

Product Name : Celesta OSP DJ ST Armored Stellar 250 Gel Free ECCS, PE OFC

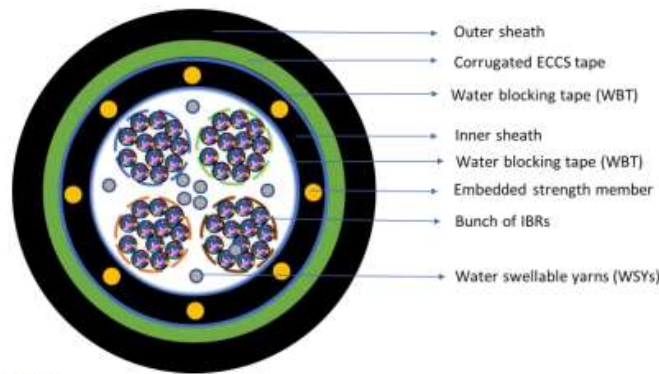
Revision : 1.2

Date : 03-Mar-2024

Product Details

STL SM CELESTA® Armored Lite Gel Free Double Sheath Optical Fibre Cable combines robust performance for duct as well as direct installations with the productivity of high-count mass fusion splicing. The optical fibres are arranged into ribbon units by placing the fibres in a flat array of color-coded fibres 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.

Construction Diagram



* 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.

Specifications

Physical Characteristics	
Fiber Type	STL Stellar (ITU-T G.657.A1/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
Inner sheath Material	Black Polyethylene
Water Blocking	Water swellable yarns and water blocking tape
Metallic Armoring	Corrugated Steel Tape (Un-bonded with Sheath)
No of Ripcords Below Tape	2 below ECCS tape
Embedded Strength Member	Aramid Reinforced Plastic (ARP)
Outer Sheath Material	UV Proof Black Polyethylene

Cable Characteristics					
Product Code	No. of Fibers	Bundling of Ribbons (Bundle X Fiber)	Unit Binder Color	Cable Diameter mm (inch) (+5%)	Cable Weight Kg/Km (lbs/ft) (±10%)
S10288C104FAB20000	288	4 X 72	Blue, Orange, Green, Brown	16.0 (0.629)	215 (0.144)
S10432C106FAB20000	432	6 X 72	Blue, Orange, Green, Brown, Slate, White	17.0 (0.669)	235 (0.157)
S10576C104FAB20000	576	4 X 144	Blue, Orange, Green, Brown	18.4 (0.724)	265 (0.178)
S10864C106FAB20000	864	6 X 144	Blue, Orange, Green, Brown, Slate, White	21.5 (0.846)	330 (0.221)
S11008C107FAB20000	1008	7 X 144	Blue, Orange, Green, Brown, Slate, White, Red	22.5 (0.885)	370 (0.248)
S11152C104FAB20000	1152	4 X 288	Blue, Orange, Green, Brown	23.6 (0.929)	425 (0.285)
S11728C106FAB20000	1728	6 X 288	Blue, Orange, Green, Brown, Slate, White	26.7 (1.05)	525 (0.352)

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 $\leq 0.15\text{ dB/km}$
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 $\leq 0.05\text{ dB/km}$

Cable Performance Standards

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

Packing and Lengths

Drum Type	: Wooden Drums
Length Multiple (km)	: 4 6 km (13,123 20,000 ft) ± 5%
Order Tolerance	: ± 5%
Short Lengths	: Max 5%, Customer Approval

Printing Details

Printing	: STERLITE SM STELLAR "FIBER COUNT" "FIBRE TYPE" CELESTA ARMORED OFC LASER SYMBOL TELEPHONE SYMBOL "YEAR OF MANUFACTURE" "LENGTH CODE" "FEET/METER MARKING"
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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.