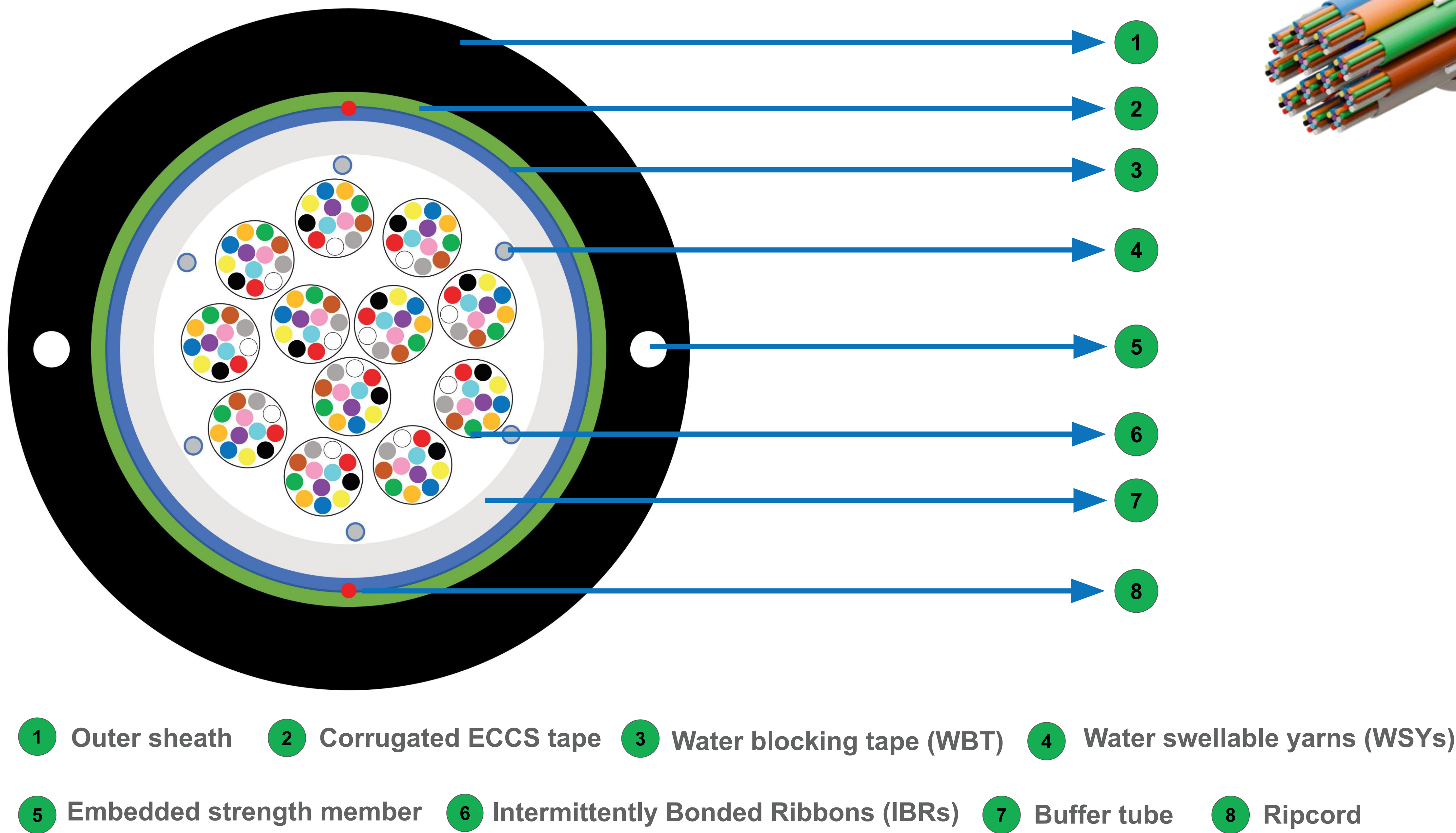


SM CELESTA Armored Lite

Gel Free Single Sheath OFC



* 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, light weight, easy to handle & install

Product Details

STL CELESTA® Unitube Single Jacket Steel Tape Armored 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 contain water swellable yarns and is surrounded with water-swellable tape to prevent water ingress in the cable. A Corrugated Steel Tape armor surrounds the inner sheath making the cable robust and installation friendly.

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

Printing : STL CELESTA IBR ARMOR-LITE OFC FIBER COUNT F SM G657A1 TELEPHONE SYMBOL MONTH(MM)/ YEAR(YYYY) LENGTH CODE FEET MARKING(XXXXX) FT MADE IN USA

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.A1
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
Tube Material	Polypropylene
Water Blocking	Water swellable yarns/ water blocking type binders/ water blocking tape
Metallic Armoring	Corrugated Steel Tape (Un-bonded with Sheath)
No of Ripcords	2 below ECCS tape
Embedded Strength Member	Steel wires
Outer Sheath Material	UV Proof Black MDPE

Fiber Color Sequence (AS per EIA/TIA 598C)											
Blue	Orange	Green	Brown	Slate	White	Red	Black	Yellow	Violet	Rose	Aqua

Cable Characteristics				
Product Code	No. of Fibers	Bundling of Ribbons (Bundle X Fiber)	Tube color	Cable Diameter mm (inch) (±10%)
S10024bb01FABU0000	12	1 X 12	White	10.5 (0.413)
S10024bb01FABU0000	24	1 X 24	White	10.5 (0.413)
S10048bb01FABU0000	48	1 X 48	White	10.5 (0.413)
S10096bb01FABU0000	96	1 X 96	White	11.5 (0.453)
S10144bb01FABU0000	144	1 X 144	White	12.5 (0.492)
S10288bb01FABU0000	288	1 X 288	White	14.0 (0.551)
S10432bb01FABU0000	432	1 X 432	White	14.75 (0.581)

Mechanical & Environmental Characteristics		
Cable Characteristics	Cable Performance	Testing Standard
Tensile Strength (N) (lb.)	Short Term – 2700 (607) Long Term – 900 (202.3) (or 0.3*short term tensile)	ICEA 640 FOTP-33
Crush Resistance (N/100 mm) (lb./inch)	3000 (171)	ICEA 640 FOTP-41
Impact Strength(Nm) (lb. Inch)	5 (44.2)	ICEA 640 FOTP-25
Torsion	±180º	ICEA 640 FOTP-85
Min. Bend Radius (During Installation)	20 D	ICEA 640 FOTP-88
Min. Bend Radius (After Installation)	15 D	ICEA 640 FOTP-88
Water Penetration Test*	1m waterhead, 3m samples, 24 h	ICEA 640 FOTP-82
Temperature Performance	Max. change in attenuation shall be </= 0.15 dB/km at 1550nm	ICEA 640 FOTP-3
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 (loose tube).

Note: All test be carried out by ICEA-640.

Packing and Lengths

Drum Type	Length Multiple (in feet)	Order Tolerance
Wooden Drums	10,000 /20,000 ± 5%,	-0%, +5%

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 type (bb)		No. of active tubes		Cable core types (c)	Fiber color code (d)	Sheath/Jacket type (ee)		Running number		Special Request ()	
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 0012 to 0432

3. bb - Fiber code corresponding to requested fiber type among following options

Fiber Code	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 IBR bundles: 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 Type

Code	Sheath Type
BU	ECCS (Unbonded) + PE (For Single Armor Single Jacket Designs)

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