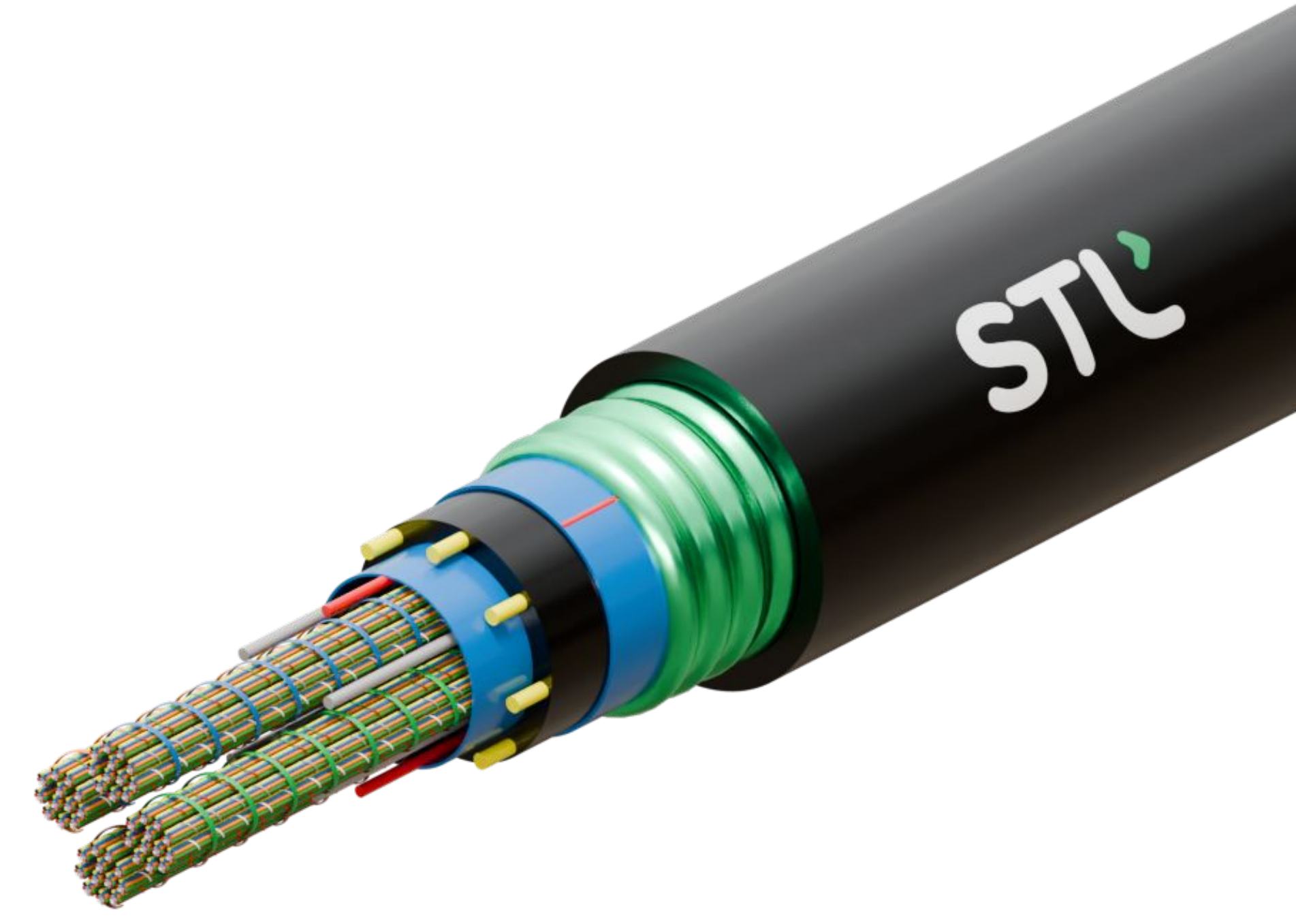
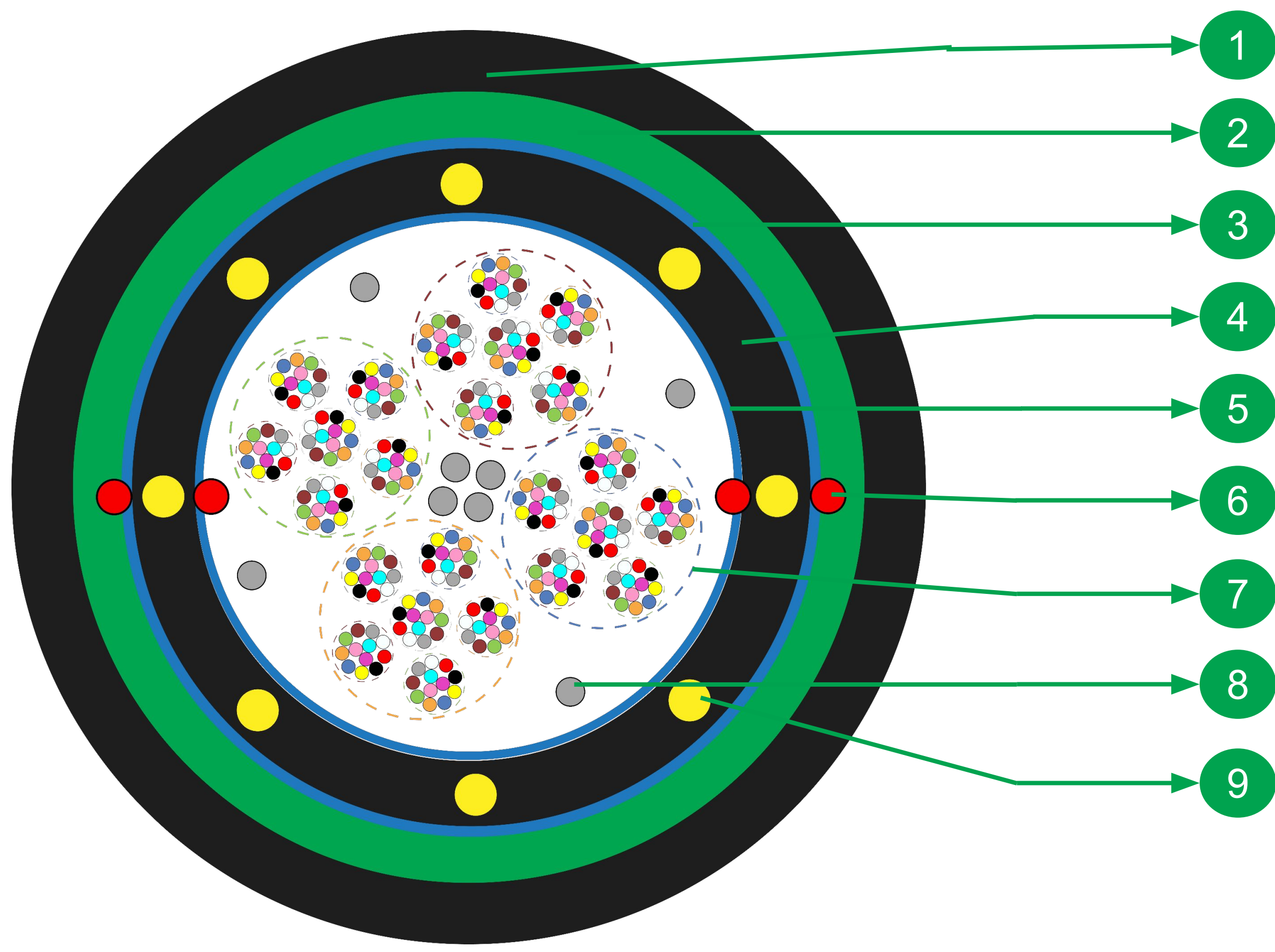




SM CELESTA (IBR) Armored Lite

Gel Free Double Jacket Steel Tape OFC



1 OUTER SHEATH

2 CORRUGATE STEEL TAPE

3 WATER BLOCKING TAPE

4 INNER SHEATH

5 WATER BLOCKING TAPE

6 RIPCORDS

7 INTERMITTENTLY BONDED RIBBON

8 WATER SWELLABLE YARNS

9 EMBEDDED STRENGTH MEMBER

** Typical construction diagram - Not to scale*

Features & Benefits

- Ribbon cable can be prepared and spliced much more rapidly.
- Precise Fiber and ribbon geometries result in excellent mass fusion splicing yields.
- Fiber ribbons are individually marked for easy identification.
- Lower diameter cable as compared to conventional flat ribbon.
- Dry water-blocking technology for gel free core helps in quicker end preparation.
- Steel tape adds to crush resistance as well as can be used as a cable locator after installation.
- Easily removable rugged thermoplastic jacket.
- UV protected, Flexible, lightweight, easy to handle & install.

Product Details

STL SM CELESTA® IBR Armored Lite Gel Free Double Sheath Optical Fiber Cable combines robust performance for duct as well as direct installations with the productivity of high-count mass fusion splicing. The optical fibers are arranged into ribbon units by placing the fibers in a flat array of color-coded fibers partially bonded together by a UV-curable acrylate matrix. CELESTA comes with gel free technology; the inner sheath contains water swellable yarns and is surrounded with water-swellable tape to prevent water ingress in the cable. Corrugated Steel Tape armor surrounds the inner sheath making the cable robust and installation friendly.

Fibers and Cable Performance Standards

Cable complies to the following standards IEC 60793, ANSI/ICEA S-87-640, ITU-T, RoHS, REACH, EIA/TIA-598C.

Printing Details

STERLITE SM “FIBER COUNT” “FIBER TYPE” CELESTA ARMORED OFC LASER SYMBOL TELEPHONE SYMBOL “YEAR OF MANUFACTURE” “LENGTH CODE” “FEET/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	
Fiber Type	ITU-T G.657.A2
Maximum Cabled Attenuation (dB/km)	1310nm: 0.4 & 1550nm: 0.3
PMD LDV (ps/sqrt.km)	</= 0.1
Fibers per Ribbon	12
Fiber Color Sequence in Ribbon	Blue, Orange, Green, Brown, Slate, White, Red, Black, Yellow, Violet, Rose, Aqua
No of Ripcords Below inner sheath	2
Water Blocking	Water swellable yarns and water blocking tape
Inner sheath Material	Black Polyethylene
Water Blocking Element	Water blocking tape
Metallic Armoring	Corrugated Steel Tape (Un-bonded with Sheath)
No of Ripcords	2 below ECCS tape
Embedded Strength Member	Aramid Reinforced Plastic (ARP)
Outer Sheath Material	UV Proof Black MDPE

Cable Characteristics					
Product Code	No. of Fibers	Bundling of Ribbons (Bunch X Fiber)	Unit Binder Color	Cable Diameter mm (inch) (+5%)	Cable Weight Kg/Km (lbs/ft) (+10%)
S10288bb04FAB20000	288	4 X 72	Blue, Orange, Green, Brown	16.0 (0.629)	215 (0.144)
S10432bb06FAB20000	432	6 X 72	Blue, Orange, Green, Brown, Slate, White	17.0 (0.669)	235 (0.157)
S10576bb04FAB20000	576	4 X 144	Blue, Orange, Green, Brown	18.4 (0.724)	265 (0.178)
S10864bb06FAB20000	864	6 X 144	Blue, Orange, Green, Brown, Slate, White	21.5 (0.846)	330 (0.221)
S11008bb07FAB20000	1008	7 X 144	Blue, Orange, Green, Brown, Slate, White, Red	22.5 (0.885)	370 (0.248)
S11152bb04FAB20000	1152	4 X 288	Blue, Orange, Green, Brown	23.6 (0.929)	425 (0.285)
S11728bb06FAB20000	1728	6 X 288	Blue, Orange, Green, Brown, Slate, White	26.7 (1.05)	525 (0.352)

Specifications

Mechanical & Environmental Characteristics		
Cable Characteristics	Testing Standard	Cable Performance
Tensile Strength (N) (lb.)	ICEA 640 FOTP-33	Short Term – 2700 (607) Long Term – 900 (202.3) (or 0.3*short term tensile)
Crush Resistance (N/100 mm) (lb./inch)	ICEA 640 FOTP-41	4400 (228.4)
Impact Strength(Nm) (lb. Inch)	ICEA 640 FOTP-25	5 (44.2)
Torsion	ICEA 640 FOTP-85	±180°
Min. Bend Radius (During Installation)	ICEA 640 FOTP-88	20 D
Min. Bend Radius (After Installation)	ICEA 640 FOTP-88	15 D
Water Penetration Test*	ICEA 640 FOTP-82	1m waterhead, 3m samples, 24 h
Temperature Performance	ICEA 640 FOTP-3	Max. change in attenuation shall be </= 0.15 dB/km
Installation		-30° C to +70° C
Operation		-40° C to +70° C
Storage		-40° C to +70° C

*Water Penetration Test shall be applied on optical element (Inner Sheath).

Note: All tests shall be carried out as per ICEA standards. Change in attenuation after and before testing shall be </= 0.05 dB/km

Packing and Lengths

Drum Type	Length Multiple (in feet)	Order Tolerance	Short Lengths
Wooden Drums	13,123 20,000 ± 5%	± 5%	Max 5%, Customer Approval

Ordering Information

Optical fiber cable in other fiber types may be available on request, please create product code from the table below. Cable complies to the following standards IEC 60793, ANSI/ICEA S-87-640, Telcordia GR-20, ITU-T, RoHS, REACH.

Product type (aa)		Fiber count				Fiber code (bb)		No. of active tubes		Cable core type (c)	Fibers color code (d)	Jacket/ Sheath type (ee)		Running number		Special Request (ff)	
1		2				3		4		5	6	7		8		9	
-	-	-	-	-	-	-	-	-	-	F	A	-	-	0	0	0	0

Create the desired Product Code following the instructions below:

1. aa - Product Type

Code	Product Type
S1	IBR Direct Buried (Armored)

2. Fiber count by indicating the corresponding number from 0288 to 1728
3. bb - Fiber code corresponding to requested fiber type among following options

Fiber Code (bb)	Fiber type (ITU-T)	STL’s Fiber Name	Mode Field Diameter MFD ±0.4 (µm) at 1310 nm
S2	G.657.A2	HD A2 250	8.6
C1	G.652.D/G.657.A1/G.657.A2	Stellar 250	9.1

4. Number of active tubes : 01 to 06
5. c - Cable Core Type

Code	Core Type
F	Dry tube/ Dry Core

6. d - Fiber Color Code

Code	Fiber Color Code
A	A- EIA/TIA 598 C- Blue to Aqua

7. ee - Jacket/Sheath Type

Code	Jacket/Sheath Type
B2	PE + ECCS + PE

For additional information please contact your sales representative.

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

02/052026

The information given herein, including drawings, illustrations and schematics are intended for illustration purposes only and is believed to be reliable. However, STL makes no warranties to its accuracy or completeness and disclaims any liability in connection with its use. STL obligations shall be only set forth in STL standard terms and conditions of the sale and in no case, STL be liable for any incidental, indirect or consequential damages arising out of sale, resale, use or misuse of the product. Users of STL products should make their own evaluation to determine the suitability of such each product for the specific application.