

Light Armored Fiber Cable

NT-ARMLT-xxx-SM

xxx = Fiber Count 12, 24, 48, 72, 96, 144



Description:

Highly durable and reliable for underground and lashed aerial installations as well as general outside plant installations, including direct buried in harsh environments. Nanda Technologies armored fiber optic cable has a build-in metal armor inside the outer jacket.

Armored cable provides extra protection for fiber optic cable, without sacrificing flexibility or functionality within fiber networks. This cable is more robust and reliable when encountering rodents, moisture and other issues that may cause damage. The superior features make armored fiber cable a perfect fit for campus & building backbones, data centers and industrial applications.

Specifications:

Parameter	Specification of Singlemode Optical Fiber (G.652D)	
Fiber Type / Material	Singlemode / Doped Silica	
Attenuation Coefficient	@1310nm ≤0.35dB/Km @1383nm ≤0.34dB/Km @1550nm ≤0.21 dB/Km @1625nm ≤0.24dB/Km	
Point Discontinuity	≤0.05	
Cable Cut-off Wavelength	≤1260nm	
Zero-dispersion Wavelength	1300 ~ 1324nm	
Zero-dispersion Slope	≤0.092 ps/(nm² km)	
PM Do (Quadrature average*)	≤0.2 ps/Km ^{1/2}	
Mode Field Diameter @ 1310nm	9.2 ±0.4 um	
Core I Clad Concentricity Error	≤1.5um	
Cladding Diameter	125.0 ±0.7um	
Cladding Non-circularity	≤1.0%	
Primary Coating Diameter	245 ±10um	
ProofTest Level	I00kpsi (=0.69 Gpa), 1%	
Temperature Dependence	0°~ +70°C @ 1310 & 1550nm: ≤0.1 dB/Km	
Specification	Parameter	
Allowable Tensile Strength	Short Term: 2700N, Long Term: 800N	
Allowable Crush Resistance	2200 (N/100mm)	
Mechanical& Environmental Performance Testing		
Test	Test Method	Acceptance Condition
Tensile Strength: IEC 794-1-2-E 1	Load: Short term tension Length of cable: ~ 50m	Fiber strain: ≤0.36% Loss change: ≤0.1 dB @1550 nm No fiber break and no sheath damage
Crush Test: IEC 60794-1-2-E3	Load: Short term crush Load time: 1 min	Loss change: ≤0.1dB @1550nm No fiber break and no sheath damage
Impact Test: IEC 60794-1-2-E4	Points of impact: 3 Times per point: 1 Impact energy: 5J	Loss change: ≤0.1dB@1550nm No fiber break and no sheath damage
Temperature Cycling Test: YD/T901-2001-4.4.4.1	Temperature Step: +20°C -> -40°C -> +70°C -> +20°C Time per each step: 12 Hrs Number of cycles: 2	Loss change: ≤0.05 dB/km @1550 nm No fiber break and no sheath damage

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Parameter		Specification					
Number of Fibers		12	24	48	72	96	144
Design		G.652D					
Central Strength Member		Material: Fiber Reinforced Plastic (FRP), Diameter: 2.5mm (±0.2mm)					
Additional Sheath	Material:	Material: Low-density Polyethylene (LDPE)					
	Diameter:	-			3.9mm (±0.05mm)		7.2mm (±0.05mm)
Loose Tube	Material	Polybutylene Terephthalate (PBT)					
	Dia: ±0.06mm	2.3					
	Thickness: ±0.03mm	0.35					
	Core# / Tube	12					
Filler Rope	Material	LDPE					
	Color	Black					
	Dia: ±0.03mm	2.3					
	Number	5	4	2	-	-	-
Water Blocking Layer		Water Blocking Tape & Water Blocking Yarn					
Strength Member		Glass Yarn					
Armoring	Material:	Steel Strip					
	Thickness: ±0.03mm	0.20					
Ripcord	Material/Color	Aramid Fiber / Yellow					
Outer Sheath	Material:	Medium-density Polyethylene (MOPE)					
	Thickness: ±0.03mm	1.8					
Cable Diameter (±0.2mm)		12, 24, 48, 72 fibers: 12.5 96 fibers:14.2 144 fibers: 16.4					
Min. Bend Radius	Without Tension	10.0 x Cable Diameter					
	Maximum Tension	15.0 x Cable Diameter					
Temp. Range	Installation	-30 ~ +60°C (-22 ~ 140°F)					
	Transport/Storage	-40 ~ + 70°C (-40 ~ 158°F)					
	Operation	-40 ~ +70°C (-40 ~ 158°F)					

Features:

- Loose tube
- Singlemode
- Fiber counts from 12 to 144
- Smaller, more flexible tubes for easier installation and routing
- On 5,000 meter reels
- PE coated armor offers additional crush resistance and protection from rodent attack

