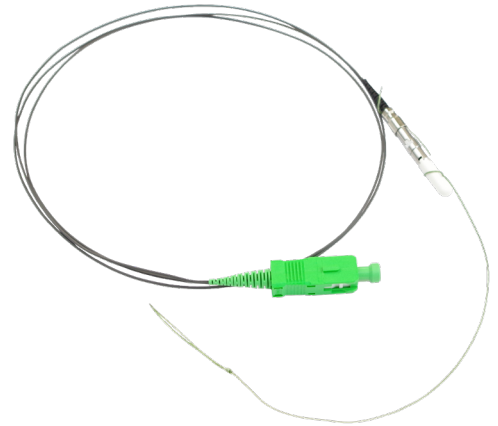# FieldShield®
StrongFiber

CLEARFIELD

Application

Designed to simplify the placement of fiber, FieldShield StrongFiber reduces the cost of any fiber deployment while providing industry leading protection when combined with FieldShield Microducts. StrongFiber is pulled through microduct at turn-up maximizing installation efficiency. In the event of a duct or fiber being damaged or for future upgrades, the fiber can be easily pulled from the microduct. The duct is then repaired and a new FieldShield StrongFiber assembly is pushed or pulled through the microduct for a fast and cost-effective restoration or upgrade.

StrongFiber may be used in place of a traditional patch cord for reduced cable pileup within the route-path of new or traditionally oversubscribed frames within a central office, headend, data center or remote hut. StrongFiber is 85% smaller than traditional 3 mm patch cords and 69% smaller than 1.2 mm patch cords. The reduced size and weight makes the fiber less susceptible to micro-bends and makes it much easier to store using any fiber management element.

Description

FieldShield StrongFiber is a durable high tensile strength fiber when compared to other fibers of its size. It is suitable for both indoor and outdoor environments when used in FieldShield Microduct. Manufactured with premium bend-insensitive fiber, FieldShield StrongFiber offers high tensile strength to resist damage to the fiber during installation in the FieldShield Microducts. When terminated with a FieldShield Pullable Connector, the FieldShield StrongFiber can be quickly deployed in FieldShield Microduct, reducing installation time drastically.

Features and Benefits

Integrity
- StrongFiber fiber cable designed, tested and certified to Telcordia GR-20
- Available in singlemode
- Supports all SC and LC connectors

Protection
- Bend-insensitive (G.657.A2) fiber protects optical signal with minimal to zero attenuation
- Lightweight with low coefficient of friction to maximize pull distances

Access
- Standard color is black
- Tech-friendly 900 µm fiber
- Suitable for all types of indoor implementations

Investment
- Quick and easy deployment allows capital investment to be aligned to customer take rates

Technical Specifications

FieldShield StrongFiber - Physical Glass Characteristics	
Fiber Size	250 µm
Clad Diameter	125.0 ± 0.7 µm
Clad Non-circularity	≤ 1 %
Core/Clad Concentricity Error (Offset)	≤ 0.5 µm maximum, < 0.2 µm typically
Coating Diameter (Uncolored)	235 - 245 µm
Coating-Clad Concentricity Error	(Offset) ≤ 12 µm
Tensile Proof Test	100 kpsi (0.69 GPa)
Coating Strip Force Range	≥ 0.3 lbf < 2.0 lbf (≥ 1.3 N < 8.9 N)

FieldShield®
StrongFiber

FieldShield StrongFiber	
Fiber	OFS All Wave Flex + Fiber or equivalent
Water Peak	ZWP (Zero Water Peak)
Bend-Insensitive	Meets G.657 A2
Color	Black
Length	Up to 300 feet (91.44 m)
Fiber Count	Single Fiber
Pullable Connectors	FieldShield SC/UPC, SC/APC
Standard Connectors	SC/UPC, SC/APC, LC/UPC, LC/APC
Mode	Singlemode
Outside Diameter	900 µm
Material	Thermoplastic Blend, Low Smoke/Fume, Non-Halogen Flame Retardant
Rating	OSP Temperature Rated
Bend-Radius	10 mm minimum
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	18 lbs (8.16 kg)

Performance Specifications

Connector Type	Ferrule Material	Polish Type	Ins. Loss Typical	Max. Ins. Loss	Min. Ret. Loss
SC	Ceramic	UPC	0.15 dB	0.20 dB	55.00 dB
LC	Ceramic	UPC	0.15 dB	0.20 dB	55.00 dB
SC	Ceramic	APC	0.18 dB	0.20 dB	65.00 dB
LC	Ceramic	APC	0.18 dB	0.20 dB	65.00 dB

Configured Part Numbers

Disclaimer/Note: Paper configurator shown is for reference only and should not be used to configure a saleable product configuration. All options shown on paper configurators may not be available or compatible with other options listed. Please contact your Clearfield representative for assistance in product configurations.

FS - A S 1 - 0 0 1 - ___ Z Z - ___ Z Z XXXM or XXXF

[1]   [2]

[1] Select Connector #1

B = Pullable SC/UPC
D = Pullable SC/APC
A = SC/UPC
C = SC/APC
E = LC/UPC
G = LC/APC

[2] Select Connector #2

B = Pullable SC/UPC
D = Pullable SC/APC
A = SC/UPC
C = SC/APC
E = LC/UPC
G = LC/APC
Z = Pigtail

XXXM or XXXF

XXXM = Length in meters
XXXF = Length in feet