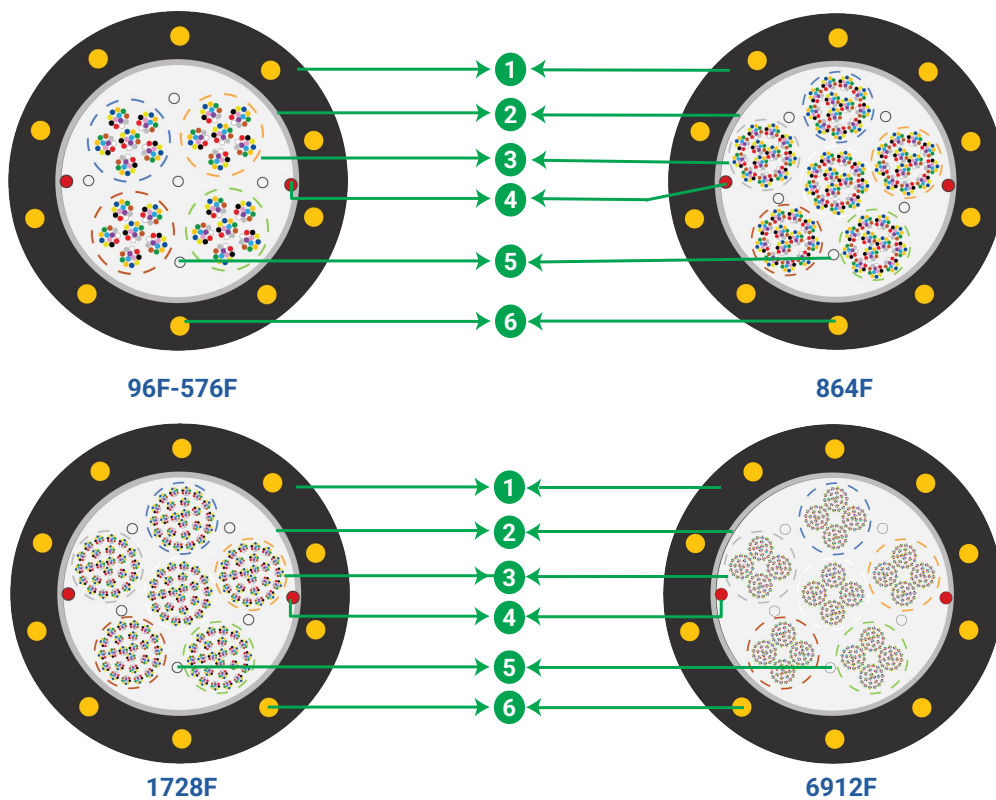


Celesta

Intermittently Bonded Ribbon OFC Single Sheath Duct



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 IBR 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)	≤ 0.1
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.)
R10048bb01FAP10000	48	1 x 48	Blue	8.2 (0.322)	40 (0.026)	800 (179.8)
R10072bb01FAP10000	72	1 x 72	Blue	8.2 (0.322)	40 (0.026)	800 (179.8)
R10096bb01FAP10000	96	1 x 96	Blue	8.2 (0.322)	45 (0.030)	1000 (224.8)
R10144bb02FAP10000	144	2 X 72	Blue, Orange	11.7 (0.460)	78 (0.05)	1000 (224.8)
R10288bb04FAP10000	288	4 X 72	Blue, Orange, Green, Brown	11.7 (0.460)	96 (0.06)	2500 (562)
R10432bb06FAP10000	432	6 X 72	Blue, Orange, Green, Brown, Slate, White	12.7 (0.50)	110 (0.73)	2700 (606.9)
R10576bb04FAP10000	576	4 X 144	Blue, Orange, Green, Brown	14.0 (0.55)	130 (0.08)	2700 (606.9)
R10864bb06FAP10000	864	6 x 144	Blue, Orange, Green, Brown, Slate, White	17.7 (0.69)	200 (0.13)	2700 (606.9)
R11152bb04FAP10000	1152	4 x 288	Blue, Orange, Green, Brown	19.8 (0.77)	250 (0.168)	2700 (606.9)
R11728bb06FAP10000	1728	6 x 288	Blue, Orange, Green, Brown, Slate, White	23.5 (0.93)	332 (0.222)	2700 (606.9)
R13456bb12FAP10000	3456	12 x 288	Blue, Orange, Green, Brown, Slate, White, Red, Black, Yellow, Violet, Pink, Aqua	25.5 (1.0)	390 (0.262)	Short Term 2700 (606.9)
R16912bb06FAP10000	6912*	6 x 1152	Blue, Orange, Green, Brown, Slate, White	35.2 (1.39)	700 (0.470)	Long term 890 (200.8)

*6912F is only available with 200µm.

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)	10 (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 <= 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 and above fiber count cables, sample length shall be 5m

Note : All tests shall be carried out as per ICEA 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

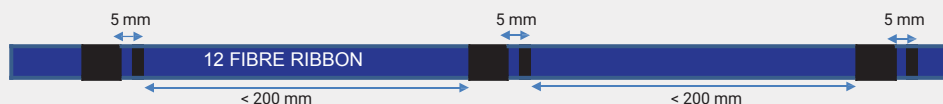
Binder Color Sequence (AS per EIA/TIA 598C)

Blue Orange Green Brown Slate White

Printing on IBR



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%	± 5%	Max 20%, 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 type (bb)		No. of active tubes		Cable core types (c)	Fiber 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
R1	IBR Duct

2. Fibre count by indicating the corresponding number from 0048 to 6912
3. bb - Fibre code corresponding to requested fibre 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
S9	G.657.A2	HD A2 200	8.6
C1*	G.652.D/G.657.A1/G.657.A2	Stellar 250	9.1

* Available upto 1728 fiber count only

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/Sheath Type

Code	Core type
P1	Polyethylene (PE)

For additional information please contact your sales representative.

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

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