FieldShield®
Pushable Optical Fiber

Application
Designed to simplify the placement of fiber, FieldShield Pushable Optical Fiber reduces the cost of any fiber deployment, while providing industry leading protection when mated with FieldShield Microducts. Pushable Optical Fiber is either pulled or pushed through microduct at turn-up, maximizing installation efficiency. In the event of a later fiber cut, the fiber can be easily pulled from the microduct. The duct is then repaired and a new FieldShield Pushable Assembly is pushed or pulled through the microduct for a fast and cost-effective restoration.

Description
FieldShield Pushable Optical Fiber is a durable and crush resistant product that is suitable for most indoor or outdoor environments. Manufactured using PBT jacketing, pushable optical fiber offers flexibility as well as resistance to chemicals. FieldShield Pushable Optical Fiber is typically recommended to be used in conjunction with FieldShield Microduct.

Features and Benefits
Integrity
- Available in singlenode
- Supports all industry standard connectors

Protection
- Bend-insensitive (G.657.A2) fiber protects optical signal with minimal to zero attenuation down to a 10 mm radius
- Tough PBT jacketing provides high column strength and low coefficient of friction to maximize push and pull distances
- Lightweight and high crush resistance
- One and two fiber drops protected by water blocking Kevlar strength member
- 6 to 48-fiber utilize water blocking gel

Access
- Standard color is black
- Tech-friendly 250 μm fiber inside the outer jacket reduces splicing steps and installation costs
- Suitable for all types of indoor and outdoor implementations within a microduct

Investment
- Pushes directly into a Clearview® Cassette, FieldShield is optimized for placement alongside Clearfield® FieldSmart® fiber management platforms
- Quick and easy deployment allows capital investment to be aligned to customer take rates
- Available in multiple fiber counts up to 48 fibers

Recommended Push/Pull

![Push/Pull Diagrams]

Available in 1, 2, 6, 12, 24 and 48 fiber counts
# Technical Specifications

## FieldShield Pushable Optical Fiber

<table>
<thead>
<tr>
<th>Fiber</th>
<th>Corning ClearCurve Optical Fiber or equivalent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Water Peak</td>
<td>ZWP (Zero Water Peak)</td>
</tr>
<tr>
<td>Bend-Insensitive</td>
<td>Bend-Insensitive Fiber G.657.A2</td>
</tr>
<tr>
<td>Color Code</td>
<td>TIA/EIA 598 (US Standard)</td>
</tr>
<tr>
<td>Fiber Count</td>
<td>Any fiber count up to 48 fibers</td>
</tr>
<tr>
<td>Pushable Connectors</td>
<td>FieldShield SC/UPC, SC/APC, Simplex and Duplex LC/UPC, Simplex and Duplex LC/APC, MPO</td>
</tr>
<tr>
<td>Standard Connectors</td>
<td>SC/UPC, SC/APC, LC/UPC, LC/APC, FC/UPC, FC/APC, ST/UPC, HFOC SC/APC, MPO</td>
</tr>
<tr>
<td>Internal Fiber Size</td>
<td>250 μm</td>
</tr>
<tr>
<td>Outside Diameter</td>
<td>1 to 12-fiber: 0.118&quot; (3.0 mm); 24-fiber: 0.156&quot; (3.96 mm); 48-fiber: 0.217&quot; (5.51 mm)</td>
</tr>
<tr>
<td>Color</td>
<td>Black</td>
</tr>
<tr>
<td>Material</td>
<td>PBT</td>
</tr>
<tr>
<td>Bend-Radius</td>
<td>10 mm minimum</td>
</tr>
<tr>
<td>High Temperature Aging</td>
<td>(-40°C + 85°C) ≤ 0.05 dB/km</td>
</tr>
<tr>
<td>Temperature &amp; Humidity Cycling</td>
<td>≤ 0.05 dB/km (at -10°C to 85°C and 95% RH)</td>
</tr>
<tr>
<td>Water Immersion (23 ± 2°C)</td>
<td>≤ 0.05 dB/km</td>
</tr>
<tr>
<td>Operating Temperature</td>
<td>-40°F to 176°F (-40°C to 80°C)</td>
</tr>
<tr>
<td>Installation Temperature</td>
<td>-14°F to 158°F (-26°C to 70°C)</td>
</tr>
<tr>
<td>Installation Tension</td>
<td>20 lbf for 3 mm; 20 lbf for 4 mm</td>
</tr>
<tr>
<td>Markings</td>
<td>Part number, lot number and footage markers every two feet (609.60 mm)</td>
</tr>
</tbody>
</table>

## Pre-Configured Part Numbers

<table>
<thead>
<tr>
<th>Part Number</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>FS-CA1-001-8ZD-B 01000F</td>
<td>FieldShield boxed Pushable Optical Fiber, 1-fiber (250 μm), singlemode, 3 mm jacket, 1000 feet (305 m)</td>
</tr>
<tr>
<td>FS-CA1-001-8ZD-B 02000F</td>
<td>FieldShield boxed Pushable Optical Fiber, 1-fiber (250 μm), singlemode, 3 mm jacket, 2000 feet (610 m)</td>
</tr>
<tr>
<td>FS-CA1-001-8ZD-B 03000F</td>
<td>FieldShield boxed Pushable Optical Fiber, 1-fiber (250 μm), singlemode, 3 mm jacket, 3000 feet (914 m)</td>
</tr>
<tr>
<td>FS-CA1-001-8ZD-B 05000F</td>
<td>FieldShield boxed Pushable Optical Fiber, 1-fiber (250 μm), singlemode, 3 mm jacket, 5000 feet (1,524 m)</td>
</tr>
<tr>
<td>FS-CA1-002-8ZD-B 01000F</td>
<td>FieldShield boxed Pushable Optical Fiber, 2-fiber (250 μm), singlemode, 3 mm jacket, 1000 feet (305 m)</td>
</tr>
<tr>
<td>FS-CA1-002-8ZD-B 02000F</td>
<td>FieldShield boxed Pushable Optical Fiber, 2-fiber (250 μm), singlemode, 3 mm jacket, 2000 feet (610 m)</td>
</tr>
<tr>
<td>FS-CA1-002-8ZD-B 03000F</td>
<td>FieldShield boxed Pushable Optical Fiber, 2-fiber (250 μm), singlemode, 3 mm jacket, 3000 feet (914 m)</td>
</tr>
<tr>
<td>FS-CA1-006-8ZD-B 01000F</td>
<td>FieldShield boxed Pushable Optical Fiber, 6-fiber (250 μm), singlemode, 3 mm jacket, 1000 feet (305 m)</td>
</tr>
<tr>
<td>FS-CA1-006-8ZD-B 03000F</td>
<td>FieldShield boxed Pushable Optical Fiber, 6-fiber (250 μm), singlemode, 3 mm jacket, 3000 feet (914 m)</td>
</tr>
<tr>
<td>FS-CA1-012-8ZD-B 01000F</td>
<td>FieldShield boxed Pushable Optical Fiber, 12-fiber (250 μm), singlemode, 3 mm jacket, 1000 feet (305 m)</td>
</tr>
<tr>
<td>FS-CA1-012-8ZD-B 03000F</td>
<td>FieldShield boxed Pushable Optical Fiber, 12-fiber (250 μm), singlemode, 3 mm jacket, 3000 feet (914 m)</td>
</tr>
<tr>
<td>FS-CA1-024-8ZE-B 01000F</td>
<td>FieldShield boxed Pushable Optical Fiber, 24-fiber (250 μm), singlemode, 4 mm jacket, 1000 feet (305 m)</td>
</tr>
<tr>
<td>FS-CA1-024-8ZE-B 02000F</td>
<td>FieldShield boxed Pushable Optical Fiber, 24-fiber (250 μm), singlemode, 4 mm jacket, 2000 feet (610 m)</td>
</tr>
<tr>
<td>FS-CA1-024-8ZE-B 05000F</td>
<td>FieldShield boxed Pushable Optical Fiber, 24-fiber (250 μm), singlemode, 4 mm jacket, 5000 feet (1,524 m)</td>
</tr>
<tr>
<td>FS-CA1-048-8ZF-B 01500F</td>
<td>FieldShield boxed Pushable Optical Fiber, 48-fiber (250 μm), singlemode, 5.5 mm jacket, 1500 feet (457 m)</td>
</tr>
<tr>
<td>FS-CA1-048-8ZF-B 02500F</td>
<td>FieldShield boxed Pushable Optical Fiber, 48-fiber (250 μm), singlemode, 5.5 mm jacket, 2500 feet (762 m)</td>
</tr>
</tbody>
</table>