Bonding clamp
- 8. Grounding wire (optional)

## SUSPENSION CLAMP



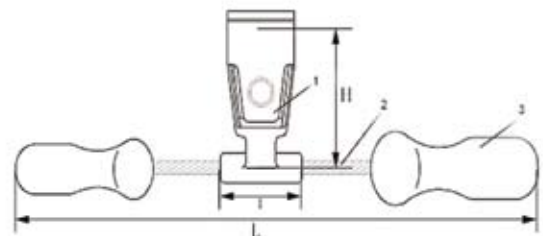
- 1. Clevis thimble (optional)
- 2. Double eye twisted (optional)
- 3. Cast aluminium clamp
- 4. Elastomer insert clamp
- 5. Outer rods
- 6. Structural reinforcing rods
- 7. Grooved earthing clamps
- 8. Grounding wire (optional)

## DOUBLE PREFORMED SUSPENSION CLAMP



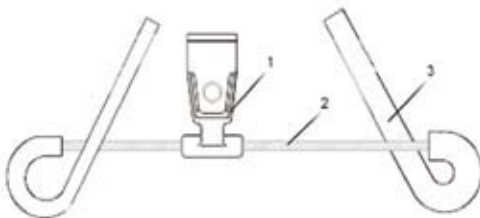
- 1. Clevis thimble (optional)
- 2. Suspension link - double pivots
- 3. Suspension link - model PS
- 4. Cast aluminium insert
- 5. Rubber insert
- 6. Outer Rods
- 7. Structural reinforcing rods
- 8. Grooved earthing clamps
- 9. Grounding wire

## VIBRATION DAMPER



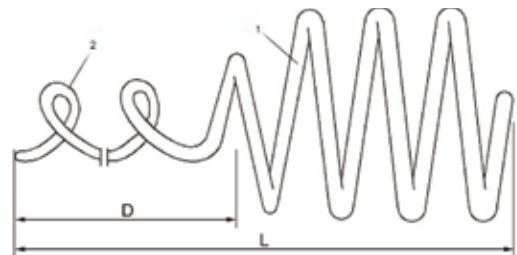
- 1. Cast aluminium clamp (AA)
- 2. Galvanized steel wire
- 3. Hammer: cast iron, hot galvanized steel

## VIBRATION DAMPER FOR ADSS

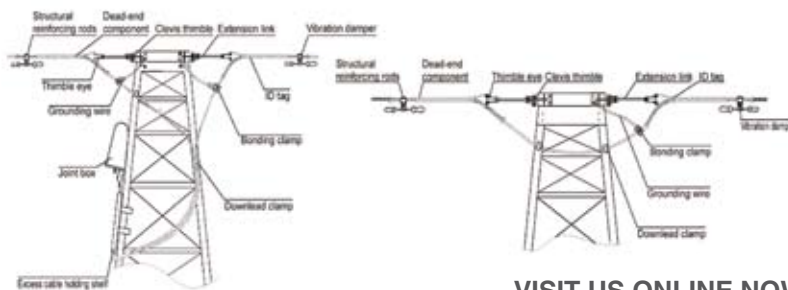


- 1. Cast aluminium clamp
- 2. Galvanized steel wire
- 3. Hammer

## ANTI ELECTRICAL STRESS COIL



- 1. Gripping section
- 2. Coil section



# Fibre in a Box

**Fibre in a box is the new way to use fibre optic cable.** Supplied as lengths of 305m REELEX® box (just like copper data cables) this revolutionary product enables storage of 7320 metres in just one pallet space, reducing warehousing costs. Fibre in a box enables easy "off the shelf" sales with no cable cutting. Installers can easily carry one box of each of their favourite, frequently used cables in their vans. With no cable reels it is easy and convenient to use on site.

Fibre in a box is currently available in 4, 6, 8 and 12 core tight buffered fibre optic cable OM1, OM2, OM3, OM4 and OS1/OS2 fibre construction types are available. Please call our friendly sales team for loose tube fibre optic cable availability.

## Features

- ▶ 305m boxes
- ▶ REELEX® packaging
- ▶ No cable cutting
- ▶ 24 boxes per pallet
- ▶ Small Cat. 5 type box
- ▶ Available in 4/8/12 core with multimode, singlemode and bend insensitive fibres

## Benefits



- ▶ Convenient "off the shelf" sales
- ▶ Smooth pull out on site
- ▶ Possible to easily pull several cables at once
- ▶ Saves time and cost; no reeling equipment required
- ▶ 7320 metres in one pallet space; saves warehousing space and cost
- ▶ Easily stored in installer's van
- ▶ Eliminates scrap

- OS2  
9/125
- OM1  
62.5/125
- OM2  
50/125
- OM3  
50/125
- OM4  
50/125



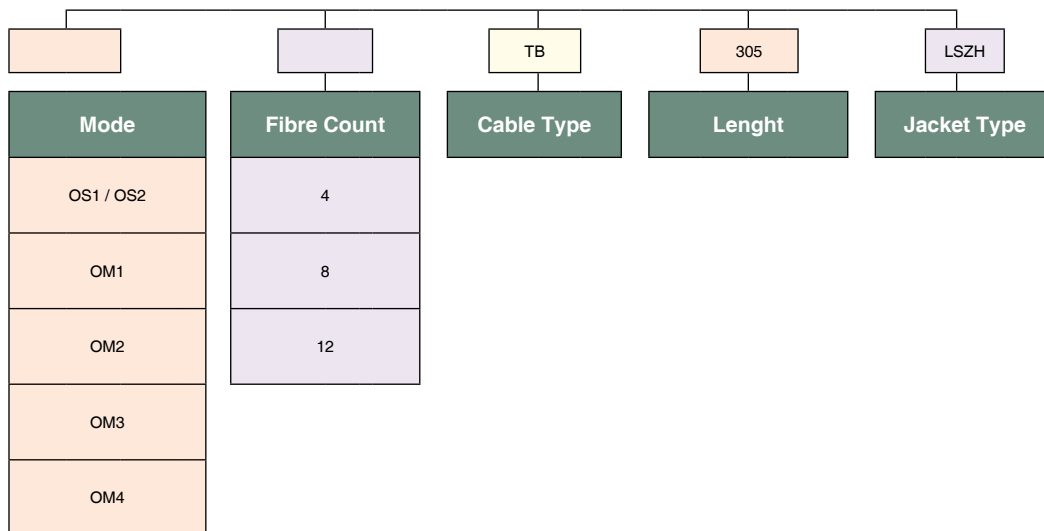
- ▶ Easy
- ▶ Simple
- ▶ Portable

Fire Retardant    Internal Use

## Fibre in a Box Part Number Generator

Please select a code from each coloured section displayed below, to create your specific Fibre in a box. Place all of the codes together in order to generate your part number.



FOR MORE INFORMATION CALL **+44 (0)870 127 3330**

## Cable Preparation Tools

To complement the Optronics range of fibre optic and copper cables, FibreFab is pleased to offer a comprehensive and practical range of tools for cutting, stripping, crimping, cleaving and terminating fibre optic and copper cables.

On the following pages you will find a selection of equipment designed to assist an installer in pulling cable into position, even in the most awkward locations and in cutting, cleaving, stripping and terminating fibre optic and copper cables in the most efficient and time saving way.

A small investment in the quality equipment on the following pages will be very quickly repaid in terms of time saved.

*“Our Optronics range of copper and fibre installation tools and test equipment offers the networking installer an unrivalled choice. We also recommend you look no further for fibre cleaning and polishing requirements as Optronics has the answer.”*



## Optronics Fibre Tools

### Easy Handle Stripper

The stripper has 3 stripping guides which are used to remove the 2 to 3mm jacket from patchcord cable, 900µm buffer insulation and 250µm acrylic coating. This leaves the 125µm bare fibre exposed for termination. The stripping holes are angular as opposed to rounded, this gives the blades better grip onto the fibre which results in a quality strip.



*Description*

*Part Number*

Easy handle stripper

OPT-FOS

### Carbide Pen Cleaver

Optronics has two styles of cleavers in it's range, The OPT-CPC is a pen style scribe which has a 30 degree wedge tip made from carbide, the material and angle ensures a precision cleave. The pen cap is great for keeping the tip protected when stored.



*Description*

*Part Number*

Carbide pen cleaver

OPT-CPC

### Jacket Stripper

Ideal for removing the outer jacket from multi-core fibre optic cables between 4.5 and 25mm in diameter. The stripper removes the jacket by slitting the sheath around the cables circumference and then horizontally to the desired length, the jacket is then peeled away from the cable. You can also gain access to fibres at mid length, this is achieved by making two cuts around the circumference at the desired position then by cutting horizontally between the two.



*Description*

*Part Number*

Jacket stripper

OPT-CS

### Kevlar™ Shears

Specialist scissors are required to cut the Kevlar from multi-core and patchcord cables. These scissors are specifically designed with robust hardened steel and very sharp serrated blades to make the removal of Kevlar very easy. They have a chrome plated finish and ergonomic handles. Due to the sharpness and robust design of the blades they can also be used on a multitude of other materials.



*Description*

*Part Number*

High quality Kevlar shears.

OPT-KS

### Ratchet Style Crimping Tool

The OPT-FOCT is a very rugged crimping tool. It has a universal die which allows you to crimp any standard fibre optic connector including ST, SC, FC, LC and MTRJ.

The comfort grip handles makes regular use easy on the user's hand. The design incorporates a ratchet mechanism which ensures there is a consistent and quality crimp every time irrespective of the user.



*Description*

*Part Number*

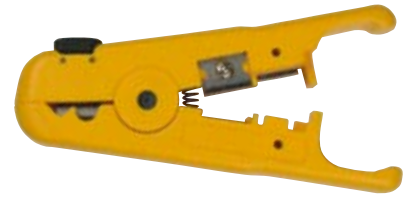
Ratchet style crimping tool

OPT-FOCT

## Optronics Fibre Tools

### Universal Strippers

The stripper has an adjustable blade which allows the stripping of cable from 3.2 to 9mm in diameter. It can strip outer jackets of small core fibre cable, multi-conductor cable, plus flat or irregular cable. The blade can be used to cut data cable and strip duplex fibre cable.



Description	Part Number
Data cable stripper	OPT-UTPS

### Cyclops Stripper

The cyclops cable stripper can be used to strip the jacket from most cable types up to 11mm in diameter, these include UTP / STP data cable, fibre optic and audio cable. It is completely automatic and requires no blade adjustments



Description	Part Number
Cyclops stripper	CYCLOPSSTRIPPER

### Cable Cutters

A simple yet necessary tool if you wish to cut cables to your own lengths. These cutters can be used on cables up to 10.5mm in diameter be it fibre optic or copper UTP/STP.

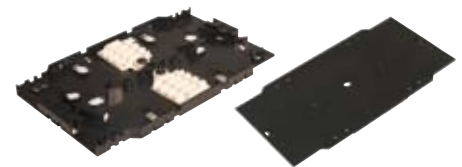
The Jaws are curved to enhance the cutting action and prevent cables being crushed under the cutting pressure. Soft grip PVC handles makes this tool comfortable to use over long periods. A locking mechanism guarantees the jaws are kept closed when not in use to keep the blades from being damaged.



Description	Part Number
0.14" Cable cutter	OPT+CC

### Universal Splice Tray

The Optronics universal splice tray is the perfect fibre management solution; each tray fits easily into any fibre enclosure such as a patch panel or lockable wall boxes and can be stacked to accommodate higher fibre counts. Each tray is 80mm x 155mm x 7mm (WxLxD) supplied with a lid for added protection to the internal managed fibre. Each tray requires splice holders which are sold separately.



Description	Part Number
Universal splice tray	SPLICETRAY
Splice tray lid	SPLICETRAYLID

### Fibre Management Kits

Fibre management kits are a versatile accessory for patch panels and wall boxes. They provide all the necessary items to professionally organise and manage the internal excess fibre. Each kit includes a cable gland, splice bridge, bunny clips and warning label.



Description	Part Number
Fibre management kit	CABLEMANAGEMENT

# Optronics Fibre Tools

## Polishing Machine

The Optronics PC20 polishing machine has been designed specifically to meet the needs of small termination houses. It is a low cost and easy-to-use manufacturing solution that supports quick turnaround manufacturing.

Optronics provide a complete technical support service and can supply detailed instructions from cable preparation to final test. These processes have been tried, tested and honed for over a decade and are the same as used in our facilities.

Description	Part Number
Polishing Machine, UK Power Cord	PC20POLISHER-UK
Polishing Machine, EU Power Cord	PC20POLISHER-EU
ST/PC Polish Jig, 12 Position Polishing Plate	STPC12JIG
LC/PC Polish Jig, 12 Position Polishing Plate	LCPC12JIG
LC/APC Polish Jig, 12 Position Polishing Plate	LCAPC12JIG
FC/PC Polish Jig, 12 Position Polishing Plate	FCPC12JIG
FC/APC Polish Jig, 12 Position Polishing Plate	FCAPC12JIG
SC/PC Polish Jig, 12 Position Polishing Plate	SCPC12JIG
SC/APC Polish Jig, 8 Position Polishing Plate	SCAPC8JIG
Rubber Pad, Durometer Reading 60 4"/10mm	DUR060PAD110MM
Rubber Pad, Durometer Reading 70 4"/10mm	DUR070PAD110MM
Rubber Pad, Durometer Reading 80 4"/10mm	DUR080PAD110MM



## Polishing Discs

Optronics offers a superior range of diamond polishing disc. They are ideally suited for polishing machines but can also be used for hand polishing applications. Available in packs of 25 as standard and measure 127mm (5") in diameter, in the following grades, 9µm, 5µm, 3µm, and 1µm.

Description	Part Number
1 µm Diamond Lapping Film 127mm Disk Pk25	OPT1UMDISC127
3 µm Diamond Lapping Film 127mm Disk Pk25	OPT3UMDISC127
5 µm Diamond Lapping Film 127mm Disk Pk25	OPT5UMDISC127
9 µm Diamond Lapping Film 127mm Disk Pk25	OPT9UMDISC127
0.5 µm Diamond Lapping Film 127mm Disk Pk25	OPT0.5MDISC127
Finishing Diamond Lapping Film 127mm Disk Pk25	FIDISC127



## Heat Cure Fibre Termination

The OPT-FHS series hand-held fibre inspection microscopes are an ideal choice for checking field terminations for fibre end face quality.

A combination of durable construction, comfortable design, easy operation and quality optics ensures that this tool will enhance the performance of installation and maintenance staff.

The OPT-FHS scopes are designed with a professional grade coaxial illumination system. This maximizes the detail seen by the user, because the light travels along the same axis as the end face making even fine scratches and contaminants easily visible.

The OPT-FHS series is equipped with a laser attenuation filter for your safety. Laser attenuation filters provide excellent eye protection. However, they are not a substitute for practising good laser safety. Never attach or view a live fibre with any optical fibre microscope.

Description	Part Number
200 x Coaxial Illumination Hand Held Fibre Scope	OPT-FHS-200X
400 x Coaxial Illumination Hand Held Fibre Scope	OPT-FHS-400X



Image viewed through coaxial illumination  
left slide shows contaminant detail  
right slide shows clean connector



# Optronics Fibre Optic Cleaning Products

## Lint Free Tissues

Lint free tissues are a versatile consumable for many applications. They are mainly used to clean bare fibre as part of the termination or splicing process.

The lint free characteristic allows them to be used for a multitude of other purposes such as cleaning optical equipment and preparing work surfaces.

Description	Part Number
100 Lint free tissues	CLEANTISSUE/100
400 Lint free tissues	CLEANTISSUE/400



## IPA Wipes

The Optronics pre-saturated wipes contain 99% pure IPA or isopropyl alcohol. The wipe material is made from a high quality, non-abrasive, lint free fabric.

They can efficiently remove dust, grease, oil, flux, soils and other contaminants and residues from substrates prior to bonding such as bare optical fibre during a termination or splicing process.

Description	Part Number
50pcs IPA saturated wipes	CLEANWIPES
Single IPA saturated wipes	CLEANWIPES/S



## Foam Buds

Foam buds are the ideal consumable for cleaning bulkheads after installation. They are used to clean the end faces of connectors that are installed from inside the enclosure, the snug fit of the foam head will also remove any contaminants found inside the adapter.

Description	Part Number
2.5mm foam buds	CLEANBUDS



## Micro Fibre Sticks

Micro fibre sticks are the ideal consumable for cleaning 1.25mm bulkheads after installation. They can be used to clean the end faces of connectors that are installed from inside the enclosure. Cleaning is achieved by inserting the micro fibre tip inside the adapter's aperture and twisting once.

The micro fibre material allows the user to clean installed connector end faces without scratching the surface and ensures a perfect clean first time.

Description	Part Number
100 1.25mm micro fibre sticks	CLEANSTICKS



# Cleaning and Termination Kits

## Cleaning Kit

The Optronics fibre optic cleaning kits combine all the best and most widely used products into one simple to use package. They contain all the necessary products to competently and professionally clean fibre optic installations. With 3 levels of kits available it's easier to choose which kit is right for the user application.

Description	Part Number
Level one cleaning kit	CLEANKIT-L1
Level two cleaning kit	CLEANKIT-L2
Level three cleaning kit	CLEANKIT-L3



## Cold Cure Fibre Termination

The Optronics cold cure fibre termination and inspection kit is an essential piece of kit for engineers who wish to terminate fibre using the cold cure method. This kit is suited for any engineer who is experienced at terminating fibre.

The kit contains the superior Optronics range of tools including the Optronics inspection scope. All items are packed into their own cut foam compartment to keep them from damage. The kit is presented in a virtually indestructible yet stylish case which is ideal for such fragile equipment.

Description	Part Number
Cold cure fibre termination kit	OPT- COLDKIT



## Heat Cure Fibre Termination

The Optronics heat cold cure fibre termination and inspection kit is an essential piece of kit for engineers who wish to terminate fibre using the cold cure method. This kit is suited for any engineer who is experienced at terminating fibre.

The kit contains the superior Optronics range of tools including the Optronics inspection scope. All items are packed into their own cut foam compartment to keep them from damage. The kit is presented in a virtually indestructible yet stylish case which is ideal for such fragile equipment.

Description	Part Number
Heat cure fibre termination kit	OPT- HEATKIT



## Splice Protectors

Splice protectors are used after a fusion splice has been performed. The protectors are slipped over the joint and heated using the oven located on the splicer.

The polyethylene then shrinks to form a tight hold over the joint which is supported by a steel pin giving extra added strength and protection to the splice joint.

Description	Part Number
60mm splice protectors	SPLICE60CLEAR
45mm splice protectors	SPLICE45CLEAR



## Fusion Splicer

The Optronics OPT-FSPL fusion splicer uses a core-to-core profile alignment system to provide the best possible termination of optical fibres.

The splicer is small and lightweight and is supplied complete in its own hard carry case making it ideal for use in the field.

The standard OPT-FSPL-KIT comprises the fusion splicer, cleave tool, battery and charger, AC power supply, spare electrodes, cooling tray buffer stripper and hard carry case with strap.

Description	Part Number
Fusion splicer, AC adaptor and power cord, battery, charger, spare electrodes, cooling tray, precision cleave tool, buffer stripper, carry case	OPT-FSPL-KIT



FOR MORE INFORMATION CALL **+44 (0)870 127 3330**



# Test and Measurement

## OPTMSKIT

The OPTMS test kit combines the OPTPM AUTO optical power meter, OPTLS QUAD integrated LED and LASER light source and is ideally suited for testing fibre optic networks with singlemode and multimode cables.



Description	Part Number
Quad Optical Light Source Kit	OPTMSKIT

## ST Multimode Kit

The OPTM test kit is an inexpensive solution for testing multimode systems. The kit combines the OPTPM optical power meter and the OPTL S dual optical light source which operates at 850 and 1300nm. Its a great kit for beginners or network owners and can be used for testing premises networks, LAN and gigabit ethernet. Includes optical light source, optical power meter. Protective rubber boots, adaptor cap, 50 and 62.5µm mandrels, users guide and carrying case.



Description	Part Number
ST Test Kit	OPTMKIT

## Visual Fault Locator

The OPTVFL is a compact but powerful visual fault locator designed to trouble-shoot faults on fibre optic cables. Light generated by this unit will escape from sharp bends and breaks in jacketed or bare fibres, as well as poorly mated connectors. It can also identify faults in fibre optic jumper cables, distribution frames, patch panels, and splice trays.



Description	Part Number
Visual Fault Identifier	OPTVFL

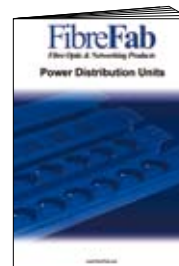
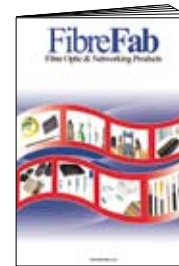
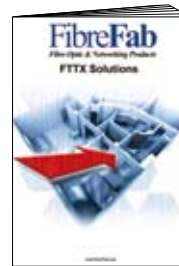
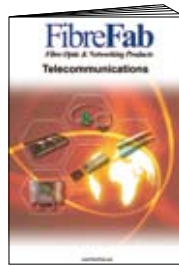
## Optronics OTDR

A user friendly multimode and singlemode OTDR specifically designed for testing and trouble-shooting enterprise, campus and access networks. It's robust construction and long battery life make it ideal for use in the field. A single button push starts a test, making it simple to use for beginner or expert. The result is then shown as a trace or table of events in full colour, making the location of faults of fibre cable uncomplicated. By transferring the result to a USB memory stick or directly to a PC via the USB port, easy management of the results can be achieved using the free software provided. Improved fibre testing capability can be achieved by adding the optional power meter, visual fault locator and connector end face inspection probe making the Optronics OTDR a truly versatile fibre optic instrument.



Description	Part Number
Optronics Test Multimode/ Singlemode Quad OTDR	OPT-OTDR

Other catalogues available for download at  
<http://www.FibreFab.com/downloads.php>



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