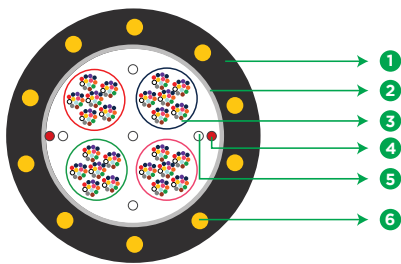
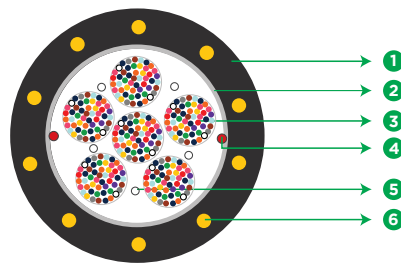


Celesta

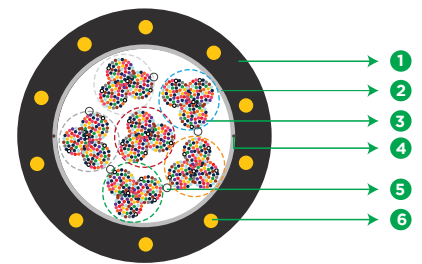
Intermittently Bonded Ribbon OFC Single Sheath Duct



96F-576F



864F



1728F

- | | | |
|-----------------------|--------------------------------|-----------------------------------|
| 1 OUTER SHEATH | 2 WATER BLOCKING TAPE | 3 BUNCH OF IBRs |
| 4 RIPCORDS | 5 WATER SWELLABLE YARNS | 6 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.

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 HD A2 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.) |
| R10096S201FAP10000 | 96 | 1 x 96 | Blue | 8.2 (0.322) | 45 (0.030) | 1000 (224.8) |
| R10144S202FAP10000 | 144 | 2 X 72 | Blue, Orange | 11.7 (0.460) | 78 (0.05) | 1000 (224.8) |
| R10288S204FAP10000 | 288 | 4 X 72 | Blue, Orange, Green, Brown | 11.7 (0.460) | 96 (0.06) | 2500 (562) |
| R10432S206FAP10000 | 432 | 6 X 72 | Blue, Orange, Green, Brown, Slate, White | 12.7 (0.50) | 110 (0.73) | 2700 (606.9) |
| R10576S204FAP10000 | 576 | 4 X 144 | Blue, Orange, Green, Brown | 14.0 (0.55) | 130 (0.08) | 2700 (606.9) |
| R10864S206FAP10000 | 864 | 6 x 144 | Blue, Orange, Green, Brown, Slate, White | 17.7 (0.69) | 200 (0.13) | 2700 (606.9) |
| R11728S206FAP10000 | 1728 | 6 x 288 | Blue, Orange, Green, Brown, Slate, White | 23.5 (0.93) | 332 (0.222) | 2700 (606.9) |

Specifications

| Mechanical & Environmental Characteristics | | |
|--|--|----------------------|
| Cable Characteristics | Cable Performance | Testing Standard |
| Tensile Strength (N) (lbf) | Short Term - as per above table Long Term - 1/3 rd 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) | 1 (8.85) | 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 $\leq 0.15\text{ dB/km}$ | 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 $\leq 0.05\text{ dB/km}$ 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 |
|------|--------|-------|-------|-------|-------|-----|-------|--------|--------|------|------|

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

| | | | | | |
|------|--------|-------|-------|-------|-------|
| Blue | Orange | Green | Brown | Slate | White |
|------|--------|-------|-------|-------|-------|

Printing on IBR

Denotes '1'

3 mm

Denotes '5'

3 mm

5 mm

Pictorial view of Printing on IBR

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 |

For additional information please contact your sales representative.

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

01/0724

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.