FieldShield®
Pushable Optical Fiber

CLEARFIELD

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

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

Integrity
- FieldShield fiber cable designed, tested and certified to Telcordia GR-20
- Available in singlemode
- 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
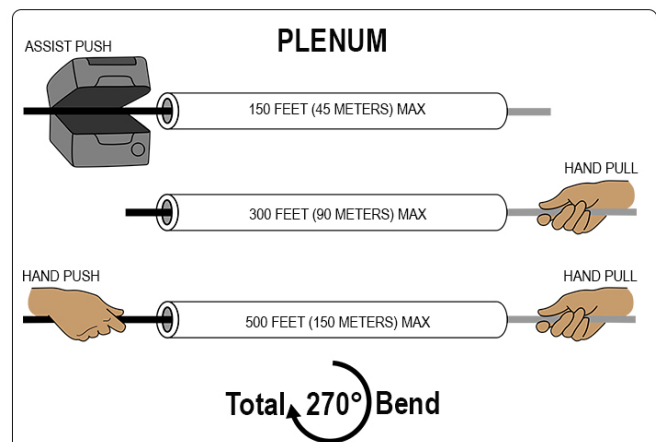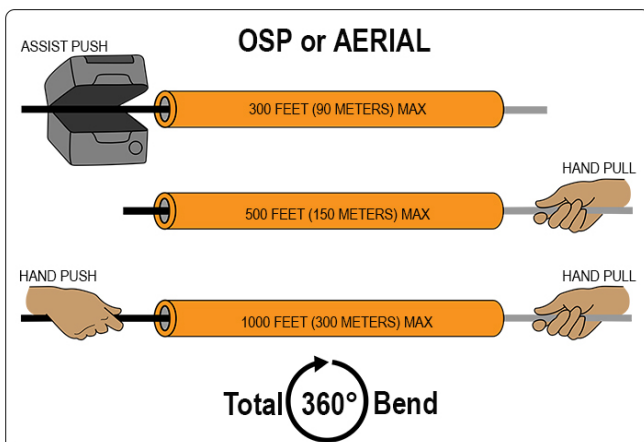- 6 to 48-fiber utilize water blocking gel

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

OSP or AERIAL

ASSIST PUSH

300 FEET (90 METERS) MAX

500 FEET (150 METERS) MAX — HAND PULL

HAND PUSH — 1000 FEET (300 METERS) MAX — HAND PULL

Total 360° Bend

PLENUM

ASSIST PUSH

150 FEET (45 METERS) MAX

300 FEET (90 METERS) MAX — HAND PULL

HAND PUSH — 500 FEET (150 METERS) MAX — HAND PULL

Total 270° Bend

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Technical Specifications

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

Pre-Configured Part Numbers

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