

# Fiber Cable Assemblies

## Outside Plant Fiber Assemblies

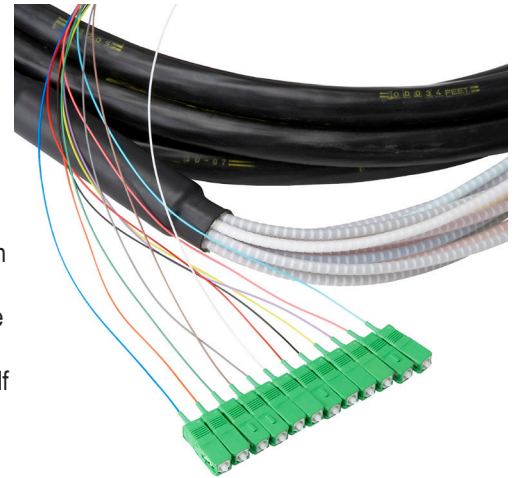


### Application

Clearfield® Outside Plant Fiber Assemblies are used in a variety of applications including DLC cabinets, PON cabinets, cross-connect cabinets and fiber termination panels. Standard OSP cable is used and the terminated end of the assembly is up-jacketed with either 900  $\mu$ m or 2 mm tubing. The assembly is then terminated with the required connectors. Fiber counts can be from 2 to 288 fibers.

### Description

Clearfield OSP Fiber Assemblies are designed to perform flawlessly in even the most harsh environments. Our process and design directly addresses failure prone areas such as the transition (where the fiber is broken out into individual units) and at the termination. We use a patented process in the fiber transition that not only protects the fiber but also ensures that no lateral movement occurs due to temperature variations. Standard breakouts are half meter and one meter. Clearfield can also do custom breakouts to meet your unique panel needs.



### Features and Benefits

#### Integrity

- Cable and terminations are designed, tested and certified to GR-20, GR-326 and GR-1435
- Specialty cable designs available including ribbon fiber, loose-tube and ADSS (All-Dielectric Self-Supporting)
- Supports industry standard singlemode and multimode fiber

#### Protection

- Rugged cable design protects against harsh outdoor environment
- Wide variety of up-jacket sizes for all applications, ruggedized 3 mm, 2 mm, 1.6 mm and 900  $\mu$ m
- Loose tube available in a gel-filled design for full water-block or gel-free
- All dielectric design (except armored cable)
- Pulling-eye available to ease installation and for added protection

#### Access

- Industry standard terminations include SC and LC (ask a Clearfield representative for other connector availability)
- Versatile cable designs well suited for in-conduit, lashed aerial and direct buried applications
- Fiber counts from two to 288 in loose tube or ribbon cables (higher fiber counts available)

#### Investment

- Outside Plant Fiber Assemblies offer a rugged solution for deploying fiber in any OSP optical network
- Environmentally stable, low-insertion loss, minimal back reflection
- All assemblies are 100% tested

### Recommendation

When designing a patch cord (double-ended assembly) that will be pulled through conduit a pulling eye may be a good solution. Any assembly with 24 fibers or less can be fitted with a pulling eye.

### Technical Specifications

Outside Plant Fiber Assemblies	
Core Size and Type	Singlemode and multimode
Fiber Count	2-fiber to 288-fiber
Jacket O.D.	900 $\mu$ m, 2.0 mm (48-fiber max), 3mm (for MPO terminations only)
Cable Types	Outdoor (Riser/Non-Rated), Outdoor Armored (Riser/Non-Rated)
Connector Types	SC/UPC, SC/APC, LC/UPC, LC/APC, MPO
Operating Temperature	-40°C to 85°C (-40°F to 185°F)
Breakout Length	Half meter, one meter, pulling eye, custom

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### Minimum Performance Specifications for Terminated Singlemode Connectors

Connector Type	Ferrule Material	Polish Type	Ins. Loss, Typical	Max. Ins. Loss	Min. Ret. Loss
SC	Ceramic	UPC	0.15 dB	0.30 dB	55.00 dB
LC	Ceramic	UPC	0.15 dB	0.30 dB	55.00 dB
SC	Ceramic	APC	0.20 dB	0.30 dB	65.00 dB
LC	Ceramic	APC	0.20 dB	0.30 dB	65.00 dB

### Minimum Performance Specifications for Terminated Multimode Connectors

Connector Type	Ferrule Material	Polish Type	Ins. Loss, Typical	Max. Ins. Loss
SC	Ceramic	PC	0.25 dB	≤ 0.50 dB
LC	Ceramic	PC	0.25 dB	≤ 0.50 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.*

0 - - - - -
XXXX or XXXF

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**1 Select Cable Construction**

B = OSP, riser rated  
E = OSP, non-rated  
M = OSP, armored, non-rated

**4 Select Connector # 1**

A = SC/UPC      5 = MPO male  
C = SC/APC      6 = MPO female  
E = LC/UPC  
G = LC/APC

**7 Select Connector # 2**

A = SC/UPC      P = Pulling Eye  
C = SC/APC      Z = Pigtail  
E = LC/UPC      5 = MPO male  
G = LC/APC      6 = MPO female

**2 Select Mode / Type**

1 = Singlemode, loose tube  
2 = Singlemode, ribbon  
3 = Multimode (62.5) loose tube  
4 = Multimode (62.5) ribbon  
5 = Multimode (50 µm) loose tube  
6 = Multimode (50 µm) ribbon  
7 = Multimode (50 µm LO) loose tube  
8 = Multimode (50 µm LO) ribbon

**5 Select Breakout # 1**

B = 1 meter  
C = 0.5 meter

**8 Select Breakout # 2**

B = 1 meter  
C = 0.5 meter  
Z = Pigtail

**3 Select Fiber Count \***

X X X = port count in increments of 12

\* Some fiber counts including fiber quantities not divisible by 12 may be built with the next highest fiber count cable (i.e. - A 60-fiber assembly may be built using a 72-count fiber where the 1<sup>st</sup> 60 fiber will be terminated and the final 12 fibers will be cut off at the breakout point.

**6 Select Upjacketing # 1**

A = 900 µm  
B = 2 mm (only up to 24 fiber)  
D = 3 mm

**9 Select Upjacketing # 2**

A = 900 µm  
B = 2 mm (only up to 48 fiber)  
Z = Pigtail

**XXXX or XXXF**

XXXX = Length in meters  
XXXF = Length in feet