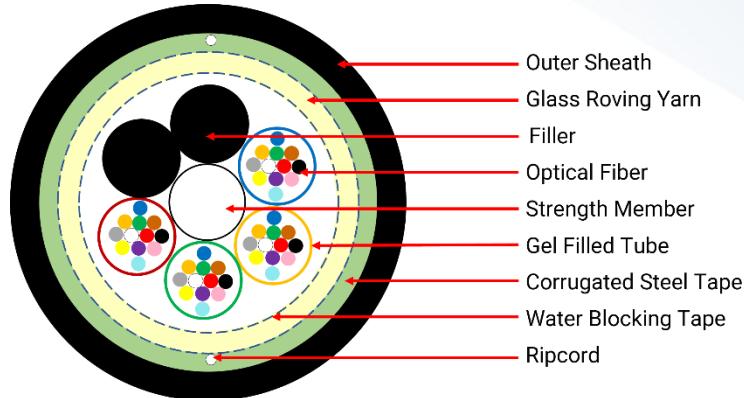


# Single Mode Outdoor Fiber Optic Cable – 48F



The Outdoor fiber optic cables are PBT Multi loose tube with colored fiber cores. The constructions are of water-blocking gel material with Non-Metallic Central Strength member & ECCS armoring. This cable has LSZH outer jacket and makes it perfect for outdoor applications.

## Features

- Complies to ANSI/TIA-568.3-D, ITU-T G652.D, Telcordia GR-20, IEC 60794-2/ 60794-3-10
- LSZH jacket
- ECCS Armoring
- Waterproof layer & excellent moisture resistance provided
- Excellent consistent performance
- Covered under 3C3® Performance Warranty

## Constructional Specifications

Fiber Count	:	48F
Fibers per loose Tube	:	12F
Fiber colors	:	Blue, Orange, Green, Brown, Grey, White
Loose Tube Color	:	Blue, Orange, Green, Brown, Grey, White, Red, Black, Yellow, Purple, Pink, Aqua
Loose Tube Diameter	:	2.0mm
Fillers	:	2
Central Strength Member	:	FRP
Diameter of CSM	:	1.4mm
Water Blocking Material	:	Thixotropic Gel
Outer Sheath	:	LSZH
Sheath Color	:	Black
Nominal Cable diameter	:	12.5 ±0.5mm
Sheath Thickness	:	2.00 mm nominal
Nominal Cable weight	:	145 ±5 kg/km
Drum Length	:	2 Km ± 5 %

# Single Mode Outdoor Fiber Optic Cable – 48F

## Mechanical Specifications

Specification	Value	Test Method
Tensile Strength (Long Term)	: 2500N	IEC-60794-1-E1
Tensile Strength (Short Term)	: 4000N	IEC-60794-1-E1
Bend Radius	: 20D	IEC-60794-1-E11
Kink Radius	: 10D	IEC-60794-1-E11
Crush Resistance (Short)	: 4000N /100mm	IEC-60794-1-E3
Crush Resistance (Long)	: 3000N /100mm	IEC-60794-1-E3
Impact Resistance	: 10 Nm	IEC/EN 60794-1-E4
Torsion Strength	: $\pm 180$ degree	IEC/EN 60794-1-E7

## Optical Specifications

Specification	Value	Test Method
Fiber Type	: 9/125 $\mu$ m	
Fiber Coating Color	: Colored	
Core Non-circularity	: $\leq 1\%$	IEC/EN 60793-1-20
Cladding Diameter	: $125.0 \pm 0.7 \mu$ m	IEC/EN 60793-1-20
Core/cladding Concentricity Error	: $\leq 0.6 \mu$ m	IEC/EN 60793-1-20
Cladding Non-circularity	: $\leq 1.0\%$	IEC/EN 60793-1-20
Coating Diameter	: $245 \pm 10 \mu$ m	IEC/EN 60793-1-21
Coating/cladding Concentricity Error	: $\leq 12 \mu$ m	IEC/EN 60793-1-20
Attenuation Co-efficient	: $1310\text{nm} \leq 0.36\text{dB/km}$ : $1550\text{nm} \leq 0.24\text{dB/km}$ : $1625\text{nm} \leq 0.26\text{dB/km}$	IEC/EN 60793-1-40 IEC/EN 60793-1-40 IEC/EN 60793-1-40
Zero dispersion slope	: $\leq 0.092\text{ps}/(\text{nm}^2 \cdot \text{km})$	
Zero dispersion wavelength	: $1300 \sim 1324\text{nm}$	
Polarization mode dispersion	: $\leq 0.20 \text{ ps}/\sqrt{\text{km}}$	
Mode field diameter	: $1310\text{nm} : 9.0 \pm 0.4 \mu$ m	IEC/EN 60793-1-45
Cut-off wavelength ( $\lambda_c$ )	: $1260\text{nm}$	IEC/EN 60793-1-44
Chromatic dispersion	: $1288 \sim 1339\text{nm} \leq 3.5\text{ps}(\text{nm} \cdot \text{km})$ : $1550\text{nm} \leq 18 \text{ ps}/(\text{nm} \cdot \text{km})$ : $1625\text{nm} \leq 22 \text{ ps}/(\text{nm} \cdot \text{km})$	IEC/EN 60793-1-42 IEC/EN 60793-1-42 IEC/EN 60793-1-42

# Single Mode Outdoor Fiber Optic Cable – 48F

## Environmental Specifications

Installation Temperature	:	-10°C~+70°C
Storage Temperature	:	-40°C~+70°C
Operating Temperature	:	-40°C~+70°C

## Standard Compliances/Certifications

- RoHS Certified

## Ordering Information

Product Code	Description
53032-0048	High Link Fiber Optic, Armored, Multi-loose Tube Outdoor Cable, Gel filled, 12F/T, CSM FRP, Single Sheath Black LSZH, SM, 48F