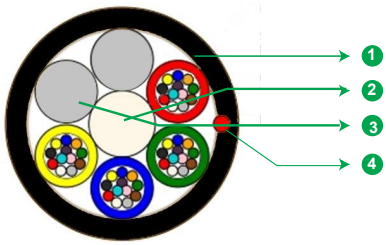
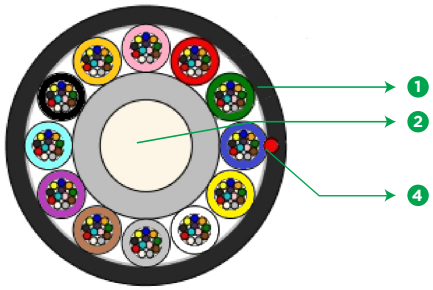
Micro-Lite

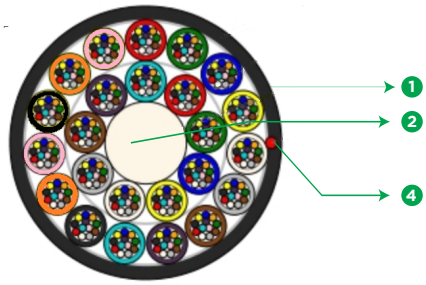
Multitube Gel Filled OFC 12F - 576F
A-DQ(ZN)2Y nn x ff E9/125 (nn = 01 to 24; ff = 12 or 24)



Cross Section 48F



Cross Section 144F



Cross Section 288F

1 OUTER JACKET 2 STRENGTH MEMBER 3 FILLING ELEMENT 4 RIPCORD(S)

** Typical Construction Diagram - Not to Scale*

Features & Benefits

- As compared to conventional cable, Micro Cable diameter is smalller thereby reducing transportation and 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 and install
- Class Fca rated according to CPR

Product Details

STL Micro-LITE Multitube Single Jacket Optical Fibre Cables are typically used in micro duct applications. This cable is a stranded micro loose tube cable with optical fibres 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 propagation along the cable.

Fibres and Cable Performance Standards

The fibres and cables are compliant 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-LITE-OFC CE-MARKING-Fca 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/√km)	≤ 0.1
Fibres per Tube	12 or 24
Central Strength Member	FRP (Fibre Reinforced Plastic)
Fillers (if required)	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[1]

Fibres Colour Sequence (as per DIN/VDE 0888)[2,3]											
Red	Green	Blue	Yellow	White	Grey	Brown	Violet	Turquoise	Black	Orange	Pink

Note: [1]PA jacket and/or other jacket colours are available on demand, prior approval

[2]The fibres 13 to 24, when present, have a black ring marking (the black fibre is replaced by a natural fibre with black ring marking), the tubes follow the same sequence as the fibres and the tubes above 12, when present, have a longitudinal black stripe ink-jet marked or co-extruded (black tube with white stripe).

[2]Other fibres and tubes colour sequences are available on demand, prior approval.

Cable Designs with G.652 D 250µm Fibres[4]

Product Code	Fibre count	Fibre Type	Tube/ Fillers	Duct ID mm	Cable Diameter (mm) ±0.3 mm	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
C10096S308GDP10000	96	G.652 D	8/0	8	6.0	35	500
C10144S312GDP10000	144	G.652 D	12/0	12	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	18	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 G.657 A1/G.652 D 250µm Fibres[4]							
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)
C10012SN01GDP10000	12	G.657 A1/G.652 D	1/5	8	5.7	28	500
C10024SN02GDP10000	24	G.657 A1/G.652 D	2/4	8	5.7	28	500
C10036SN03GDP10000	36	G.657 A1/G.652 D	3/3	8	5.7	28	500
C10048SN04GDP10000	48	G.657 A1/G.652 D	4/2	8	5.7	28	500
C10072SN06GDP10000	72	G.657 A1/G.652 D	6/0	8	5.7	28	500
C10096SN08GDP10000	96	G.657 A1/G.652 D	8/0	8	6.0	35	500
C10144SN12GDP10000	144	G.657 A1/G.652 D	12/0	12	8.0	50	1000
C10144SN06GDP10000	144	G.657 A1/G.652 D	6/0	10	6.8	40	500
C10192SN08GDP10000	192	G.657 A1/G.652 D	8/0	10	7.8	56	1000
C10288SN24GDP10000	288	G.657 A1/G.652 D	(9+15)/0	18	9.4	75	1500
C10432SN18GDP10000	432	G.657 A1/G.652 D	(6+12)/0	18	12.5	118	1000
C10576SN24GDP10000	576	G.657 A1/G.652 D	(9+15)/0	18	13.4	130	1000

Cable Designs with G.657 A1/G.652 D 200µm Fibres[4]							
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)
C20012N101GDP10000	12	G.657 A1/G.652 D 200	1/5	8	4.6	20	500
C20024N102GDP10000	24	G.657 A1/G.652 D 200	2/4	8	4.6	20	500
C20036N103GDP10000	36	G.657 A1/G.652 D 200	3/3	8	4.6	20	500
C20048N104GDP10000	48	G.657 A1/G.652 D 200	4/2	8	4.6	20	500
C20072N106GDP10000	72	G.657 A1/G.652 D 200	6/0	8	4.6	20	500
C20096N108GDP10000	96	G.657 A1/G.652 D 200	8/0	8	5.9	34	500
C20144N112GDP10000	144	G.657 A1/G.652 D 200	12/0	10	7.6	45	500
C20144N106GDP10000	144	G.657 A1/G.652 D 200	6/0	8	6.1	34	500
C20192N108GDP10000	192	G.657 A1/G.652 D 200	8/0	10	7.2	51	500
C20216N109GDP10000	216	G.657 A1/G.652 D 200	9/0	10	7.5	54	500
C20288N124GDP10000	288	G.657 A1/G.652 D 200	(9+15)/0	10	7.9	70	800
C20432N118GDP10000	432	G.657 A1/G.652 D 200	(6+12)/0	12	8.8	70	1000
C20576N124GDP10000	576	G.657 A1/G.652 D 200	(9+15)/0	14	10.3	92	1000

Note: [4]Selection of available fibres in the respective Product Ordering Information sections, other fibre types are available on demand prior approval.

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/10cm)	500	IEC-60794-1-21-E3A
Impact Strength (N·m)	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	1 m waterhead, 3 m samples, 24 h	IEC-60794-1-21-F5B
Drip Test	30 cm, 70°C, 24 h	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, 6 ± 5%	±5%	Max 5%, upon customer approval

Ordering Information

Other Fibres counts, types and colours sequences may be available on request, please create product code from the table below.

Product type		Fibre count (0012 – 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						
-	-	-	-	-	-	-	-	-	-	G	-	P	1	0	0	0	0

1. Product type

Code	Cable Design
C1	Micro-Lite cable with 250µm fibres
C2	Micro-Lite cable with 200µm fibres

2. Fibre count by indicating the corresponding number from 0012 to 0576

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

Fibre code		Fibre type (ITU-T)	STL's Fibre Name	Mode Field Diameter (MFD) @1310 nm (µm)
S	3	G.652 D	OH-Lite 250[5]	9.1 ± 0.4
S	N	G.657.A1/G.652 D	Nova 250[5]	9.2 ± 0.4
C	1	G.657 A2/G.652 D	Stellar 250[5]	9.1 ± 0.4
H	1	G657.A1	HD A1 250[5]	8.6 ± 0.4
S	2	G.657 A2	HD A2 250[5]	8.6 ± 0.4
N	1	G.657 A1/G.652 D 200µm	Nova 200[6]	9.2 ± 0.4
C	2	G.657 A2/G.652 D 200µm	Stellar 200[6]	9.1 ± 0.4
S	9	G.657 A2 200µm	HD A2 200[6]	8.6 ± 0.4

Note: [5]Only for Product type "C1" cables.
[5]Only for Product type "C2" cables.

4. Number of active tubes : 01 to 24

5. Fibres and tubes colour sequence available options[7]

Code	Fibres and Tubes Colour Codes
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 approval

For additional information please contact your sales representative.
You can also visit our website at www.stl.tech or www.stl.tech/germany

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