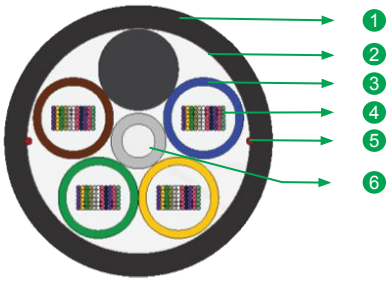
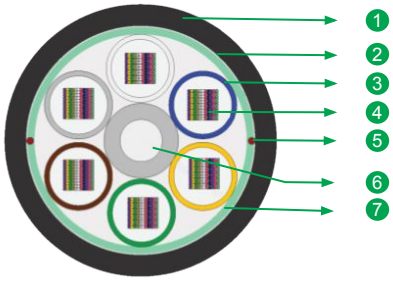
Product Specification

RapidRibbon

Gel Free Single Jacket Ribbon OFC



Single Jacket Dielectric Design



Single Jacket Armored Design

1 OUTER JACKET
2 WATER BLOCKING TAPE
3 GEL FREE LOOSE TUBES
4 RIBBON
5 RIPCORD(S)
6 STRENGTH MEMBER
7 CORRUGATED STEEL TAPE

** Typical Construction Diagram - Not to Scale*

Features & Benefits

- **Precise Fiber and Ribbon Geometries for Mass Fusion Splicing:** The fiber ribbons provide good mass-fusion splicing efficiency, while also enabling the occasional single-fiber splicing; saving time and resources during network construction.
- **Gel-Free Core with Dry Water-Blocking Technology**: Our innovative technology guarantees a gel-free core, simplifying end preparation and reducing installation time. Dry water-blocking enhances cable performance in adverse weather conditions, minimizing downtime.
- **Easily Removable Rugged Thermoplastic Jacket:** The cables are equipped with a rugged thermoplastic jacket that can be easily removed when needed. Additionally, dry-water blocking technology ensures swift access to the cable core, simplifying maintenance and repairs.
- **Flexible and Lightweight Design**: Our cables are designed to be incredibly flexible and lightweight, ensuring easy handling and installation, reducing strain on your team, and saving time during deployment.
- **Compliance with Federal Build America Buy America Regulations:** Options available for cable and fiber components that are nationally sourced and adhere to federal regulations, demonstrating our commitment to quality and compliance.

Product Details

STL RapidRibbon Single Jacket Ribbon Cable integrates robust performance with the efficiency of high-count mass fusion splicing for aerial, direct buried and duct installations. Twelve optical fibers, color-coded and bonded with a UV-curable acrylate matrix, offer a streamlined solution. Employing gel-free technology, the buffer tubes, with water-swellable yarns, are shielded by water-swellable tape to stop water ingress. The reverse oscillation stranding method enhances flexibility and durability, forming the cable core around the central strength member. To provide additional protection, STL RapidRibbon is also available with a robust corrugated steel tape armor that envelops the cable core, and a thermoplastic jacket is then applied over this armor layer. This proven design not only enhances the cable's durability but also simplifies installation, making it a dependable choice for a wide range of applications. STL RapidRibbon excels in demanding environments and outside plant applications, providing a reliable, scalable solution in a compact form.

Fibers and Cable Performance Standards

Cable complies to the following standards IEC 60793, IEC 60794, ANSI/ICEA S-87-640, Telcordia GR-20, ITU-T, RoHS, REACH, EIA/TIA 598C

Specifications

Physical Characteristics	
Maximum Cabled Attenuation (dB/km)	1310nm : 0.4 & 1550nm : 0.3
PMD/LDV (ps/sqrt.km)	≤ 0.1
Fibers per IB Ribbon	12
Tube Material	White or Natural, Polypropylene (PP)
Central Strength Members	FRP (Fiber Reinforced Plastic)
Water Blocking	Yarns and Water Swellable Tape
Metallic Armoring (For Armored Design)	Corrugated Steel Tape (Un-bonded with Jacket)
No. of Ripcords	2
Outer Jacket Material	UV Proof Black Polyethylene

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

Cable Characteristics						
Product Code [1]	**Fiber count**	**No. of Tubes**	**Cable Diameter mm (in) ±5%**	**Cable Weight kg/km (lbs./ft.) ±10%**	**Cable Diameter mm (in) ±5%**	**Cable Weight kg/km (lbs./ft.) ±10%**
			Single Jacket Dielectric Design		**Single Jacket Armored Design**	
AA-0012-BB-01-F-A-CC-0000	12	1	11.8 (0.464)	138 (0.092)	12.5 (0.492)	144 (0.096)
AA-0024-BB-01-F-A-CC-0000	24	1				
AA-0036-BB-01-F-A-CC-0000	36	1				
AA-0048-BB-01-F-A-CC-0000	48	1				
AA-0072-BB-01-F-A-CC-0000	72	1	12.2 (0.480)	145 (0.097)	13.0 (0.511)	160 (0.107)
AA-0096-BB-01-F-A-CC-0000	96	1	12.6 (0.496)	150 (0.100)	13.5 (0.531)	180 (0.120)
AA-0144-BB-01-F-A-CC-0000	144	1	13.8 (0.543)	162 (0.108)	14.5 (0.570)	200 (0.134)
AA-0288-BB-04-F-A-CC-0000	288	4	21.4 (0.842)	230 (0.154)	23.8 (0.937)	365 (0.245)
AA-0432-BB-06-F-A-CC-0000	432	6	23.8 (0.937)	275 (0.184)	26.2 (1.03)	440 (0.295)
AA-0576-BB-04-F-A-CC-0000	576	4	24.4 (0.960)	306 (0.205)		
AA-0864-BB-06-F-A-CC-0000	864	6	27.0 (1.06)	365 (0.245)	29.0 (1.14)	530 (0.356)

Note 1: This is the recommended product code nomenclature. Refer to Ordering Information at the end of this document for details.

Specifications

Mechanical & Environmental Characteristics [2]			
Cable Characteristics		**Cable Performance**	**Testing Standard Method**
Tensile Strength		Short Term - 2700 (606.9) | Long Term - 900 (202.3)	IECA 640 | FOTP-33
Crush Resistance (N/cm) (lbf/in)	Dielectric Design	220 (125)	IECA 640 | FOTP-41
	Armored Design	300 (171)	IECA 640 | FOTP-41
Impact Strength(Nm)		5 (44.2)	IECA 640 | FOTP-25
Torsion		±180º	IECA 640 | FOTP-85
Min. Bend Radius (During Installation)		20 D	IECA 640 | FOTP-88
Min. Bend Radius (After Installation)		15 D	IECA 640 | FOTP-88
Water Penetration Test		1m head, 3m samples, 24 hrs	IECA 640 | FOTP-82
Temperature Performance		Max. change in attenuation shall be ≤ 0.15 dB/km	IECA 640 | FOTP-3
Installation		-30º C to +70º C	
Operation		-40º C to +70º C	
Storage		-40º C to +70º C	

Note 2: 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.

Packing and Lengths

Drum Type	Fiber Count	Length Multiple (in feet)	Order Tolerance	Short Lengths
Wooden Drums	Up to 288F	3,123; 20,000 ± 5%	-0%, +5%	Max 5%, Customer Approval
	432F- 864F	10,000 ± 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, IEC 60794, ANSI/ICEA S-87-640, Telcordia GR-20, ITU-T, RoHS, REACH, EIA/TIA 598C

Product Type	Fiber Count	Fiber Type	No. of Active Tubes	Cable Core Type	Fibers Color Code	Jacket Type	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
N1	Flat Ribbon Multi-Tube Dielectric Cable (192F - 864F)
O1	Flat Ribbon Multi-Tube Armor Cable (192F - 864F)
O7	Flat Ribbon Unitube Armored Cable (12F - 144F)
Q1	Flat Ribbon Unitube Dielectric Cable (12F - 144F)

2. Fiber Count - Refer to Product Code in Cable Characteristics Table

3. BB - Fiber Type Corresponding to Requested Fiber Type Among Following Options

Code	Fiber Type (ITU-T)	STL's Fiber Name	Mode Field Diameter MFD ±0.4(µm) at 1310 nm
SN	G.657.A1/ G.652.D	STL Nova 250 Fiber	9.1
U1 (For Unitube Designs)	G.657.A1/ G.652.D	US-Made G.657.A1 Fiber	9.2
E1 (For Multi-Tube Designs)	G.652.D	US-Made G.652.D Fiber	9.2

4. Number of Active Tubes - Refer to Product Code in Cable Characteristics Table

5. Cable Core Type

Code	Core Type
F	Dry Tube/ Dry Core

6. Fiber Color Code

Code	Fiber Color
A	A- EIA/TIA 598 C- Blue to Aqua

7. CC - Jacket Type

Code	Jacket Type
P1	PE (For Single Jacket Dielectric Designs)
BU	ECCS (Unbonded) + PE (For Single Armor Single Jacket Designs)

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For additional information please contact your sales representative.

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