Type: OM3, OFNP, CSA FT6



Cleerline SSF<sup>TM</sup> 24 strand Single Tube fiber optic cable is composed of 24 fibers within a distribution style cable with an overall plenum jacket.

SSF<sup>™</sup> Single Tube cable is ideal for inter-building or intra-building data communication backbones in high density settings as well as MPO assemblies.

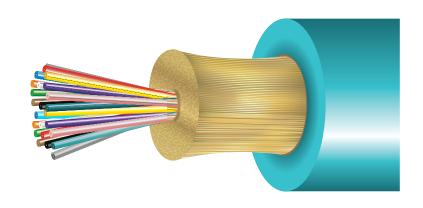
Cleerline SSF™ Single Tube Multimode is fully compatible with all common connector systems for standard 50/125 multimode fiber. The included SSF™ fiber provides extreme durability and strength.

## FEATURES AND BENEFITS

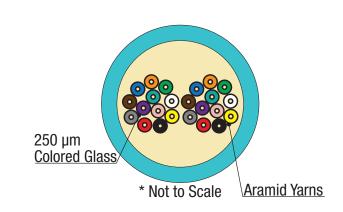
- High mechanical strength, superior fatigue (nd = 30)
- Up to 10,000x the bend longevity of traditional fiber
- Integral SSF<sup>TM</sup> coating provides glass protection
- Increased safety due to incredible bend insensitivity
- Exclusive 250 µm Soft Peel acrylate
- Convenient single tube construction for high-density applications

## **APPLICATIONS**

- Inter-/Intra-building voice or data communication
- MPO assemblies and high-density applications
- UL listed type OFNP for installation in ducts, plenums and other spaces used as environmental air returns when installed in accordance with NEC article 770-51 (a) and 770-53(a)



**3D VIEW** 



**TYPICAL CROSS SECTION** 

| PART NUMBER       | FIBERS    | DESCRIPTION               | ТҮРЕ   | 0.D.   | WEIGHT<br>(KG / KM) | MIN. BEND RADIUS,<br>INSTALLATION |
|-------------------|-----------|---------------------------|--------|--------|---------------------|-----------------------------------|
| 24STD50125M0M3P   | 24 Fibers | 24 Strand - 1000 ft Spool | Plenum | 3.1 mm | 8.4                 | 3.1 cm                            |
| 24STD50125M0M3P-B | 24 Fibers | 24 Strand - Cut to Order  | Plenum | 3.1 mm | 8.4                 | 3.1 cm                            |





## **CONSTRUCTION**

| FIBER        |                                   |
|--------------|-----------------------------------|
| Fibers       | 24                                |
| Туре         | 50/125 Multimode OM3              |
| Coating      | 250 µm "Soft Peel" S-Type Coating |
| Color Coding | Per TIA/EIA 598C                  |

| JACKET          |  |  |  |
|-----------------|--|--|--|
| Туре            | Plenum Rated PVC + UV I/O              |  |  |
| Color           | Aqua                                   |  |  |
| Outer Diameter  | 3.1 mm                                 |  |  |
| Markings        | Sequential Foot Markings               |  |  |
| Strength Member | Kevlar (Plenum + water blocking yarns) |  |  |

| PHYSICAL DATA                                     |   |  |  |
|---|---|--|--|
| Storage Temperature Range                         | -20°C to +60°C                            |  |  |
| Operating Temperature Range                       | -20°C to +60°C                            |  |  |
| Max Tensile Load (Installation)                   | 800 N (189 lbf)                           |  |  |
| Max Tensile Load Long Term                        | 500 N (112 lbf)                           |  |  |
| Min. Bend Radius, Unloaded                        | 10 x 0.D.                                 |  |  |
| Cable Outside Diameter, Nominal                   | 3.1 mm                                    |  |  |
| Cable Package                                     | 1000 ft Reel or customer request, spooled |  |  |
| Rating  | FT6-Plenum                                |  |  |
| Crush Resistance (TIA/EIA 455-41A)                | 3.5 N/mm, 10 mins;<br>< 0.2 dB            |  |  |
| Impact Resistance (TIA/EIA 455-25B)               | 3 Impacts, 1 N • M;<br>< 0.2 dB           |  |  |
| Cyclic Flexing<br>(TIA/EIA 455-104A)              | 25 Times, < 0.2 dB                        |  |  |
| Tensile Loading and Bending (TIA/<br>EIA 455-33A) | 100 N load, 10 mins; < 0.2 dB             |  |  |

| ENVIRONMENTAL CHARACTERISTICS - FIBER          |                            |  |  |
|--|----------------------------|--|--|
| Temperature Dependence,<br>850 nm and 1300 nm  | $\leq 0.5 \text{ dB / km}$ |  |  |
| Induced Attenuation                            | -60°C to + 85°C            |  |  |
| Watersoak Dependence,<br>850 nm and 1300 nm    | $\leq$ 0.5 dB / km         |  |  |
| Induced Attenuation at 20°C for 30 days        |                            |  |  |
| Damp Heat Dependence,<br>850 nm and 1300 nm    | $\leq 0.5 \text{ dB / km}$ |  |  |
| Induced Attenuation at 85°C, 85% R.H., 30 days |                            |  |  |
| Dry Heat Dependence,<br>850 nm and 1300 nm     | $\leq 0.5 \text{ dB / km}$ |  |  |
| Induced Attenuation at 85°C, 30 days           |                            |  |  |

| PHYSICAL CHARACTERISTICS                      |   |          |  |  |
|---|---|----------|--|--|
| Core Diameter                                 | $50.0 \pm 2.5 \mu m$  |          |  |  |
| Core Non-circularity                          | ≤ 6%  |          |  |  |
| Core / Hybrid Cladding<br>Concentricity Error | ≤ 3.0 µm  |          |  |  |
| Hybrid Cladding Diameter                      | 125 ± 0.7 μm  |          |  |  |
| Hybrid Cladding Non-<br>Circularity Error     | ≤ 3.0%  |          |  |  |
| Soft Peel Jacket Identifier                   | $250 \pm 0.7 \mu \text{m}$  |          |  |  |
| Coating Strip Force                           | 100 g   |          |  |  |
| Fiber Curl                                    | ≥ 2 m   |          |  |  |
| Proof Test                                    | 100 kpsi  |          |  |  |
| Dynamic Fatigue 23°C, 41% R.H.                | > 30 nD   |          |  |  |
| Bend Induced Attenuation,<br>850 nm           | <ul><li>2 bending turns around</li><li>15 mm diameter mandrel</li></ul> | ≤ 1.0 dB |  |  |
| Bend Induced Attenuation,<br>1300 nm          | <ul><li>2 bending turns around</li><li>15 mm diameter mandrel</li></ul> | ≤ 1.0 dB |  |  |
| Length  | 1.0 - 8.8 km  |          |  |  |
| Max Attenuation, 850 nm                       | < 4.0 dB / km   |          |  |  |
| Max Attenuation, 1300 nm                      | < 1.5 dB / km   |          |  |  |
|   |   |          |  |  |

| OPTICAL CHARACTERISTICS       |         |  |  |
|-------------------------------|---------|--|--|
| Attenuation Coefficient       | 850 nm  | $\leq 3.0 \text{ dB/km}$               |  |
|                               | 1300 nm | ≤ 1.0 dB/km                            |  |
| Numerical Aperture            |         | $0.200 \pm 0.015$                      |  |
| Overfilled Modal<br>Bandwidth | 850 nm  | $\geq$ 1500 MHz $\cdot$ km             |  |
|                               | 1300 nm | $\geq 500 \text{ MHz} \cdot \text{km}$ |  |
| High Performance EMB          | 850 nm  | $\geq 2000~MHz\cdot km$                |  |

| BACKSCATTER CHARACTERISTICS        |              |       |  |
|------------------------------------|--------------|-------|--|
| Attenuation Directional Uniformity | ≤ 0.05 dB/km |       |  |
| Attenuation Uniformity             | ≤ 0.05 dB/km |       |  |
| Group Index of Refraction          | 850 nm       | 1.481 |  |
|                                    | 1300 nm      | 1.476 |  |

## COMPLIANCE

UL Listed Type OFNP, CSA FT6 / IECA S-104-696. RoHS Compliant Directive 2011/65/EU SSF™ conforms to the requirement of IEC 60793-2-10 A1a, ISO/IEC 11801 & ITU-T G.651.1 850 nm Laser-Optimized 50 µm core multimode fiber for 10 Gb/s and above applications.





