# STC

## Micro-Lite

Multitube Gel Filled OFC 12F - 576F



\* Typical Construction Diagram - Not to Scale

## **Features & Benefits**

- As compared to conventional cable, Micro Cable diameter is less and thereby reducing installation costs
- Excellent solutions for new and existing duct systems
- Typically blown into micro ducts previously installed into large ducts
- Dry water-blocking technology for gel free core helps in quicker end preparation
- Easily removable rugged thermoplastic jacket
- Flexible, light weight, easy to handle & install

## **Product Details**

STL Micro-LITE Multitube Single Jacket Fibre Optic Cables are typically used in micro duct or aerial drop installation applications. This cable is a stranded micro loose tube cable with optical Fibre placed inside robust buffer tubes stranded around a Fibre reinforced plastic (FRP) central strength member. In addition to optical Fibres, the buffer tubes contain water blocking gel to prevent water ingress in the cable.

## **Fibres and Cable Performance Standards**

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

## **Printing Details**

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

**Note**: 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.

## **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 Sheath	1						
Outer Jacket Material	UV Proof Black HDPE. PA is available on demand and prior approval						

			Fibres	Colour Se	equence	(as per D	IN/VDE	0888) <sup>2,3</sup>			
Red	Green	Blue	Yellow	White		Brown	Violet	Turquoise	Black	Pink	Orange

**Note**: <sup>1</sup>The fibres 13 to 24, when present, have a black ring marking (the back 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).

<sup>2</sup>Other fibres and tubes colour sequences are available on demand, prior approval.

					1 250µm Fibre µm also availal		
Product Code	Fibre count	Fibre Type	Tube/ Fillers	Duct ID mm	Cable Diameter (mm) ±0.3	Cable Weight (kg/km) ±10%	Max. Tensile Strength (N)
C10012S301GDP10000	IO012S301GDP10000 12 G.652 D 1/5 8		5.7	28	500		
C10024S302GDP10000	24	G.652 D	2/4	8	5.7	28	500
C10036S303GDP10000	48	G.652 D	3/3	8	5.7	28	500
C10048S304GDP10000	72	G.652 D	4/2	8	5.7	28	500
C10072S306GDP10000	96	G.652 D	6/0	8	5.7	28	500
C10096S308GDP10000	144	G.652 D	8/0	10	6.0	35	500
C10144S312GDP10000	144	G.652 D	12/0	10	8.0	50	1000
C10144S306GDP10000	144	G.652 D	6/0	12	6.8	40	500
C10192S308GDP10000	192	G.652 D	8/0	10	7.8	56	1000
C10288S324GDP10000	288	G.652 D	(9+15)/0	18	9.4	75	1500
C10432S318GDP10000	432	G.652 D	(6+12)/0	18	12.5	118	1000

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					1 250µm Fibre µm also availal			
Product Code	Fibre count	Fibre Type	Tube/ Fillers	Duct ID mm	Cable Diameter (mm) ±0.3	Cable Weight (kg/km) ±10%	Max. Tensile Strength (N)	
C10576S324GDP10000	576	G.652 D	(9+15)/0	18	13.4	130	1000	
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	8	8.0	50	1000	
C10144S106GDP10000	144	G.657 A1	6/0	8	7.0	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	72	1500	
C10432S118GDP10000	432	G.652 D	(6+12)/0	18	12.5	118	1000	
C10576S124GDP10000	576	G.652 D	(9+15)/0	18	13.4	130	1000	

	Cable Designs with G.657A1 200µm Fibre (Cable design with G.657 A2 200µm also available)									
Product Code	Fibre count	Fibre Type Tube/ Fillers		Duct ID mm	Cable Diameter (mm) ±0.3	Cable Weight (kg/km) ±10%	Max. Tensile Strength (N)			
C20012S804GDP10000	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			
C20216S808GDP10000	216	G.657 A1 200	9/0	10	7.5	54	500			
C202885824GDP10000	288	G.657 A1 200	(9+15)/0	10	7.9	70	800			
C20288S824GDP10000	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			

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## **Specifications**

Mechanical & Environmental Characteristics							
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	20 x OD	IEC-60794-1-21-E6					
Bend	20 x OD	IEC-60794-1-21-E11A					
Min. Bend Radius (During Installation)	20 D						
Min. Bend Radius (After Installation)	15 D						
Water Penetration Test	1m waterhead, 3m samples, 24 h	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:** 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.

## **Packing and Lengths**

Drum Type	Length Multiple (in km)	Order Tolerance	Short Lengths
Wooden Drums	4 ± 5% (For all Fibre Counts)	±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.

Proc ty	luct pe			e cou - 08	ınt 364)		ore pe	No. of active tubes (01-24)			Fibres/tubes colour code			Runi num	_	Spec require	
1				2		14	3	4			5						
-	-	-	-	-	-	-	-	-	-	G	-	Ρ	1	0	0	0	0

### 1. Product type

Code	Tensile Strength
C1	Standard Microduct with 250µm fibre
C2	NextGen Microduct 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	STL Fibre Brand Name
S1	G.652D/G.657 A1	BOW-LITE (250µm)
S2	G.657 A2	BOW-LITE (E) (250µm)
S3	G.652D	OH-LITE (250µm)
SN	G.657 A1 adv/G652D	OH-LITE NOVA (250µm)
C1	G.657A2/A1/G.652 D	STELLAR (250µm)
S8	G.657 A1 200µm	MICRO BOW-LITE (200µm)
S9	G.657 A2 200µm	MICRO BOW-LITE (E)

4. Number of active tubes : 01 to 24

#### 5. Fibres and tubes colour sequence available options<sup>3</sup>

Code	Fibres and Tubes Colour Codes					
A	EIA/TIA 598 C					
D	DIN/VDE 0888					
F	France					
Н	Switzerland					
	Italy					
L	Hungary					
М	Poland					
	<b>Note:</b> <sup>3</sup> other colour codes are available on demand prior STL approval					

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## For additional information please contact your sales representative.

You can also visit our website at www.stl.tech

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