Cleerline SSF™ Simplex cable is composed of a single SSF™ fiber with an overall 3.0 mm Riser, Plenum, or CPR-rated LSZH jacket.

SSF™ Simplex is ideal for inter-building or intra-building data communication backbones.

Cleerline SSF™ Simplex Multimode is fully compatible with all common connector systems for standard 50/125 multimode fiber. The included SSF™ fiber provides extreme durability and strength, with up to 10,000 times the bend insensitivity of traditional fiber.

**FEATURES AND BENEFITS**

- High mechanical strength, superior fatigue (nD = 30)
- Compatible with common connector systems for 50/125 multimode
- Up to 10,000x the bend longevity of traditional fiber
- Integral SSF™ coating provides glass protection
- Increased safety due to incredible bend insensitivity
- Exclusive 250 µm Soft Peel acrylate

**APPLICATIONS**

- Inter-/Intra-building voice or data communication
- Installation in ducts or underground conduit
- Fiber-to-the-desk (FTTD) / Fiber-to-the-Home (FTTH)
- ETL 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)

**PART NUMBER** | **FIBERS** | **DESCRIPTION** | **TYPE** | **O.D.** | **WEIGHT**
--- | --- | --- | --- | --- | ---
S50125MOM3X | 1 Fiber | Simplex 50/125 SSF - 1000 ft Spool | R/P/L | 3.0 mm | 6.61
S50125MOM3X-B | 1 Fiber | Simplex 50/125 SSF - Cut to Order | R/P/L | 3.0 mm | 6.61
## Construction

### Fiber
<table>
<thead>
<tr>
<th>Fibers</th>
<th>1</th>
</tr>
</thead>
<tbody>
<tr>
<td>Type</td>
<td>50/125 Multimode OM3</td>
</tr>
<tr>
<td>Coating</td>
<td>250 µm &quot;Soft Peel&quot; S-Type Coating</td>
</tr>
<tr>
<td>Color Coding</td>
<td>Per TIA/EIA 598C</td>
</tr>
</tbody>
</table>

### Jacket
<table>
<thead>
<tr>
<th>Type</th>
<th>Riser Rated PVC (Indoor) / Plenum Rated PVC + UV I/O / CPR-rated LSZH (Indoor/Outdoor)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Color</td>
<td>Aqua</td>
</tr>
<tr>
<td>Outer Diameter</td>
<td>3.0 mm</td>
</tr>
<tr>
<td>Markings</td>
<td>Sequential Foot Markings</td>
</tr>
<tr>
<td>Strength Member</td>
<td>Kevlar (Plenum + water blocking yarns)</td>
</tr>
</tbody>
</table>

### Physical Data
| Storage Temperature Range | -40°C to +85°C |
| Operating Temperature Range | -20°C to +75°C |
| Max Tensile Load (Installation) | 1000 N (225 lbf) |
| Max Tensile Load Long Term | 500 N (112 lbf) |
| Min. Bend Radius, Unloaded | 1 x O.D. |

### Physical Characteristics

#### Fiber Characteristics
- Core Diameter: 50.0 ± 2.5 µm
- Core Non-circularity: ≤ 6%
- Core / Hybrid Cladding Concentricity Error: ≤ 3.0 µm
- Hybrid Cladding Diameter: 125 ± 2 µm
- Hybrid Cladding Non-Circularity: ≤ 2.0%
- Soft Peel Jacket Identifier: 245 ± 10 µm
- Coating Strip Force: 100 g
- Fiber Curl: ≥ 2 m
- Proof Test: 100 kpsi
- Dynamic Fatigue (n<sub>d</sub>) 23°C, 41% R.H.: ≥ 31.72
- Bend Induced Attenuation, 850 nm: 2 turns around 15 mm radius mandrel ≤ 0.2 dB
- Bend Induced Attenuation, 850 nm: 2 turns around 7.5 mm radius mandrel ≤ 0.5 dB
- Length: 1.0 - 8.8 Km

#### Optics Characteristics
- Attenuation Coefficient
  - 850 nm: ≤ 4.0 dB/km
  - 1300 nm: ≤ 1.5 dB/km
- Numerical Aperture: 0.200 ± 0.015
- Overfilled Modal Bandwidth
  - 850 nm: ≥ 1500 MHz · km
  - 1300 nm: ≥ 500 MHz · km
- High Performance EMB
  - 850 nm: ≥ 2000 MHz · km

#### Environmental Characteristics
- Temperature Dependence, 850 nm and 1300 nm
  - Induced Attenuation -60°C to + 85°C ≤ 0.5 dB / km
- Watersoak Dependence, 850 nm and 1300 nm
  - Induced Attenuation at 20°C for 30 days ≤ 0.5 dB / km
- Damp Heat Dependence, 850 nm and 1300 nm
  - Induced Attenuation at 85°C, 85% R.H., 30 days ≤ 0.5 dB / km
- Dry Heat Dependence, 850 nm and 1300 nm
  - Induced Attenuation at 85°C, 30 days ≤ 0.5 dB / km

#### Backscatter Characteristics
- Attenuation Directional Uniformity: ≤ 0.05 dB/km
- Attenuation Uniformity: ≤ 0.05 dB
- Group Index of
  - 850 nm: 1.481
- Refraction
  - 1300 nm: 1.476

#### Compliance
- ETL Listed Type OFNR, CSA FT4, IECA S-83-596 & OFNP CSA FT6 / IECA S-104-696.
- LSZH Listed CPR Cca-s1a,d1,a1.
- DoP Available on Request.
- RoHS Compliant Directive 2011/65/EU
- SSF™ conforms to the requirement of IEC 60793 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.

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