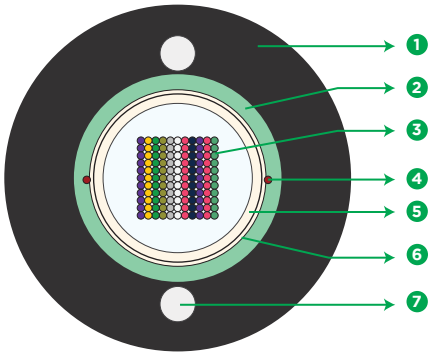
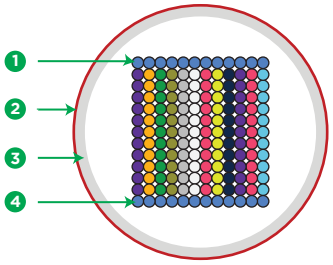
Product Specification

Ribbon-Lite

Unitube Gel Free Single Jacket Armored OFC
12F - 144F | Nova - G.657.A1 Single Mode Fiber





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

1. RIBBON SAFEGUARDING
2. FIBER RIBBON AND WSM
3. WATER SWELLABLE MATERIAL
4. RIBBON SAFEGUARDING

** Typical Construction Diagram - Not to Scale*

Features & Benefits

- Ribbon cable can be prepared and spliced much more rapidly
- Precise Fiber and ribbon geometries result in excellent mass fusion splicing yields
- Fiber ribbons are individually marked for easy identification
- Dry water-blocking technology for gel free core helps in quicker end preparation
- Steel tape adds to crush resistance as well as can be used as a cable locator after installation
- Easily removable rugged thermoplastic jacket
- UV protected, Flexible, light weight, easy to handle & install

Product Details

STL RIBBON-LITE Unitube Single Jacket Steel Tape Armored Cable combines robust performance for duct as well as direct installations with the productivity of high count mass fusion splicing. The optical fibers are arranged into ribbon units by placing the fibers in a flat array of color-coded Fibers bonded together by a UV-curable acrylate matrix. RIBBON-LITE comes with gel free technology, the buffer tubes contain water swellable yarns and is surrounded with water-swellable tape to prevent water ingress in the cable. A Corrugated Steel Tape armor surrounds the buffer tube, sheathed by thermoplastic jacket with embedded steel strength members diagonally opposite placed over the armor layer making the cable robust and installation friendly.

Cable Performance Standards

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

Printing Details

Printing : STL SM NOVA “FIBER COUNT” ARMORED 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 NOVA (ITU-T G.657A1)
Maximum Cabled Attenuation (dB/km)	1310nm : 0.4 & 1550nm : 0.3
PMD LDV (ps/sqrt.km)	</= 0.1
Fibers per Ribbon	12
Tube Material	White or Natural, Polypropylene (PP)
Water Blocking	Yarns and water swellable tape
Metallic Armoring	Corrugated Steel Tape (Un-bonded with Sheath)
No. of Ripcords Below Tape	2
Embedded Strength Member	Steel Wire
Outer Sheath Material	UV Proof Black Polyethylene

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

Cable Characteristics				
Product Code	**Ribbon per Tube**	**Tube Color Sequence**	**Cable Diameter (mm +/- 5%)**	**Cable Weight (kg/km +/- 10%)**
RA0012FSN01TFBUUS	1	BSR, 1 RIBBON 1, BSR	12.5 (0.492)	142 (0.095)
RA0024FSN01TFBUUS	2	BSR, 1 RIBBON 1, 2 RIBBON 2, BSR	12.5 (0.492)	144 (0.096)
RA0036FSN01TFBUUS	3	BSR, 1 RIBBON 1, 2 RIBBON 2, 3 RIBBON 3, BSR	12.5 (0.492)	146 (0.098)
RA0048FSN01TFBUUS	4	BSR, 1 RIBBON 1, 2 RIBBON 2, 3 RIBBON 3, 4 RIBBON 4, BSR	12.5 (0.492)	152 (0.102)
RA0072FSN01TFBUUS	6	BSR, 1 RIBBON 1, 2 RIBBON 2, 3 RIBBON 3, 4 RIBBON 4, 5 RIBBON 5, 6 RIBBON 6, BSR	13.0 (0.511)	160 (0.107)
RA0096FSN01TFBUUS	8	BSR, 1 RIBBON 1, 2 RIBBON 2, 3 RIBBON 3, 4 RIBBON 4, 5 RIBBON 5, 6 RIBBON 6, 7 RIBBON7, 8 RIBBON 8, BSR	13.5 (0.531)	180 (0.120)
RA0144FSN01TFBUUS	12	BSR, 1 RIBBON 1, 2 RIBBON 2, 3 RIBBON 3, 4 RIBBON 4, 5 RIBBON 5, 6 RIBBON 6, 7 RIBBON 7, 8 RIBBON 8, 9 RIBBON 9, 10 RIBBON 10, 11 RIBBON 11, 12 RIBBON 12, BSR	14.5 (0.570)	200 (0.134)

Note : BSR - Blue Colored Safeguard Ribbon

Specifications

Mechanical & Environmental Characteristics		
Cable Characteristics	**Cable Performance**	**Testing Standard**
Tensile Strength (N) (lbf)	Short Term – 2700 (606.9) Long Term – 900 (202.3) (or 0.3*short term tensile)	ICEA 640 | FOTP-33
Crush Resistance (N/cm) (lbf/in)	300 (171)	ICEA 640 | FOTP-41
Impact Strength (Nm) (lbf.in)	5 (44.2)	ICEA 640 | FOTP-25
Torsion	±180°	ICEA 640 | FOTP-85
Min. Bend Radius (During Installation)	20 D	ICEA 640 | FOTP-88
Min. Bend Radius (After Installation)	15 D	ICEA 640 | FOTP-88
Water Penetration Test	1m waterhead, 3m samples, 24 h	ICEA 640 | FOTP-82
Temperature Performance	Max. change in attenuation shall be </= 0.15 dB/km	ICEA 640 | FOTP-3
Installation	-30°C to +70°C	
Operation	-40°C to +70°C	
Storage	-40°C to +70°C	

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.

Packing and Lengths

Drum Type	Length Multiple (in feet)	Tolerance	Short Lengths
Wooden Drums	13,123; 20000 ± 5% (For all fiber counts)	-0%, +5%	Max 5%, Customer Approval

For additional information please contact your sales representative.
You can also visit our website at www.stl.tech