

**Product Name** : SM Armored Lite Multitube Gel Free Single Sheath OFC

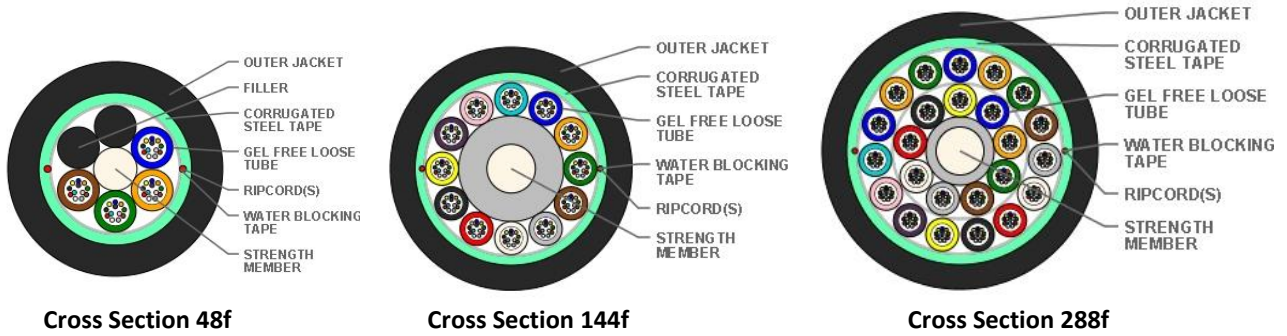
**Revision** : 2.1

**Date** : 4-Oct-2021

**Product Details**

STL ARMOR-LITE® Gel Free Multitube Single Jacket Steel Tape Armored Cables are suitable for direct burial as well as for duct applications. ARMOR-LITE comes with gel free technology, the buffer tubes contain water swellable yarns and the cable core is surrounded with water-swellable tape to prevent water ingress in the cable. The buffer tubes are stranded around the central strength member using reverse oscillation stranding method forming the cable core. A Corrugated Steel Tape armor surrounds the cable core with thermoplastic jacket placed over the armor layer making the cable robust and installation friendly.

**Construction Diagram**



\* Typical Construction Diagram - Not to Scale

**Features & Benefits**

- PE outer jacket & Steel tape armor provide rodent protection along with improved crush and impact protection
- The Steel tape enables post installation cable locating
- Dry water-blocking technology for gel free core helps in quicker end preparation
- Easily removable rugged thermoplastic jacket un-bonded with steel tape
- Flexible, light weight, easy to handle & install

**Specifications**

Physical Characteristics	
Fiber Count	4~288
Fiber Type	STL NOVA ( ITU-T G.657A1)
Maximum Cabled Attenuation (dB/km)	1310nm : 0.35 & 1550nm : 0.25
PMD LDV (ps/sqrt.km)	<= 0.1
Fibers per Tube	4   6   8   12
Fiber Color Sequence (as per TIA 598-D)	Blue, Orange, Green, Brown, Slate, White, Red, Black, Yellow, Violet, Rose, Aqua
Tube Material	Polypropylene (PP)
Loose tube Size	2.4 mm ( typical)
Central Strength Member	FRP (Fiber Reinforced Plastic)
Filler	Thermoplastic material
Core Wrapping	Binder and water swellable tape
Metallic Armoring	Corrugated Steel Tape (Un-bonded with Sheath)
No of Ripcords Below Tape	2
Outer Sheath Material	UV Proof Black Polyethylene

Cable Characteristics						
Product Code	Fiber Count	No. of Tubes	Tube Color Sequence	No. of Fillers	Cable Diameter mm (inch) (± 5%)	Cable Weight Kg/Km (lbs./ft.) (± 10%)
MA0004FSN01TFBUUS	4	1	Blue, Filler, Filler, Filler, Filler, Filler	5	12.6 (0.496)	145 (0.095)
MA0006FSN01TFBUUS	6	1	Blue, Filler, Filler, Filler, Filler, Filler	5	12.6 (0.496)	145 (0.095)
MA0008FSN01TFBUUS	8	1	Blue, Filler, Filler, Filler, Filler, Filler	5	12.6 (0.496)	148 (0.097)
MA0012FSN01TFBUUS	12	1	Blue, Filler, Filler, Filler, Filler, Filler	5	12.6 (0.496)	148 (0.099)
MA0024FSN02TFBUUS	24	2	Blue, Orange, Filler, Filler, Filler, Filler	4	12.6 (0.496)	146 (0.096)
MA0036FSN03TFBUUS	36	3	Blue, Orange, Green, Filler, Filler, Filler	3	12.6 (0.496)	146 (0.096)
MA0048FSN04TFBUUS	48	4	Blue, Orange, Green, Brown, Filler, Filler	2	12.6 (0.496)	140 (0.094)
MA0060FSN05TFBUUS	60	5	Blue, Orange, Green, Brown, Slate, Filler	1	12.6 (0.496)	140 (0.094)
MA0072FSN06TFBUUS	72	6	Blue, Orange, Green, Brown, Slate, White	0	12.6 (0.496)	136 (0.092)
MA0084FSN07TFBUUS	84	7	Blue, Orange, Green, Brown, Slate, White, Red, Filler	1	14.3 (0.562)	160 (0.107)
MA0096FSN08TFBUUS	96	8	Blue, Orange, Green, Brown, Slate, White, Red, Black	0	14.3 (0.562)	160 (0.107)
MA0144FSN12TFBUUS	144	12	Blue, Orange, Green, Brown, Slate, White, Red, Black, Yellow, Violet, Rose, Aqua	0	17.8 (0.700)	265 (0.178)
MA0192FSN16TFBUUS	192	16	<b>1<sup>st</sup> Layer</b> - Blue, Orange, Green, Brown, Slate, White <b>2<sup>nd</sup> Layer</b> -Red, Black, Yellow, Violet, Rose, Aqua, Blue#, Orange#, Green#, Brown#, Filler, Filler	2	17.8 (0.700)	234 (0.157)
MA0216FSN18TFBUUS	216	18	<b>1<sup>st</sup> Layer</b> - Blue, Orange, Green, Brown, Slate, White <b>2<sup>nd</sup> Layer</b> -Red, Black, Yellow, Violet, Rose, Aqua, Blue#, Orange#, Green#, Brown#, Slate #, White#	0	17.8 (0.700)	221 (0.148)
MA0288FSN24TFBUUS	288	24	<b>1<sup>st</sup> Layer</b> - Blue, Orange, Green, Brown, Slate, White, Red, Black, Yellow <b>2<sup>nd</sup> Layer</b> -Violet, Rose, Aqua, Blue#, Orange#, Green#, Brown#, Slate#, White#, Red#, Black#, Yellow#, Violet#, Rose#, Aqua#.	0	20.2 (0.795)	275 (0.184)

Mechanical & Environmental Characteristics		
Cable Characteristics	Testing Standard	Cable Performance
Tensile Strength (N)(lbf)	ICEA 640   FOTP-33	Short Term – 2700 (606.9) Long Term – 900 (202.3)
Crush Resistance (N/cm) (lbf/in)	ICEA 640   FOTP-41	300 (171)
Impact Strength (Nm)(lbf.in)	ICEA 640   FOTP-25	10 (88.5)
Torsion	ICEA 640   FOTP-85	±180°
Min. Bend Radius (During Installation)	ICEA 640   FOTP-88	20 D
Min. Bend Radius (After Installation)	ICEA 640   FOTP-88	15 D
Water Penetration Test*	ICEA 640   FOTP-82	1m head, 3m samples, 24 hrs.
Temperature Performance	ICEA 640   FOTP-3	Max. change in attenuation shall be <math>\leq 0.15\text{ dB/km}</math>
Installation		-30° C to +70° C
Operation		-40° C to +70° C
Storage		-40° C to +70° C

# - denotes single black stripe marking via inkjet or co-extrusion, white stripe marking for black loose tube. ## - denotes double stripe marking.

\* Water Penetration Test shall be applied between optical element and outer sheath and inside the optical element.

**Note:** All tests shall be carried out as per IEC standards. Change in attenuation after and before testing shall be <math>\leq 0.05\text{ dB/km}</math> for Single Mode Fiber.

### Cable Performance Standards

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

### Packing and Lengths

- Drum Type : Wooden Drums
- Length Multiple (ft.) : 13,123 | 20,000 ± 5%
- Order Tolerance : -0%, +5%
- Short Lengths : Max 5%, Customer Approval

### 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.