Cleerline SSF™ Armored Corrugated Steel Distribution cable consists of a PE overall jacket with 2, 6, 12, or 24 fibers and water-blocking Kevlar yarns.

The core is protected by a corrugated armored steel tube that offers easy installation and high crush resistance. A polyethylene, UV-resistant jacket protects the cable, allowing direct burial.

Cleerline SSF™ Armored Single Mode is fully compatible with all common connector systems for standard 9/125 single mode fiber.

This product offers bend performance beyond EIA SP-2840A, superior crush resistance, and superior pull.

**FEATURES AND BENEFITS**

- High mechanical strength, superior fatigue
- Compatible with common connector systems for 9/125 single mode
- Integral SSF™ coating provides glass protection
- Exclusive 250 µm Soft Peel acrylate
- High crush resistance
- Cable built to withstand rugged environments

**APPLICATIONS**

- Outdoor direct burial
- Installations requiring high crush resistance

**PART NUMBER** | **FIBERS** | **DESCRIPTION** | **TYPE** | **O.D.** | **WEIGHT (LB / 1000 FT)**
--- | --- | --- | --- | --- | ---
2ACS91250S2PE | 2 Fibers | 2 Strand Direct Burial - 1000 ft Spool | PE-UV | 9.0 mm | 62
2ACS91250S2PE-B | 2 Fibers | 2 Strand Direct Burial - Cut to Order | PE-UV | 9.0 mm | 62
6ACS91250S2PE | 6 Fibers | 6 Strand Direct Burial - 1000 ft Spool | PE-UV | 9.0 mm | 62
6ACS91250S2PE-B | 6 Fibers | 6 Strand Direct Burial - Cut to Order | PE-UV | 9.0 mm | 62
12ACS91250S2PE | 12 Fibers | 12 Strand Direct Burial - 1000 ft Spool | PE-UV | 9.0 mm | 62
12ACS91250S2PE-B | 12 Fibers | 12 Strand Direct Burial - Cut to Order | PE-UV | 9.0 mm | 62
24ACS91250S2PE | 24 Fibers | 24 Strand Direct Burial - 1000 ft Spool | PE-UV | 9.0 mm | 62
24ACS91250S2PE-B | 24 Fibers | 24 Strand Direct Burial - Cut to Order | PE-UV | 9.0 mm | 62
### CONSTRUCTION

#### PHYSICAL DATA

<table>
<thead>
<tr>
<th>Storage Temperature Range</th>
<th>-30°C to +60°C</th>
</tr>
</thead>
<tbody>
<tr>
<td>Operating Temperature Range</td>
<td>-20°C to +75°C</td>
</tr>
<tr>
<td>Max Tensile Load (Installation)</td>
<td>2000 N (450 lbf)</td>
</tr>
<tr>
<td>Max Tensile Load Long Term</td>
<td>600 N (135 lbf)</td>
</tr>
<tr>
<td>Allowable Bend Radius</td>
<td>Dynamic 20D</td>
</tr>
<tr>
<td>Subunit Diameter</td>
<td>3.0 mm Loose Tube</td>
</tr>
<tr>
<td>Cable Outside Diameter, Nominal</td>
<td>9.0 mm</td>
</tr>
<tr>
<td>Construction</td>
<td>Loose Tube, Corrugated Steel Tube</td>
</tr>
<tr>
<td>Cable Package</td>
<td>1000 ft Reel or customer request, spooled</td>
</tr>
<tr>
<td>Crush Resistance (N/100 mm)</td>
<td>3000 N</td>
</tr>
</tbody>
</table>

#### FIBER OPTIC CHARACTERISTICS

<table>
<thead>
<tr>
<th>Max. Attenuation</th>
<th>Standard Compliance &amp; Condition</th>
<th>Δ Loss</th>
</tr>
</thead>
<tbody>
<tr>
<td>1260 nm</td>
<td>≤ 0.45 dB / km</td>
<td></td>
</tr>
<tr>
<td>1310 nm</td>
<td>≤ 0.40 dB / km</td>
<td></td>
</tr>
<tr>
<td>1383 nm</td>
<td>≤ 0.35 dB / km</td>
<td></td>
</tr>
<tr>
<td>1550 nm</td>
<td>≤ 0.3 dB / km</td>
<td></td>
</tr>
<tr>
<td>1625 nm</td>
<td>≤ 0.35 dB / km</td>
<td></td>
</tr>
</tbody>
</table>

#### MACRO BENDING LOSS

<table>
<thead>
<tr>
<th>Macro Bending Loss - 1550 nm</th>
<th>10 turns, 15 mm bending diameter</th>
<th>0.03 dB</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>1 turn, 10 mm bending diameter</td>
<td>0.1 dB</td>
</tr>
<tr>
<td></td>
<td>1 turn, 7.5 mm bending diameter</td>
<td>0.5 dB</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Macro Bending Loss - 1625 nm</th>
<th>10 turns, 15 mm bending diameter</th>
<th>0.1 dB</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>1 turn, 10 mm bending diameter</td>
<td>0.2 dB</td>
</tr>
<tr>
<td></td>
<td>1 turn, 7.5 mm bending diameter</td>
<td>1.0 dB</td>
</tr>
</tbody>
</table>

### FIBER PERFORMANCE

#### Item | Standard Compliance & Condition | Δ Loss |
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>High Humidity Aging</td>
<td>IEC 60793-1-50, 85°C/85% RH, 30 Days</td>
<td>&lt; 0.05 dB/km</td>
</tr>
<tr>
<td>Thermal Aging</td>
<td>IEC 60793-1-51, 85°C, 30 Days</td>
<td>&lt; 0.05 dB/km</td>
</tr>
<tr>
<td>Temperature Cycling</td>
<td>IEC 60793-1-52, -10°C - 85°C, 21 cycles</td>
<td>&lt; 0.05 dB/km</td>
</tr>
<tr>
<td>Water Soak</td>
<td>IEC 60793-1-53, 23°C/soak in water, 30 days</td>
<td>&lt; 0.05 dB/km</td>
</tr>
<tr>
<td>Hydrogen Aging</td>
<td>IEC 60793-2-50, 23°C/Hydrogen loading 0.01 atm</td>
<td>&lt; 0.40 dB/km</td>
</tr>
</tbody>
</table>

### CABLE PERFORMANCE

#### Item | Standard Compliance & Condition | Δ Loss |
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Tensile Test</td>
<td>TIA/EIA-455-33A, 100 kg tensile load, 10 minutes</td>
<td>&lt; 0.20 dB/km</td>
</tr>
<tr>
<td>Repeat Bending</td>
<td>TIA/EIA-455-104A, 25 times around 60 mm bending diameter</td>
<td>&lt; 0.20 dB/km</td>
</tr>
<tr>
<td>Impact Test</td>
<td>TIA/EIA-455-25B, 1 kgf, 20 times</td>
<td>&lt; 0.20 dB/km</td>
</tr>
<tr>
<td>Twist Test</td>
<td>TIA/EIA-455-85A, 1 m, 10 times</td>
<td>0.20 dB/km</td>
</tr>
<tr>
<td>Crush Test</td>
<td>TIA/EIA-455-41A, 1 kgf, 10 minutes</td>
<td>&lt; 0.20 dB/km</td>
</tr>
<tr>
<td>Water Penetration</td>
<td>TIA/EIA-455-82B, 1 m static water pressure, 3 m sample for 4 hours</td>
<td>No leakage</td>
</tr>
<tr>
<td>Temperature Cycling</td>
<td>TIA/EIA-455-3A, -40°C - 70°C</td>
<td>≤ 0.20 dB/km</td>
</tr>
</tbody>
</table>

### COMPLIANCE