## Optical Characteristics

| Fiber Type | CORNING SMF-28 Ultra Optic fiber |  |  |
| :---: | :---: | :---: | :---: |
| Attenuation(dB/km) |  | $\begin{aligned} & 1310 \mathrm{~nm} \leq 0.32 \\ & 1383 \mathrm{~nm} \leq 0.32 \\ & 1490 \mathrm{~nm} \leq 0.21 \\ & 1550 \mathrm{~nm} \leq 0.18 \\ & 1625 \mathrm{~nm} \leq 0.20 \end{aligned}$ |  |
| Point Discontinuity |  | 1310nm | $\leq 0.05 \mathrm{~dB}$ |
|  |  | 1550nm | $\leq 0.05 \mathrm{~dB}$ |
| Mode-Field Wavelength( $\lambda \mathrm{cc}$ ) |  | 1310nm | 9.2 $\pm 0.4 \mathrm{um}$ |
|  |  | 1550nm | 10.4 $\pm 0.5$ |
| Polarization Mode Dispersion (PMD) (ps/ $\sqrt{\mathrm{km}}$ ) |  | PMD Link design value | $\leq 0.04$ |
|  |  | Max. Indiviadual fiber PMD | $\leq 0.1$ |
| Fiber Cutoff wavelength(nm) |  | $\leq 1260$ |  |
| Dispersion Value[ps/(nm.km)] |  | $1550 \mathrm{~nm} \leq 18.0 \quad 1625 \mathrm{~nm} \leq 22.0$ |  |
| Fiber Curl |  | $\geq 4.0 \mathrm{~m}$ radius of curvature |  |
| Cladding diameter(um) |  | $125 \pm 0.7$ |  |
| Core-Clad Concentricity |  | $\leq 0.5$ um |  |
| Cladding non-circularity(\%) |  | $\leq 0.7$ |  |
| Coating-Cladding concertricity(um) |  | $\leq 12$ |  |
| Coating diameter( $\mu \mathrm{m}$ ) |  | $242 \pm 5$ |  |
| Coating diameter(um) |  | 8.2 |  |
| Effective Group Index of Refraction(Neff) |  | 1310nm:1.4676 1550nm:1.4682 |  |
| Fatugue Resistance Paremeter(Nd) |  | 20 |  |
| Rayleigh Backscatter Coefficient (for 1 ns Pulse Width) |  | 1310nm: -77dB 1550nm: -82dB |  |
| Temperature Dependence |  | ${ }^{-60 \sim 85}{ }^{\circ} \mathrm{C}$ |  |
| Temperature-humidity cycling |  | -10 to $+85^{\circ} \mathrm{C}, 98 \%$ R.H. |  |

Gorelink Plenum Indoor/outdoor Tight-Buffered Distribution Cable contains 48 tight-buffered fibers bundled under the same jacket with aramid yarn strength members to stiffen the cable and prevent kinking. It is manufactured with an outer jacket that incorporates a UV stabilizer for protection against exposure to the sun.
With aramid yarn as a reinforcing member, the cable is light weight, softness and easy to peel. It is widely used between wiring closets and equipment rooms within the buildings.

## Application

1. Widely used in FTTH access network.
2. Telecommunication Networks
3. CCTV Networks
4. Data communications Networks
5. Local Area Networks

Features

1. Widely used between wiring closets and equipment rooms
2. Tested to meet or exceed TIA \& GR-409-

CORE standards
3. Light weight and buffered to 900 um for easy stripping and handling
4. With UV resistant protection outer jacket
5. Characteristic of fiber color:
blue/orange/green/brown/grey/white/red/ black/yellow/purple/pink/aqua

| Item Number: | 11F3-048xx |  |
| :--- | :---: | :---: |
| Title: | Plenum 48 Strand Indoor/Outdoor Fiber Optic Cable, OS2 <br> $9 / 125$ Singlemode, Corning SMF-28 Ultra, Black, Spool |  |
| Drawn by: | JL | $888-212-8295$ <br> CableWholesale |
| ID: | MAC |  |

## Technical Parameter

Fiber Count 48 Cores

| Outer Diameter(mm) |  | $10.5 \pm 0.3$ |
| :--- | :--- | :---: |
| Nomial Weight(KG/KM) |  | 61 |
| Max. Tensile Strength(N) | Short-term | 1000 |
|  | Long-term | 600 |
| Min. Bending Radius(mm) | Short-term | 20 D |
|  | Long-term | 10 D |
| Max. Crush Resistance(N) | Short-term | 200 |
|  | Long-term | 100 |

## Environmental characteristics

| Temperature dependence <br> Induced attenuation | $-40 \sim 75^{\circ} \mathrm{C}$ | $\leq 0.05 \mathrm{~dB} / \mathrm{km}$ |
| :--- | :---: | :---: |
| Temperature-humidity cycling <br> Induced attenuation | -10 to $+75^{\circ} \mathrm{C}, 90 \%$ R.H. | $\leq 0.05 \mathrm{~dB} / \mathrm{km}$ |
| Damp heat dependence <br> Induced attenuation | $85^{\circ} \mathrm{C}, 85 \%$ R.H., 30 days | $\leq 0.05 \mathrm{~dB} / \mathrm{km}$ |
| Watersoak dependence <br> Induced attenuation | $20^{\circ} \mathrm{C}$ for 30 days | $\leq 0.05 \mathrm{~dB} / \mathrm{km}$ |
| Temperature Range | Operating Temperature | $20 \sim 75^{\circ} \mathrm{C}$ |
|  | Storage Temperature | $40 \sim 80^{\circ} \mathrm{C}$ |

## Cable Marking

| Sheath Marking | Meter mark, Type of optical cable and fiber count, <br> Manufacturer name ,Manufacture date |
| :--- | :--- |
| Length Marking | Length mark at intervals of one meter along the outside <br> of cable sheath |

Cable Parameters

| Rev. | Description | Date |
| :---: | :---: | :---: |
| A |  | $05-2023$ |


| Product | Singlemod 9/125 |
| :--- | :--- |
| Fiber Count | 48 cores |
| Fiber Type | CORNING Glass |
| Strength Member | Aramid Yarn |
| Cable Type | 900um Tight Buffer |
| Outer Jacket Color | Black |
| Outer Jacket | OFNP, Plenum rated |

## Macrobend Loss

| Mandrel Radius <br> $(\mathrm{mm})$ | Number of Turns | Wavelength <br> $(\mathrm{nm})$ | Induced Attenuation <br> $(\mathrm{dB})$ |
| :---: | :---: | :---: | :---: |
| 10 | 1 | 1550 | $\leq 0.50$ |
| 10 | 1 | 1625 | $\leq 1.50$ |
| 15 | 10 | 1550 | $\leq 0.05$ |
| 15 | 10 | 1625 | $\leq 0.30$ |
| 25 | 100 | $1310,1550,1625$ | $\leq 0.01$ |

* The induced attenuation due to fiber wrapped around a mandrel of a specified radius.

|  | PART NO. | $\begin{array}{\|c\|} \hline \text { CABLE } \\ \text { LENGTH } \\ \hline \end{array}$ | Carton size/cm | G.W/kg | N.W/kg |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | 11F3-048NF | 500 ft | $44 * 44 * 34$ | 17.6 | 16.6 |
|  | $11 \mathrm{~F} 3-048 \mathrm{NH}$ | 1000 ft | 50*34 | 33.1 | 29.3 |
|  | 11F3-0482H | 2000 ft | 60*51 | 66.8 | 59.2 |
| Item Number: | 11F3-048xx |  |  |  |  |
| Title: | Plenum 48 Strand Indoor/Outdoor Fiber Optic Cable, OS2 9/125 Singlemode, Corning SMF-28 Ultra, Black, Spool |  |  |  |  |
| Drawn by: | JL | $888-212-8295$ |  |  |  |
| Approved by: | MAC |  |  |  |  |
| ID: | 399 |  |  |  |  |

