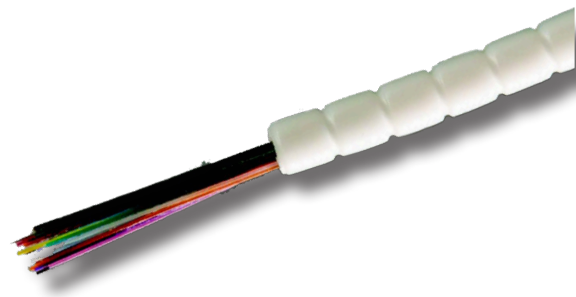


# Miniflex<sup>®</sup> Plenum Cable



## Features & Benefits

- UL 1651 Plenum (OFNP) and FT6 Rated
- Ruggedized Microcable
- Lightweight – 11.5 kg/km (7.9 lbs/kft)
- Compact – small diameter of 4 mm
- Flexible – grooving allows tough polymer to be flexible
- Anti-kink property
- High crush resistance – up to 750N
- Small bend radius – down to 10 mm
- Easier handling, 2 km (6,500 ft) reels weigh less than 28 kg (60 lbs)
- Excellent mix of mechanical and fire rating properties
- Exceptional low smoke as observed under NFPA 262



### Compatibility

- All normal fiber termination methods (e.g. SC/LC/MTP/E2000)
- Cable push-fit connectors
- Electrical cable style installation – staples or cable clips

## Overview

The Indoor Plenum fiber cable is available with 1 to 24 fibers with an industry standard 250 micron singlemode and multimode. The tough, yet flexible Miniflex<sup>®</sup> Plenum cable can be easily routed in tight areas. The compact and lightweight properties are suitable for routing in trays and racks, and the cable's anti-kink properties make handling the optical fiber much safer. It's available terminated or unterminated. The cable also provides protection in areas where optical fiber is exposed to human contact. Miniflex picks up where your armored cable ends and continues to provide to end-to-end optical fiber protection.

## Applications

- FTTH/FTTX - Indoor
- Data Infrastructure
- Telecoms

## Technical Data

### Mechanical Performance Specifications

| Crush<br><i>IEC 60794-1-21 E3A</i> |                                |                       | Tensile<br><i>IEC 60794-1-21 E1</i> |                     | Impact<br><i>IEC 60794-1-21 E</i> |                                | Min. Bend Radius<br><i>IEC 60794-1-21 E11A</i> |                     | Kink<br><i>IEC 60794-1-21 E10</i> |
|------------------------------------|--------------------------------|-----------------------|-------------------------------------|---------------------|-----------------------------------|--------------------------------|--|---------------------|-----------------------------------|
| <i>Recoverable Jacket</i>          | <i>&lt;0.05 dB attenuation</i> | <i>Loss of Signal</i> | <i>Operational</i>                  | <i>Installation</i> | <i>Recoverable Jacket</i>         | <i>&lt;0.05 dB attenuation</i> | <i>Operational</i>                             | <i>Installation</i> | <i>Min. Diameter</i>              |
| <i>N</i>                           | <i>N/cm</i>                    | <i>N</i>              | <i>N</i>                            | <i>N</i>            | <i>N/m</i>                        | <i>N/m</i>                     | <i>mm</i>                                      | <i>mm</i>           | <i>mm</i>                         |
| 290                                | 750/10                         | 2000                  | 100                                 | 100                 | 1                                 | >3                             | 40   | 21                  | >32                               |

# Miniflex<sup>®</sup> Plenum Cable



## Technical Data

### Transmission Performance Specification

| Item                                      | Single-mode                            | Single-mode 900µm            | Multi-mode                            |
|---|--|------------------------------|---------------------------------------|
| Specification                             | G657 A1                                | G657 A2                      | OM3                                   |
| Attenuation (850 / 1300 nm)               | n/a                                    | n/a                          | 3.5/1.5 dB/km                         |
| Attenuation (1310 / 1550 nm)              | 0.4/0.3 dB/km                          | 0.4/0.3 dB/km                | n/a                                   |
| Attenuation at 1383 nm                    | ≤ 0.32 dB/km                           | n/a                          | n/a                                   |
| Attenuation at 1625 nm                    | < 0.24 dB/km                           | < 0.24 dB/km                 | n/a                                   |
| Refractive Index at 1310nm, 1550nm        | 1.467, 1.468                           | 1.467, 1.468                 | n/a                                   |
| Refractive Index at 850nm, 1300nm         | n/a                                    | n/a                          | 1.482, 1.477                          |
| Proof test                                | 0.69 GPa (100 kpsi), 1% min.           | 0.69 GPa (100 kpsi), 1% min. | 0.69 GPa (100 kpsi), 1% min.          |
| Cladding diameter                         | 125 ± 0.7µm                            | 125 ± 0.7 µm                 | 125 ± 1.0µm                           |
| Coated diameter                           | 235µm to 245µm                         | 235µm to 245µm               | 237µm to 247µm                        |
| Core/Cladding concentricity error         | ≤ 0.5µm                                | ≤ 0.5 µm                     | ≤ 1.0µm                               |
| Coating concentricity error               | ≤ 12µm                                 | ≤ 12µm                       | ≤ 6µm                                 |
| Macro bend loss                           | (1550 nm)                              | (1550 nm)                    | (850 and 1300 nm)                     |
| 10 turns at 50mm diameter                 | ≤ 0.01 dB                              | n/a                          | ≤ 0.2 dB                              |
| 10 turns at 15 mm diameter                | ≤ 0.2 dB                               | ≤ 0.03 dB                    | n/a                                   |
| 1 turn at 10mm diameter                   | ≤ 0.2 dB                               | ≤ 0.10 dB                    | n/a                                   |
| 1 turn at 7.5mm diameter                  | n/a                                    | ≤ 0.50 dB                    | n/a                                   |
| Temp. range (operation)<br>-60°C to +85°C | max attenuation change<br>≤ 0.05 dB/km |                              | max attenuation change<br>≤ 0.1 dB/km |
| Coating Strip Force                       | 1.3 to 8.9 N                           |                              | 1.3 to 8.9 N                          |

### Cable Specifications

| Fiber Count             | O.D.      | Nominal Weight | Service Temp           | Install Temp           |
|-------------------------|-----------|----------------|------------------------|------------------------|
| (250 µm)                | mm (in)   | kg/km (lb/kft) | °C (°F)                | °C (°F)                |
| 1*, 2, 4, 8, 12, 18, 24 | 4.0 (.16) | 11.5 (7.9)     | -40 to 70 (-40 to 158) | -40 to 70 (-40 to 158) |

\*also available in 900µm

# Miniflex<sup>®</sup> Plenum Cable



## Ordering Information: Code Builder

|           |      |   |   |   |             |   |     |   |      |        |
|-----------|------|---|---|---|-------------|---|-----|---|------|--------|
| Example   | TNCA | - |   | - | 4.0-24-PVDF | - | WHT | - | 1000 | G657A1 |
| Character | 1    |   | 2 |   | 3           |   | 4   |   | 5    | 6      |

**1.** Product Type  
TNCA = Fiber Cable

**2.** Option  
A = Aramid

**3.** Unique Product Code  
4.0-01-PVDF = 1 fiber  
4.0-02-PVDF = 2 fibers  
4.0-04-PVDF = 4 fibers  
4.0-08-PVDF = 8 fibers  
4.0-12-PVDF = 12 fibers  
4.0-18-PVDF = 18 fibers  
4.0-24-PVDF = 24 fibers

**4.** Color  
WHT = White  
*(check availability)*

**5.** Length  
1000 = 1000 ft / 305 m  
6500 = 6500 ft / 2 km

**6.** Fiber Type  
G657A1  
G657A2  
OM3  
OM4