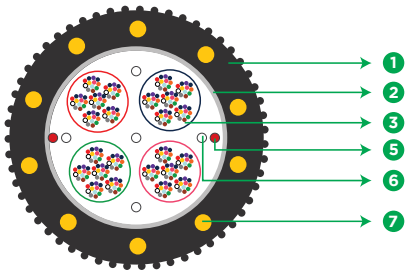
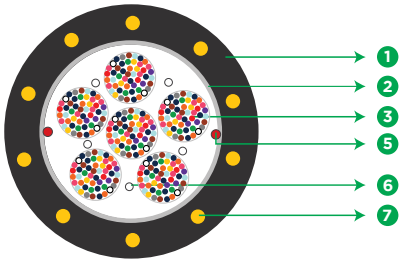
Celesta

Intermittently Bonded Ribbon OFC
Single Sheath Duct



96F~576F



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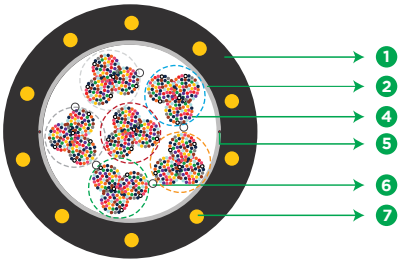

1728F

1. **OUTER SHEATH**
2. **WATER BLOCKING TAPE**
3. **BUNDLE OF RIBBONS OF 12 FIBERS**
4. **BUNDLE OF RIBBONS OF 24 IBRs**
5. **RIPCORDS**
6. **WATER SWELLABLE YARNS**
7. **EMBEDDED STRENGTH MEMBER**

** Typical Construction Diagram - Not to Scale*

Features & Benefits

- Special bend insensitive fiber results in increased power budget and network serviceability
- Unique cable design allows deployment by blowing and pulling
- Innovative Color-coded bonded design for easier and faster Ribbon identification
- Black Printing for easier and faster Ribbon identification
- Precise fiber and ribbon geometries result in excellent mass fusion splicing yields
- Multiple ribbon bundles design with ripcords for easy and quick mid-span access
- Aramid reinforced plastic strength members for mitigating preferential bending
- Dry water-blocking technology for gel free core helps in quicker end preparation

Product Details

STL's Celesta Intermittent Bonded Ribbon Cable combines robust performance for duct installations with the productivity of high-count mass fusion splicing. The innovative ribbon bond design results in dense fiber packing and smaller cable diameter. This cable offers an outstanding solution for demanding high-growth, high-bandwidth communications applications like data centers, equipment connections within cabinets, outside plant applications.

Product Specification

Cable Performance Standards

Cable complies to the following standards IEC 60793, IEC 60794, ANSI/ICEA S-122-744, Telcordia GR-20, ITU-T, RoHS, REACH, EIA/TIA-598C.

Printing Details

Printing : STL SM “FIBER COUNT” “FIBER TYPE” CELESTA IBR OFC LASER SYMBOL TELEPHONE SYMBOL YEAR OF MANUFACTURE LENGTH CODE FEET 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	STL Bow-Lite(E) ITU-T G.657A2 250um
Maximum Cabled Attenuation (dB/km)	1310nm : 0.4 & 1550nm : 0.3
PMD LDV (ps/sqrt.km)	≤ 0.2
Ribbon Type	Intermittently Bonded Ribbon (IBR)
Fiber per IB Ribbon	12
Water Blocking Elements	Yarns and Water Swellable Tape
No. of Ripcords	2
Strength Member	Aramid Reinforced Plastic (ARP) Embedded in outer Sheath
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%)	Tensile Strength N (lbf.)
CR0096FS201BFP1US	96	1 x 96	Blue	8.2 (0.322)	45 (0.030)	1000 (224.8)
CR0144FS202BFP1US	144	2 X 72	Blue, Orange	11.7 (0.460)	78 (0.05)	1000 (224.8)
CR0288FS204BFP1US	288	4 X 72	Blue, Orange, Green, Brown	11.7 (0.460)	96 (0.06)	2500 (562)
CR0432FS206BFP1US	432	6 X 72	Blue, Orange, Green, Brown, Slate, White	12.7 (0.50)	110 (0.73)	2700 (606.9)
CR0576FS204BFP1US	576	4 X 144	Blue, Orange, Green, Brown	14.0 (0.55)	130 (0.08)	2700 (606.9)
CR0864FS206BFP1US*	864	6 x 144	Blue, Orange, Green, Brown, Slate, White	17.7 (0.69)	200 (0.13)	2700 (606.9)
CR1728FS203BFP1US*	1728	6 x 288	Blue, Orange, Green, Brown, Slate, White	23.5 (0.93)	332 (0.222)	2700 (606.9)

*- 864F and 1728F shall have smooth surface.

Specifications

Mechanical & Environmental Characteristics		
Cable Characteristics	**Cable Performance**	**Testing Standard**
Tensile Strength (N) (lbf)	Short Term – as per above table Long Term – 1/3rd of the short term tensile	ICEA 122-744|FOTP-33
Crush Resistance (N/cm) (lbf/in)	220 (125.62)	ICEA 122-744|FOTP-41
Impact Strength (Nm) (lb.in)	10 (88.5)	ICEA 122-744|FOTP-25
Torsion	±180°	ICEA 122-744|FOTP-85
Min. Bend Radius (During Installation)	20 D	ICEA 122-744|FOTP-88
Min. Bend Radius (After Installation)	15 D	ICEA 122-744|FOTP-88
Water Penetration Test*	1m waterhead, 3m samples, 24 h	ICEA 122-744|FOTP-82
Temperature Performance	Max. change in attenuation shall be </= 0.15 dB/km	ICEA 122-744|FOTP-3
Installation	-30°C to +70°C	
Operation	-40°C to +70°C	
Storage	-40°C to +70°C	

* For 1728F sample length shall be 5m

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

IBR Identification Printing and Color Sequence

Fiber Color Sequence (AS per EIA/TIA 598C)

Blue	Orange	Green	Brown	Slate	White	Red	Black	Yellow	Violet	Rose	Aqua

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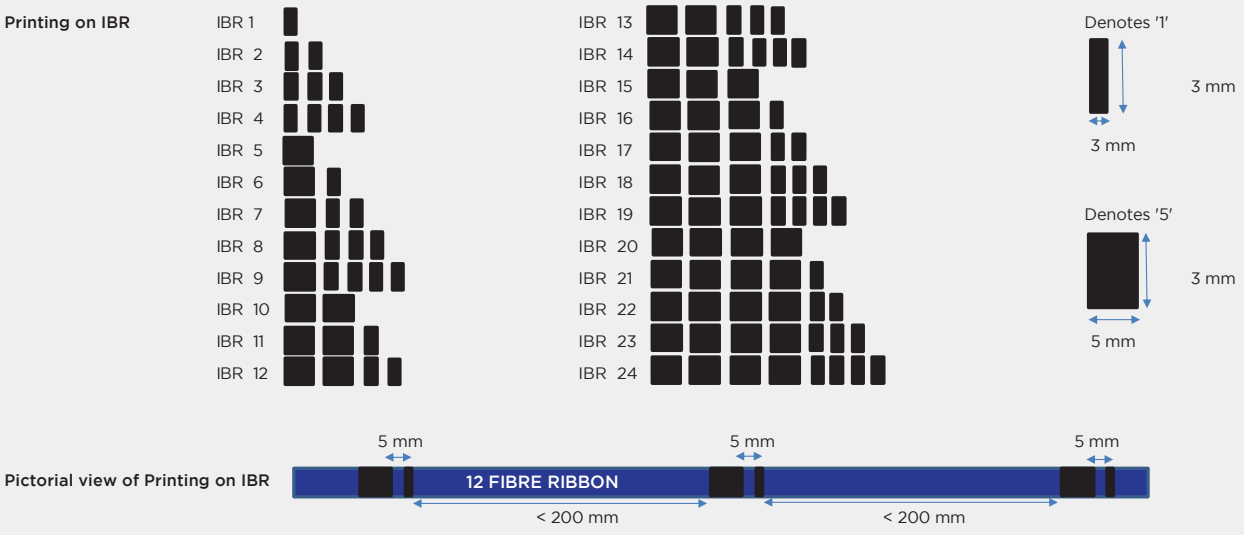
Blue	Orange	Green	Brown	Slate	White



Packing and Lengths

Drum Type	Length Multiple (feet)	Order Tolerance	Non-standard Length
Wooden Drums	10,000 | 20,000 ± 5% (upto 864F) 10,000 ± 5% (for 1728F)	± 5%	Max 20%, Customer Approval