Cleerline SSF™ 2-4 strand fiber breakout cable is composed of SSF™ fibers in an overall jacket with 2.0 mm subunits and, if applicable, a central strength member.

SSF™ Breakout cable is lightweight and ultra flexible. The cable’s construction provides extra durability.

Cleerline SSF™ Micro Distribution Breakout is fully compatible with all common connector systems for standard 50/125 multimode fiber.

The included SSF™ fiber provides extreme durability and strength. Flex tested to 2000 cycles, impact to 1500 cycles, and crush to 100 kgf/mm.

**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)

<table>
<thead>
<tr>
<th>PART NUMBER</th>
<th>FIBERS</th>
<th>DESCRIPTION</th>
<th>TYPE RISER/PLENUM</th>
<th>O.D.</th>
<th>WEIGHT (LB / 1000 FT)</th>
<th>MIN. BEND RADIUS, INSTALLATION</th>
<th>MIN. BEND RADIUS, OPERATION</th>
</tr>
</thead>
<tbody>
<tr>
<td>2B501250M3X</td>
<td>2 Fibers</td>
<td>2 Strand - 1000 ft Spool</td>
<td>X= R/P</td>
<td>5.0 mm</td>
<td>37.5</td>
<td>11.5 cm</td>
<td>5.0 cm</td>
</tr>
<tr>
<td>2B501250M3X-B</td>
<td>2 Fibers</td>
<td>2 Strand - Cut to Order</td>
<td>X= R/P</td>
<td>5.0 mm</td>
<td>37.5</td>
<td>11.5 cm</td>
<td>5.0 cm</td>
</tr>
<tr>
<td>4B501250M3X</td>
<td>4 Fibers</td>
<td>4 Strand - 1000 ft Spool</td>
<td>X= R/P</td>
<td>7.2 mm</td>
<td>40.5</td>
<td>12.37 cm</td>
<td>7.2 cm</td>
</tr>
<tr>
<td>4B501250M3X-B</td>
<td>4 Fibers</td>
<td>4 Strand - Cut to Order</td>
<td>X= R/P</td>
<td>7.2 mm</td>
<td>40.5</td>
<td>12.37 cm</td>
<td>7.2 cm</td>
</tr>
</tbody>
</table>
### CONSTRUCTION

#### FIBER
- **Fibers**: 2, 4
- **Type**: 50/125 Multimode OM3
- **Coating**: 250 µm "Soft Peel" S-Type Coating
- **Color Coding**: Per TIA/EIA 598C

#### JACKET
- **Type**: Riser Rated PVC (Indoor)
- **Color**: Aqua
- **Outer Diameter**: Varies by Part Number
- **Subunit Diameter**: 2.0 mm
- **Markings**: Sequential Foot Markings
- **Strength Member**: Kevlar (Plenum + water blocking yarns)

#### PHYSICAL DATA
- **Storage Temperature Range**: -40°C to +80°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.
- **Min. Bend Radius, Operation**: Varies by part number
- **Cable Outside Diameter, Nominal**: Varies by part number
- **Cable Package**: 1000 ft Reel or customer request, spooled
- **Rating**: FT4 - Riser / FT6-Plenum
- **Crush Resistance (TIA/EIA 455-41A)**: 100 kgf / mm
- **Impact Resistance (TIA/EIA 455-25B)**: 1500 impact cycles
- **Flexing @ 90 degrees (TIA/EIA 455-104A)**: 2000 flexing cycles

#### PHYSICAL CHARACTERISTICS (SSF™ FIBER)
- **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, 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

#### ENVIRONMENTAL CHARACTERISTICS (SSF™ FIBER)
- **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

#### OPTICAL CHARACTERISTICS (SSF™ FIBER)
- **Attenuation Coefficient**: 850 nm ≤ 4.0 dB/km
- **Numerical Aperture**: 1300 nm ≤ 1.5 dB/km
- **Overfilled Modal Bandwidth**: 850 nm ≥ 1500 MHz · km
- **Bandwidth**: 1300 nm ≥ 500 MHz · km
- **High Performance EMB**: 850 nm ≥ 2000 MHz · km

#### BACKSCATTER CHARACTERISTICS (SSF™ FIBER)
- **Attenuation Directional Uniformity**: ≤ 0.05 dB/km
- **Attenuation Uniformity**: ≤ 0.05 dB
- **Group Index of Refraction**: 850 nm 1.481
- **850 nm**: 1.476
- **1300 nm**: 1.476

#### COMPLIANCE
- ETL Listed Type OFNR, CSA FT4, IECA S-83-596 & OFNP, CSA FT6, or non-LSZH ETL / IECA S-104-696.
- 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.