



## Armored



The cable's composition consists of several key components. A 250µm optical fiber is securely housed within a high modulus loose tube, further reinforced with a waterproof compound for environmental protection.

At the cable's core is a non-metallic FRP (Fiber Reinforced Plastic) central core, providing structural stability.

To create a compact, rounded cable core, the loose tube and filler rope are carefully twisted around the central reinforcing core, ensuring the cable's shape and integrity.

Gaps within the cable core are diligently filled with a water-blocking filler, safeguarding the optical fibers from moisture.

Additionally, a longitudinally applied corrugated plastic-coated steel tape (PSP) enhances the cable's resistance to external forces and environmental conditions. The cable is sealed with a polyethylene sheath, adding further protection and insulation.

# litelinx



### Highlights

- 250µm optical fiber in a high modulus loose tube with waterproof reinforcement.
- Core Stability: Non-metallic FRP central core for structural stability.
- Compact Design: Twisted loose tube and filler rope maintain shape and integrity.
- A Moisture Protection: Water-blocking filler safeguards optical fibers.
- Enhanced Resistance: Longitudinally applied corrugated plastic-coated steel tape (PSP).

#### Structure Design:

- Central strength member (CSM): FRP rod
- Fiber 12-288F ITU-T G652D (A1 & A2 Glass options are available)
- Loose tube containing fibers & filled with a suitable water tightness filling compound
- Loose tubes SZ stranded around CSM
- Longitudinal water tightness: dry core with water swellable yarns

### **Optical characteristics:**

Attenuation Coefficient	@1310nm	≤ 0.4 dB/Km				
	@1550nm	≤ 0.3 dB/Km				

#### **Mechanical Performance**

Tension Strength and Crush resistance in accordance with the

IEC60794-1-2 E1 / E2 standard.

Minimum bending radius Static 10D and 30D Dynamic

(D is the cable diameter in mm)

#### Color Code:

The individual fibers and loose tubes comply with the TIA/EIA-598-A Standard.

# litelinx



### Specifications:

Fiber Count			12	24	48	72	96	144	288	
Loose Tube	Counts		2	4	4	6	8	12	24	
	Diameter (mm)		1.8	1.8	2.1	2.1	2.1	2.1	2.1	
	Thickness (mm)		0.3	0.3	0.3	0.3	0.3	0.3	0.3	
	Material		PBT							
	Water Blocking		Tube filling compound							
Fiber count per tube			6	6	12	12	12	12	12	
Central Strength Member	Material		FRP							
	Size (mm)		1.8	1.8	2.2	2.2	1.8	2.2	3.2	
Single Armor	Armoring	Material	Corrugated steel type							
	Armoning	Thickness	Min. 0.2mm with coating							
	Outer Sheath	Material	HDPE, Black							
		Nom Thickness	1.6	1.6	1.6	1.6	1.6	1.6	1.6	
	Overall diameter (nom.)(mm)(±0.2)		9.7	9.7	10.8	3 10.8	11.9	14.6	6 17.5	
	Cable Weight Kg/Km		114	114	127	127	151	242	324	
Dual Armor	First Armoring	Material	Plastic Coated Aluminum Tape							
		Thickness	Min. 0.2mm with coating							
	Inner Sheath	Material	PE							
		Thickness	0.8-1.0mm							
	Second Armoring	Material	Plastic Coated Corrugated Steel Tape/ Aluminum Tape							
		Thickness	0.2mm							
	Outer Sheath	Material	MDPE, black							
		Nom Thickness	1.6	1.6	1.6	1.6	1.6	1.6	1.6	
	Overall diameter (nom.)(mm)(±0.2)		12.7	12.7	13.7	13.7	15	19	20.5	
	Cable Weight Kg/Km		180	180	210	210	244	363	395	
Temperature Range	Single Armored: Storage: -40~+60°C Installation: -20~+60°C Operation: -40~+70°C				Dual Armored: Storage: -40~+60°C Installation: -20~+60°C Operation: -40~+70°C					