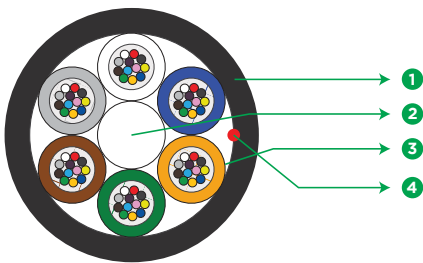
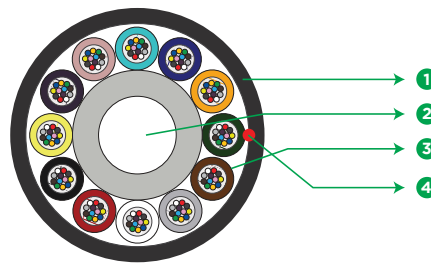


# Micro-Lite

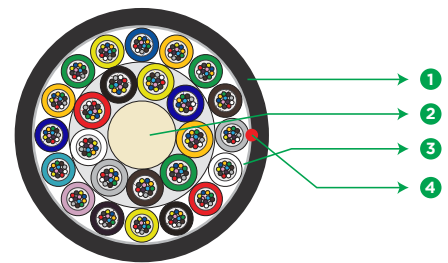
## Multitube Gel Filled OFC



**Cross Section 72F**



**Cross Section 144F**



**Cross Section 288F**

**1 OUTER JACKET**

**2 CENTRAL STRENGTH MEMBER**

**3 LOOSE TUBE**

**4 RIPCORD(S)**

*\* Typical Construction Diagram - Not to Scale*

### Features & Benefits

- **Reduced Installation Costs:** Micro Cables feature a smaller diameter, which not only saves space but also significantly reduces installation costs.
- **Ideal for New and Existing Duct Systems:** These cables provide excellent solutions for both new and pre-existing duct systems, making them versatile and adaptable to various infrastructure setups.
- **Efficient Blown Installation:** Micro Cables can be easily blown into micro ducts that are pre-installed within larger ducts. This streamlined process enhances installation efficiency and minimizes disruptions.
- **Dry Water-Blocking Technology:** The use of dry water-blocking technology ensures a gel-free core, facilitating faster and more convenient end preparation. This innovation reduces the time and effort required for cable termination.
- **Removable Rugged Thermoplastic Jacket:** The cables are equipped with a rugged thermoplastic jacket that can be easily removed when needed. This feature simplifies maintenance and repairs, allowing for swift access to the core.
- **Flexibility and Lightweight Design:** Micro Cables are incredibly flexible and lightweight, making them easy to handle and install.

### Product Details

STL Micro-Lite Multitube Single Jacket Fibre Optic Cables are designed for maximum efficiency in microduct or aerial installations, featuring a lightweight design and optimized diameter for superior blown performance. This cable employs tightly packed bend-insensitive fibres within a sustainably designed thermoplastic jacket. The cable utilizes micro loose tubes wound around a central strength member made of Fibre Reinforced Plastic (FRP), making it ideal for microduct blown installations. Additionally, advanced water-blocking gel within the buffer tubes ensures protection against water ingress, even in challenging environmental conditions. This versatile cable solution provides robust reliability and performance for a wide range of optical fibre installation applications.

## Fibres and Cable Performance Standards

Cable complies with the following standards IEC 60793, IEC 60794-5-10, ITU-T, RoHS, REACH.

## Printing Details<sup>1,2</sup>

Printing: STERLITE SM FIBRE TYPE FIBRE COUNT F MICRO OFC LASER SYMBOL TELEPHONE SYMBOL YEAR OF MANUFACTURE LENGTH CODE METER MARKING

- Note:**
1. The accuracy of marking shall be +0.5%. Occasional loss of printing & remarking shall be as per Bell core GR 20 and this supersedes the earlier markings.
  2. Custom cable printing is readily available on demand, subject to prior approval.

## Specifications

Physical Characteristics	
Maximum Cabled Fibre Attenuation (dB/km)	1310nm: 0.35; 1550nm: 0.23; 1625nm: 0.26
PMD LDV (ps/sqrt.km)	≤ 0.1
Fibres per Tube	12 or 24
Central Strength Member	FRP (Fibre Reinforced Plastic)
Fillers	Thermoplastic material, natural colour
Core binder	Binder and water swellable yarns
No of Ripcords Below Outer Jacket	1
Outer Jacket Material	UV Proof Polyethylene <sup>3</sup> . PA is available on demand and prior approval

**Note 3:** Other jacket colours and fibre colour sequences can be provided upon request, pending prior approval.

Fibres Colour Sequence <sup>4</sup> (as per DIN/VDE 0888)											
Red	Green	Blue	Yellow	White	Grey	Brown	Violet	Turquoise	Black	Orange	Pink

**Note 4:** In the tubes with 24 fibre, when present, 13th to 24th fibre have a black ring marking (the black fibre is replaced by a natural fibre with black ring marking). The tubes above 12, when present, have a longitudinal black stripe ink-jet marked or co-extruded (black tube with white stripe).

Cable Designs with G.652 D 250µm Fibre <sup>5</sup>							
Product Code*	Fibre count	Fibre Type	Tube/ Filler	Duct ID (mm)	Cable Diameter (mm) ±5%	Cable Weight (Kg/km) ±10%	Max. Tensile Strength (N)
C10012S301GDP10000	12	G.652 D	1/5	8	5.7	28	500
C10024S302GDP10000	24	G.652 D	2/4	8	5.7	28	500
C10036S303GDP10000	36	G.652 D	3/3	8	5.7	28	500
C10048S304GDP10000	48	G.652 D	4/2	8	5.7	28	500
C10072S306GDP10000	72	G.652 D	6/0	8	5.7	28	500
C10096S308GDP10100	96	G.652 D	8/0	8	6.0	35	500
C10144S312GDP10000	144	G.652 D	12/0	10	8.0	50	1000
C10144S306GDP10000	144	G.652 D	6/0	10	6.8	40	500
C10192S308GDP10000	192	G.652 D	8/0	10	7.8	56	1000
C10288S324GDP10000	288	G.652 D	(9+15)/0	12	9.4	75	1500
C10432S318GDP10000	432	G.652 D	(6+12)/0	18	12.5	118	1000
C10576S324GDP10000	576	G.652 D	(9+15)/0	18	13.4	130	1000

Cable Designs with Bend Insensitive 250µm Fibre<sup>5</sup>

Product Code*	Fibre count	Fibre Type	Tube/Filler	Duct ID (mm)	Cable Diameter (mm) ±5%	Cable Weight (Kg/km) ±10%	Max. Tensile Strength (N)
C10012S101GDP10000	12	G.657.A1	1/5	8	5.7	28	500
C10024S102GDP10000	24	G.657.A1	2/4	8	5.7	28	500
C10036S103GDP10000	36	G.657.A1	3/3	8	5.7	28	500
C10048S104GDP10000	48	G.657.A1	4/2	8	5.7	28	500
C10072S106GDP10000	72	G.657.A1	6/0	8	5.7	28	500
C10096S108GDP10000	96	G.657.A1	8/0	8	6.0	35	500
C10144S112GDP10000	144	G.657.A1	12/0	10	8.0	50	1000
C10144S106GDP10000	144	G.657.A1	6/0	10	6.8	40	500
C10192S108GDP10000	192	G.657.A1	8/0	10	7.8	56	1000
C10288S124GDP10000	288	G.657.A1	(9+15)/0	12	9.4	75	1500
C10432S118GDP10000	432	G.657.A1	(6+12)/0	18	12.5	118	1000
C10576S124GDP10000	576	G.657.A1	(9+15)/0	18	13.4	130	1000

Cable Designs with Bend Insensitive 200µm Fibre<sup>5</sup>

Product Code*	Fibre count	Fibre Type	Tube/Filler	Duct ID (mm)	Cable Diameter (mm) ±5%	Cable Weight (Kg/km) ±10%	Max. Tensile Strength (N)
C20048S804GDP10000	48	G.657.A1 200	4/2	8	4.6	20	500
C20072S806GDP10000	72	G.657.A1 200	6/0	8	4.6	20	500
C20096S808GDP10000	96	G.657.A1 200	8/0	8	5.9	34	500
C20144S812GDP10000	144	G.657.A1 200	12/0	10	7.6	45	500
C20144S806GDP10000	144	G.657.A1 200	6/0	8	6.1	34	500
C20192S808GDP10000	192	G.657.A1 200	8/0	10	7.2	51	500
C20216S809GDP10000	216	G.657.A1 200	9/0	10	7.5	54	500
C20288S824GDP10000	288	G.657.A1 200	(9+15)/0	10	7.9	70	800
C20432S818GDP10000	432	G.657.A1 200	(6+12)/0	12	8.8	70	1000
C20576S824GDP10000	576	G.657.A1 200	(9+15)/0	14	10.3	92	1000

Cable Designs with Legacy Compatible Bend Insensitive 200µm Fibre<sup>5</sup>

Product Code*	Fibre count	Fibre Type	Tube/Filler	Duct ID (mm)	Cable Diameter (mm) ±5%	Cable Weight (Kg/km) ±10%	Max. Tensile Strength (N)
C20144N206GAP10000	144	G.657.A1 200/ G.652.D 200	6/0	8	5.5	30	500
C20192N208GAP10000	192	G.657.A1 200/ G.652.D 200	8/0	8	6.3	42	500
C20288N224GDP10000	288	G.657.A1 200/ G.652.D 200	(9+15)/0	10	7.4	55	1000
C20432N218GAP10000	432	G.657.A1 200/ G.652.D 200	(6+12)/0		8.4	65	1000
C20576N224GAP10000	576	G.657.A1 200/ G.652.D 200	(9+15)/0		9.6	84	1000

**Note 5:** Selection of available fibres in the respective Product Ordering Information sections, other fibre types are available on demand prior approval.

Mechanical & Environmental Characteristics <sup>6</sup>		
Cable Characteristics	Cable Performance	Testing Standard Method
Tensile Strength	As per above tables	IEC-60794-1-21-E1
Crush Resistance (N/cm)	500	IEC-60794-1-21-E3A
Impact Strength(Nm)	2	IEC-60794-1-21-E4
Torsion	±180°	IEC-60794-1-21-E7
Repeated Bending	Radius 20 x OD	IEC-60794-1-21-E6
Bend	Radius 15 X OD	IEC-60794-1-21-E11A
Min. Bend Radius (During Installation)	20 x OD	
Min. Bend Radius (After Installation)	15 X OD	
Water Penetration Test	1m waterhead, 3m samples, 24 hrs	IEC-60794-1-21-F5B
Drip Test	30 cm, 70° C, 24 hr	IEC-60794-1-21-E14
Temperature Performance		IEC-60794-1-22-F1
Installation	-5° C to +50° C	
Operation	-30° C to +70° C	
Storage	-40° C to +70° C	

**Note 6:** All tests shall be performed according to the relevant methods of the IEC 60794-1 standard series with limit values and acceptance criteria according to the IEC 60794-5-10 standard.

## Installation Guidelines

End Preparation: Refer to STL's SOP for the end preparation document on STL website.

## Packing and Lengths

Drum Type	Length Multiple (in km)	Order Tolerance	Short Lengths
Wooden Drums	4	±5%	Max 5%, Customer Approval

## Ordering Information

Other Fibres counts, types and tube colours sequences may be available on request, please create product code from the table below. Cable complies with the following standards IEC 60793, IEC 60794, ITU-T, RoHS and REACH.

Product Type		Fibre Count (0004 - 0576)				Fibre Type		No. of Active Tubes (01-24)		Cable Core Type	Fibres/Tubes Colour Code		Jacket Type		Running Number		Special Requirement	
1		2				3		4			5		6				7	
-	-	-	-	-	-	-	-	-	-	G	-	P	1	0	0	0	-	

### 1. Product type

Code	Product Type
C1	Multitube Microduct Cable with 250µm fibre
C2	Multitube Microduct Cable with 200µm fibre

### 2. Fibre count by indicating the corresponding number from 0006 to 0576

### 3. Fibre code corresponding to requested fibre type among following options

Code	Fibre Type (ITU-T)	STL Fibre Name	Mode Field Diameter MFD ±0.4 (µm)
S1	G.657.A1	STL HD A1 250 Fibre	8.6
S2	G.657.A2	STL HD A2 250 Fibre	8.6
S3	G.652.D	STL OH-Lite 250 Fibre	9.1
SN	G.657.A1/ G.652.D	STL Nova 250 Fibre	9.2
N2	G.657.A1/ G.652.D	STL Nova 200 Fibre	9.2
C1	G.657.A2/ G.652.D	STL Stellar 250 Fibre	9.1
S8	G.657.A1	STL Bow-Lite 200 Fibre	8.8
S9	G.657.A2	STL HD A2 200 Fibre	8.6

### 4. Number of active tubes: 01 to 24

### 5. Fibres and tubes colour sequence

Code	Fibres and Tubes Colour Codes <sup>7</sup>
A	EIA/TIA 598 C
D	DIN/VDE 0888
F	France
H	Switzerland
I	Italy
L	Hungary
M	Poland

**Note 7:** Other colour codes are available on demand prior STL approval

### 6. Jacket Type

Code	Jacket Type
P1	PE Outer Sheath
N1	PA Outer Sheath

### 7. Jacket Colour

Code	Jacket Colour <sup>8</sup>
O0	Black
J1	Orange

**Note 8:** Other jacket colour are available on demand prior STL approval.

**For additional information please contact your sales representative.**

You can also visit our website at [www.stl.tech](http://www.stl.tech)

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