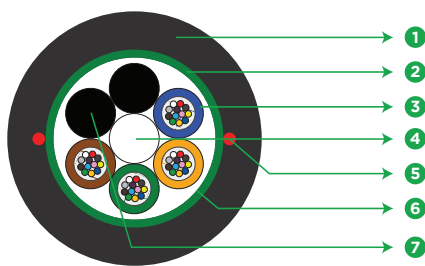
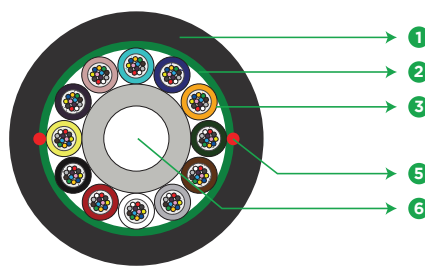


ARMOR -LITE

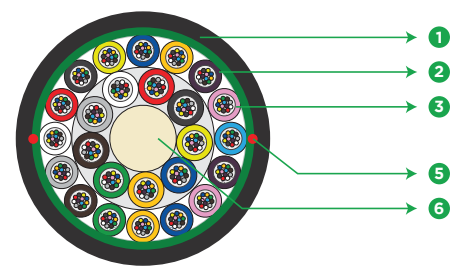
Out-Side Plant, Double Jacket, corrugated Steel Tape armoured, Gel filled Multi-Loose Tube Optical Fibre Cables 12F – 288F



Cross Section 48f



Cross Section 144f



Cross Section 288f

① OUTER JACKET

② CORRUGATED STEEL TAPE

③ GEL FILLED TUBE

④ STRENGTH MEMBER

⑤ RIPCORD(S)

⑥ WATER BLOCKING TAPE

⑦ FILLER

** Typical Construction Diagram - Not to Scale*

Features & Benefits

- Steel Tape armour and 2 HDPE jackets provide rodent protection along with improved crush and impact protection.
- The Steel Tape armour provides excellent rodent protection and enables post installation cable locating
- Dry water-blocking technology for gel free core helps in quicker end preparation
- Easily removable rugged thermoplastic jacket, with UV protection
- Flexible, light weight, easy to handle & install

Product Details

STL ARMOR -LITE Out-Side Plant, Double Jacket, corrugated Steel Tape armoured, Gel filled Multi-Loose Tube Optical Fibre Cables are suitable for direct burial as well as for duct applications. These cables are based on a loose tube structure with optical fibres placed inside robust buffer tubes stranded around a fibre-glass reinforced plastic (FRP) central strength member. In addition to optical fibres, the buffer tubes contain water blocking gel, and the cable core is surrounded with water-swellaable tape to prevent water ingress in the interstices of cable core. A corrugated Steel Tape armour surrounds the inner jacket and the outer jacket of thermoplastic material is extruded over the armouring bonded to is thus making the cable robust and installation friendly.

Fibres and Cable Performance Standards

The cables comply to the following standards IEC 60793-2-50, IEC 60794-3-10, Telcordia GR-20, ITU-T G652 and/or G657, RoHS, REACH.

Printing Details

STERLITE SM FIBRE TYPE FIBRE COUNT F ARMOR LITE OFC LASER SYMBOL TELEPHONE SYMBOL
YEAR OF MANUFACTURE LENGTH CODE METER MARKING

Printing method : Ink-Jet

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/fflkm)	≤ 0.1
Fibres per Tube	12
Central Strength Member	FRP (Fibre Reinforced Plastic)
Fillers (if required)	Thermoplastic material, Black colour
Core binder	Binders and water swellable yarns and tape
No of Ripcords Below Inner Sheath	2
Inner Jacket Thickness (mm)	1.0 (nominal)
Inner Sheath Material	Black HDPE
Metallic Armouring	Corrugated Steel Tape
No of Ripcords Below Outer Sheath	2
Outer Jacket Thickness (mm)	1.5 (nominal)
Outer Jacket Material	UV Proof Black, HDPE

Fibres and Tubes Colour Sequence (as per DIN/VDE 0888)^{1,2}

Red	Green	Blue	Yellow	White	Grey	Brown	Violet	Turquoise	Black	Pink	Orange
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Notes: ¹The 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).

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

Cable Designs with Double Jacket

Fibre count	Fibre type	Fibre count	Tubes/Fillers	Buffer tube size (mm) ±0.1	Cable Diameter (mm) ±0.5mm	Cable Weight (kg/km) ± 10%	Tensile Strength Short Term (N)
B10012S301GDB20000	G.652 D	12	1/5	2.4	13.4	170	3000
B10024S302GDB20000	G.652 D	24	2/4	2.4	13.4	170	3000
B10048S304GDB20000	G.652 D	48	4/2	2.4	13.4	170	3000
B10072S306GDB20000	G.652 D	72	6/0	2.4	13.4	170	3000
B10096S308GDB20000	G.652 D	96	8/0	2.4	14.2	205	3000
B10144S312GDB20000	G.652 D	144	12/0	2.4	17.0	265	3000
B10192S316GDB20000	G.652 D	192	(6+10) ³ /2	2.4	17.4	260	3000
B10216S318GDB20000	G.652 D	216	(6+12) ³ /0	2.4	17.4	260	3000
B10288S324GDB20000	G.652 D	288	(9+15) ³ /0	2.4	19.2	330	3000
B10012S101GDB20000	G.657 A1	12	1/5	2.4	13.4	170	3000
B10024S102GDB20000	G.657 A1	24	2/4	2.4	13.4	170	3000
B10048S104GDB20000	G.657 A1	48	4/2	2.4	13.4	170	3000
B10072S106GDB20000	G.657 A1	72	6/0	2.4	13.4	170	3000
B10096S108GDB20000	G.657 A1	96	8/0	2.4	14.2	205	3000
B10144S112GDB20000	G.657 A1	144	12/0	2.4	17.0	265	3000
B10192S116GDB20000	G.657 A1	192	(6+10) ³ /2	2.4	17.4	260	3000
B10216S118GDB20000	G.657 A1	216	(6+12) ³ /0	2.4	17.4	260	3000
B10288S124GDB20000	G.657 A1	288	(9+15) ³ /0	2.4	19.2	330	3000

Notes: ³Cable core having 2 layers of loose tubes: first addendum in brackets = number of active tubes in inner layer, second addendum in brackets = number of active tubes in outer layer

Specifications

Mechanical & Environmental Characteristics		
Cable Characteristics	Testing Standard Method	Cable Performance
Tensile Strength Short term (N)	IEC-60794-1-21-E1	As per above tables
Crush Resistance (N/10cm)	IEC-60794-1-21-E3A	3000
Impact Strength (N·m)	IEC-60794-1-21-E4	20
Torsion	IEC-60794-1-21-E7	±180°
Repeated Bending	IEC-60794-1-21-E6	20 x OD
Bend	IEC-60794-1-21-E11A	20 x OD
Min. Bend Radius (During Installation)		20 x OD
Min. Bend Radius (After Installation)		15 x OD
Water Penetration Test	IEC-60794-1-21-F5B	1m waterhead, 3m samples, 24 h
Drip Test	IEC-60794-1-21-E14	30 cm, 70°C, 24 h
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 60794-3-10 standard.

Packing and Lengths

Drum Type	Length Multiple (in feet)
Wooden Drums	4 ± 5% (For all Fibre Counts)

Ordering Information

Please create the desired Product Code following the instructions below:

Product type		Fibre count (0004 – 0288)				Fibre type		No. of active tubes/bundles (01-24)		Tube/ Core type	Fibres/tubes colour code		Jacket type		Running number		Special requirement	
		1				2		3			4							
B	1	-	-	-	-	-	-	-	-	G	-	-	B	2	0	0	0	0

1. Fibre count by indicating the corresponding number from 0004 to 0288

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

Fibre code		Fibre type (ITU-T)	STL's Fibre Name
S	3	G.652D	OH-LITE
S	1	G.652D/G.657A1	BOW-LITE
S	N	G.657A1adv./G.652D	OH-LITE NOVA
S	5	G.655	DOF LITE LEA

3. Select number of active tubes/bundles by indicating the corresponding number from 01 to 24

4. Fibres and tubes colour sequence available options⁴

Code	Fibres and Tubes Colour Codes
A	EIA/TIA 598 C
D	DIN/VDE 0888
F	France
H	Switzerland ⁵
I	Italy
L	Hungary
M	Poland
Note: ⁴ other colour codes are available on demand, prior STL approval ⁵ The standard Swiss colour code includes also the Black jacket with 2 longitudinal Orange stripes	

For additional information please contact your sales representative.

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