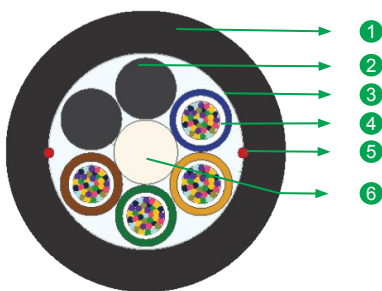
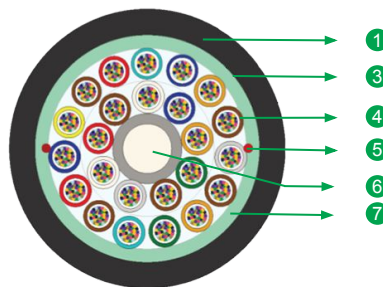


# RapidTube

## Multi Loose Tube Gel Free OFC



Single Jacket Dielectric Design



Single Jacket Armored Design

1 OUTER JACKET

2 FILLER

3 WATER BLOCKING TAPE

4 GEL FREE LOOSE TUBES

5 RIPCORD(S)

6 STRENGTH MEMBER

7 CORRUGATED STEEL TAPE

\* Typical Construction Diagram - Not to Scale

## Features & Benefits

- **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.
- **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.
- **Robust Rodent Protection:** The PE outer jacket combined with steel tape armor creates a formidable barrier against rodent damage, safeguarding your cables from costly and disruptive disruptions caused by rodents.
- **Superior Crush and Impact Resistance:** The reinforced design offers outstanding protection against crushing and impact forces, ensuring the integrity and longevity of your cable infrastructure even in demanding environments.
- **Effortless Post-Installation Cable Locating:** The steel tape armor not only provides physical protection but also serves as a reference point for precise post-installation cable locating, facilitating maintenance and repair tasks with accuracy.
- **Convenient Jacket Removal:** The thermoplastic jacket, engineered for easy removal and unbonded with the steel tape, simplifies cable installation and maintenance, making your job more efficient and cost-effective.
- **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 RapidTube Multi Loose Tube Gel free optical fiber cables are engineered for versatile applications, making them ideal for aerial, direct burial and duct installations. Setting them apart is their innovative gel-free technology, which ensures reliable performance in challenging environmental conditions. These cables are surrounded with water-swellable yarns within the buffer tubes and a water-swellable tape around the cable core, effectively safeguarding against water ingress. The cable core is thoughtfully constructed with buffer tubes, which are expertly stranded around a central strength member using the reverse oscillation stranding method. To provide additional protection, STL RapidTube 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 thoughtful design not only enhances the cable's durability but also simplifies installation, making it a dependable choice for a wide range of applications.

## Fibers and Cable Performance Standards

Cable complies to the following standards IEC 60793, ANSI/ICEA S-87-640, Telcordia GR-20, ITU-T, RoHS, REACH.

## Specifications

Physical Characteristics	
Maximum Cabled Attenuation (dB/km)	1310nm : 0.35 & 1550nm : 0.25
PMD/LDV (ps/sqrt.km)	≤ 0.1
Tube Material	Polypropylene (PP)
Loose Tube Size	2.4 mm (Typical)
Central Strength Members	FRP (Fiber Reinforced Plastic)
Filler	Thermoplastic Material
Core Wrapping	Binder 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
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Cable Characteristics						
Product Code <sup>1</sup>	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-0004-BB-01-F-A-CC-0000	4	1	10.6 (0.417)	74 (0.049)	12.6 (0.496)	140 (0.094)
AA-0006-BB-01-F-A-CC-0000	6	1				
AA-0008-BB-01-F-A-CC-0000	8	1				
AA-0012-BB-01-F-A-CC-0000	12	1				
AA-0024-BB-02-F-A-CC-0000	24	2				
AA-0048-BB-04-F-A-CC-0000	48	4				
AA-0060-BB-05-F-A-CC-0000	60	5				
AA-0072-BB-06-F-A-CC-0000	72	6	12.5 (0.484)	88 (0.059)	14.3 (0.562)	160 (0.107)
AA-0084-BB-07-F-A-CC-0000	84	7				
AA-0096-BB-08-F-A-CC-0000	96	8	15.7 (0.622)	140 (0.094)	17.8 (0.700)	234 (0.157)
AA-0144-BB-12-F-A-CC-0000	144	12				
AA-0216-BB-18-F-A-CC-0000	216	18				
AA-0288-BB-24-F-A-CC-0000	288	24	18.2 (0.716)	172 (0.115)	20.2 (0.795)	275 (0.184)
AA-0432-BB-36-F-A-CC-0000	432	36	22.4 (0.881)	240 (0.161)	23.4 (0.921)	350 (0.228)

**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 <sup>2</sup>			
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)		As per GR-20 compliance	IECA 640   FOTP-25
Torsion		±180°	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		-30° C to +70° C	
Operation		-40° C to +70° C	
Storage		-40° C to +70° 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	Length Multiple (in feet)	Order Tolerance	Short Lengths
Wooden Drums	13,123; 20,000 ± 5% (All Fiber Counts)	-0%, +5%	Max 5%, 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	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		
D1	Multi Loose Tube Single Jacket Dielectric Cable		
B1	Multi Loose Tube Single Jacket Steel Tape Armored Cable		
2. Fiber Count - Refer to Product Code in Cable Characteristics Table			
3. BB - Fiber Type Code Corresponding to Requested Fiber Type Among Following Options			
Code	Fiber Type (ITU-T)	STL's Fiber Name	Mode Field Diameter MFD $\pm 0.4(\mu\text{m})$ at 1310 nm
SN	G.657.A1/ G.652.D	STL Nova 250 Fiber	9.1
U1	G.657.A1/ G.652.D	US-Made G.657.A1 Fiber	9.2
4. Number of Active Tubes - Refer to Product Code in Cable Characteristics Table			
5. Cable Core Type			
Code	Cable Core Type		
F	Dry Tube/ Dry Core		
6. Fibers Color Code			
Code	Fibers 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](http://www.stl.tech)

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