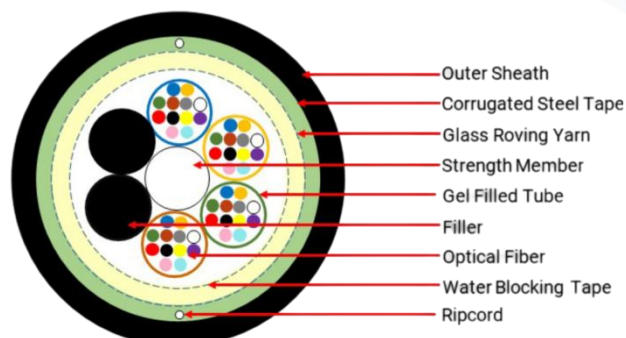


# Multi-Mode Outdoor Fiber Optic Cable (48F)



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 an LSZH outer jacket and makes it perfect for outdoor applications

## Features

- Complies to ANSI/TIA-568.3-D, Telcordia GR-20, IEC 60794-2, ISO/IEC 11801, ISO/IEC 24702
- ECCS Armoring
- Waterproof layer & excellent moisture resistance provided
- Excellent consistence performance
- Covered under 3C3® Performance Warranty

## Constructional Specifications

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

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## 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 Joule         | IEC/EN 60794-1-E4 |
| Torsion Strength              | : $\pm 180$ degree | IEC/EN 60794-1-E7 |

## Optical Specifications

| Specification                        | Value                      | Test Method       |
|--------------------------------------|----------------------------|-------------------|
| Fiber Type                           | : 50/125 $\mu$ m           |                   |
| Fiber Coating Color                  | : Colored                  |                   |
| Core non-circularity                 | : $\leq 6\%$               | IEC/EN 60793-1-20 |
| Cladding Diameter                    | : 125.0 $\pm$ 0.7 $\mu$ m  | IEC/EN 60793-1-20 |
| Core/cladding Concentricity Error    | : $\leq 1.5\mu$ m          | IEC/EN 60793-1-20 |
| Cladding non-circularity             | : $\leq 1.0\%$             | IEC/EN 60793-1-20 |
| Coating Diameter                     | : 242 $\pm$ 7 $\mu$ m      | IEC/EN 60793-1-21 |
| Coating/cladding Concentricity Error | : $\leq 12\mu$ m           | IEC/EN 60793-1-20 |
| Attenuation Co-efficient             | : 850nm $\leq$ 2.5dB/km    | IEC/EN 60793-1-40 |
|                                      | : 1300nm $\leq$ 0.8dB/km   | IEC/EN 60793-1-40 |
| Effective Modal Bandwidth            | : $\geq 4700$ MHz.km (OM4) |                   |
|                                      | : $\geq 2000$ MHz.km (OM3) |                   |
| Attenuation inhomogeneity            | : $\leq 0.1$ dB(500)       |                   |
| Numerical Aperture                   | : 0.275 $\pm$ 0.015        |                   |

# Multi-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**  
53C32-0048

### Description

High Link Fiber Optic, Armored, Multi-loose Tube Outdoor Cable,  
Gel filled, 12F/T, CSM FRP, Single Sheath Black LSZH, MM  
C = 2 - OM2, 3 - OM3, 4 - OM4