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#### **CommScope Fiber Optic Cables**



#### **Proven Quality and Performance**

In the past thirty years, fiber optic cables have evolved from a laboratory novelty to become an indispensible necessity on the communication superhighway. Fiber optic superior bandwidth and versatility makes it the transmission medium of choice for a variety of communication applications.



Bearing this versatility in mind, CommScope has developed three families of fiber optic cables to be used anywhere in the communication hierarchy: Outside Plant, Indoor/Outdoor and Premise.

#### Outside plant cables for standard and rugged environments

For direct buried, underground duct and aerial installations, CommScope offers several designs, which include a variety of loose tube cables, from all dielectric to heavy duty moisture-resistant, double armored and triple-jacketed cables. Design options include: Drop Armored, a smaller, lighter weight cable for use when space is at a minimum; Central Tube for point-to-point installations; Stranded Loose Tube and pavement cables. Any of these cables may be pre-installed in high-strength OSP conduit.

#### Indoor/outdoor cables for strength and safety (including zero-halogen types)

CommScope's design for these hybrid application cables offer construction and jacketing suitable for outside usage yet comply with NEC/CEC riser (OFNR) flame standards. This design allows you to run cable through the building entrance without having to terminate or splice different cables together which results in significant savings in time and labor. Cable types include Central Tube designs, standard and heavy-duty stranded loose tube riser and plenum cables and Triathlon, a specially designed low-smoke/zero halogen distribution and cordage cables.

#### Premises cables for safety and performance

CommScope's premises cables are designed to handle the stresses of indoor applications. Along with riser and plenum rated distribution, breakout and cordage cables, CommScope also offers heavy-duty distribution and cordage that provide additional fiber protection.

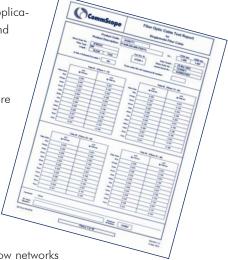
#### Fiber Optic Components

CommScope offers an innovative line of optical components for premise and outside plant applications. This product line includes connectors, adapters, enclosures, panels, fanouts, closures and jumpers.

#### Test reports - a higher standard for higher speeds

Every reel of CommScope fiber optic cable is subjected to stringent testing throughout the entire manufacturing process. Our state-of-the-art process controls and testing systems insure that every foot of CommScope cable consistently meets or exceeds our high standards.

To prove that our fiber optic cables exceed industry standards, we go to the extra step of attaching the individual cable test report to every reel. You get proof-positive that the cable you purchase will perform to the level you require.



Remember, a network is only as good as the cable that connects it. Specify the cables that allow networks to communicate; fiber optic cables from CommScope.

Detailed product specification sheets are available at the download area of our website.

#### **Fiber Optic Numbering Key**





**Position** 









#### Sample Part Number

#### Position 1: Cable Style

#### DS - 5L

Flooded Stranded Loose Tube

0 Outdoor (Arid Core® Standard)

6

Zero Halogen

M Messenger

Non-Halogen (Indoor Only)

Р Plenum Riser

#### Position 2: Fiber Count

Total Fiber Count (in increments of two)

\*XXX variable in catalog number.

#### Position 3: Cable Construction

Stranded Loose Tube Armored

L2 Stranded Loose Tube Dual Jacket/Single Armor Stranded Loose Tube Triple Jacket/Dual Armor

CN Central Tube All Dielectric

Stranded Loose Tube Non Armored All Dielectric Stranded Loose Tube All Dielectric/Dual Jacket

DA Drop Armored CA Central Tube Armored

#### Indoor & Indoor/Outdoor Cable Constructions

**DS** Distribution

**CN** Central Tube Armored

ZC Zipcord

BO Breakout **DU** Duplex

Stranded Loose Tube Non Armored All Dielectric Ш Stranded Loose Tube Heavy Duty Non Armored

SP Simplex IC Interconnect

FiberGuard \*\* Use first character of the construction code above plus one of the following: Steel Armor, No Jacket Υ Aluminum Armor, No Jacket

Steel Armor w/Jacket

Z Aluminum Armor w/Jacket

#### Position 4: Fiber Type

#### P - 012 - DS - **5L FSDOR**

8W 9.2 MFD LightScope ZWP™, singlemode 62.5/125µm FDDI Grade, multimode

5H Standard 50 $\mu$ m, multimode **5M** 50μm, LaserCore 150, multimode 50µm, LaserCore<sup>™</sup> 300, multimode

CM Composite (singlemode & multimode), HY Hybrid (fiber, copper, & coax) \*XY variable in catalog number

#### Position 5: Jacket Print

#### ISDOR

Printed in Feet (Standard) Printed in Meters Χ

#### Position 6: Miscellaneous Values 012 -DS

For cordage, value indicates outside diameter; otherwise additional description

01-12 Fiber Count per Subunit **HD** Heavy Duty

Standard

Special Print

Cordage

1.6mm Jacket OD 2.0mm Jacket 2.5mm Jacket OD 2.9mm Jacket OD

#### Position 7: Color Field

#### 012 - DS 5L **FSDOR**

For Outdoor Cables, this field designates color of stripe/tracer. Outdoor Cables are manufactured with a standard black jacket — No Stripe (NS). Stripes (tracers) are also available in the following colors (min. order required):

Blue BL

**OR** Orange

WH White

**GR** Green VL Violet ΥL Yellow For Premises, Indoor/Outdoor or Outdoor Tight Buffer Cables, this field indicates jacket color. Standard jacket colors:

YL Yellow for singlemode

Black for Indoor/Outdoor and Tight Buffer Outdoor

**OR** Orange for Multimode & Composite AQ Aqua for LaserCore & LaserCore Composites

\*ZZ variable in catalog number.

Available Non Standard jacket colors: (min. order required)

BL Blue RD Red **OR** Orange Black GR Green YL Yellow BR Brown Violet SL Slate **RO** Rose WH White AQ Aqua

#### Positions 8-11: When Position 4 is CM

Position 10: Multimode Fiber Type Position 11: Multimode Fiber Count

Position 8: Singlemode Fiber Type Position 9: Singlemode Fiber Count

## Laser CORE 300™ Type 5L Multimode Fiber Specifications

#### CommScope

#### Available in all CommScope Cable Types

#### LaserCore 300 Type 5L Optical Fiber: 50 micron Multimode Fiber

Physical Characteristics	
Core Diameter	$50.0 \pm 2.5 \mu\text{m}$
Cladding Diameter	$125 \pm 1.0 \mu \text{m}$
Core/Clad Offset	≤ 1.5 μm
Coating Diameter (uncolored)	$245 \pm 10 \mu \text{m}$
Coating Diameter (colored)	$255 \pm 7 \mu \text{m}$
Coating/Cladding Concentricity Error, max.	6 μm
Clad Non-Circularity	≤ 1%
Mechanical Characteristics	
Prooftest	100kpsi (.69 Gpa)
Coating Strip Force	0.3 - 2.0 lbf (1.3 - 8.9 N)
Dynamic Fatigue Parameter (nd)	≥ 18
Macrobend 100 turns @ 75mm mandrel	
850 nm	0.50 dB max.
1300 nm	0.50 dB max.
Optical Characteristics, Wavelength Specific	
Attenuation, Loose Tube Cable - Max.	
850 nm	3.0 dB/km
1300 nm	1.0 dB/km
Attenuation, Tight Buffer Cable - Max.	
850 nm	3.0 dB/km
1300 nm	1.0 db/km
Bandwidth, OFL	
850 nm	1500 MHz - km
1300 nm	500 MHz - km
Bandwidth, Laser	
850 nm	2000 MHz - km
1300 nm	500 MHz - km
Differential Mode Delay	
850 nm	per TIA-492AAAC
1300 nm	0.88 ps/m
Group Refractive Index	
850 nm	1.483
1300 nm	1.479
1 GB Ethernet Distance	
850 nm	970m
1300 nm	600m
10 GB Ethernet Distance*	
850 nm	300 m
Optical Characteristics, General	
Numerical Aperture	0.200 <u>+</u> 0.015
Point Defects, max	0.15 dB
Zero Dispersion Wavelength	1297 - 1316 nm
Zero Dispersion Slope	0.101 ps/(km-nm-nm)
Environmental Characteristics	
Temperature Dependence -60°C to +85°C	$\leq$ 0.1 dB
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Temperature Humidity Cycling -10°C to 85°C up to 95% RH	$\leq$ 0.1 dB
Temperature Humidity Cycling -10°C to 85°C up to 95% RH Water Immersion, 23 + 2°C	≤ 0.1 dB ≤ 0.2 dB

<sup>\*</sup>Compliant with emerging IEEE 802.3ae standards for 10 GB Ethernet transmission at the 850 nm window. Standard jacket color is Aqua for Premise cables. Other jacket colors may be subject to minimum order quantities.





## Laser CORE 150™ Type 5M Multimode Fiber Specifications

#### Available in all CommScope Cable Types

#### LaserCore 150 Type 5M Optical Fiber: 50 micron Multimode Fiber

Physical Characteristics	
Core Diameter	$50.0 \pm 2.5 \mu\text{m}$
Cladding Diameter	$125 \pm 1.0 \mu \text{m}$
Core/Clad Offset	<u>&lt;</u> 1.5 μm
Coating Diameter (uncolored)	$245 \pm 10 \mu m$
Coating Diameter (colored)	$255 \pm 7 \mu\text{m}$
Coating/Cladding Concentricity Error, max.	6 μm
Clad Non-Circularity	<u>≤</u> 1%
Mechanical Characteristics	
Prooftest	100kpsi (.69 Gpa)
Coating Strip Force	0.3 - 2.0 lbf (1.3 - 8.9 N)
Dynamic Fatigue Parameter (nd)	<u>≥</u> 18
Macrobend 100 turns @ 75mm mandrel	
850 nm	0.50 dB max.
1300 nm	0.50 dB max.
Optical Characteristics, Wavelength Specific	
Attenuation, Loose Tube Cable - Max.	
850 nm	3.0 dB/km
1300 nm	1.0 dB/km
Attenuation, Tight Buffer Cable - Max.	
850 nm	3.0 dB/km
1300 nm	1.0 db/km
Bandwidth, OFL	110 00,1111
850 nm	700 MHz - km
1300 nm	500 MHz - km
Bandwidth, Laser	COCTURE NIT
850 nm	950 MHz - km
1300 nm	500 MHz - km
Differential Mode Delay	OOO MILE KIII
850 nm	0.70 ps/m
1300 nm	0.88 ps/m
Group Refractive Index	0.00 ps, iii
850 nm	1.483
1300 nm	1.479
1 GB Ethernet Distance	1.177
850 nm	750m
1300 nm	600m
10 GB Ethernet Distance*	000111
850 nm	150 m
Optical Characteristics, General	130 III
Numerical Aperture	$0.200 \pm 0.015  \mu \mathrm{m}$
Point Defects, max	≤ 0.15 μm
Zero Dispersion Wavelength	1297 - 1316 nm
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Zero Dispersion Slope	0.101 ps/[km-nm-nm]
Environmental Characteristics	- 014
Temperature Dependence -60°C to +85°C	≤ 0.1 d
Temperature Humidity Cycling -10°C to 85°C up to 95% RH	≤ 0.1 dB
Water Immersion, 23 + 2°C	≤ 0.2 dB
Heat Aging, 85 + 2°C	$\leq$ 0.2 dB

<sup>\*</sup>Compliant with emerging IEEE 802.3ae standards for 10 GB Ethernet transmission at the 850 nm window. Standard jacket color is Aqua for Premise cables. Other jacket colors may be subject to minimum order quantities.



# Type 5H Multimode Fiber Specifications



#### Available in all CommScope Cable Types

#### Type 5H Optical Fiber: 50 micron Multimode Fiber

Physical Characteristics	
Core Diameter	$50.0 \pm 2.5 \mu\text{m}$
Cladding Diameter	125 ± 1.0 μm
Core/Clad Offset	<u>≤</u> 1.5 μm
Coating Diameter (uncolored)	$245 \pm 10 \mu \text{m}$
Coating Diameter (colored)	$255 \pm 7 \mu \text{m}$
Coating/Cladding Concentricity Error, max.	6 μm
Clad Non-Circularity	<u>≤</u> 1%
Mechanical Characteristics	
Prooftest	100kpsi (.69 Gpa)
Coating Strip Force	0.3 - 2.0 lbf (1.3 - 8.9 N)
Dynamic Fatigue Parameter (nd)	<u>≥</u> 18
Macrobend 100 turns @ 75mm mandrel	
850 nm	0.50 dB max.
1300 nm	0.50 dB max.
Optical Characteristics, Wavelength Specific	
Attenuation, Loose Tube Cable - Max.	
850 nm	3.0 dB/km
1300 nm	1.0 dB/km
Attenuation, Tight Buffer Cable - Max.	
850 nm	3.5 dB/km
1300 nm	1.5 db/km
Bandwidth, OFL	
850 nm	500 MHz
1300 nm	500 MHz
Group Refractive Index	
850 nm	1.482
1300 nm	1.477
1 GB Ethernet Distance	
850 nm	600m
1300 nm	600m
Optical Characteristics, General	
Numerical Aperture	0.200 <u>+</u> 0.015
Point Defects, max	0.15 dB
Zero Dispersion Wavelength	1297 - 1316 nm
Zero Dispersion Slope	0.101 ps/[km-nm-nm]
Environmental Characteristics	
Temperature Dependence -60°C to +85°C	≤ 0.10 dB
Temperature Humidity Cycling -10°C to 85°C up to 95% RH	≤ 0.20 dB
Water Immersion, 23 + 2°C	≤ 0.20 dB
Heat Aging, 85 + 2°C	≤ 0.20 dB
-	

#### **Type 6F Multimode Fiber Specifications**

#### Available in all CommScope Cable Types

#### Type 6F Optical Fiber: 62.5 micron, FDDI Grade Multimode Fiber

Physical Characteristics	
Core Diameter	$62.5 \pm 2.5 \mu\text{m}$
Cladding Diameter	$125 \pm 1.0 \mu\text{m}$
Core/Clad Offset	≤ 1.5 μm
Coating Diameter (uncolored)	$245 \pm 10 \mu \text{m}$
Coating Diameter (colored)	254 ± 7 μm
Coating/Cladding Concentricity Error, max.	6 μm
Clad Non-Circularity	< 1%
Mechanical Characteristics	<u></u>
Prooftest	100kpsi (.69 Gpa)
Coating Strip Force	0.3 - 2.0 lbf (1.3 - 8.9 N)
Dynamic Fatigue Parameter (nd)	> 18
Macrobend 100 turns @ 75mm mandrel	<del>-</del>
850 nm	0.50 dB max.
1300 nm	0.50 dB max.
Optical Characteristics, Wavelength Specific	
Attenuation, Loose Tube Cable - Max.	
850 nm	3.0 dB/km
1300 nm	1.0 dB/km
Attenuation, Tight Buffer Cable - Max.	
850 nm	3.5 dB/km
1300 nm	1.5 db/km
Bandwidth, OFL	
850 nm	200 MHz - km
1300 nm	500 MHz - km
Group Refractive Index	
850 nm	1.496
1300 nm	1.491
1 GB Ethernet Distance	
850 nm	300m
1300 nm	550m
Optical Characteristics, General	
Numerical Aperture	0.275 <u>+</u> 0.015
Point Defects, max	0.15 dB
Zero Dispersion Wavelength	1320 - 1365 nm
Zero Dispersion Slope	0.097 ps/(km-nm-nm)
Environmental Characteristics	
Temperature Dependence -60°C to +85°C	≤ 0.2 dB
Temperature Humidity Cycling -10°C to 85°C up to 95% RH	≤ 0.2 dB
Water Immersion, 23 + 2°C	≤ 0.2 dB
Heat Aging, 85 + 2°C	$\leq$ 0.2 dB

<sup>\*20</sup> Year warranty subject to CommScope's terms and conditions including usual disclaimers, exceptions and limitations. Contact an authorized CommScope representative for information concerning qualification and issuance of this warranty.

## LightScope Type 8W Singlemode Fiber Specifications



#### Available in all CommScope Cable Types

#### LightScope ZWP Type 8W Optical Fiber: Dispersion-Unshifted, Matched-Clad Singlemode Fiber

Physical Characteristics	
Cladding Diameter	$125 \pm 0.7 \mu \text{m}$
Core/Clad Offset	≤ 0.5 µm
Coating Diameter (uncolored)	245 ± 10 µm
Coating Diameter (colored)	254 ± 7 μm
Coating/Cladding Concentricity Error, max.	12 μm
Clad Non-Circularity	≤ 1%
Mechanical Characteristics	<u> </u>
Prooftest	100kpsi (.69 Gpa)
Coating Strip Force	0.3 - 2.0 lbf (1.3 - 8.9 N)
Fiber Curl	≥ 4 m
Dynamic Fatigue Parameter (nd)	≥ 18
Macrobend 100 turns @ 50mm mandrel	
1550 nm	0.10 dB max.
Macrobend 1 turn @ 32mm mandrel	0.10 dbdx.
1550 nm	0.10 dB max.
Optical Characteristics, Wavelength Specific	
Attenuation, Loose Tube Cable	
1310 nm	0.35 dB/km
1385 nm	0.32 dB/km
1550 nm	0.24 dB/km
Attenuation, Tight Buffer Cable	
1310 nm	0.70 dB/km
1385 nm	0.70 dB/km
1550 nm	0.70 db/km
Mode Field Diameter	
1310 nm	$9.2 \pm 0.3  \mu \text{m}$
1385 nm	9.6 ± 0.6 μm
1550 nm	10.4 <u>+</u> 0.5 μm
Group Refractive Index	<del></del>
1310 nm	1.466
1385 nm	1.466
1550 nm	1.467
Backscatter Coefficients	
1310 nm	-49.6
1385 nm	-52.1
Dispersion	
1310 nm	3.5 ps/(nm-km) from 1285 to 1330 nm
1550 nm	18 ps/(nm-km)
Optical Characteristics, General	
Point Defects	0.10 dB
Cutoff Wavelength	≤ 1260
Zero Dispersion Wavelength	1300 - 1322 nm
Zero Dispersion Slope	0.092 ps/(km-nm-nm)
Polarization Mode Dispersion Link Design Value	≤ 0.1 ps/sqrt(km)
Environmental Characteristics	
Temperature Dependence -60°C to +85°C	≤ 0.05 dB
Temperature Humidity Cycling -10°C to 85°C up to 95% RH	≤ 0.05 dB
Water Immersion, 23 + 2°C	≤ 0.05 dB
Heat Aging, 85 + 2°C	≤ 0.05 dB



#### **Hybrid Cables**

#### Featuring Combinations of Coax, Fiber and/or Unshielded Twisted Pair

Structured cabling is a continually growing facet of telecommunications. In an effort to provide connectivity for all necessary services, hybrid cable designs are becoming the choice to easily

install numerous cables to each outlet for cable television, HDTV, computer networking, multi-line telephone service, security, energy management systems, and more - all via a single cable run.

Using our unique position as the one cable supplier manufacturing coax, twisted pair and fiber optic cables under one roof, CommScope employs advanced engineering technologies by manufacturing and testing each component of a hybrid cable simultaneously.

CommScope offers true hybrid/composite cables featuring subunits contained within a single jacket. Our constructions offer the additional protection of an outside jacket compared to designs offered by many vendors that are merely a bundle of subunits wrapped together with a special tape or binder thread - frequently called "speed pull". CommScope hybrid cables are constructed from subunits carefully selected and performance-verified individually and as the sum of individual parts.

Special designs can be produced at your request, quickly and economically using our flexible manufacturing system. In fact, CommScope will help define the product that best meets your specific needs. Contact any CommScope sales representative at 800.544.1948 to discuss your application.



Features	Benefits
May contain UTP, coax and fiber optic subunits individually jacketed then cabled in a single bundle under one smooth surface.	<ul> <li>Great for multiple cable television drops, phone/data lines, security systems and multimedia requirements</li> <li>Saves time and installation dollars</li> <li>Easier materials management</li> <li>Components can be easily separated into individually jacketed points for easy termination</li> <li>Capable of voice transmission, cable television location and site powering</li> <li>Avails future proofing for the demands of advanced data video and telecommunications</li> <li>Less prone to snags and violations of cable bend radius limits</li> <li>Enhances the cable's ruggedness enabling each subunit to better withstand the rigors of cable installation and remote field applications</li> </ul>
Coax Cable Subunits	<ul> <li>Robust coax cable components are available in a variety of braid options to provide protection against moisture, liquids and gases while boasting excellent mechanical strength and transmission qualities</li> </ul>
Singlemode and/or multimode fiber optic cable subunits	<ul> <li>Excellent for transmission of voice, data or video signals with extraordinary reliability and clarity. No other medium today can challenge fiber optics in bandwidth, distance and noise immunity</li> <li>Available in armored constructions for additional rodent and environmental protection</li> <li>Tight buffered, loose tube or central tube designs offered in singlemode or multimode optical fiber types and a range of grades</li> </ul>
Copper twisted pair subunits	Specify Category 5e which provides the performance necessary for voice and data networking

#### **Hybrid Cables**



#### 2-12 Fiber Arid-Core Construction and 2 pair or 5 pair 22 AWG

Product Type/ Fiber Count	Catalog Number	Outer Diameter Width x Height inch/mm	Loaded L	Radius Jnloaded inch/cm	Installation Loading Ibs/newtons	Crush Resistance N/cm	Weight lbs/ kg/ 1000' 1000m
2-12 Fiber	O- <b>XXX</b> -DN-HY- F12NS/ <b>XYXXX</b> /2X22STP	.33/8.40 x 0.64/16.38	25.7/65.5 12	2.9/32.8	300/1335	440	109 162.8
2-12 Fiber	O- <b>XXX</b> -DN-HY- F12NS/ <b>XYXXX</b> /5X22STP	.34/8.60 x 0.65/16.58	26.0/66.3 13	3.0/33.2	300/1335	440	123 183.4

Variables in the Catalog Number: XXX = Total Fiber Count

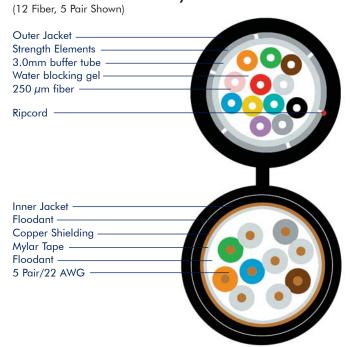
XY = FiberGrade

**8W** (8.3/125μm, LightScope ZWP, singlemode) **6F** (62.5/125μm, multimode)

**6F** (62.5/125μm, multimode) **5H** (Standard 50μm, multimode) **5M** (LaserCore 150, 50μm, multimode) **5L** (LaserCore 300, 50μm, multimode)

Buffer Tube/Fiber identification colors: 1/Blue, 2/Orange, 3/Green, 4/Brown, 5/Slate, 6/White, 7/Red, 8/Black, 9/Yellow, 10/Violet, 11/Rose, 12/Aqua

#### Arid Core Construction Hybrid



Description	Specification			
Operating Temp.	-40 to 70°C			
Installation Temp.	-30 to 60°C			
Storage Temp.	-40 to 70°C			
Crush Resistance	> Telcordia GR-20			
Impact Resistance	> Telcordia GR-20			
Flexing	> Telcordia GR-20			
Twist/Bend	> Telcordia GR-20			

#### 2-12 Fiber Arid-Core Construction and 3 Pair or 6 Pair 22 AWG

Product Type/ Fiber Count	Catalog Number	Outer Diameter Width x Height inch/mm	Min. Be Loaded inch/cm	nd Radius Unloaded inch/cm	Installation Loading Ibs/newtons	Crush Resistance N/cm	Weight Ibs/ kg/ 1000' 1000m
2-12 Fiber	O- <b>XXX</b> -DN-HY- FNS/ <b>XYXXX</b> /3X22UTP	.37/9.5 x .66/16.9	26.5/67.4	13.2/33.7	300/1335	440	93 138.2
2-12 Fiber	O-XXX-DN-HY- F12NS/XYXXX/6X22UTP	.37/9.5 x .66/16.9	26.5/67.4	13.2/33.7	300/1335	440	102 152

Variables in the Catalog Number: XXX = Total Fiber Count

= Fiber Grade

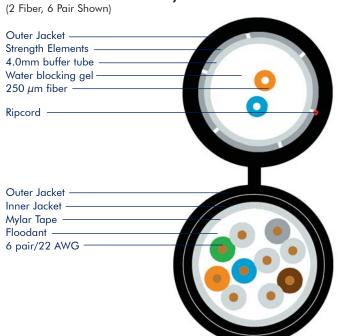
**8W** (8.3/125μm, LightScope ZWP, singlemode) **6F** (62.5/125μm, multimode)

**5H** (Standard 50μm, multimode)

5M (LaserCore 150, 50µm, multimode) **5L** (LaserCore 300, 50µm, multimode)

Buffer Tube/Fiber identification colors: 1/Blue, 2/Orange, 3/Green, 4/Brown, 5/Slate, 6/White, 7/Red, 8/Black, 9/Yellow, 10/Violet, 11/Rose, 12/Aqua

#### Arid Core Construction Hybrid



Description	Specification			
Operating Temp.	-40 to 70°C			
Installation Temp.	-30 to 60°C			
Storage Temp.	-40 to 70°C			
Crush Resistance	> Telcordia GR-20			
Impact Resistance	> Telcordia GR-20			
Flexing	> Telcordia GR-20			
Twist/Bend	> Telcordia GR-20			

#### **Hybrid Cables**



#### 2-108 Fiber Arid-Core Construction Stranded Loose Tube and 1 pair 24 AWG

Product Type/ Fiber Count	Catalog Number	Outer Diameter inch/mm	Min. Be Loaded inch/cm	nd Radius Unloaded inch/cm	Installation Loading Ibs/newtons	Crush Resistance N/cm	Weight  bs/ kg/  1000' 1000m
2-108 Fiber	O- <b>XXX</b> -LN-HY- F12NS/ <b>XYXXX</b> /1X24STP	.66/16.7	13.1/33.4	6.6/16.7	607/2700	440	121 180

Variables in the Catalog Number: XXX = Total Fiber Count

XY = FiberGrade

**8W** (8.3/125 $\mu$ m, LightScope ZWP, singlemode) **6F** (62.5/125 $\mu$ m, multimode)

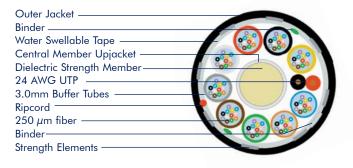
**5H** (Standard 50μm, multimode)

**5M** (LaserCore 150, 50μm, multimode) **5L** (LaserCore 300, 50μm, multimode)

Buffer Tube/Fiber identification colors: 1/Blue, 2/Orange, 3/Green, 4/Brown, 5/Slate, 6/White, 7/Red, 8/Black, 9/Yellow, 10/Violet, 11/Rose, 12/Aqua

#### Arid Core Construction Stranded Loose Tube Hybrid

(108 Fiber, 1 UTP Shown)



Specification
-40 to 70°C
-30 to 60°C
-40 to 75°C
> Telcordia GR-20

#### **Hybrid Cables**

#### Single Jacket Outdoor Cable 2-60 Fiber and 1-4 18AWG Arid-Core Construction

Product Type/ Fiber Count	Catalog Number	Outer Diameter Width x Height inch/mm	Min. Bei Loaded inch/cm	nd Radius Unloaded inch/cm	Installation Loading Ibs/newtons	Crush Resistance N/cm	Wei Ibs/ 1000'	ight kg/ 1000m
2-48 Fiber	O- <b>XXX</b> -ln-hy- F12ns/ <b>XYXXX</b> / <b>Z</b> X18AWG	.46/11.7	9.2/23.4	4.6/11.7	607/2700	440	74	111
2-60 Fiber	O- <b>XXX</b> -ln-hy- F12ns/ <b>XYXXX/Z</b> X18awg	.50/12.7	10.0/25.4	5.0/12.7	607/2700	440	94	140

Variables in the Catalog Number: XXX = Total Fiber Count

XY = FiberGrade

**8W** (8.3/125μm, LightScope ZWP, singlemode) **6F** (62.5/125μm, multimode) **5H** (Standard 50μm, multimode)

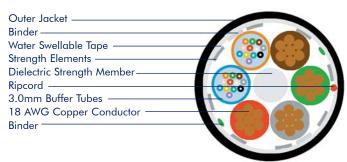
**5M** (LaserCore 150, 50μm, multimode) **5L** (LaserCore 300, 50μm, multimode)

Z = Number of Copper Conductors

Buffer Tube/Fiber identification colors: 1/Blue, 2/Orange, 3/Green, 4/Brown, 5/Slate, 6/White, 7/Red, 8/Black, 9/Yellow, 10/Violet, 11/Rose, 12/Aqua

#### Arid Core Construction Stranded Loose Tube Hybrid

(24 Fiber, 4 x 18 AWG Shown)



Description	Specification
Operating Temp.	-40 to 70°C
Installation Temp.	-30 to 60°C
Storage Temp.	-40 to 75°C
Crush Resistance	> Telcordia GR-20
Impact Resistance	> Telcordia GR-20
Flexing	> Telcordia GR-20
Twist/Bend	> Telcordia GR-20

# lossary/Index

#### **Hybrid Cables**



#### Self-Supporting 2-12 Fiber Arid-Core Construction and Brightwire™ RG-6 Quad Shield

Product Type/ Fiber Count	Catalog Number	Outer Diameter Width x Height inch/mm	Min. Bend Radius Loaded Unloade inch/cm inch/cm		Crush Resistance N/cm	Weight   lbs/ kg/   1000' 1000m
2-12 Fiber	M- <b>XXX</b> -DN-HY- F12NS/ <b>XYXXX</b> /F6SSBW	.30/7.62 x .75/19.17	30.1/76.7 15.0/38	3 300/1335	440	75 111.4

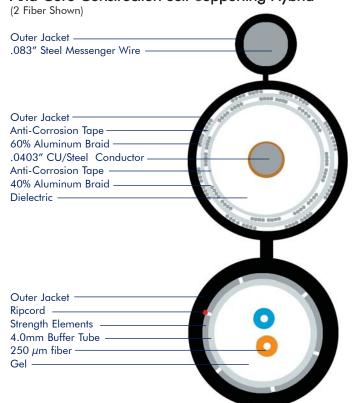
Variables in the Catalog Number: XXX = Total Fiber Count

XY = FiberGrade

**8W** (8.3/125μm, LightScope ZWP, singlemode) **6F** (62.5/125μm, multimode) **5H** (Standard 50μm, multimode) **5M** (LaserCore 150, 50μm, multimode) **5L** (LaserCore 300, 50μm, multimode)

Buffer Tube/Fiber identification colors: 1/Blue, 2/Orange, 3/Green, 4/Brown, 5/Slate, 6/White, 7/Red, 8/Black, 9/Yellow, 10/Violet, 11/Rose, 12/Aqua

#### Arid Core Construction Self-Supporting Hybrid



Description	Specification
Operating Temp.	-40 to 70°C
Installation Temp.	-30 to 60°C
Storage Temp.	-40 to 70°C
Crush Resistance	> Telcordia GR-20
Impact Resistance	> Telcordia GR-20
Flexing	> Telcordia GR-20
Twist/Bend	> Telcordia GR-20

#### 2-12 Fiber Arid-Core Construction and Brightwire™ RG-6 Quad Shield

Product Type/ Fiber Count	Catalog Number	Outer Diameter Width x Height inch/mm		nd Radius Unloaded inch/cm	Installation Loading Ibs/newtons	Crush Resistance N/cm	Weight Ibs/ kg/ 1000' 1000m
2-12 Fiber	O <b>-XXX</b> -DN-HY- F12NS/ <b>XYXXX</b> /F6SSBW	.30/7.62 x .59/15.08	23.7/60.3	11.8/30.2	300/1335	440	35 52.6

Variables in the Catalog Number: XXX = Total Fiber Count

**Hybrid Cables** 

XY = Fiber Grade

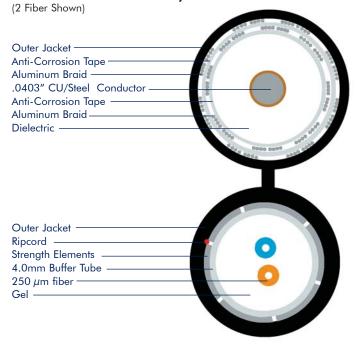
**8W** (8.3/125 $\mu$ m, LightScope ZWP, singlemode) **6F** (62.5/125 $\mu$ m, multimode)

**5H** (Standard 50μm, multimode)

**5M** (LaserCore 150, 50μm, multimode) **5L** (LaserCore 300, 50μm, multimode)

Buffer Tube/Fiber identification colors: 1/Blue, 2/Orange, 3/Green, 4/Brown, 5/Slate, 6/White, 7/Red, 8/Black, 9/Yellow, 10/Violet, 11/Rose, 12/Aqua

#### Arid Core Construction Hybrid



Description	Specification
Operating Temp.	-40 to 70°C
Installation Temp.	-30 to 60°C
Storage Temp.	-40 to 70°C
Crush Resistance	> Telcordia GR-20
Impact Resistance	> Telcordia GR-20
Flexing	> Telcordia GR-20
Twist/Bend	> Telcordia GR-20

#### **Outside Plant Cables**



#### Robust Dielectric and Armored Constructions

All CommScope Outside Plant (OSP) cables are designed and manufactured to provide outstanding mechanical and optical performance. This cable family uses a loose tube construction to provide multiple levels of protection for the fiber strands.

Our heavy-duty products are engineered to withstand the rigors of environmental extremes.

We offer several constructions, which include:

Stranded Loose Tube, using reverse oscillation stranding, in dielectric and armored constructions, with up to 288 fibers

Central Tube, armored and dielectric up to 96 fibers arranged in easy-to-handle color-coded 12 fiber groups

**Drop**, small lightweight construction to allow ease of installation

Pavement Cable, cost effective installation which eliminates costly direction boring or trenching through a parking lot or other paved area



#### CommScope's ARID-CORE® Moisture Barrier

- •No greasy flooding compound
- •Speeds installation time
- •Installer friendly

Moisture migration is virtually eliminated in Stranded Loose Tube cables by means of a unique three-level approach. In addition to tough outer jacketing and gel filling within the buffer tube, we employ ARID-CORE, a super-absorbent polymer (SAP) technology between the jacket and the buffer tubes. When moisture meets the ARID-CORE it is absorbed, thereby eliminating water migration and serving as a physical block ensuring long-term cable reliability in the Outside Plant.

Meets requirements of Telcordia, ICEA, REA/RUS, and IEC industry standards. CommScope is registered to the ISO 9001:2000 quality standard.

Calculate sag and tension values with our SpanMaster™ software available free.

#### Outside Plant Arid-Core® Stranded Loose Tube Non-Armored All Dielectric



#### Designs for Aerial and Conduit Applications

ARID-CORE water blocking technology helps protect fibers from moisture /reduces termination effort Certain configurations available in lengths of 8.4 miles/14 km singlemode and 4.95 miles/8 km multimode Standard color-coding on fibers and buffer tubes for easy identification All buffer tubes are constructed to a nominal OD of 3mm

**RUS Approved** 

Product Type/ Fiber Count	Catalog Number	Outer Diameter inch/mm	Min. Ben Loaded inch/cm	d Radius Unloaded inch/cm	Installation Loading Ibs/newtons	Crush Resistance N/cm	Weight lbs/ kg/ 1000' 1000m
Single jacket 2 - 60 Fiber	O- <b>XXX</b> -LN- <b>XY</b> -F12NS	.46/11.7	9.2/23.4	4.6/11.7	607/2700	440	63 94
62 - 72 Fiber	O- <b>XXX</b> -LN- <b>XY</b> -F12NS	.50/12.7	10.0/25.4	5.0/12.7	607/2700	440	72 107
74 - 96 Fiber	O- <b>XXX</b> -LN- <b>XY</b> -F12NS	.58/14.7	11.5/29.4	5.8/14.7	607/2700	440	95 141
98 - 120 Fiber	O-XXX-LN-XY-F12NS	.66/16.8	13.2/33.6	6.6/16.8	607/2700	440	118 176
122 - 144 Fiber	O-XXX-LN-XY-F12NS	.74/18.9	14.8/37.8	7.4/18.9	607/2700	440	145 216
146 - 216 Fiber	O-XXX-LN-XY-F12NS	.74/18.9	14.8/37.8	7.4/18.9	607/2700	440	153 228
218 - 288 Fiber	O-XXX-LN-XY-F12NS	.86/21.9	17.2/43.8	8.6/21.9	607/2700	440	211 315
Singlemode/Multimode Composite (4-288 fiber)	O- <b>XXX</b> -LN-CM-F12NS/	AAaaa/BBbbb	Refer to above specifications.				

Variables in the Catalog Number: XXX = Total Fiber Count

For Composites Only:

XY = Fiber Grade 8W (8.3/125 $\mu$ m, Light Scope ZWP, single mode) 5M (Laser Core 150, 50 $\mu$ m, multimode) 5L (Laser Core 300, 50 $\mu$ m, multimode)

**5H** (Standard 50μm, multimode)

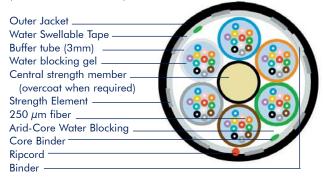
 aaa is replaced with singlemode fiber count
 bbb is replaced by multimode fiber count

 AA is replaced with singlemode type
 BB is replaced by multimode type

Buffer Tubes/Fiber identification colors: 1/Blue, 2/Orange, 3/Green, 4/Brown, 5/Slate, 6/White, 7/Red, 8/Black, 9/Yellow, 10/Violet, 11/Rose, 12/Aqua Buffer tubes 13-18 repeat color sequence with tracer stripe.

#### Arid Core Stranded Loose Tube Non-Armored All Dielectric

(72 Fiber Version Shown)



Description	Specification
Operating Temp.	-40 to 70°C
Installation Temp.	-30 to 70°C
Storage Temp.	-40 to 75°C
Crush Resistance	> Telcordia GR-20
Impact Resistance	> Telcordia GR-20
Flexing	> Telcordia GR-20
Twist/Bend	> Telcordia GR-20

## Spe **46**



#### **Outside Plant Arid-Core® Stranded Loose Tube Armored**

#### Jacket/Armor Combinations for Buried/Underground/Aerial Use

Corrugated steel tape armor is strong yet flexible

ARID-CORE water blocking technology helps protect fibers from moisture /reduces termination effort Certain configurations available in lengths of 8.4 miles/14 km singlemode and 4.95 miles/8 km multimode Standard color-coding on fibers and buffer tubes helps ease installation

All buffer tubes are constructed to a nominal OD of 3mm

**RUS Approved** 

Product Type/ Fiber Count	Catalog Number	Outer Diameter inch/mm	Min. Ber Loaded inch/cm	nd Radius Unloaded inch/cm	Installation Loading Ibs/newtons	Crush Resistance N/cm	Weig lbs/ 1000'	ght kg/ 1000m
Single jacket/ single armor 2 - 60 Fiber	O-XXX-LA-XY-F12NS	.53/13.4	10.5/26.8	5.3/13.4	607/2700	440	120	179
62 - 72 Fiber	O-XXX-LA-XY-F12NS	.56/14.3	11.2/28.6	5.6/14.3	607/2700	440	133	199
74 - 96 Fiber	O- <b>XXX</b> -LA- <b>XY</b> -F12NS	.64/16.4	12.9/32.8	6.4/16.4	607/2700	440	166	247
98 - 120 Fiber	O-XXX-LA-XY-F12NS	.72/18.4	14.4/36.8	7.2/18.4	607/2700	440	200	299
122 - 144 Fiber	O-XXX-LA-XY-F12NS	.80/20.5	16.1/41.0	8.0/20.5	607/2700	440	237	353
146 - 216 Fiber	O- <b>XXX</b> -LA- <b>XY</b> -F12NS	.80/20.5	16.1/41.0	8.0/20.5	607/2700	440	245	365
218 - 288 Fiber	O- <b>XXX</b> -LA- <b>XY</b> -F12NS	.92/23.5	18.4/47.0	9.2/23.5	607/2700	440	318	474
Singlemode/Multimode Composite (4-288 fiber)	O-XXX-LA-CM-F12NS	/AAaaa/BBbbb	Refer to above specifications.					

Variables in the Catalog Number: XXX = Total Fiber Count

XY = FiberGrade 8W (8.3/125μm, LightScope ZWP, singlemode) 5M (LaserCore 150, 50μm, multimode) 5L (LaserCore 300, 50μm, multimode) 5H (Standard 50μm, multimode)

For Composites Only:

aaa is replaced with singlemode fiber count

A is replaced with singlemode type

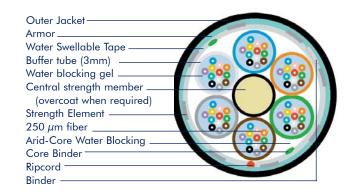
bbb is replaced by multimode fiber count

BB is replaced by multimode type

Buffer Tube/Fiber identification colors: 1/Blue, 2/Orange, 3/Green, 4/Brown, 5/Slate, 6/White, 7/Red, 8/Black, 9/Yellow, 10/Violet, 11/Rose, 12/Aqua Buffer tubes 13-18 repeat color sequence with tracer stripe.

#### Arid Core Stranded Loose Tube Armored

(72 Fiber Version Shown)



#### **Mechanical Properties**

Description	Specification
Operating Temp.	-40 to 70°C
Installation Temp.	-30 to 70°C
Storage Temp.	-40 to 75°C
Crush Resistance	> Telcordia GR-20
Impact Resistance	> Telcordia GR-20
Flexing	> Telcordia GR-20
Twist/Bend	> Telcordia GR-20

#### **Outside Plant Arid-Core® Drop Armored**



#### Jacket/Armor Combinations for Buried/Underground/Aerial Use

Corrugated steel tape armor is strong yet flexible

ARID-CORE water blocking technology helps protect fibers from moisture /reduces termination effort Certain configurations available in lengths of 8.4 miles/14 km singlemode and 4.95 miles/8 km multimode Standard color-coding on fibers and buffer tubes helps ease installation

All buffer tubes are constructed to a nominal OD of 3mm

Product Type/ Fiber Count	Catalog Number	Outer Diameter inch/mm	Min. Ber Loaded inch/cm	nd Radius Unloaded inch/cm	Installation Loading Ibs/newtons	Crush Resistance N/cm	We lbs/ 1000'	ight kg/ 1000m
2 - 12 Fiber	O- <b>XXX</b> -DA- <b>XY</b> -F12NS	.31/7.90	12.4/31.6	6.2/15.8	300/1335	440	48	69.0
Singlemode/Multimode Composite (4-12 fiber)  O-XXX-DA-CM-F12NS/AAaaa/BBbbb				above speci	fications.			

Variables in the Catalog Number:

XXX = Total Fiber Count

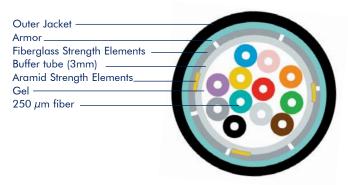
= FiberGrade 5M (LaserCore 150, 50µm, multimode) **8W** (8.3/125 $\mu$ m, LightScope ZWP, singlemode) **6F** (62.5/125μm, multimode) **5L** (LaserCore 300, 50μm, multimode) **5H** (Standard 50μm, multimode) For Composites Only:

aaa is replaced with singlemode fiber count

AA is replaced with singlemode type BB is replaced by multimode type Buffer Tube/Fiber identification colors: 1/Blue, 2/Orange, 3/Green, 4/Brown, 5/Slate, 6/White, 7/Red, 8/Black, 9/Yellow, 10/Violet, 11/Rose, 12/Aqua

#### Arid Core Drop Armored

(12 Fiber Version Shown)



#### **Mechanical Properties**

**bbb** is replaced by multimode fiber count

Description	Specification
Operating Temp.	-40 to 70°C
Installation Temp.	-30 to 70°C
Storage Temp.	-40 to 75°C
Crush Resistance	> FOTP-41
Impact Resistance	> FOTP-25
Flexing	> FOTP-104
Twist/Bend	> FOTP-85

#### **Outside Plant Central Tube Non-Armored All Dielectric**



#### Dielectric Combinations for Buried/Underground/Aerial Use

Robust constructions offer excellent protection of fibers

Product Type/ Fiber Count	Catalog Number	Outer Diameter inch/mm	Min. Be Loaded inch/cm	nd Radius Unloaded inch/cm	Installation Loading Ibs/newtons	Crush Resistance N/cm	Weight  bs/ kg/ 1000' 1000m
Central Tube Dielectric 2-24 Fiber, 4mm Tube	O-XXX-CN-XY-F12NS	.38/9.7	7.6/19.4	3.8/9.7	607/2700	440	60 89
Central Tube Dielectric 26-48 Fiber, 6mm Tube	O- <b>XXX</b> -CN- <b>XY</b> -F12NS	.49/12.4	9.7/24.8	4.9/12.4	607/2700	440	103 154
Central Tube Dielectric 50-96 Fiber, 8mm Tube	O-XXX-CN-XY-F12NS	.57/14.4	11.3/28.8	5.7/14.4	607/2700	440	130 194
Singlemode/Multimode Composite (4-96 Fiber)	O-XXX-CN-CM-F12NS/AAaaa/BBbbb Refer to above specifications.  Tube size will vary dependent on fiber count/configuration.						
	, ,						

Variables in the Catalog Number: XXX = Total Fiber Count

= FiberGrade **8W** (8.3/125μm, LightScope ZWP, singlemode) **6F** (62.5/125μm, multimode) **5H** (Standard  $50\mu m$ , multimode)

For Composites Only: aaa is replaced with singlemode fiber count

Fiber & Binder Thread identification colors:

**AA** is replaced with singlemode type

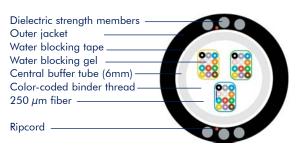
5M (LaserCore 150, 50µm, multimode) **5L** (LaserCore 300, 50 $\mu$ m, multimode)

bbb is replaced by multimode fiber count BB is replaced by multimode type

1/Blue, 2/Orange, 3/Green, 4/Brown, 5/Slate, 6/White, 7/Red, 8/Black, 9/Yellow, 10/Violet, 11/Rose, 12/Aqua

#### Central Tube Non-Armored All Dielectric Cable

36 Fiber Dielectric Version



Description	Specification
Operating Temp.	-40 to 70°C
Installation Temp.	-30 to 70°C
Storage Temp.	-40 to 75°C
Crush Resistance	> Telcordia GR-20
Impact Resistance	> Telcordia GR-20
Flexing	> Telcordia GR-20
Twist/Bend	> Telcordia GR-20

#### **Outside Plant Central Tube Armored**



#### Armored Combinations for Buried/Underground/Aerial Use

Robust constructions offer excellent protection of fibers

Product Type/ Fiber Count	Catalog Number	Outer Diameter inch/mm	Min. Be Loaded inch/cm	nd Radius Unloaded inch/cm	Installation Loading Ibs/newtons	Crush Resistance N/cm	Weight Ibs/ kg/ 1000' 1000m
Central Tube Armored 2-24 Fiber, 4mm Tube	O- <b>XXX</b> -CA- <b>XY</b> -F12NS	.40/10.3	8.1/20.6	4.0/10.3	607/2700	440	91 135
Central Tube Armored 26-48 Fiber, 6mm Tube	O-XXX-CA-XY-F12NS	.48/12.2	9.6/24.4	4.8/12.2	607/2700	440	119 177
Central Tube Armored 50 - 96 Fiber 8mm Tube Size	O-XXX-CA-XY-F12NS	.58/14.8	11.6/29.6	5.8/14.8	607/2700	440	150 224
Singlemode/Multimode Composite (4-96 Fiber)	O-XXX-CN-CM-F12NS/AAaaa/BBbbb Refer to above specifications.  Tube size will vary dependent on fiber count/configuration.						

Variables in the Catalog Number: XXX = Total Fiber Count

XY = FiberGrade	<b>8W</b> (8.3/125μm, LightScope ZWP, singlemode)	<b>5M</b> (LaserCore 150, 50μm, multimode)
	<b>6F</b> (62.5/125μm, multimode)	<b>5L</b> (LaserCore 300, 50μm, multimode)
	<b>5H</b> (Standard 50μm, multimode)	

For Composites Only:

aaa is replaced with singlemode fiber count
AA is replaced with singlemode type

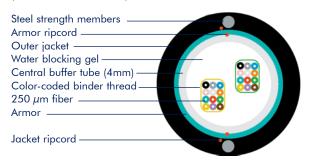
bbb is replaced by multimode fiber count
BB is replaced by multimode type

Fiber & Binder Thread identification colors:

1/Blue, 2/Orange, 3/Green, 4/Brown, 5/Slate, 6/White, 7/Red, 8/Black, 9/Yellow, 10/Violet, 11/Rose, 12/Aqua

#### Central Tube Armored Cable

(24 Fiber Version Shown)



Description	Specification
Operating Temp.	-40 to 70°C
Installation Temp.	-30 to 70°C
Storage Temp.	-40 to 75°C
Crush Resistance	> Telcordia GR-20
Impact Resistance	> Telcordia GR-20
Flexing	> Telcordia GR-20
Twist/Bend	> Telcordia GR-20

# Outside Plant Self-Supporting Figure 8 Stranded Loose Tube



#### Dielectric and Armored Designs for Aerial Use

ARID-CORE water blocking technology protects fibers from moisture/reduces termination effort All buffer tubes are constructed to a nominal OD of 3mm.

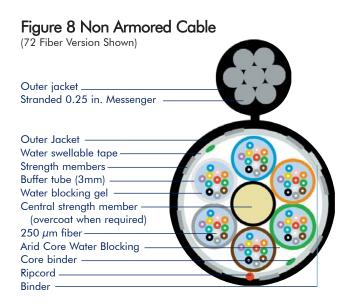
Product Type/ Fiber Count	Catalog Number	Outer Diameter inch/mm	Min. Be Loaded inch/cm	end Radius Unloaded inch/cm	Crush Resistance N/cm	Weight  bs/ kg/  1000' 1000m
Figure 8 Non-Armored 2 - 72 Fiber	M- <b>XXX</b> -LN- <b>XY</b> -F12NS	0.48/12.3	37.3/49.4	18.6/24.7	440	225 335
Figure 8 Armored 2 - 72 Fiber	M-XXX-LA-XY-F12NS	0.55/14.1	40.3/56.4	20.1/28.2	440	286 427
Singlemode/Multimode Composite (4-72 fiber)	M- <b>XXX</b> -LN-CM-F12NS// -LA-	AAaaa/BBbbb	Refer to abov	e specificatio	ns.	
Variables in the Catalog Number: XXX = Total Fiber Cou	nt					
XY = FiherGrode	<b>8W</b> (8.3/125µm, Light	Scope 7WP single	mode)	5M (lasorC	ore 150, 50µm, r	nultimodo)

**6F** (62.5/125μm, multimode) **5L** (LaserCore 300, 50μm, multimode) **5H** (Standard 50μm, multimode)

For Composites Only: aaa is replaced with singlemode fiber count bbb is replaced by multimode fiber count AA is replaced with singlemode type BB is replaced by multimode type

Buffer Tubes/Fiber identification colors: 1/Blue, 2/Orange, 3/Green, 4/Brown, 5/Slate, 6/White, 7/Red, 8/Black, 9/Yellow, 10/Violet, 11/Rose, 12/Aqua

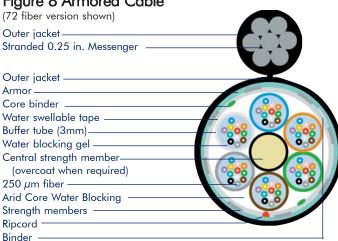
Loading Capabilities: Meets the loading conditions of heavy, medium or light storm loading areas as defined in Rule 251 of the National Electric Safety Code (NESC).



#### **Mechanical Properties**

Description	Specification
Operating Temp.	-40 to 70°C
Installation Temp.	-30 to 70°C
Storage Temp.	-40 to 75°C
Crush Resistance	> Telcordia GR-20
Impact Resistance	> Telcordia GR-20
Flexing	> Telcordia GR-20
Twist/Bend	> Telcordia GR-20

#### Figure 8 Armored Cable



#### Outside Plant Specialty Designs Multi-Jacketed Armored Stranded Loose Tube

#### Jacket/Armor Combinations for Buried/Underground/Aerial Use

Strong, durable double and triple jacketed construction with corrugated steel tape armor Certain configurations available in lengths of 8.4 miles/14 km singlemode and 4.95 miles/8 km multimode Standard color-coding on fibers and buffer tubes helps ease installation All buffer tubes are constructed to a nominal OD of 3mm.

Double jacket/single armor version RUS Approved!

Product Type/ Fiber Count	Catalog Number	Outer Diameter inch/mm	Min. Be Loaded inch/cm	nd Radius Unloaded inch/cm	Installation Loading Ibs/newtons	Crush Resistance N/cm	Weight lbs/ kg/ 1000' 1000m
Double jacket/ single armor 2 - 72 Fiber	O- <b>XXX</b> -L2- <b>XY</b> -F12NS	.62/15.9	12.5/31.8	6.2/15.9	607/2700	440	148 220
74 - 96 Fiber	O- <b>XXX</b> -L2- <b>XY</b> -F12NS	.71/18.0	14.1/36.0	7.1/18.0	607/2700	440	180 269
Triple jacket/ double armor 2 - 72 Fiber	O- <b>XXX</b> -L3- <b>XY</b> -F12NS	.77/19.7	15.5/39.4	7.7/19.7	607/2700	440	334 498
Singlemode/Multimode Composite (4-72 fiber)	O-XXX-L2-CM-F12NS/AAaaa/BBbbb (2-96 fibers) Refer to above specificationsL3- Refer to above specifications.						

Variables in the Catalog Number: XXX = Total Fiber Count

For Composites Only:

XY = FiberGrade 8W (8.3/125 $\mu$ m, LightScope ZWP, singlemode) 5M (6F (62.5/125 $\mu$ m, multimode) 5L (LightScope ZWP, singlemode)

**5H** (Standard 50µm, multimode)

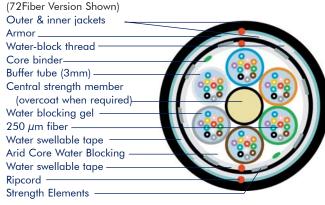
**aaa** is replaced with singlemode fiber count **AA** is replaced with singlemode type

**5M** (LaserCore 150, 50μm, multimode) **5L** (LaserCore 300, 50μm, multimode)

**bbb** is replaced by multimode fiber count **BB** is replaced by multimode type

Buffer Tubes/Fiber identification colors: 1/Blue, 2/Orange, 3/Green, 4/Brown, 5/Slate, 6/White, 7/Red, 8/Black, 9/Yellow, 10/Violet, 11/Rose, 12/Aqua Buffer tubes 13-18 repeat color sequence with tracer stripe.

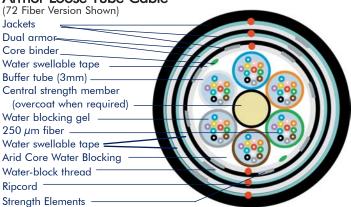
#### Double Jacket/Single Armor Loose Tube Cable



#### Mechanical Properties

Description	Specification
Operating Temp.	-55 to 70°C
Installation Temp.	-30 to 70°C
Storage Temp.	-55 to 75°C
Crush Resistance	> Telcordia GR-20
Impact Resistance	> Telcordia GR-20
Flexing	> Telcordia GR-20
Twist/Bend	> Telcordia GR-20

# Triple Jacket/Double Armor Loose Tube Cable



#### **Outside Plant Pavement Cable**



#### **Designs for Pavement Conditions**

Applications: Metropolitan areas, such as building drops, where cable installation is normally difficult; Campus environments where paved surface and/or concrete surface connects the buildings; Environments where permitting can be difficult

Benefits: Central buffer tube offers superior fiber protection during cable access/termination; Copper armor provides excellent thermal stability, good tensile performance, and provides excellent crush resistance

Product Type/ Fiber Count	Catalog Number	Outer Diameter inch/mm	Mii Loaded inch/cm	n. Bend Radius Unloaded inch/cm	Loading Ibs/newtons	Installation Resistance N/cm	Crush Ibs/ 1000'	Weight kg/ 1000m
Single jacket 2 - 72 Fiber	O- <b>XXX</b> -CP- <b>XY</b> -F12NS	.34/8.79	13.8/35.2	6.9/17.6	100/445	440	80	119.4
Singlemode/Multimode Composite (4-72 fiber)	O- <b>XXX</b> -LN-CM-F12NS -LA-	6/ <b>AAaaa/BBbbb</b>	Refer to ab	ove specificat	ions.		•	

Variables in the Catalog Number: = Total Fiber Count

= Fiber Grade **8W** (8.3/125 $\mu$ m, LightScope ZWP, singlemode) **6F** (62.5/125μm, multimode)

**5H** (Standard 50 $\mu$ m, multimode)

For Composites Only: aaa is replaced with singlemode fiber count

AA is replaced with singlemode type

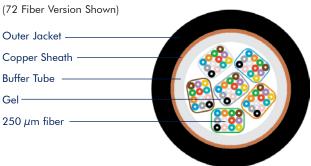
**bbb** is replaced by multimode fiber count BB is replaced by multimode type

5M (LaserCore 150, 50µm, multimode)

**5L** (LaserCore 300, 50 $\mu$ m, multimode)

Buffer Tubes/Fiber identification colors: 1/Blue, 2/Orange, 3/Green, 4/Brown, 5/Slate, 6/White, 7/Red, 8/Black, 9/Yellow, 10/Violet, 11/Rose, 12/Aqua Buffer tubes 13-18 repeat color sequence with tracer stripe.

#### **Oustide Pavement Cable**



Description	Specification
Operating Temp.	-40 to 70°C
Installation Temp.	-30 to 70°C
Storage Temp.	-40 to 75°C
Crush Resistance	> Telcordia GR-20
Impact Resistance	> Telcordia GR-20
Flexing	> Telcordia GR-20
Twist/Bend	> Telcordia GR-20

# Outside Plant Flooded Stranded Loose Tube All Dielectric



#### **Designs for All Outside Plant Conditions**

Certain configurations available in lengths of 8.4 miles/14 km singlemode and 4.95 miles/8 km multimode Standard color-coding on fibers and buffer tubes for fast installations
All buffer tubes are constructed to a nominal OD of 3mm.

Minimum order quantities may apply

Product Type/ Fiber Count	Catalog Number	Outer Diameter inch/mm	Min. Ben Loaded inch/cm	d Radius Unloaded inch/cm	Installation Loading Ibs/newtons	Crush Resistance N/cm	Weight lbs/ kg/ 1000' 1000m
Single jacket 2 - 60 Fiber	F- <b>XXX</b> -LN- <b>XY</b> -F12NS	.46/11.6	9.1/23.2	4.6/11.6	607/2700	440	71 106
62 - 72 Fiber	F-XXX-LN-XY-F12NS	.49/12.6	9.9/25.2	4.9/12.6	607/2700	440	82 122
74 - 96 Fiber	F-XXX-LN-XY-F12NS	.57/14.6	11.5/29.2	5.7/14.6	607/2700	440	107 160
98 - 120 Fiber	F-XXX-LN-XY-F12NS	.66/16.7	13.1/33.4	6.6/16.7	607/2700	440	135 201
122 - 144 Fiber	F- <b>XXX</b> -LN- <b>XY</b> -F12NS	.73/18.7	14.7/37.4	7.3/18.7	607/2700	440	165 246
146 - 216 Fiber	F- <b>XXX</b> -LN- <b>XY</b> -F12NS	.73/18.5	14.5/37.0	7.3/18.5	607/2700	440	211 315
218 - 288 Fiber	F-XXX-LN-XY-F12NS	.84/21.5	16.9/43.0	8.4/21.5	607/2700	440	304 453
Singlemode/Multimode Composite (4-288 fiber)	F-XXX-LN-CM-F12NS/AAaaa/BBbbb		Refer to abo	ve specification	ons.		

Variables in the Catalog Number: XXX = Total Fiber Count

 XY
 = FiberGrade
 8W (8.3/125µm, LightScope ZWP, singlemode)
 5M (LaserCore 150, 50µm, multimode)

 6F (62.5/125µm, multimode)
 5L (LaserCore 300, 50µm, multimode)

**5H** (Standard 50μm, multimode)

For Composites Only:

aaa is replaced with singlemode fiber count

A is replaced with singlemode type

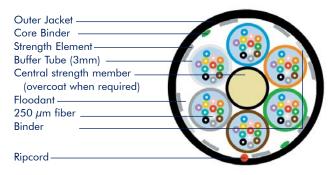
bbb is replaced by multimode fiber count

BB is replaced by multimode type

Buffer Tubes/Fiber identification colors: 1/Blue, 2/Orange, 3/Green, 4/Brown, 5/Slate, 6/White, 7/Red, 8/Black, 9/Yellow, 10/Violet, 11/Rose, 12/Aqua Buffer tubes 13-18 repeat color sequence with tracer stripe.

#### Flooded Stranded Loose Tube All Dielectric Cable

(72 Fiber Version Shown)



Description	Specification
Operating Temp. Installation Temp.	-40 to 70°C -30 to 70°C
Storage Temp.	-40 to 75°C
Crush Resistance	> Telcordia GR-20
Impact Resistance	> Telcordia GR-20
Flexing	> Telcordia GR-20
Twist/Bend	> Telcordia GR-20

#### **Outside Plant Flooded Stranded Loose Tube Armored**

#### Jacket/Armor for Buried/Underground/Aerial Use

Corrugated steel tape armor is strong yet flexible

Certain configurations available in lengths of 8.4 miles/14 km singlemode and 4.95 miles/8 km multimode Standard color-coding on fibers and buffer tubes helps ease installation

All buffer tubes are constructed to a nominal OD of 3mm.

Minimum order quantities may apply

Product Type/ Fiber Count	Catalog Number	Outer Diameter inch/mm	Min. Ben Loaded inch/cm	d Radius Unloaded inch/cm	Installation Loading Ibs/newtons	Crush Resistance N/cm	We lbs/ 1000'	ight kg/ 1000m
Single jacket 2 - 60 Fiber	F- <b>XXX</b> -LA- <b>XY</b> -F12NS	.51/13.1	10.3/26.2	5.1/13.1	607/2700	440	133	199
62 - 72 Fiber	F-XXX-LA-XY-F12NS	.55/14.1	11.1/28.2	5.5/14.1	607/2700	440	150	223
74 - 96 Fiber	F-XXX-LA-XY-F12NS	.63/16.1	12.6/32.2	6.3/16.1	607/2700	440	186	277
98 - 120 Fiber	F-XXX-LA-XY-F12NS	.71/18.2	14.3/36.4	7.1/18.2	607/2700	440	225	335
122 - 144 Fiber	F-XXX-LA-XY-F12NS	.80/20.3	15.9/40.6	8.0/20.3	607/2700	440	265	395
146 - 216 Fiber	F-XXX-LA-XY-F12NS	.78/20.0	15.7/40.0	7.8/20.0	607/2700	440	311	464
218 - 288 Fiber	F-XXX-LA-XY-F12NS	.90/23.0	18.1/46.0	9.0/23.0	607/2700	440	420	626
Singlemode/Multimode Composite (4-288 fiber)	F-XXX-LA-CM-F12NS/	/AAaaa/BBbbb	Refer to abo	ve specificatio	ns.	!		

Variables in the Catalog Number: XXX = Total Fiber Count

XY = FiberGrade 8W (8.3/125µm, LightScope ZWP, singlemode) 5M (LaserCore 150, 50µm, multimode) 5L (LaserCore 300, 50µm, multimode) 5H (Standard 50µm, multimode)

For Composites Only:

aaa is replaced with singlemode fiber count

A is replaced with singlemode type

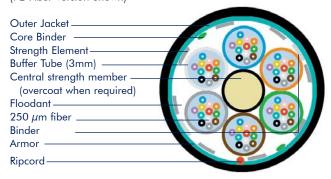
BB is replaced by multimode fiber count

BB is replaced by multimode type

Buffer Tubes/Fiber identification colors: 1/Blue, 2/Orange, 3/Green, 4/Brown, 5/Slate, 6/White, 7/Red, 8/Black, 9/Yellow, 10/Violet, 11/Rose, 12/Aqua Buffer tubes 13-18 repeat color sequence with tracer stripe.

#### Flooded Stranded Loose Tube Armored Cable

(72 Fiber Version Shown)



#### **Mechanical Properties**

Description	Specification
Operating Temp.	-40 to 70°C
Installation Temp.	-30 to 70°C
Storage Temp.	-40 to 75°C
Crush Resistance	> Telcordia GR-20
Impact Resistance	> Telcordia GR-20
Flexing	> Telcordia GR-20
Twist/Bend	> Telcordia GR-20

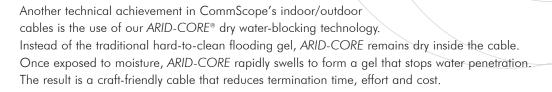
#### Indoor/Outdoor Cables (OFNR & OFNP)

#### Riser-Rated Designs are Rugged for Outdoor and Safe for Indoor

CommScope indoor/outdoor tight buffer cables are designed to meet the rigors of outside plant while allowing for direct connectorization of the individual fibers, yet meet the National Electric Code/Canadian Electric Code (NEC/CEC) requirement of Optical Fiber Non-conductive Riser (OFNR).

CommScope indoor/outdoor loose tube cables are a unique design - they are made to withstand the typical rigors of the outside plant environment (the buffer tubes are filled with a compound that blocks moisture flow while protecting the fiber), yet are made of materials that permit them to meet OFNR and OFNP requirements.

Indoor/outdoor cables allow a cable to be run from outside a building to the inside without changing cable types, thus avoiding the extra time and labor of an additional splice point. Their riser or plenum listing makes this possible.



We offer several constructions, which include:

#### Riser:

**Triathlon**<sup>™</sup> **Low Smoke/Zero-Halogen (LSZH) Distribution** cables of up to 72 tight buffered fibers. Cable also meets OFNR-LS listing requirements per UL-1685.

**Triathlon Low Smoke/Zero-Halogen (LSZH) Cordage** in simplex, duplex zipcord and two-fiber interconnect tight buffered designs. Cable also meets OFNR-LS listing requirements per UL-1685.

**Central Tube** cables of up to 24 fibers in a robust all dielectric design.

Stranded Loose Tube cables of up to 288 fibers in a dielectric construction.

#### Plenum:

Stranded Loose Tube cables of up to 72 fibers in a dielectric construction.



## **Triathlon™ Indoor/Outdoor LSZH Distribution** Low Smoke-Zero Halogen Construction Permits Riser Use as Well



Black jackets are UV-stable for outdoor use yet meet critical NEC/CEC riser (OFNR and OFN-LS) safety standards Riser rating eliminates splice points at the building entrance

ARID-CORE water blocking technology helps protect fibers from moisture

Low-smoke zero-halogen gives added protection to building occupants and equipment

Tight buffered construction reduces installation cost Numbered subunits and color-coded fibers help ease installation

Fiber Count	Catalog Number	Outer Diameter inch/mm	Min. Be Loaded inch/cm	nd Radius Unloaded inch/cm	Max. Ter Short term lbs./ Newtons	nsile Load Long term Ibs./Newtons	We lbs/ 1000'	ight kg/ 1000m
4 Fiber (no central member)	Z-ØØ4-DS- <b>XY</b> -FSDBK	.19/4.8	3.8/9.6	2.0/4.8	300/1335	90/400	14	20
6 Fiber	Z-ØØ6-DS- <b>XY</b> -FSDBK	.20/5.2	4.1/10.3	2.0/5.2	300/1335	90/400	16	23
8 Fiber	Z-ØØ8-DS- <b>XY</b> -FSDBK	.23/5.8	4.6/11.7	2.3/5.8	300/1335	90/400	23	35
12 Fiber	Z-Ø12-DS- <b>XY</b> -FSDBK	.26/6.6	5.2/13.3	2.6/6.6	400/1780	120/534	31	46
18 Fiber	Z-Ø18-DS- <b>XY</b> -FSDBK	.54/13.6	10.7/27.3	5.4/13.6	600/2670	180/801	98	146
24 Fiber	Z-Ø24-DS- <b>XY</b> -FSDBK	.59/15.0	11.8/29.9	5.9/15.0	600/2670	180/801	126	187
36 Fiber	Z-Ø36-DS- <b>XY</b> -FSDBK	.66/16.9	13.3/33.7	6.6/16.9	800/3560	240/1068	149	222
48 Fiber	Z-Ø48-DS- <b>XY</b> -FSDBK	.73/18.6	14.6/37.2	7.3/18.6	800/3560	240/1068	192	285
60 Fiber	Z-Ø60-DS- <b>XY</b> -FSDBK	.82/20.9	16.5/41.9	8.2/20.9	1000/4450	300/1335	244	364
72 Fiber	Z-Ø72-DS- <b>XY</b> -FSDBK	.91/23.0	18.1/46.1	9.1/23.0	1000/4450	300/1335	302	449
Singlemode/Multimode Composite (4 - 72 fiber)	Z-ØØØ-DS-CM-FSDBI	: <td><b>bb</b> Custom de</td> <td>esign - sizes/sp</td> <td>ecs will vary dep</td> <td>ending on fiber c</td> <td>ount</td> <td></td>	<b>bb</b> Custom de	esign - sizes/sp	ecs will vary dep	ending on fiber c	ount	

Variables in the Catalog Number: = Total Fiber Count

= Fiber Grade 8W (8.3/125µm, LightScope ZWP, singlemode) 5M (LaserCore 150, 50µm, multimode) **6F** (62.5/125μm, multimode) **5L** (LaserCore 300, 50μm, multimode) **5H** (Standard 50μm, multimode)

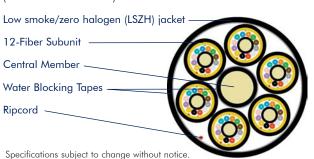
For Composites Only: aaa is replaced with singlemode fiber count **bbb** is replaced by multimode fiber count AA is replaced with singlemode type BB is replaced by multimode type

Fiber identification colors: 1/Blue, 2/Orange, 3/Green, 4/Brown, 5/Slate, 6/White, 7/Red, 8/Black, 9/Yellow, 10/Violet, 11/Rose, 12/Aqua

Fibers 13-24: repeat color sequence with tracer stripe

#### Triathlon LSZH Indoor/Outdoor-Riser Distribution Cable

(72 fiber version shown)



12 Fiber Unit

LSZH Riser Rated Jacket Aramid yarn Central Member 900μm tight-buffered 250μm fiber Ripcord \_ Water Blocking Thread -

	•
Description	Specification
Operating Temp. Installation Temp. Storage Temp. Crush Resistance Impact Resistance Flexing Twist/Bend	-40 to 70°C -30 to 70°C -40 to 75°C > Telcordia GR-409 > Telcordia GR-409 > Telcordia GR-409 > Telcordia GR-409

#### **Triathlon Indoor/Outdoor LSZH Cordage**



#### Low Smoke-Zero Halogen Construction Permits Riser Use as Well

Black jackets are UV-stable for outdoor use yet meet critical NEC/CEC riser (OFNR and OFN-LS) safety standards

Riser rating eliminates splice points at the building entrance

ARID-CORE water blocking technology helps protect fibers from moisture

Low-smoke zero-halogen gives added protection to building occupants and equipment

Simplex, duplex and zipcord cables available in a variety of sizes

Designed for ease of handling and termination

Numbered subunits and color-coded fibers help ease installation

Cable Type/Unit Size	Catalog Number	Outer Diameter inch/mm	Min. Be Loaded inch/cm	nd Radius Unloaded inch/cm	Max. Ter Short term Ibs./ Newtons	nsile Load Long term Ibs./Newtons	Weigl lbs/ 1000' 1	ht kg/ 1 000m
Simplex/2.9mm Standard	Z-ØØ1-SP- <b>XY</b> -F29BK	.11/2.9	2.3/5.8	1.2/3.0	60/267	18/80	6.2	9.2
Duplex/2.5mm Standard	Z-ØØ2-DU- <b>XY</b> -F25BK	.13/3.4 x .23/5.9	2.6/6.7	1.3/3.4	90/400	27/120	14.9	22.2
Zipcord/2.9mm Standard	Z-ØØ2-ZC- <b>XY</b> -F29BK	.11/2.9 x .23/5.9	2.3/5.8	1.21/3.0	90/400	27/120	12.4	18.5
2 fiber interconnect	Z-ØØ2-IC- <b>XY</b> -FSDBK	.15/3.9	3.0/7.7	1.5/3.9	225/1001	68/300	7.8	11.6

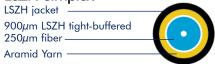
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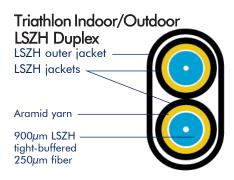
XY = Fiber Grade

**8W** (8.3/125µm, LightScope ZWP, singlemode) **6F** (62.5/125µm, multimode) **5H** (Standard 50µm, multimode) **5M** (LaserCore 150, 50μm, multimode) **5L** (LaserCore 300, 50μm, multimode)

Fiber identification colors: 1/Blue, 2/Orange

# Triathlon Indoor/Outdoor LSZH Simplex





#### Triathlon Indoor/Outdoor LSZH 2-fiber Interconnect





#### Mechanical Properties

Description	Specification				
Impact Resistance Flexing	-40 to 70°C -30 to 70°C -40 to 75°C > Telcordia GR-409 > Telcordia GR-409 > Telcordia GR-409 > Telcordia GR-409				

#### **Indoor/Outdoor Stranded Loose Tube Riser**



#### **Standard Versions**

All meet critical NEC/CEC riser (OFNR) safety standards, eliminating the need for splice point at building entrance ARID-CORE water blocking technology helps protect fibers from moisture Standard color-coding on fibers and buffer tubes helps ease installation
All buffer tubes are constructed to a nominal OD of 3mm

Product Type/ Fiber Count	Catalog Number	Outer Diameter inch/mm	Min. Bend Loaded inch/cm	d Radius Unloaded inch/cm	Installation Loading Ibs/newtons	Crush Resistance N/cm	Weight Ibs/ kg/ 1000' 1000m
Single jacket 2 - 60 Fiber	R- <b>XXX</b> -LN- <b>XY</b> -F12BK	.50/12.8	10.0/25.6	5.0/12.8	607/2700	440	102 152
62 - 72 Fiber	R- <b>XXX</b> -LN- <b>XY</b> -F12BK	.53/13.6	10.7/27.2	5.3/13.6	607/2700	440	116 173
74 - 96 Fiber	R- <b>XXX</b> -LN- <b>XY</b> -F12BK	.62/15.7	12.3/31.4	6.2/15.7	607/2700	440	152 226
98 - 120 Fiber	R-XXX-LN-XY-F12BK	.69/17.7	13.9/35.4	6.9/17.7	607/2700	440	192 287
122 - 144 Fiber	R-XXX-LN-XY-F12BK	.78/19.8	15.5/39.6	7.8/19.8	607/2700	440	239 357
146 - 216 Fiber	R- <b>XXX</b> -LN- <b>XY</b> -F12BK	.80/20.5	16.1/41.0	8.0/20.5	607/2700	440	272 357
218 - 288 Fiber	R- <b>XXX</b> -LN- <b>XY</b> -F12BK	.92/23.4	18.4/46.8	9.2/23.4	607/2700	440	329 491
Singlemode/Multimode Composite (4-288 fiber)	emode/Multimode posite (4-288 fiber)  R-XXX-LN-CM-F12BK/AAaaa/BBbbb Refer to above specifications.						

Variables in the Catalog Number: XXX = Total Fiber Count

XY = FiberGrade

8W (8.3/125μm, LightScope ZWP, singlemode)

6F (62.5/125μm, multimode)

5H (Standard 50μm, multimode)

5H (Standard 50μm, multimode)

For Composites Only:

aaa is replaced with singlemode fiber count

AA is replaced with singlemode type

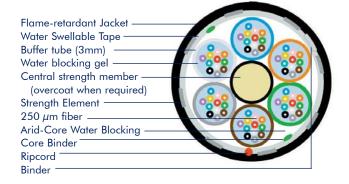
bbb is replaced by multimode fiber count

BB is replaced by multimode type

Buffer Tubes/Fiber identification colors: 1/Blue, 2/Orange, 3/Green, 4/Brown, 5/Slate, 6/White, 7/Red, 8/Black, 9/Yellow, 10/Violet, 11/Rose, 12/Aqua Buffer tubes 13-18 repeat color sequence with tracer stripe.

#### Indoor/Outdoor Stranded Loose

(72 Fiber Version Shown)



#### **Mechanical Properties**

Description	Specification				
Operating Temp.	-40 to 70°C				
Installation Temp.	-30 to 70°C				
Storage Temp.	-40 to 75°C				
Crush Resistance	> Telcordia GR-409				
Impact Resistance	> Telcordia GR-409				
Flexing	> Telcordia GR-409				
Twist/Bend	> Telcordia GR-409				

#### **Indoor/Outdoor Heavy Duty Stranded Loose Tube Riser**



#### Heavy-Duty Double-Jacket Versions

All meet critical NEC/CEC riser (OFNR) safety standards, eliminating the need for splice point at building entrance ARID-CORE water blocking technology helps protect fibers from moisture Dual jacket (PVC/PVDF) version offers additional mechanical and chemical protection Standard color-coding on fibers and buffer tubes helps ease installation All buffer tubes are constructed to a nominal OD of 3mm

Product Type/ Fiber Count	Catalog Number	Outer Diameter inch/mm	Min. Bend Loaded inch/cm	d Radius Unloaded inch/cm	Installation Loading Ibs/newtons	Crush Resistance N/cm	Wei lbs/ 1000'	ght kg/ 1000m
Single jacket 2 - 60 Fiber	R- <b>XXX</b> -LH- <b>XY</b> -F12BK	.53/13.5	10.6/27.0	5.3/13.5	607/2700	440	112	167
62 - 72 Fiber	R- <b>XXX</b> -LH- <b>XY</b> -F12BK	.57/14.4	11.3/28.8	5.7/14.4	607/2700	440	125	186
74 - 96 Fiber	R- <b>XXX</b> -LH- <b>XY</b> -F12BK	.64/16.4	12.9/32.8	6.4/16.4	607/2700	440	166	247
98 - 120 Fiber	R- <b>XXX</b> -LH- <b>XY</b> -F12BK	.73/18.5	14.5/37.0	7.3/18.5	607/2700	440	209	311
122 - 144 Fiber	R- <b>XXX</b> -LH- <b>XY</b> -F12BK	.81/20.6	16.2/41.2	8.1/20.6	607/2700	440	257	383
146 - 216 Fiber	R- <b>XXX</b> -LH- <b>XY</b> -F12BK	.83/21.2	16.6/42.4	8.3/21.2	607/2700	440	255	381
218 - 288 Fiber	R- <b>XXX</b> -LH- <b>XY</b> -F12BK	.95/24.2	19.0/48.4	9.5/24.2	607/2700	440	347	518
Singlemode/Multimode Composite (4-288 fiber)  R-XXX-LH-CM-F12BK/AAaaa/BBbbb Refer to above specifications.								

Variables in the Catalog Number: XXX = Total Fiber Count

XY = Fiber Grade

8W (8.3/125μm, LightScope ZWP, singlemode)

6F (62.5/125μm, multimode)

5M (LaserCore 150, 50μm, multimode)

5L (LaserCore 300, 50μm, multimode)

For Composites Only:

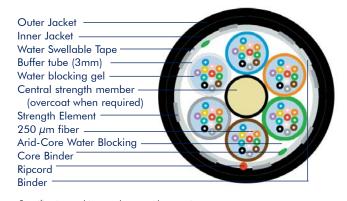
aaa is replaced with singlemode fiber count
AA is replaced with singlemode type

bbb is replaced by multimode fiber count
BB is replaced by multimode type

Buffer Tubes/Fiber identification colors: 1/Blue, 2/Orange, 3/Green, 4/Brown, 5/Slate, 6/White, 7/Red, 8/Black, 9/Yellow, 10/Violet, 11/Rose, 12/Aqua Buffer tubes 13-18 repeat color sequence with tracer stripe.

#### Indoor/Outdoor Stranded Loose

(72 Fiber Version Shown)



#### **Mechanical Properties**

Description	Specification
Operating Temp.	-40 to 70°C
Installation Temp.	-30 to 60°C
Storage Temp.	-40 to 75°C
Crush Resistance	> FOTP-41
Impact Resistance	> FOPT-25
Flexing	> FOTP-104
Twist/Bend	> FOTP-85

 ${\it Specifications \ subject \ to \ change \ without \ notice.}$ 

#### **Indoor/Outdoor Stranded Loose Tube Plenum**



#### Standard Versions

Features: Loose tube cable utilizing Arid-Core and dry tube technology; Temperature range is fully outside plant rated; Water blocking prevents moisture migration; Meets NEC requirements for OFNP rating

Benefits: Combines application spaces of building interconnect and plenum in a campus environment; Cables is suitable for direct burial, duct, or aerial installations; Dielectric design is lightweight, easy to access and does not require grounding

Product Type/ Fiber Count	Catalog Number	Outer Diameter inch/mm	Min. Ben Loaded inch/cm	d Radius Unloaded inch/cm	Installation Loading Ibs/newtons	Crush Resistance N/cm	Weight lbs/ kg/ 1000' 1000m	
Single jacket 2 - 60 Fiber	P- <b>XXX</b> -LN- <b>XY</b> -F12NS	.43/11.0	8.7/22.0	4.3/11.0	600/2670	440	78 116	
62 - 72 Fiber	P- <b>XXX</b> -LN- <b>XY</b> -F12NS	.47/11.9	9.3/23.7	4.7/11.9	600/2670	440	92 136	
Singlemode/Multimode Composite (2 - 72 fiber)	P-XXX-LN-CM-F12NS/AAaaa/BBbbb Refer to above specifications.							

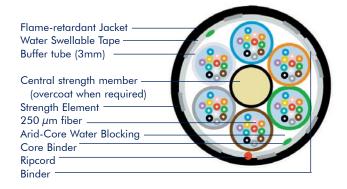
Variables in the Catalog Number: XXX = Total Fiber Count

XY = FiberGrade	8W (8.3/125μm, LightScope ZWP, singlemode) 6F (62.5/125μm, multimode) 5H (Standard 50μm, multimode)	<b>5M</b> (LaserCore 150, 50μm, multimode) <b>5L</b> (LaserCore 300, 50μm, multimode)
For Composites Only:	<ul><li>aaa is replaced with singlemode fiber count</li><li>AA is replaced with singlemode type</li></ul>	<b>bbb</b> is replaced by multimode fiber count <b>BB</b> is replaced by multimode type

Buffer Tubes/Fiber identification colors: 1/Blue, 2/Orange, 3/Green, 4/Brown, 5/Slate, 6/White, 7/Red, 8/Black, 9/Yellow, 10/Violet, 11/Rose, 12/Aqua Buffer tubes 13-18 repeat color sequence with tracer stripe.

#### Indoor/Outdoor Stranded Loose

(72 Fiber Version Shown)



Description	Specification
Operating Temp.	-40 to 70°C
Installation Temp.	-30 to 70°C
Storage Temp.	-40 to 75°C
Crush Resistance	> Telcordia GR-409
Impact Resistance	> Telcordia GR-409
Flexing	> Telcordia GR-409
Twist/Bend	> Telcordia GR-409

#### **Indoor/Outdoor Central Tube Riser**

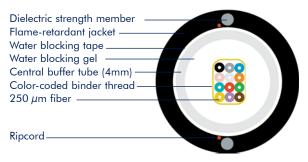
#### Multiple Constructions to Meet Your Specific Application

All meet critical NEC/CEC riser (OFNR) safety standards eliminating the need for splice point at building entrance ARID-CORE water blocking technology helps protect fibers from moisture Standard color-coding on fibers helps ease installation

Product Type/ Fiber Count	Catalog Number	Outer Diameter inch/mm	Min. Be Loaded inch/cm	end Radius Unloaded inch/cm	Installation Loading Ibs/newtons	Crush Resistance N/cm	Weight Ibs/ kg/ 1000' 1000m	
Central Loose Tube 2-24 Fiber, 4mm Tube	R- <b>XXX</b> -CN- <b>XY</b> -F12NS	.41/10.5	8.2/21.0	4.1/10.5	607/2700	440	68 101	
Singlemode/Multimode Composite (2-24 fiber)	R- <b>XXX</b> -CN-CM-F12NS/	efer to above	specification	S.				
Variables in the Catalog Numbe XXX = Total Fiber C								
XY = FiberGrade	<b>8W</b> (8.3/125μm, Li <b>6F</b> (62.5/125μm, n <b>5H</b> (Standard 50μn	nultimode)	glemode)	•	erCore 150, 50μm Core 300, 50μm,	,		
For Composites Only:	<b>aaa</b> is replaced with <b>AA</b> is replaced with		count	bbb is replaced by multimode fiber count BB is replaced by multimode type				
Fiber & Binder Thread identification colors:	1/Blue, 2/Orange,	3/Green, 4/Brown	, 5/Slate, 6/Wh	nite, 7/Red, 8/E	Black, 9/Yellow, 10,	Violet, 11/Rose,	, 12/Aqua	

#### Indoor/Outdoor Central Tube Cable

(12 Fiber version shown)



Description	Specification			
Operating Temp.	-40 to 70°C			
Installation Temp.	-30 to 70°C			
Storage Temp.	-40 to 75°C			
Crush Resistance	> Telcordia GR-409			
Impact Resistance	> Telcordia GR-409			
Flexing	> Telcordia GR-409			
Twist/Bend	> Telcordia GR-409			

#### **Premises Cables**



#### Riser and Plenum-Rated Designs for Indoor Applications

CommScope premises cables are engineered with two goals in mind - excellent mechanical/ optical performance coupled with superior fire safety ratings. These goals are achieved in a family of cables that meet all critical NEC/CEC requirements for riser or plenum applications while offering resistance to installation and termination stresses.

Our distribution cables are a perfect example of this achievement. Subunits of 12 fibers are engineered into constructions that are up to 30% smaller in diameter and up to 50% lighter than comparable products. The result is a compact cable that installs and terminates easily.

Premises fiber optic cable meet or exceed performance standards as established by Telcordia Telcordia GR-409, TIA/EIA 568B, ICEA 83-596, ANSI X3.166-1990 & X3T9.5 PMD, FDDI, ATM, Fibre Channel and HIPPI.

We offer several constructions, which include:

Riser and Plenum Distribution cables of up to 144 fibers in a lightweight and compact construction.

Heavy-Duty Riser and Plenum Distribution cables of 6 to 12 fibers with a robust construction.

Low Smoke/Zero-Halogen Distribution cables of up to 72 fibers which can be used outdoor as well, thus eliminating the need to change cable types at the building entrance.

Riser and Plenum Cordage in simplex, duplex, zipcord and two-fiber interconnect.

Riser and Plenum Breakout cables of up to 24 individually jacketed fibers in a single unit.





#### **Riser and Plenum Distribution Products**

#### FastFiber products available in 50 micron, 62.5 micron and singlemode

Rules and Guidelines:

- Maximum order quantity per customer, per product, per day is 2 kms (or 6,560 ft.)
- Continental U.S. freight allowed on orders of \$5000 or more (other than Alaska & Hawaii)
- Minimum cut length is 250 ft.
- Pull and cut charges are FREE on available FastFiber products
- Orders placed by 12 noon Eastern on Friday will be available for shipment the following Monday
- Reels are non-returnable and non-refundable

#### FastFiber™ Riser & Plenum Distribution Products

Cable Type	Catalog Number	Outer Diameter inch/mm	Min. E Loaded inch/cm	Bend Radius Unloaded inch/cm	Max. Te Short Term Ibs./Newton	ensile Load Long Term lbs./Newton	We lbs/ 1000'	ght kg/ 1000'
Riser Distribution	R-ØØ6-DS-6F-FSDOR	.20/5.0	4.0/10.1	2.0/5.0	300/1335	90/400	15	22
	R-Ø12-DS-6F-FSDOR	.23/5.8	4.6/11.7	2.3/5.8	300/1335	90/400	19	28
	R-Ø24-DS-6F-FSDOR	.55/13.9	10.9/27.7	5.5/13.9	600/2670	180/801	107	160
	R-Ø12-DS-8W-FSDYL	.23/5.8	4.6/11.7	2.3/5.8	300/1335	90/400	19	28
Plenum Distribution	P-ØØ6-DS-6F-FSDOR	.18/4.6	3.7/9.3	1.8/4.6	300/1335	90/400	14	21
	P-Ø12-DS-6F-FSDOR	.22/5.7	4.5/11.4	2.2/5.7	300/1335	90/400	21	31
	P-Ø24-DS-6F-FSDOR	.50/12.7	10.0/25.4	5.0/12.7	600/2670	180/801	104	155
	P-ØØ6-DS-8W-FSDYL	.18/4.6	3.7/9.3	1.8/4.6	300/1335	90/400	14	21
	P-Ø12-DS-8W-FSDYL	.22/5.7	4.5/11.4	2.2/5.7	300/1335	90/400	21	31
	P-Ø24-DS-8W-FSDYL	.50/12.7	10.0/25.4	5.0/12.7	600/2670	180/801	104	155
	P-Ø12-DS-5H-FSDOR	.22/5.7	4.5/11.4	2.2/5.7	300/1335	90/400	21	31

#### FastFiber<sup>™</sup> Low Smoke Zero Halogen

	Cable Type	Catalog Number	Outer Diameter inch/mm	Min. E Loaded inch/cm	Send Radius Unloaded inch/cm		nsile Load Long Term Ibs./Newton	Wei Ibs/ 1000'	ight kg/ 1000'
=	LSZH	Z-Ø12-DS-6F-FSDBK	.26/6.6	5.2/13.3	2.6/6.6	400/1780	120/534	31	46

#### Variables in the catalog number:

XXX = Total Fiber Count

XY = Fiber Grade	5H (Standard 5 6F (62.5/125μr	0μm, multimode) m, multimode)	8W (8.3/1	25μm, LightScope ZWP, singlemode)			
ZZ = Standard Jacket Color	BK (Black)	OR (Orange=Mul	timode)	YL (Yellow=singlemode)			
Fiber identification colors:		Orange, 3/Green, 4/Brown, 5/Slate, 6/White, 7/Red, 8/Black, 9/Yellow, 10/Violet, 11/Rose, 12/Aqua					

# **Premises Riser Distribution**



Meets critical NEC/CEC riser (OFNR) safety standards Numbered subunits and color-coded fibers help ease installation

Fiber	Catalog	Outer		nd Radius		nsile Load		ight /
Count	Number	Diameter inch/mm	Loaded inch/cm	Unloaded inch/cm	Short term lbs./ Newtons	Long term lbs./Newtons	lbs/ 1000'	kg/ 1000m
4 Fiber	R-ØØ4-DS- <b>XY</b> -FSD <b>ZZ</b>	.19/4.8	3.8/9.6	2.0/5.1	300/1335	90/400	13	19
6 Fiber	R-ØØ6-DS- <b>XY</b> -FSD <b>ZZ</b>	.20/5.1	4.0/10.1	2.0/5.1	300/1335	90/400	15	22
8 Fiber	R-ØØ8-DS- <b>XY</b> -FSD <b>ZZ</b>	.22/5.5	4.4/11.1	2.2/5.5	300/1335	90/400	17	26
12 Fiber	R-Ø12-DS- <b>XY</b> -FSD <b>ZZ</b>	.23/5.8	4.6/11.7	2.3/5.8	300/1335	90/400	19	28
18 Fiber (3 subunits)	R-Ø18-DS- <b>XY</b> -FSD <b>ZZ</b>	.48/12.3	9.7/24.6	4.8/12.3	600/2670	180/801	100	148
24 Fiber (4 subunits)	R-Ø24-DS- <b>XY</b> -FSD <b>ZZ</b>	.56/14.1	11.1/28.2	5.6/14.1	600/2670	180/801	107	160
<b>36 Fiber</b> (3 subunits)	R-Ø36-DS- <b>XY</b> -FSD <b>ZZ</b>	.56/14.2	11.2/28.5	5.6/14.2	800/3560	240/1068	119	177
48 Fiber (4 subunits)	R-Ø48-DS- <b>XY</b> -FSD <b>ZZ</b>	.62/15.7	12.3/31.3	6.2/15.7	800/3560	240/1068	127	188
60 Fiber (5 subunits)	R-Ø6Ø-DS- <b>XY</b> -FSD <b>ZZ</b>	.70/17.7	13.9/35.3	7.0/17.7	1000/4450	300/1335	171	254
72 Fiber (6 subunits)	R-Ø72-DS- <b>XY</b> -FSD <b>ZZ</b>	.77/19.6	15.4/39.1	7.7/19.6	1000/4450	300/1335	211	314
<b>96 Fiber</b> (8 subunits)	R-Ø96-DS- <b>XY</b> -FSD <b>ZZ</b>	.92/23.4	18.4/46.7	9.2/23.4	1000/4450	300/1335	309	459
144 Fiber (12 subunits)	R-144-DS- <b>XY</b> -FSD <b>ZZ</b>	1.00/25.3	19.9/50.6	10.0/25.3	1000/4450	300/1335	310	461
Singlemode/Multimode Composite (4 - 144 fiber)  R-XXX-DS-CM-FSDOR/AAaaa/BBbbb Custom design - sizes/specs will vary depending on fiber count								

Variables in the Catalog Number: XXX = Total Fiber Count

= Standard Jacket Color

XY = FiberGrade 8W (8.3/125µm, LightScope ZWP, singlemode)
6F (62.5/125µm, multimode)
5H (Standard 50µm, multimode)

OR (Orange- Multimode or Composite cable)
AQ (Aqua- LaserCore)

For Composites Only:

aaa is replaced with singlemode fiber count
AA is replaced with singlemode type

**5M** (LaserCore 150, 50μm, multimode) **5L** (LaserCore 300, 50μm, multimode)

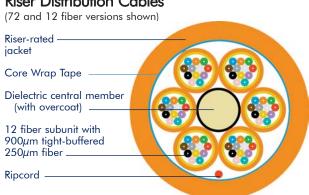
YL (Yellow- singlemode cable)
Minimum order required for special colors.

**bbb** is replaced by multimode fiber count **BB** is replaced by multimode type

1/Blue, 2/Orange, 3/Green, 4/Brown, 5/Slate, 6/White, 7/Red, 8/Black, 9/Yellow, 10/Violet, 11/Rose, 12/Aqua Subunits are numbered for easy identification

# Riser Distribution Cables

Fiber identification colors:



# Mechanical Properties

Description	Specification
Operating Temp.	-20 to 70°C
Installation Temp.	-20 to 70°C
Storage Temp.	-40 to 70°C
Crush Resistance	> Telcordia GR-409
Impact Resistance	> Telcordia GR-409
Flexing	> Telcordia GR-409
Twist/Bend	> Telcordia GR-409

# 12 Fiber Unit





Specifications subject to change without notice.

# **Premises Heavy-Duty Riser Distribution**

# Central Strength Member Provides Additional Fiber Support

Meets critical NEC/CEC riser (OFNR) safety standards Overcoated dielectric central strength member for additional strength and support

Fiber Count	Catalog Number	Outer Diameter inch/mm	Min. Be Loaded inch/cm	nd Radius Unloaded inch/cm	Max. Ten Short term Ibs./ Newtons	sile Load Long term Ibs./Newtons	We lbs/ 1000'	ight kg/ 1000m
6 Fiber	R-ØØ6-DS- <b>XY</b> -FHD <b>ZZ</b>	.20/5.1	4.1/10.3	2.0/5.1	300/1335	90/400	16	23
8 Fiber	R-ØØ8-DS- <b>XY</b> -FHD <b>ZZ</b>	.23/5.8	4.6/11.7	2.3/5.8	300/1335	90/400	21	31
12 Fiber	R-Ø12-DS- <b>XY</b> -FHD <b>ZZ</b>	.26/6.6	5.2/13.3	2.6/6.6	400/1780	120/534	28	42
Singlemode/Multimode Composite (6 - 12 fiber)	R-XXX-DS-CM-FHDOR/A	Aaaa/BBbbb	Custom desi	gn - sizes/spec	s will vary depen	ding on fiber co	ount	

Variables in the Catalog Number:

XXX = Total Fiber Count

XY = FiberGrade	<b>8W</b> (8.3/125μm, LightScope ZWP, singlemode) <b>6F</b> (62.5/125μm, multimode) <b>5H</b> (Standard 50μm, multimode)	<b>5M</b> (LaserCore 150, 50μm, multimode) <b>5L</b> (LaserCore 300, 50μm, multimode)
ZZ = Standard Jacket Color	<b>OR</b> (Orange- Multimode or Composite cable) <b>AQ</b> (Aqua- LaserCore)	YL (Yellow- singlemode cable) Minimum order required for special colors.
For Composites Only:	<ul> <li>aaa is replaced with singlemode fiber count</li> <li>AA is replaced with singlemode type</li> </ul>	<b>bbb</b> is replaced by multimode fiber count <b>BB</b> is replaced by multimode type

Fiber identification colors:

1/Blue, 2/Orange, 3/Green, 4/Brown, 5/Slate, 6/White, 7/Red, 8/Black, 9/Yellow, 10/Violet, 11/Rose, 12/Aqua

# Premises Riser Heavy-Duty Distribution Cable

(12 fiber version shown)



# **Mechanical Properties**

Description	Specification
Operating Temp.	-20 to 70°C
Installation Temp.	-20 to 70°C
Storage Temp.	-40 to 70°C
Crush Resistance	> Telcordia GR-409
Impact Resistance	> Telcordia GR-409
Flexing	> Telcordia GR-409
Twist/Bend	> Telcordia GR-409

# **Premises Plenum Distribution**



Meets critical NEC/CEC plenum (OFNP) safety standards Numbered subunits and color-coded fibers help ease installation

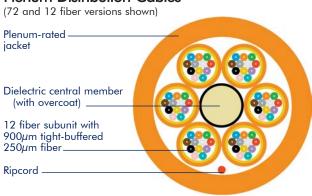
Fiber Count	Catalog Number	Outer Diameter inch/mm	Min. Bei Loaded inch/cm	nd Radius Unloaded inch/cm	Max. Ter Short term Ibs./ Newtons	nsile Load Long term Ibs./Newtons	We lbs/ 1000'	ight kg/ 1000m
4 Fiber	P-ØØ4-DS- <b>XY</b> -FSD <b>ZZ</b>	.17/4.4	3.4/8.7	1.7/4.4	300/1335	90/400	12	18
6 Fiber	P-ØØ6-DS- <b>XY</b> -FSD <b>ZZ</b>	.19/4.8	3.8/9.7	1.9/4.8	300/1335	90/400	15	22
8 Fiber	P-ØØ8-DS- <b>XY</b> -FSD <b>ZZ</b>	.20/5.1	4.0/10.2	2.0/5.1	300/1335	90/400	17	25
12 Fiber	P-Ø12-DS- <b>XY</b> -FSD <b>ZZ</b>	.22/5.7	4.5/11.4	2.2/5.7	300/1335	90/400	21	31
18 Fiber (3 subunits)	P-Ø18-DS- <b>XY</b> -FSD <b>ZZ</b>	.42/10.6	8.3/21.2	4.2/10.6	600/2670	180/801	65	96
24 Fiber (4 subunits)	P-Ø24-DS- <b>XY</b> -FSD <b>ZZ</b>	.49/12.3	9.7/24.6	4.9/12.3	600/2670	180/801	83	123
36 Fiber (3 subunits)	P-Ø36-DS- <b>XY</b> -FSD <b>ZZ</b>	.54/13.7	10.8/27.4	5.4/13.7	800/3560	240/1068	128	191
48 Fiber (4 subunits)	P-Ø48-DS- <b>XY</b> -FSD <b>ZZ</b>	.60/15.1	11.9/30.2	6.0/15.1	800/3560	240/1068	138	205
60 Fiber (5 subunits)	P-Ø6Ø-DS- <b>XY</b> -FSD <b>ZZ</b>	.68/17.2	13.6/34.5	6.8/17.2	1000/4450	300/1335	190	282
72 Fiber (6 subunits)	P-Ø72-DS- <b>XY</b> -FSD <b>ZZ</b>	.75/19.1	15.1/38.3	7.5/19.1	1000/4450	300/1335	237	353
96 Fiber (8 subunits)	P-Ø96-DS- <b>XY</b> -FSD <b>ZZ</b>	.90/23.0	18.1/46.0	9.0/23.0	1000/4450	300/1335	361	537
144 Fiber (12 subunits)	P-144-DS- <b>XY</b> -FSD <b>ZZ</b>	.95/24.1	19.0/48.2	9.5/24.1	1000/4450	300/1335	331	492
Singlemode/Multimode Composite (4 - 144 fiber)	P-XXX-DS-CM-FSDOR/AAaaa/BBbbb Custom design - sizes/specs will vary depending on fiber count							

Variables in the Catalog Number: XXX = Total Fiber Count

XY = Fiber-Grade	8W (8.3/125μm, LightScope ZWP, singlemode) 6F (62.5/125μm, multimode) 5H (Standard 50μm, multimode)	<b>5M</b> (LaserCore 150, 50μm, multimode) <b>5L</b> (LaserCore 300, 50μm, multimode)
ZZ = Standard Jacket Color	OR (Orange- Multimode or Composite cable) AQ (Aqua- LaserCore)	YL (Yellow- singlemode cable) Minimum order required for special colors.
For Composites Only:	<ul><li>aaa is replaced with singlemode fiber count</li><li>AA is replaced with singlemode type</li></ul>	<b>bbb</b> is replaced by multimode fiber count <b>BB</b> is replaced by multimode type

Fiber identification colors: 1/Blue, 2/Orange, 3/Green, 4/Brown, 5/Slate, 6/White, 7/Red, 8/Black, 9/Yellow, 10/Violet, 11/Rose, 12/Aqua Subunits are numbered for easy identification

# Plenum Distribution Cables



# **Mechanical Properties**

Description	Specification
Operating Temp.	-20 to 70°C
Installation Temp.	-20 to 70°C
Storage Temp.	-40 to 70°C
Crush Resistance	> Telcordia GR-409
Impact Resistance	> Telcordia GR-409
Flexing	> Telcordia GR-409
Twist/Bend	> Telcordia GR-409

# 12 Fiber Subunit

Specifications subject to change without notice.

# **Premises Heavy-Duty Plenum Distribution**

# Central Strength Member Provides Additional Fiber Support

Meets critical NEC/CEC plenum (OFNP) safety standards

Overcoated dielectric central strength member for additional strength and support

Fiber Count	Catalog Number	Outer Diameter inch/mm	Min. Be Loaded inch/cm	nd Radius Unloaded inch/cm	Max. Ter Short term lbs./ Newtons	nsile Load Long term Ibs./Newtons	We lbs/ 1000'	ight kg/ 1000m
6 Fiber	P-ØØ6-DS- <b>XY</b> -FHD <b>ZZ</b>	.19/4.9	3.9/9.8	1.9/4.9	300/1335	90/400	16	23
8 Fiber	P-ØØ8-DS- <b>XY</b> -FHD <b>ZZ</b>	.22/5.5	4.4/11.1	2.2/5.5	300/1335	90/400	21	32
12 Fiber	P-Ø12-DS- <b>XY</b> -FHD <b>ZZ</b>	.25/6.3	5.0/12.7	2.5/6.3	400/1780	120/534	30	44
Singlemode/Multimode Composite (6 - 12 fiber)	P- <b>XXX</b> -DS-CM-FHDOR/	AAaaa/BBbbb	Custom des	ign - sizes/spe	cs will vary depe	nding on fiber co	unt	

Variables in the Catalog Number:

= Fiber Grade

For Composites Only:

Fiber identification colors:

= Standard Jacket Color

XXX = Total Fiber Count

8W (8.3/125µm, LightScope ZWP, singlemode) 6F (62.5/125µm, multimode) 5H (Standard 50µm, multimode)

**OR** (Orange- Multimode or Composite cable) **AQ** (Aqua- LaserCore)

aaa is replaced with singlemode fiber count AA is replaced with singlemode type

AA is replaced with singlemode type

BB is replaced by multimode type

1/Blue, 2/Orange, 3/Green, 4/Brown, 5/Slate, 6/White, 7/Red, 8/Black, 9/Yellow, 10/Violet, 11/Rose, 12/Aqua

# Premises Plenum Heavy-Duty Distribution Cable

(12 fiber version shown)



# **Mechanical Properties**

5M (LaserCore 150, 50µm, multimode)

**5L** (LaserCore 300, 50 $\mu$ m, multimode)

Minimum order required for special colors.

**bbb** is replaced by multimode fiber count

YL (Yellow- singlemode cable)

# Several Meets criti

# **Premises Riser Cordage**

# CommScope

# Several Constructions Available for a Variety of Uses

Meets critical NEC/CEC riser (OFNR) safety standards

Simplex, duplex and zipcord cables available in a variety of sizes

Heavy-duty simplex and duplex cables help absorb extra handling stresses when using proper installation techniques Designed for ease of handling and termination

Cable Type/Unit Size	Catalog Number	Outer Diameter inch/mm	Min. Be Loaded inch/cm	nd Radius Unloaded inch/cm	Max. Ter Short term lbs./ Newtons	nsile Load Long term Ibs./Newtons	We lbs/ 1000'	ight kg/ 1000m
Simplex/1.6mm	R-ØØ1-SP- <b>XY</b> -F16 <b>ZZ</b>	0.06/1.6	2.0/5.0	1.4/3.5	35/156	11/47	1.8	2.7
Simplex/2.0mm	R-ØØ1-SP- <b>XY</b> -F20 <b>ZZ</b>	0.08/2.0	2.0/5.0	1.2/3.0	50/222	15/67	2.8	4.1
Simplex/2.9mm	R-ØØ1-SP- <b>XY</b> -F29 <b>ZZ</b>	0.11/2.9	2.3/5.8	1.4/3.5	60/267	18/80	5.8	8.7
Duplex/2.5mm	R-ØØ2-DU- <b>XY</b> -F25 <b>ZZ</b>	0.13/3.4 x 0.23/5.9	2.6/6.7	1.4/3.5	90/400	27/120	14.0	20.9
Zipcord/2.0mm	R-ØØ2-ZC- <b>XY</b> -F20 <b>ZZ</b>	0.079/2.0 x 0.161/4.1	2.0/5.0	1.2/3.0	80/356	24/107	5.4	8.0
Zipcord/2.9mm	R-ØØ2-ZC- <b>XY</b> -F29 <b>ZZ</b>	0.11/2.9 x 0.23/5.9	2.3/5.8	1.2/3.0	90/400	27/120	11.7	17.4
2 fiber interconnect	R-ØØ2-IC- <b>XY</b> -F29 <b>ZZ</b>	0.11/2.9	2.3/5.8	1.2/3.0	70/311	21/93	4.7	7.0
2 fiber interconnect	R-ØØ2-IC- <b>XY</b> -FSD <b>ZZ</b>	0.16/4.1	3.2/8.1	1.6/4.1	225/1001	68/300	8.6	12.9

Variables in the Catalog Number: XY = FiberGrade

**8W** (8.3/125μm, LightScope ZWP, singlemode) **6F** (62.5/125μm, multimode)

**5H** (Standard 50μm, multimode)

**OR** (Orange- Multimode or Composite cable) **AQ** (Aqua- LaserCore)

**5M** (LaserCore 150, 50μm, multimode) **5L** (LaserCore 300, 50μm, multimode)

YL (Yellow- singlemode cable)

Minimum order required for special colors.

Fiber identification colors:

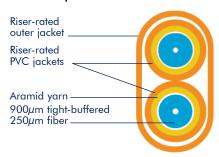
1/Blue, 2/Orange

# Riser Simplex

Riser-rated jacket 900µm tight-buffered 250µm fiber	
Aramid Yarn	

Standard Jacket Color

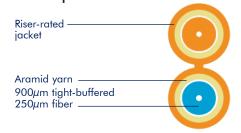
# Riser Duplex



#### Riser 2-fiber Interconnect



# Riser Zipcord



## **Mechanical Properties**

Description	Specification
Operating Temp.	-20 to 70°C
Installation Temp.	-20 to 70°C
Storage Temp.	-40 to 70°C
Crush Resistance	> Telcordia GR-409
Impact Resistance	> Telcordia GR-409
Flexing	> Telcordia GR-409
Twist/Bend	> Telcordia GR-409

Specifications subject to change without notice.

# **Premises Plenum Cordage**

# Several Constructions Available for a Variety of Uses

Meets critical NEC/CEC plenum (OFNP) safety standards

Simplex, duplex and zipcord cables available in a variety of sizes

Heavy-duty simplex and duplex cables help absorb extra handling stresses when using proper installation techniques Designed for ease of handling and termination

Cable Type/Unit Size	Catalog Number	Outer Diameter inch/mm	Min. Be Loaded inch/cm	nd Radius Unloaded inch/cm	Max. Ter Short term lbs./ Newtons	nsile Load Long term Ibs./Newtons	We lbs/ 1000'	ight kg/ 1000m
Simplex/1.6mm	P-ØØ1-SP- <b>XY</b> -F16 <b>ZZ</b>	0.06/1.6	2.0/5.0	1.4/3.5	35/156	11/47	2.1	3.2
Simplex/2.0mm	P-ØØ1-SP- <b>XY</b> -F20 <b>ZZ</b>	0.08/2.0	2.0/5.0	1.2/3.0	50/222	15/67	3.0	4.5
Simplex/2.9mm	P-ØØ1-SP- <b>XY</b> -F29 <b>ZZ</b>	0.11/2.9	2.3/5.8	1.2/3.0	60/267	18/80	6.8	10.1
Duplex/2.5mm	P-ØØ2-DU- <b>XY</b> -F25 <b>ZZ</b>	0.13/3.4 x 0.23/5.9	2.6/6.7	1.3/3.4	90/400	27/120	14.0	20.9
Zipcord/2.0mm	P-ØØ2-ZC- <b>XY</b> -F29 <b>ZZ</b>	0.079/2.0 x 0.161/4.1	2.0/5.0	1.2/3.0	80/356	24/107	5.4	8.0
Zipcord/2.9mm	P-ØØ2-ZC- <b>XY</b> -F29 <b>ZZ</b>	0.11/2.9 x 0.23/5.9	2.3/5.8	1.2/3.0	90/400	27/120	13.6	20.2
2 fiber interconnect	P-ØØ2-IC- <b>XY</b> -F29 <b>ZZ</b>	0.11/2.9	2.3/5.8	1.2/3.0	70/311	21/93	5.8	8.6
2 fiber interconnect	P-ØØ2-IC- <b>XY</b> -FSD <b>ZZ</b>	0.15/3.9	3.1/7.8	1.5/3.9	225/1001	68/300	8.8	13.1

Variables in the Catalog Number: XY = FiberGrade

**8W** (8.3/125 $\mu$ m, LightScope ZWP, singlemode)

**6F** (62.5/125μm, multimode)

AQ (Aqua- LaserCore)

**5H** (Standard 50μm, multimode)

OR (Orange- Multimode or Composite cable)

**5M** (LaserCore 150, 50μm, multimode) **5L** (LaserCore 300, 50μm, multimode)

YL (Yellow- singlemode cable)

Minimum order required for special colors.

Fiber identification colors:

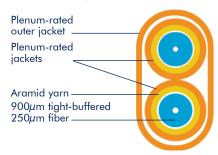
= Standard Jacket Color

1/Blue, 2/Orange

# Plenum Simplex



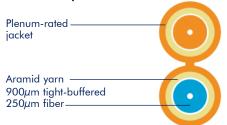
# Plenum Duplex



# Plenum 2-fiber Interconnect



# Plenum Zipcord



# Mechanical Properties

Description	Specification
Operating Temp.	-20 to 70°C
Installation Temp.	-20 to 70°C
Storage Temp.	-40 to 70°C
Crush Resistance	> Telcordia GR-409
Impact Resistance	> Telcordia GR-409
Flexing	> Telcordia GR-409 > Telcordia GR-409
Twist/Bend	> Telcordia GR-409

 ${\it Specifications \ subject \ to \ change \ without \ notice}.$ 

# Robust Meets crit

# **Premises Riser Breakout**

CommScope

# Robust Design for Easy Handling and Termination

Meets critical NEC riser (OFNR) safety standards Individual subunits are rugged and flexible

Dielectric central member on 6 to 24 fiber versions for added strength and support

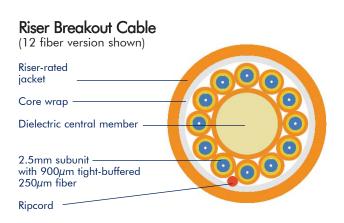
<b>2.5mm subunit</b> Fiber Count	Catalog Number	Outer Diameter inch/mm	Min. Bei Loaded inch/cm	nd Radius Unloaded inch/cm	Max. Ter Short term Ibs./ Newtons	nsile Load Long term lbs./Newtons	We lbs/ 1000'	ight kg/ 1000m
4 Fiber (no central member)	R-ØØ4-BO- <b>XY</b> -F25 <b>ZZ</b>	.31/7.8	6.2/15.7	3.1/7.8	300/1335	90/400	34	50
6 Fiber	R-ØØ6-BO- <b>XY</b> -F25 <b>ZZ</b>	.36/9.1	7.2/18.2	3.6/9.1	500/2225	150/667	46	68
8 Fiber	R-ØØ8-BO- <b>XY</b> -F25 <b>ZZ</b>	.43/10.9	8.6/21.8	4.3/10.9	600/2670	180/801	58	87
12 Fiber	R-Ø12-BO- <b>XY</b> -F25 <b>ZZ</b>	.48/12.2	9.6/24.4	4.8/12.2	600/2670	180/801	78	116
18 Fiber	R-Ø18-BO- <b>XY</b> -F25 <b>ZZ</b>	.57/14.5	11.4/28.9	5.7/14.5	600/2670	180/801	120	179
24 Fiber	R-Ø24-BO- <b>XY</b> -F25 <b>ZZ</b>	.64/16.3	12.8/32.6	6.4/16.3	600/2670	180/801	152	226
Singlemode/Multimode Composite (4 - 24 fiber)	R- <b>XXX</b> -BO-CM-FSDOR/A	AAaaa/BBbb	<b>b</b> Custom desi	gn - sizes/spec	cs will vary deper	nding on fiber co	ount	

Variables in the Catalog Number: XXX = Total Fiber Count

XY = FiberGrade	<b>8W</b> (8.3/125μm, LightScope ZWP, singlemode) <b>6F</b> (62.5/125μm, multimode) <b>5H</b> (Standard 50μm, multimode)	<b>5M</b> (LaserCore 150, 50μm, multimode) <b>5L</b> (LaserCore 300, 50μm, multimode)
ZZ = Standard Jacket Color	<b>OR</b> (Orange- Multimode or Composite cable) <b>AQ</b> (Aqua- LaserCore)	YL (Yellow- singlemode cable) Minimum order required for special colors.
For Composites Only:	aaa is replaced with singlemode fiber count AA is replaced with singlemode type	<b>bbb</b> is replaced by multimode fiber count <b>BB</b> is replaced by multimode type

Fiber identification colors:

1/Blue, 2/Orange, 3/Green, 4/Brown, 5/Slate, 6/White, 7/Red, 8/Black, 9/Yellow, 10/Violet, 11/Rose, 12/Aqua Fibers 13-24: repeat color sequence with tracer stripe



# **Mechanical Properties**

Description	Specification
Operating Temp.	-20 to 70°C
Installation Temp.	-20 to 70°C
Storage Temp.	-40 to 70°C
Crush Resistance	> Telcordia GR-409
Impact Resistance	> Telcordia GR-409
Flexing	> Telcordia GR-409
Twist/Bend	> Telcordia GR-409

Specifications subject to change without notice.

# **Premises Plenum Breakout**

# Robust Design for Easy Handling and Termination

Meets critical NEC riser (OFNP) safety standards Individual subunits are rugged and flexible

Dielectric central member on 6 to 24 fiber versions for added strength and support

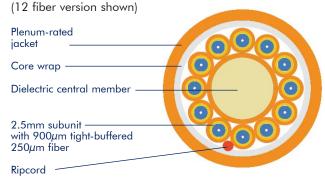
<b>2.5mm subunit</b> Fiber Count	Catalog Number	Outer Diameter inch/mm	Min. Be Loaded inch/cm	nd Radius Unloaded inch/cm	Max. Ter Short term lbs./ Newtons	nsile Load Long term Ibs./Newtons	We lbs/ 1000'	ight kg/ 1000r
4 Fiber (no central member)	P-ØØ4-BO- <b>XY</b> -F25 <b>ZZ</b>	.29/7.3	5.7/14.6	2.9/7.3	300/1335	90/400	32	48
6 Fiber	P-ØØ6-BO- <b>XY</b> -F25 <b>ZZ</b>	.34/8.5	6.7/17.1	3.4/8.5	500/2225	150/667	45	67
8 Fiber	P-ØØ8-BO- <b>XY</b> -F25 <b>ZZ</b>	.41/10.4	8.2/20.7	4.1/10.4	600/2670	180/801	58	87
12 Fiber	P-Ø12-BO- <b>XY</b> -F25 <b>ZZ</b>	.48/12.1	9.5/24.2	4.8/12.1	600/2670	180/801	90	13
18 Fiber	P-Ø18-BO- <b>XY</b> -F25 <b>ZZ</b>	.57/14.6	11.5/29.1	5.7/14.6	600/2670	180/801	145	21
24 Fiber	P-Ø24-BO- <b>XY</b> -F25 <b>ZZ</b>	.65/16.4	12.9/32.8	6.5/16.4	600/2670	180/801	183	27
Singlemode/Multimode Composite (4 - 24 fiber)	P- <b>XXX</b> -BO-CM-FSDOR/	AAaaa/BBbbb	Custom desi	ign - sizes/spe	cs will vary deper	nding on fiber co	ount	

Variables in the Catalog Number: XXX = Total Fiber Count

XY = FiberGrade	8W (8.3/125μm, LightScope ZWP, singlemode) 6F (62.5/125μm, multimode) 5H (Standard 50μm, multimode)	<b>5M</b> (LaserCore 150, 50μm, multimode) <b>5L</b> (LaserCore 300, 50μm, multimode)
ZZ = Standard Jacket Color	OR (Orange- Multimode or Composite cable) AQ (Aqua- LaserCore)	YL (Yellow- singlemode cable) Minimum order required for special colors.
For Composites Only:	aaa is replaced with singlemode fiber count AA is replaced with singlemode type	<b>bbb</b> is replaced by multimode fiber count <b>BB</b> is replaced by multimode type

Fiber identification colors: 1/Blue, 2/Orange, 3/Green, 4/Brown, 5/Slate, 6/White, 7/Red, 8/Black, 9/Yellow, 10/Violet, 11/Rose, 12/Aqua Fibers 13-24: repeat color sequence with tracer stripe





# **Mechanical Properties**

Description	Specification
Operating Temp.	-20 to 70°C
Installation Temp.	-20 to 70°C
Storage Temp.	-40 to 70°C
Crush Resistance	> Telcordia GR-409
Impact Resistance	> Telcordia GR-409
Flexing	> Telcordia GR-409
Twist/Bend	> Telcordia GR-409

Specifications subject to change without notice.



# #พืชเดินสินัน Interlocking Armored Fiber Optic Cables



Applications: These cables are protected with an interlocking armor to shield against damage.

> Used in Local Area Networks, Factory Automation, Critical Data Lines, Video, Robotics, Commercial Construction & Renovations, Heavy Industry, High Security Areas, and Indoor/Outdoor applications

Available in steel or aluminum interlocking armor, with or without overall jacket. Features:

NEC/CEC compliant

Outstanding mechanical protection for sensitive cables combined with excellent flexibility.

Optional armor color coding available.

Shown with Distribution cables, other cable constructions available.

#### Premise Fiber Optic Cables, Armored (these specifications are based on aluminum interlocking armor with outer jacket.)

Fiber Count	Catalog Number	Outer Diameter inch/mm		nd Radius I/cm Unloaded	Max. Tensile Load lbs./Newtons	Crush Resistance	Wei lbs/ 1000'	ight kg/ 1000m
6 Fiber	R-ØØ6-DZ-XY-FSDOR	0.57/14.5	11.4/29.0	8.0/20.0	300/1335	85 N/mm	96	142
	P-ØØ6-DZ-XY-FSDOR	0.57/14.5	11.4/29.0	8.0/20.0			103	154
12 Fiber	R-Ø12-DZ-XY-FSDOR	0.57/14.5	11.4/29.0	8.0/20.0	300/1335	85 N/mm	99	147
	P-Ø12-DZ-XY-FSDOR	0.57/14.5	11.4/29.0	8.0/20.0			109	162
24 Fiber	R-Ø24-DZ-XY-FSDOR	0.87/22.1	17.4/44.0	12.2/31.0	300/1335	85 N/mm	251	373
	P-Ø24-DZ-XY-FSDOR	0.82/20.8	16.4/42.0	11.5/29.0			221	328
48 Fiber	R-Ø48-DZ-XY-FSDOR	0.97/24.6	19.4/49.0	13.6/34.0	300/1335	85 N/mm	277	412
	P-Ø48-DZ-XY-FSDOR	0.92/23.4	18.4/47.0	12.9/33.0			295	439
72 Fiber	R-Ø72-DZ-XY-FSDOR	1.12/28.4	22.4/57.0	15.7/40.0	300/1335	85 N/mm	388	578
	P-Ø72-DZ-XY-FSDOR	1.12/28.4	22.4/57.0	15.7/40.0			431	641
144 Fiber	R-144-DZ-XY-FSDOR	1.32/33.5	26.4/67.0	18.5/47.0	300/1335	85 N/mm	523	778
	P-144-DZ-XY-FSDOR	1.27/32.3	25.4/65.0	17.8/45.0			553	824

Please call your CommScope Sales Representative for other FiberGuard constructions and cable counts. Specifications subject to change without notice.

Variables i	in the	Catalog	Number:
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Armor	<ul><li>W (Steel Armor, Color Coded, No Jacket)</li><li>Y (Aluminum Armor, Color Coded, No Jacket)</li></ul>	X (Steel Armor with Jacket) Z (Aluminum Armor with Jacket)
XY = Fiber Grade	<b>6F</b> (Enhanced FDDI 62.5/125μm) <b>5M</b> (50/125μm, LaserCore 150) <b>8W</b> (9.2 MFD singlemode fiber)	<b>5H</b> (50/125μm) <b>5L</b> (50/125μm, LaserCore <sup>™</sup> 300)
Standard Jacket Color	OR (Orange- Multimode or Composite cable) AQ (Aqua - LaserCore") Minimum order required for special colors.	YL (Yellow- singlemode cable) BK (Black - Indoor/Outdoor cable)
Fiber identification colors:	1/Blue, 2/Orange, 3/Green, 4/Brown, 5/Slate,	6/White, 7/Red, 8/Black, 9/Yellow, 10/Violet, 11/Rose, 12/Aqua

<sup>\*</sup>If 2 count cable and part number is D, it is a Duplex cable. If 4 count or above with part number D, it is a Distribution cable.

# Fiber Optic Packaging & Shipping

# **Shipping Information**

# **Packaging and Shipping**

Fiber optic cable is packaged for shipment on wooden or composite reels. Each package contains only one continuous length of cable. The packaging is designed to prevent damage to the cable during shipping and handling. Fiber cable reels are protected with a "reel wrap", the highest technology available today. This wrap is stronger, lighter and more environmentally friendly than other methods of lagging. In addition, reel wrap is simple to remove from the reel and readily disposable. All reel sizes between 35 and 78 inches will be blocked and palletized to help ensure safe arrival to the customer. Reels larger than 78 inches are placed on the rolling edge and securely fastened to the trailer during shipment.

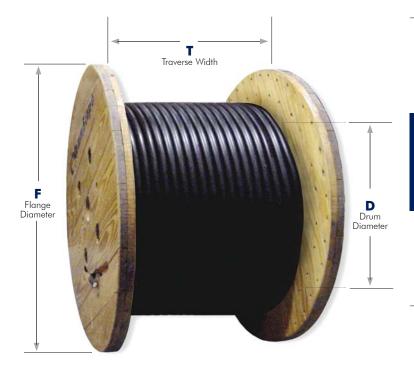
Each reel is plainly marked to indicate the direction in which it should be rolled to prevent loosening of the cable on the reel.

## **Method of Shipment**

CommScope's customary method of shipment of fiber optic cable from Claremont, North Carolina to the purchaser's site will vary depending on factors such as the size and number of cable reels, and the destination location. Shipper options include Federal Express, UPS, BAX, LTL motor freight carriers and CommScope's own fleet of trucks, "Cable Transport". Some trucks within CommScope's fleet are equipped with "Cargo Master" equipment for ease in unloading cable reels on location where no loading dock is available. CommScope has red arm Cargo Masters, which can lift anything 2,500 pounds or less. CommScope also has white arm Cargo Masters which will lift anything up to 8,000 pounds that is on an 84" reel or smaller. These specially equipped trucks are available by request.

#### **International Packaging**

Products shipped outside the continental United States are protected with reel wrap, lagged with wood, and blocked and palletized (for reel sizes between 35 and 78 inches) or placed on the rolling edge and securely fastened to international shipping containers.



# Fiber Optic Packaging & Shipping



**Shipping Information** 

# **Outside Plant Stranded Loose Tube Armored (LA) Cables**

Arid or Flooded Core

Flange x Drum x Traverse	Reel Weight (lbs)	<b>2-60F</b> 5@1	<b>62-72F</b> 6@1	<b>74-96F</b> 8@1	<b>98-120F</b> 10@1	<b>122-144F</b> 12@1	<b>146-216F</b> 12@6@1	<b>218-288F</b> 15@9@1
36 x 22 x 29.75	66	3,304	3,149	2,461	1,896	1,439	1,439	1,304
42 x 29 x 29.75	88	6,202	5,440	4,063	3,318	2,705	2,705	2,164
48 x 22 x 32.5	176	9,895	8,767	6,997	5,497	4,578	4,578	3,471
54 x 24 x 28	370	11,565	9,857	7,893	6,420	5,051	5,051	3,869
60 x 30 x 32	433	15,332	13,191	10,525	8,475	6,771	6,771	5,129
66 x 30 x 32	506	19,732	18,192	13,424	11,087	9,129	9,129	6,648
72 x 36 x 36	627	25,071	22,852	17,135	14,032	11,682	11,682	8,442
78 x 36 x 36	758	32,217	28,464	22,057	17,548	14,083	14,083	10,486
84 x 40 x 40	913	39,812	35,486	27,566	22,330	17,491	17,491	13,317
84 x 40 x 42	922	42,055	37,605	28,968	23,172	18,607	18,607	14,292
88 x 40 x 40	958	45,892	41,237	31,350	25,752	20,510	20,510	15,957
96 x 44 x 46	984	64,185	55,905	43,273	34,430	28,148	28,148	22,168

All Units in Feet

2" Flange Clearance

# **Outside Plant Stranded Loose Tube Non-Armored (LN) Cables**

Arid or Flooded Core

Flange x Drum x Traverse	Reel Weight (lbs)	<b>2-60F</b> 5@1	<b>62-72F</b> 6@1	<b>74-96F</b> 8@1	<b>98-120F</b> 10@1	<b>122-144F</b> 12@1	<b>146-216F</b> 12@6@1	<b>218-288F</b> 15@9@1
36 x 22 x 29.75	66	4,655	3,921	3,038	2,416	1,855	1,855	1,371
42 x 29 x 29.75	88	7,985	7,015	5,261	3,997	3,252	3,252	2,264
48 x 22 x 32.5	176	12,864	10,913	8,685	6,369	5,411	5,411	4,003
54 x 24 x 28	370	14,584	12,713	9,741	7,246	5,824	5,824	4,437
60 x 30 x 32	433	19,382	16,748	12,809	9,706	7,728	7,728	5,834
66 x 30 x 32	506	25,328	22,307	16,838	13,258	10,243	10,243	7,441
72 x 36 x 36	627	32,226	28,593	21,606	16,947	13,009	13,009	9,635
78 x 36 x 36	758	40,265	36,209	27,110	20,824	16,417	16,417	12,595
84 x 40 x 40	913	51,316	44,394	33,388	25,671	20,586	20,586	15,779
84 x 40 x 42	922	54,523	46,762	35,443	27,022	21,797	21,797	16,855
88 x 40 x 40	958	58,185	50,805	38,966	29,315	23,858	23,858	17,664
96 x 44 x 46	984	N/A	70,947	53,181	40,797	33,577	33,577	24,195

All Units in Feet 2" Flange Clearance

# Fiber Optic Packaging & Shipping

**Shipping Information** 

# Indoor/Outdoor Riser-Rated and Outside Plant Central Tube Cables

Flange x Drum x Traverse	Reel Weight (lbs)	<b>RCN</b> 2-24F	<b>CN</b> 2-24F	<b>CN</b> 26-48F	<b>CN</b> 50-96F	<b>CA</b> 2-24F	<b>CA</b> 26-48F	<b>CA</b> 50-96F	<b>CS</b> 2-24F	<b>CP</b> 1-72 F
35 x 16.5 x 18*	60	4,278	4,842	3,245	2,404	4,361	3,320	2,342	3,666	7,080
36 x 22 x 29.75	66	5,720	6,667	4,035	3,145	5,787	4,586	3,096	4,780	9,143
42 x 24 x 24*	94	7,575	8,578	5,742	4,226	7,684	5,841	4,144	6,525	12,555
42 x 29 x 29.75	88	10,084	11,336	7,196	5,430	10,189	7,873	5,357	8,177	16,301
48 x 22 x 32.5	176	16,547	19,282	11,854	8,909	16,903	12,907	8,657	14,087	20,000
54 x 24 x 28	370	18,390	21,994	13,740	10,447	19,418	14,636	9,708	15,680	N/A
60 x 30 x 32	433	24,416	29,277	18,020	13,954	25,710	19,441	13,017	21,059	N/A
66 x 30 x 32	506	32,262	37,821	23,762	18,149	33,716	25,417	17,103	27,279	N/A
72 x 36 x 36	627	41,005	48,201	30,347	23,185	43,287	32,326	21,541	34,542	N/A
78 x 36 x 36	758	51,632	61,447	38,159	28,871	54,218	40,404	27,018	42,885	N/A
84 x 40 x 40	913	67,881	77,427	48,855	37,359	68,250	51,488	35,170	54,354	N/A
84 x 40 x 42	922	70,832	N/A	51,361	39,007	N/A	54,062	36,769	57,628	N/A
88 x 40 x 40	958	N/A	N/A	55,567	41,752	N/A	58,392	39,428	63,260	N/A
96 x 44 x 46	984	N/A	N/A	76,766	56,497	N/A	N/A	53,704	N/A	N/A

<sup>\*</sup> Denotes Composite Reel All Units in Feet 2" Flange Clearance

# Outside Plant Double Jacketed Single Armored (L2); Triple Jacketed Double Armored (L3); Figure 8 Armored (M LA) and Non-Armored (M LN) Cables

Flange x Drum x Traverse	Reel Weight (lbs)	<b>L2</b> 2-72F	<b>L2</b> 74-96F	<b>L3</b> 2-72F	<b>M LA</b> 2-72F	<b>M LN</b> 2-72F
36 x 22 x 29.75	66	2,456	1,892	1,774	929	1,230
42 x 29 x 29.75	88	4,489	3,309	2,766	1,669	2,049
48 x 22 x 32.5	176	6,973	5,479	4,661	2,828	3,316
54 x 24 x 28	370	8,056	6,396	5,161	3,263	3,796
60 x 30 x 32	433	10,715	8,448	6,900	4,232	5,042
66 x 30 x 32	506	14,439	11,047	9,292	5,127	6,549
<b>72</b> x 36 x 36	627	18,364	14,284	11,866	6,612	8,329
78 x 36 x 36	758	22,393	17,856	15,141	8,435	10,364
84 x 40 x 40	913	29,193	22,252	19,109	10,916	13,190
84 x 40 x 42	922	30,652	23,511	19,889	11,507	13,850
88 x 40 x 40	958	33,083	25,656	21,203	12,502	14,928
96 x 44 x 46	984	45,409	35,769	29,760	17,097	20,466

All Units in Feet

2" Flange Clearance

# Fiber Optic Packaging & Shipping



# **Shipping Information**

# **Plenum-Rated Distribution Cables**

Fiber	18x12x12 FT	22x12x12 FT	30x12x12 FT	35x16.5x18 FT	36x22x29.75 FT	42x24x24 FT	42x22x29.75 FT	48x22x32.5 FT	54x24x28 FT	60x30x32 FT	66x30x32 FT	72x36x36 FT	78x36x36 FT	84x40x40 FT	88x40x40 FT
4	1,337	4,371	12,696	25,439	32,488	44,541	58,160	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
6	1,282	3,919	11,497	22,765	29,707	40,164	52,650	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
8	958	3,344	9,604	18,412	23,770	32,528	43,160	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
12	N/A	2,941	8,514	16,473	21,818	29,230	39,126	64,770	N/A						
18	N/A	N/A	2,058	3,823	4,903	6,731	8,994	14,329	16,800	22,463	28,856	36,908	47,051	N/A	N/A
24	N/A	N/A	1,571	3,249	4,038	5,747	7,203	11,869	13,508	18,041	23,794	30,383	38,211	48,919	N/A
36	N/A	N/A	1,384	2,845	3,868	5,003	6,385	10,820	12,337	16,589	21,158	26,779	34,150	44,156	N/A
48	N/A	N/A	1,169	2,420	3,094	4,247	5,352	8,810	9,697	13,004	17,083	21,884	27,445	35,131	39,382
60	N/A	N/A	N/A	1,745	2,410	3,104	3,982	6,878	7,926	10,562	13,478	16,872	20,721	27,204	30,947
72	N/A	N/A	N/A	1,461	1,894	2,576	3,313	5,488	6,408	8,461	11,067	14,307	17,888	22,291	25,704
96	N/A	N/A	N/A	1,117	1,374	1,911	2,270	4,019	4,456	5,855	7,472	9,670	12,648	15,844	17,740
144	N/A	N/A	N/A	N/A	1,303	1,605	2,162	3,466	3,864	5,122	6,639	8,431	11,188	14,502	16,322

## **Riser-Rated Distribution Cables**

Fiber	18x12x12 FT	22x12x12 FT	30x12x12 FT	35x16.5x18 FT	36x22x29.75 FT	42x24x24 FT	42x22x29.75 FT	48x22x32.5 FT	54x24x28 FT	60x30x32 FT	66x30x32 FT	72x36x36 FT	78x36x36 FT	84x40x40 FT	88x40x40 FT
4	1,282	3,919	11,497	22,765	29,707	40,164	52,650	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
6	1,225	3,770	10,744	20,662	27,200	36,267	47,658	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
8	N/A	2,941	8,514	16,473	21,818	29,230	39,126	64,770	N/A						
12	N/A	2,857	7,976	15,441	19,934	27,123	35,248	58,135	N/A						
18	N/A	N/A	1,791	3,322	4,588	5,843	7,878	12,916	14,646	19,453	25,434	32,346	40,432	N/A	N/A
24	N/A	N/A	1,329	2,774	3,810	4,909	6,298	10,704	11,514	15,543	20,932	26,521	32,579	41,707	N/A
36	N/A	N/A	1,338	2,529	3,307	4,391	6,211	9,912	11,586	15,357	19,768	25,111	31,036	39,882	N/A
48	N/A	N/A	1,123	2,125	2,986	3,679	4,709	7,974	9,005	11,888	15,795	20,332	25,701	33,087	37,217
60	N/A	N/A	N/A	1,692	2,366	3,035	3,919	6,262	7,282	9,536	12,302	15,784	20,524	25,792	29,463
72	N/A	N/A	N/A	1,411	1,854	2,510	3,250	5,407	5,819	7,722	10,234	12,999	16,402	20,568	23,836
96	N/A	N/A	N/A	N/A	1,337	1,658	2,214	3,532	4,345	5,725	7,313	9,491	11,664	14,691	16,524
144	N/A	N/A	N/A	N/A	1,230	1,558	2,050	3,318	3,797	5,043	6,551	8,332	10,367	13,195	14,933

## **LSZH Distribution Cables**

Fiber	18x12x12 FT	22x12x12 FT	30x12x12 FT	35x16.5x18 FT	36x22x29.75 FT	42x24x24 FT	42x22x29.75 FT	48x22x32.5 FT	54x24x28 FT	60x30x32 FT	66x30x32 FT	72x36x36 FT	78x36x36 FT	84x40x40 FT	88x40x40 FT
4	1,282	3,919	11,497	22,765	29,707	40,164	52,650	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
6	1,225	3,770	10,744	20,662	27,200	36,267	47,658	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
8	N/A	2,857	7,976	15,441	19,934	27,123	35,248	58,135	N/A						
12	N/A	2,147	6,100	11,896	16,081	20,920	27,571	46,324	N/A						
18	N/A	N/A	1,384	2,845	3,868	5,003	6,385	10,820	12,337	16,589	21,158	26,779	34,150	44,156	N/A
24	N/A	N/A	1,162	2,408	3,148	4,231	5,437	8,924	10,466	13,975	23,221	28,922	35,467	41,212	N/A
36	N/A	N/A	N/A	1,796	2,509	3,172	4,582	7,101	8,036	10,691	14,401	18,322	22,336	29,119	32,995
48	N/A	N/A	N/A	1,450	1,934	2,561	3,375	6,073	6,520	8,594	11,227	14,486	19,043	23,636	27,128
60	N/A	N/A	N/A	1,141	1,776	2,088	2,769	4,669	5,170	6,910	9,308	11,613	14,822	18,749	20,805
72	N/A	N/A	N/A	N/A	1,335	1,654	2,208	3,921	4,328	5,874	7,500	9,459	11,621	14,639	17,404

# Reel Weights (lbs.)

	22x12x12 FT					42x22x29.75 FT			60x30x32 FT			78x36x36 FT		88x40x40 FT
8.5	12	18	70	66	109	102	176	370	433	506	627	758	913	958

# Fiber Optic Packaging & Shipping

# **Shipping Information**

# Riser, Plenum and LSZH\* Simplex Cables

Fiber	Size	18x12x12 FT	22x12x12 FT	30x12x12 FT	35x16.5x18 FT	36x22x29.75 FT	
1	1.6	11,536	40,055	N/A	N/A	N/A	
1	1.8	8,716	28,760	85,909	N/A	N/A	
1	2.0	6,616	22,324	65,521	N/A	N/A	
1	2.5	4,492	14,608	42,380	81,529	N/A	
1	2.9	3,707	11,961	34,572	66,609	87,629	

<sup>\*</sup> LSZH is only for the 2.5 and 2.9 cables.

# Riser, Plenum and LSZH\* Zipcord Cables

Fiber	Size	18x12x12 FT	22x12x12 FT	30x12x12 FT	35x16.5x18 FT	36x22x29.75 FT	
2	1.6	5,307	18,425	53,430	N/A	N/A	
2	1.8	4,078	13,455	40,192	77,467	N/A	
2	2.5	2,246	7,304	21,190	40,765	53,354	
2	2.9	1,768	5,706	16,493	31,874	41,867	

<sup>\*</sup> LSZH is only for the 2.5 and 2.9 cables.

## Riser, Plenum and LSZH\* Duplex Cables

Fiber	Size	18x12x12 FT	22x12x12 FT	30x12x12 FT	35x16.5x18 FT	36x22x29.75 FT	42x24x24 FT	42x22x29.75 FT
2	2.5	1,406	4,898	13,887	27,045	35,483	47,495	N/A
2	2.9	1,087	3,793	10,698	20,978	27,347	36,822	48,269

<sup>\*</sup> LSZH is only for the 2.5 the cable

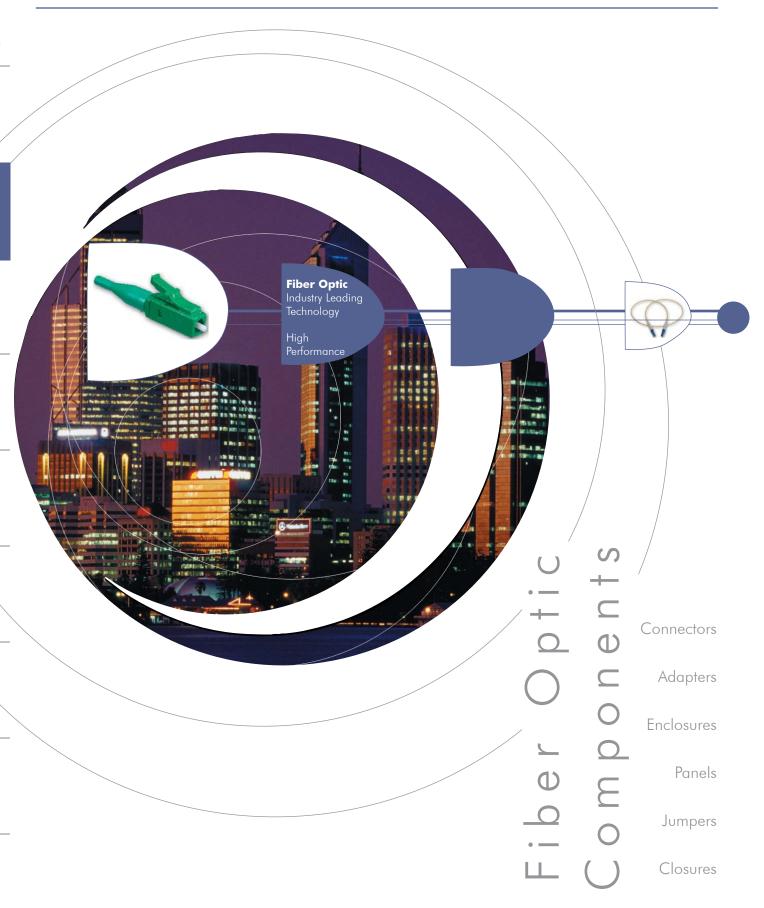
## Riser, Plenum and LSZH\* Interconnect Cables

Fiber	Size	18x12x12 FT	22x12x12 FT	30x12x12 FT	35x16.5x18 FT	36x22x29.75 FT	42x24x24 FT	42x22x29.75 FT
2	2.9	R & P	3,707	11,961	34,572	66,609	N/A	N/A
2	SD	P & LS	1,891	6,597	18,605	36,483	47,498	N/A
2	SD	R	1,781	5,551	16,311	31,966	41,784	56,360

All reels calculated using 2" flange clearance

# Reel Weights (lbs.)

18x12x12	22x12x12	30x12x12	35x16.5x18	36x22x29.75	42x24x24	42x22x29.75
FT	FT	FT	FT	FT	FT	FT
8.5	12	18	70	66	109	





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# **Components**



Several connector and adapter types are available, including LC, SC and STE (ST pull proof). The LC is a small form-factor connector with excellent optical and mechanical performance.

SC connectors and adapters are push-pull style, while the STE represents the latest in the pull-proof ST type connector.

### Applications:

- Telecommunications networks
- Local area networks
- Data processing networks
- Cable television
- Premises distribution
- Wave Division Multiplexing (coarse & dense) DWDM
- Security cameras
- FTTX (Fiber-to-the-desk, home, etc.)



# Connector Part Numbering

Code	Description		
MFC	Multimode fiber connector		
SFC	Singlemode fiber connector		
MDC	MM duplex		
SDC	SM duplex		
SCU	Ultra SC connector(s)		
STU	Ultra ST connector(s)		
FCU	Ultra FC connector(s)		
LCU	Ultra LC connector(s)		
STE	Enhanced ST connector(s)		
LCA	Angled LC connector(s)		
09	0.9mm (900 micron) OD		
16	1.6mm OD		



# **Choosing Connectivity Products**

Optical connection management presents unique challenges depending on the location and conditions of the network. Consider the following points when planning an inside plant connectivity configuration:

- On-frame or off-frame splicing
- Termination requirements: initial and growth potential
- Termination configuration: cross-connect or interconnect
- Floor space
- Bay arrangement
- Lineup growth sequence
- Connector/adapter type
- Geographic location
- Environmental factors
- Signal type from active equipment: DWDM, 40G TDM, etc.

#### Considerations

#### On-Frame vs. Off-Frame Splicing

Use on-frame splicing in the following typical situations:

- Low number of cables entering facility (with low fiber counts)
- Low number of fibers entering facility
- Limited installation space on wall, no cable vault

Use Off-Frame splicing in the following typical situations:

- High number of outside plant cables
- High number of fibers
- High-density solution with cable vault of space for wall installation

#### Cross-Connect vs. Interconnect

Use interconnect in the following typical situations:

- No reconfiguration anticipated
- · Low number of fibers entering facility
- Tight loss budget
- Limited space (e.g.hut, collocation closet, etc.)
- Low first-cost requirement

Use cross-connect in the following typical situations:

- Reconfiguration anticipated
- · High number of fibers entering facility
- · Long distances between frame and fiber optic transmission equipment
- Ample working space
- Higher initial installation cost allowed

# **LC Connectors**



# Small Form-Factor Connectors with Excellent Optical and Mechanical Performance

#### Features:

- Small Form Factor is half the size of standard connectors
- RJ-style push-pull housing
- One-piece design
- Polarized
- Pull-proof for jumper
- pc finish
- Anti-snag latch for jumper
- Minimal polish
- Standards compliant

#### Benefits:

- Doubles density
- Disengages easily in dense spaces
- Helps assure high repeatability
- Maintains transmit/receive direction
- Maintains optical contact
- Helps minimize transmission problems
- Improves durability and reduces cross-connect rearrangement effort
- Reduces installation time for field-mountable connectors

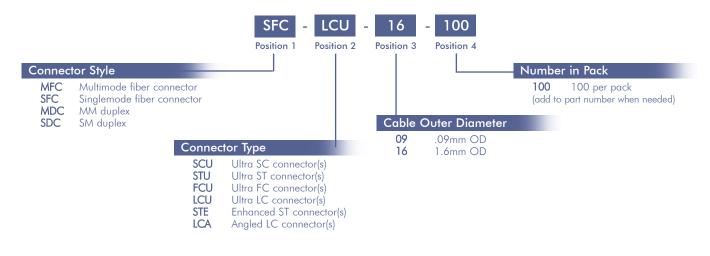








Catalog Number	Description
MFC-LCU-09	MM, LC Ultra, 0.9mm
SFC-LCU-09	SM, LC Ultra, 0.9mm
MFC-LCU-09-100	MM, LC Ultra, 0.9mm, 100 pack
SFC-LCU-09-100	SM, LC Ultra, 0.9mm, 100 pack
MFC-LCU-16	MM, LC Ultra, 1.6mm
SFC-LCU-16	SM, LC Ultra, 1.6mm
MFC-LCU-16-100	MM, LC Ultra, 1.6mm, 100 pack
SFC-LCU-16-100	SM, LC Ultra, 1.6mm, 100 pack
MDC-LCU-16	MM Duplex, LC Ultra, 1.6mm
SDC-LCU-16	SM Duplex, LC Ultra, 1.6mm
MDC-LCU-16-100	MM Duplex, LC Ultra, 1.6mm, 100 pack
SDC-LCU-16-100	SM Duplex, LC Ultra, 1.6mm, 100 pack
SFC-LCA-16-100	SM, LC Angled, 1.6mm, 100 pack





# Small Form-Factor Connectors with Excellent Optical and Mechanical Performance

# LC Angled Specifications

**LC Connectors** 

Specification	Value	
Ferrule Diameter	125 μm	
Cable OD	900 micron, 1.6 and 2.0mm	
Insertion Loss $\mu, \sigma$	0.08dB, 0.06dB	
Return Loss	minimum 70dB	
Mating Durability (insertion loss change after 500 reconnects)	<0.2dB	
Temperature Stability	-40 to 75° C	
Insertion Loss Change	<0.3dB	
Tip Material	Zirconia	

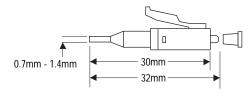
#### LC Field Mountable Connector Specifications

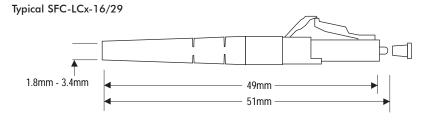
Specification	Value
Ferrule Diameter	125 μm
Cable OD	0.9mm
Insertion Loss $\mu$ , $\sigma'$	
Singlemode	0.2dB, 0.06dB
Multimode	0.2dB, 0.01dB
Return Loss	55dB
Mating Durability (insertion loss change after 500 reconnects)	<0.2dB
Temperature Stability	-40 to 75° C
Insertion Loss Change	<0.3dB
Tip Material	Zirconia

<sup>1</sup>Complete connection concatenated statistics, 8.3/125µm fiber, 62.5/125µm fiber, dry connection

- This data was obtained through laboratory testing and simulated field environments.
- The performance is representative of all CommScope multimode and singlemode LC connectors.
- The performance for field turning is 0.1dB

#### Typical SFC-LCx-09





# **SC Connectors**



# Push-Pull Style Connectors with Excellent Optical and Mechanical Performance

#### Features:

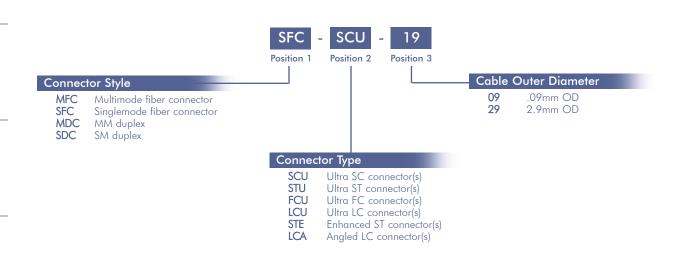
- Snap-in connector design
- Rugged and adaptable compared to other connectors
- Stable performance
- Full-proof design
- · Pull-proof for jumper

#### Benefits:

- Reduces assembly time and simplifies training
- Easy-to-install adapters and connectors
- Can be used in multiple applications including under a desk
- Reduces maintenance and creates consistent optical performance
- Maintains optical contact under load, and helps prevent accidental disconnects
- Helps minimize transmission problems
- Optimizes optical contact



Catalog Number	Description
MFC-SCU-29	MM, SC Ultra, 2.9mm
MFC-SCU-09	MM, SC Ultra, 0.9mm
SFC-SCU-29	SM, SC Ultra, 2.9mm
SFC-SCU-09	SM, SC Ultra, 0.9mm
FOT-KIT-SC-CLP	Package of 5 clips



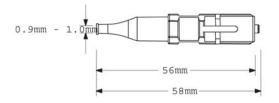
# SC Specifications

Fiber Type	Multimode	Multimode	Singlemode	Singlemode
Catalog Number	MFC-SCU-09	MFC-SCU-29	SFC-SCU-09	SFC-SCU-29
Insertion Loss $\mu, \sigma$	0.2dB, 0.2	0.2dB, 0.2	0.2dB, 0.2	0.2dB, 0.2
Fiber OD, nom	125 μm	125 μm	125 μm	125 μm
Cable OD, nom	0.9mm	2.9mm, 1.6mm*	0.9mm	2.9mm, 1.6mm*
Mating Durability	<0.2dB	<0.2dB	<0.2dB	<0.2dB
(Insertion Loss Change for 500 Reconnects)				
Proof Test, Axial, nom	2lbs	30lbs, 20lbs	2lbs	30lbs, 20lbs
Temperature Stability (-40° C to 85° C)				
Insertion Loss Stability	<0.3dB	<0.3dB	<0.3dB	<0.3dB
Mount Time - Epoxy	8 min. avg.	8 min. avg.	8 min. avg.	8 min. avg.
Mount Time - EZ	5 min. avg.	5 min. avg.	5 min. avg.	5 min. avg.

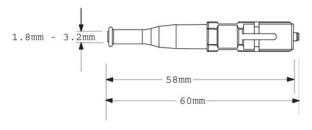
<sup>\*</sup> Note: In order to install the SC connector on 1.6mm cordage, you must order the following kit: FTO-KIT-SC-16. The 2A1 clip catalog number FOT-KIT-SC-CLP is needed to connect two simplex connectors in a duplex configuration. See Connector Kits on Page 88.

Push-Pull Style Connectors with Excellent Optical and Mechanical Performance

#### Typical xFC-SCx-09



#### Typical xFC-SCx-29



# **ST Connectors**



# Pull-Proof Syle Connectors with Excellent Optical and Mechanical Performance

#### Features:

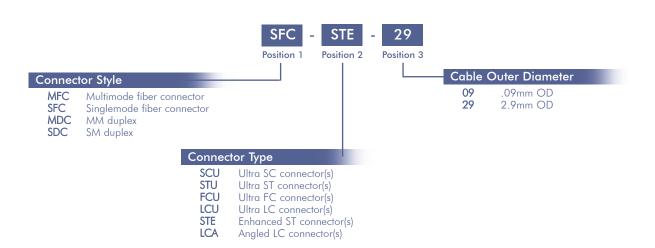
- Twist-Lock connector design
- Stable performance
- STE is pull-proof for jumpers
- Metal housing

#### Benefits:

- Easy-to-install connectors
- Maintains optical contact under load, and helps prevent accidental disconnects
- Multiple applications



Catalog Number	Description
MFC-STE-29	MM, ST++ Version, 2.9mm
MFC-STE-09	MM, ST++ Version, 0.9mm
SFC-STE-29	SM, ST++ Version, 2.9mm
SFC-STE-09	SM, ST++ Version, 0.9mm
MFC-STU-09	MM, STUltra Version, 0.9mm
SFC-STU-09	SM, STUltra Version, 0.9mm



# **ST Connectors**

# Pull-Proof Syle Connectors with Excellent Optical and Mechanical Performance

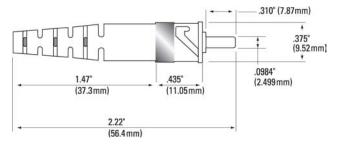
# ST Multimode Specifications

Catalog Number		MFC-STE-09		MFC-STE-09
Loss* $\mu$ , $\sigma$		0.3dB, 0.2dB		0.3dB, 0.2dB
Fiber OD nom		125 μm		125 μm
Cable OD, Buffer OD		2.9mm, 0.9mm		0.9mm
Loss repeat (500 reconnects)		<0.3dB		<0.3dB
Axial Load (minimum)		15lbs (6.8kg)		2 lbs (0.9kg
		Cable (3.0mm)		Buffer (0.9mm)
Temperature Stability (-40°C to 75°C)		<0.3dB increase		<0.3dB increase
Materials	Tip		Zirconia	
	Сар		Brass, Ni-Plated	
	Body		Zinc, Ni-Plated	
Mount time - EZ	One		5 minutes	
Mount time - Epoxy	Twelve		8 minutes avg.	

# ST Singlemode Specifications

Catalog Number		MFC-STE-09		MFC-STE-09
Loss μ, σ		0.3dB, 0.2dB		0.3dB, 0.2dB
Return Loss (average, minimum)		44dB, 40 dB		44dB, 40 dB
Fiber OD nom		125 μm		125 μm
Cable OD, Buffer OD		2.9mm, 0.9mm		0.9mm
Loss repeat (200 reconnects)		<0.3dB		<0.3dB
Axial Load (minimum)		15lbs (6.8kg)		2 lbs (0.9kg
		Cable (2.9mm)		Buffer (0.9mm)
Temperature Stability (-40°C to 75°C)		<0.3dB increase		<0.3dB increase
		40dB min. return loss		
Materials	Tip		Zirconia	
	Сар		Brass, Ni-Plated	
	Body		Zinc, Ni-Plated	
Mount time - EZ	One		5 minutes	
Mount time - Epoxy	One		18 minutes	
	Twelve		8 minutes avg.	

## Typical xFC-STE



**Connector Kits** 

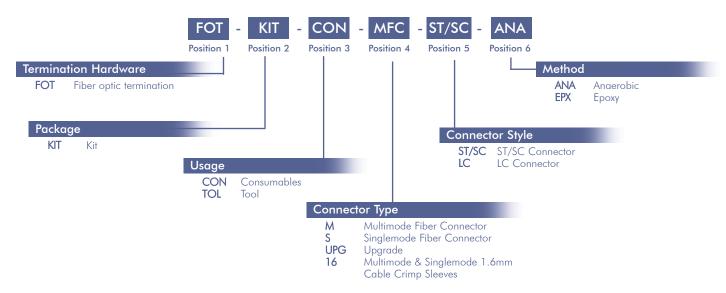


The tools and consumables can be ordered to assemble or mount CommScope connectors. The tool kits and consumable kits provide termination tools consumable for epoxy or anaerobic termination methods.



FOT-KIT-TOL-ST/SC-ANA

Catalog Number	Description
FOT-KIT-TOL-SC/ST/LC-ANA	Fiber Optic Termination Tool Kit, Anaerobic
FOT-KIT-TOL-SC/ST-EPX	Fiber Optic Termination Tool Kit, for using Epoxy
FOT-KIT-TOL-LC-UPG	Fiber Optic Termination Tool Kit, LC Anaerobic, including crimp tool for jumper assembly
FOT-KIT-CON-M-LC-ANA	Fiber Optic Consumable Kit, Multimode LC Anaerobic
FOT-KIT-CON-S-LC-ANA	Fiber Optic Consumable Kit, Singlemode LC Anaerobic
FOT-KIT-CON-M-ST/SC-ANA	Fiber Optic Consumable Kit, Multimode ST/SC Anaerobic
FOT-KIT-CON-S-ST/SC-ANA	Fiber Optic Consumable Kit, Singlemode ST/SC Anaerobic
FOT-KIT-CON-16-ST	Fiber Optic Kit to mount ST on 1.6 mm cable, 100 inserts
FOT-KIT-CON-16-SC	Fiber Optic Kit to mount SC on 1.6 mm cable, 100 inserts
FOT-KIT-CON-M-LC-EPX	Fiber Optic Consumable Kit, Multimode LC, for using Epoxy
FOT-KIT-CON-S-LC-EPX	Fiber Optic Consumable Kit, Singlemode LC, for using Epoxy
FOT-KIT-CON-M-ST/SC-EPX	Fiber Optic Consumable Kit, Multimode ST/SC, for using Epoxy
FOT-KIT-CON-S-ST/SC-EPX	Fiber Optic Consumable Kit, Singlemode ST/SC, for using Epoxy



# **Adapters**

Adapters provide a means to mate connectors in a fixed panel. CommScope's adapters are available in various types, including LC, SC and ST. They are packaged individually or in bulk quantities of 100.

#### Features:

- Easy snap-in adapter design
- Color coded for multimode (beige), singlemode (blue) and angled (green)

#### Benefits:

- Easy to snap adapters into panels making assembly faster and increases ease of installation and rearrangements
- Color coding prevents mismatch of fiber or connector types

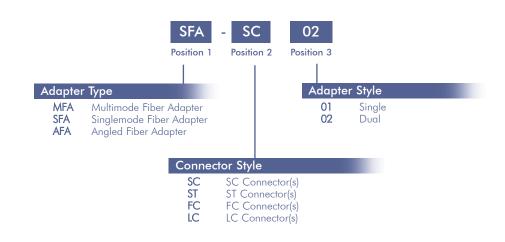






Catalog Number & Description

Catalog Number	Description
MFA-ST01	MM, ST Single
SFA-ST01	SM, ST Single
SFA-SC01	SM, SC Single
MFA-SC02	MM, SC Duplex
SFA-SC02	SM, SC Duplex
MFA-LC01	MM, LC Single
SFA-LC01	SM, LC Single
MFA-LC02	MM, LC Duplex
SFA-LC02	SM, LC Duplex
MFA-ST02-SC02	MM, ST Duplex, SC Duplex
AFA-LC01	SM, LC Angled Single



Packaging

Glossary/Index

# **LC Adapters**

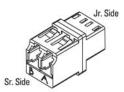


# LC Adapter Materials

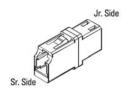
Connector Part	Material	UL 94 Rating	Oxygen Index
Adapter Housing	Engineering Plastic	V-0	50
SM Sleeve	Zirconia	-	-
MM Sleeve	Metal	-	-

#### Typical xFA-LCxx

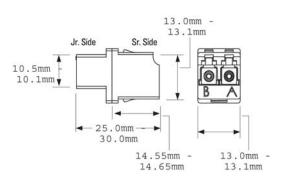
2.1A-LC DUPLEX ADAPTER



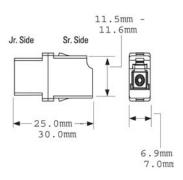
2.1B-LC SIMPLEX ADAPTER



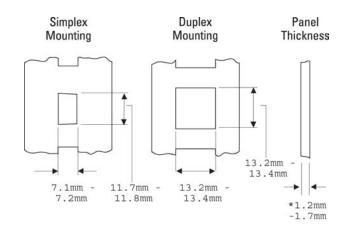
#### 2.2A-Lc DUPLEX ADAPTER Footprint



#### 2.1B-Lc SIMPLEX ADAPTER Footprint



#### 2.3-PANEL CUTOUT DIMENSIONS FOR MOUNTING LC ADAPTERS



\*Panel thickness "E" applies after surface preparation i.e. painting etc.

#### SC Adapter Materials

Connector Part	Material	UL 94 Rating	Oxygen Index
Adapter Housing	Engineering Parts	V-0	28-35
Latch Insert	Engineering Plastics	V-0	46.5
Retaining Clip	Stainless Steel	-	-
SM Sleeve	Zirconia	-	-
MM Sleeve	Phosphor Bronze	-	-

#### Typical xFA-SCxx

#### 2.1-SC SIMPLEX & DUPLEX ADAPTER : ISO VIEW

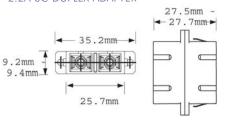
#### 2.1A-SC DUPLEX ADAPTER

#### 2.1B-SC SIMPLEX ADAPTER

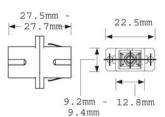




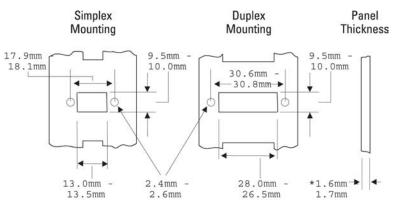
# 2.2-SC ADAPTER FOOTPRINT DIMENSIONS 2.2A-SC DUPLEX ADAPTER



#### 2.2B-SC SIMPLEX ADAPTER



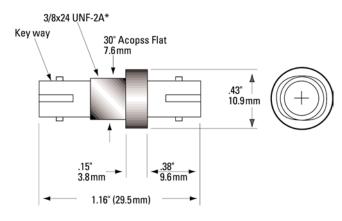
## 2.3-PANEL CUTOUT DIMENSIONS FOR MOUNTING SC ADAPTERS



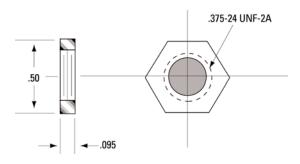
<sup>\*</sup>Panel thickness "G" applies after surface preparation i.e. painting etc.



# Typical xFA-STxx BAYONET/THREADED



#### RETAINER NUT



# **Entrance Facility**

A CommScope Building Entrance provides transition from outside plant cable to building cable. Various splice and cable capacities are available.



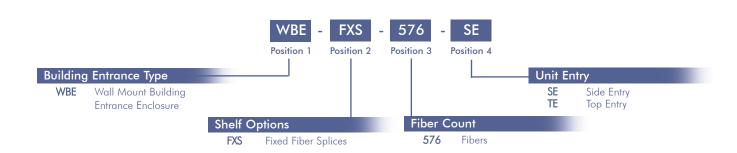


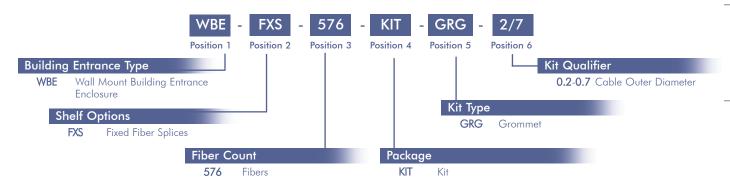
WBE-FXC-024

WBE-FXS-576-xx

Catalog Number	Description	
WBE-FXS-576-SE*	576 Splice Shelf, side entry	
WBE-FXS-576-TE*	576 Splice Shelf, top entry	
SPT-FXS-SFS	Single Fusion Splice Tray	
WBE-FXS-576-KIT-GRG-0.2/0.7	Cable Grommet Kit (0.236" - 0.708" Cable OD)	
WBE-FXC-048*	48 Splice/Termination Shelf	
WBE-FXC-024*	24 Splice/Termination Shelf	
WBE-FXS-SFS-BAS	Single Fusion Splice Tray for 12-48 fiber shelves	

<sup>\*</sup>Splice organizers and grommets ordered separately.





# Fiber Enclosures Rack Mounted



CommScope offers several fiber management shelves, including splice, jumper management, termination and combination shelves. CommScope also offers shelves with preinstalled adapters.



RFE-SLC-024-SFA-SC06

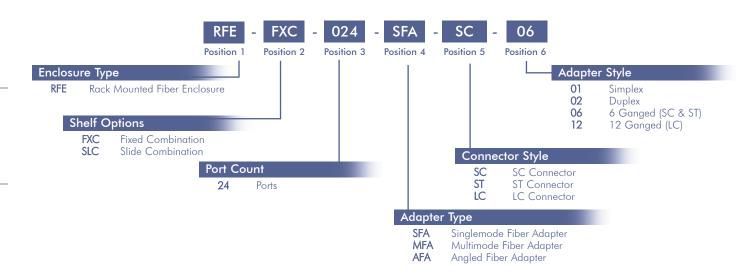


RFE-FXD-048-MFA-LC12

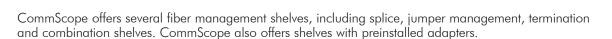
Catalog Number	Terminations	Splices	Dimensions	Description
RFE-FXD-048-MFA-LC12	48 Multimode LC	32 fusion	1.72″h x 17″w x 8″d	One unit shelf
RFE-FXC-024-MFA-SC06	24 Multimode SC		1U rack space	for termination
RFE-FXC-024-MFA-ST06	24 Multimode ST	24		& splicing,
RFE-FXD-048-SFA-LC12	48 Singlemode LC	mechanical		panels & adapters
RFE-FXC-024-SFA-SC06	24 Singlemode SC			equipped
RFE-FXC-024-SFA-ST06	24 Singlemode ST			
RFE-SLD-048-MFA-LC12	48 Multimode LC	32 fusion	1.72″h x 17″w x 8″d	One unit shelf
RFE-SLC-024-MFA-SC06	24 Multimode SC		1U rack space	for termination
RFE-SLC-024-MFA-ST06	24 Multimode ST	24		& splicing,
RFE-SLD-048-SFA-LC12	48 Singlemode LC	mechanical		panels & adapters
RFE-SLC-024-SFA-SC06	24 Singlemode SC	]		equipped
RFE-SLC-024-SFA-ST06	24 Singlemode ST			

Troughs	Description
RFE-FXD-WM19	RFE jumper trough 19" rack
RFE-SLD-WM17	RFE jumper trough 19" rack
RFE-FXD-WM23	RFE jumper trough 23" rack

Extension Brackets	Description
RFE-BKT-23	RFE-SLD Bracket 23"
RFE-BKT-ETSI	RFE-SLD Bracket ETSI



# Fiber Enclosures Rack Mounted







RFE-FXD-072-BK

Rack Mounted Catalog Number	Terminations	Splices	Dimensions	Description
RFE-FXD-072-BK	144 LC		7″h X 17″w X 11″d	7" shelf for 72
	72 SC	0	4U rack space	fiber termination,
	72 ST			panels ordered separately
RFE-FXD-144/5U	288 LC		9″h X 17″w X 11″d	9" shelf for 144
	144 SC	0	5U rack space	fiber termination,
	144 ST			panels ordered separately

<sup>\*</sup>See page 96 for ordering adapter panels. Ordered seperately

Splice Shelves Catalog Number	Terminations	Splices	Dimensions	Description	
*RFE-FXS-072	Х	144 fusion	5″h X 17″w X 11″d	5" splice for 144	
			3U rack space	single fusion or 432 MF	

<sup>\*</sup>Splice trays ordered seperately.

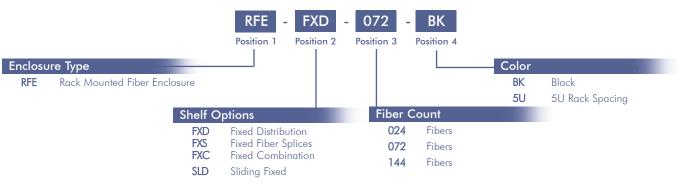
Combination Shelves Catalog Number	Terminations	Splices	Dimensions	Description
*RFE-FXC-024	24	48	5″h X 17″w X 11″d	rack mount, fixed
			3U rack space	combination, 24 fiber count
*RFE-FXC-072	72	144	12"h X 17"w X 11"d	rack mount, fixed
			7U rack space	combination, 72 fiber count
*RFE-FXC-144	144	288	21"h X 17"w X 11"d	rack mount, fixed
			12U rack space	combination, 144 fiber count

<sup>\*</sup>See page 96 for ordering adapter panels. Splice trays and panels ordered seperately.

Front Access Catalog Number	Terminations	Splices	Dimensions	Description
*RFE-SLD-072	72	0	7″h X 17″w X 11″d	7" shelf for 72
			4U rack space	fiber termination

<sup>\*</sup>See page 96 for ordering adapter panels ordered seperately.

Splice Tray Catalog Number	Terminations	Splices	Dimensions	Description
SPT-FXS-SFS	0	48		Splice Tray



# **Panels Rack Mounted**



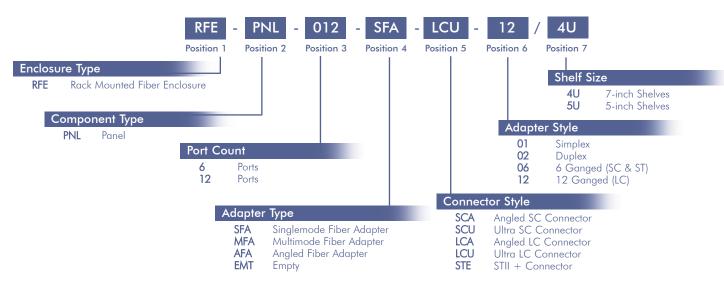


RFE-PNL-012-MFA-LCS-12

9	
Catalog Number	Description
RFE-PNL-012-MFA-LCU-12/4U	7" Adapter Panels equipped with Ganged Adptr
RFE-PNL-006-MFA-SCU-06/4U	7" Adapter Panels equipped with Ganged Adptr
RFE-PNL-006-MFA-STE-06/4U	7" Adapter Panels equipped with Ganged Adptr
RFE-PNL-012-SFA-LCU-12/4U	7" Adapter Panels equipped with Ganged Adptr
RFE-PNL-006-SFA-SCU-06/4U	7" Adapter Panels equipped with Ganged Adptr
RFE-PNL-006-SFA-STE-06/4U	7" Adapter Panels equipped with Ganged Adptr
RFE-PNL-006-MFA-STU-01/4U	7"Adapter Panels equipped with 6 MM ST indiv adptr
RFE-PNL-006-SFA-STU-01/4U	7"Adapter Panels equipped with 6 SM ST indiv adptr
RFE-PNL-006-SFA-SCU-01/4U	7"Adapter Panels equipped with 6 SM SC indiv adptr
RFE-PNL-012-SFA-LCU-02/4U	7"Adapter Panels equipped with 6 SM LC indiv adptr
RFE-PNL-006-SFA-SCU/01/4U	7" Adapter Panels equipped with SC adapters
RFE-PNL-003-SCU02/4U	7" Adapter Panels, duplex SC ports without adapters
RFE-PNL-4U-BLANK	7" Adapter Panels, blank
RFE-PNL-012-AFA-LCA01/4U	7" Adapter Panels equipped with angled LC adapters
RFE-PNL-006-AFA-SCA01/4U	7" Adapter Panels equipped with angled SC adapters
RFE-PNL-012-EMT-LCU02/4U	7" Adapter Panels without adapters
RFE-PNL-006-EMT-FCU01/4U	7" Adapter Panels without adapters
RFE-PNL-012-SFA-SCU/01/5U	9" Adapter Panels equipped with angled SC adapters
RFE-PNL-012-EMT-LCU02/5U	9" Adapter Panels without adapters
RFE-PNL-5U-BLANK	9" Adapter Panels blank
RFE-PNL-012-EMT-SCU02/5U	9" Adapter Panels without adapters
RFE-PNL-012-EMT-SCU01/5U	9" Adapter Panels without adapters
*Nood 12 papels to fully load the EYD	or EVC analogues

<sup>\*</sup>Need 12 panels to fully load the FXD or FXC enclosures.

<sup>\*\*</sup>See page 95 for ordering Rack Mounted Fiber Enclosures.







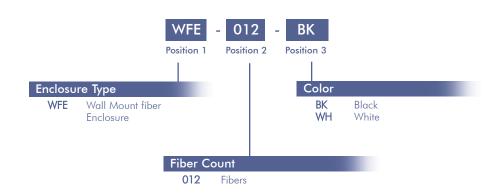
WFE-012-BK



WFE-024-BK

Rack Mounted Catalog Number	Terminations	Splices	Dimensions	Description
*WFE-012-BK	24 LC	Up to 12	8.75"h x 7.5"w x 3"d	Wall or frame mount,
*WFE-012-WH	12 SC	mechanical		top and bottom
	12 ST	or fusion		cable entry
*WFE-024-BK	48 LC	Up to 24	8.75"h x 7.5"w x 4"d	Wall or frame mount,
*WFE-024-WH	24 SC	mechanical		top and bottom
	24 ST	or fusion		cable entry

<sup>\*</sup>Panels sold separately. See page 98.



# **Panels Wall Mounted**



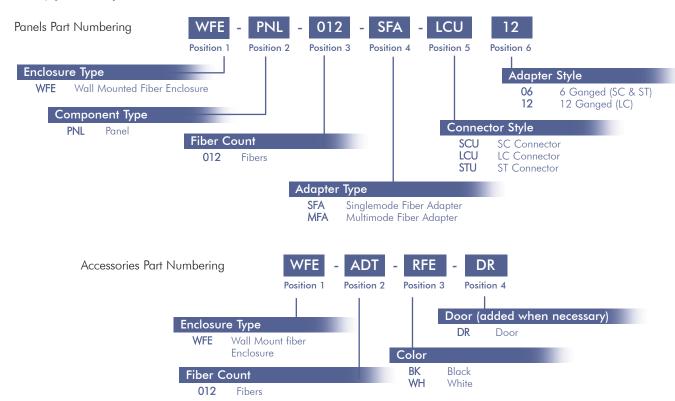
Panels Catalog Number	Description
WFE-PNL-012-MFA-LCU12	PNL equipped with Ganged Adptr
WFE-PNL-006-MFA-SCU06	PNL equipped with Ganged Adptr
WFE-PNL-006-MFA-STU06	PNL equipped with Ganged Adptr
WFE-PNL-012-SFA-LCU12	PNL equipped with Ganged Adptr
WFE-PNL-006-SFA-SCU06	PNL equipped with Ganged Adptr
WFE-PNL-006-SFA-STU06	PNL equipped with Ganged Adptr

<sup>\*</sup>Need 2 panels for WFE-012 and need 4 panels for WFE-024 to fully load.

Splice Kits (WFE) Catalog Number	Description
WFE-FXS-MES-BAS	Mechanical Splice Kit Base Unit, has 1 Sup Tray
WFE-FXS-MES-ORG	Supplemental tray & Organizer
WFE-FXS-MES-HLD	Mechanical Organizer (12 mechanicals) part of Sup Tray
	(pack of 10)
WFE-FXS-SFS-BAS	SINGLE Splice Kit Base Unit, has 1 Sup Tray
WFE-FXS-SFS-ORG	Supplemental tray & Organizer
WFE-FXS-SFS-HLD	Single Fusion Organizer (16 fusion) part of Sup Tray
	(pack of 10)
WFE-FXS-MFS-BAS	Mass Splice Kit Base Unit, has 1 Sup Tray
WFE-FXS-MFS-ORG	Supplemental tray & Organizer
WFE-FXS-MFS-HLD	Mass Fusion Organizer (6 Mass fusion) fits Sup Tray (pack of 12)

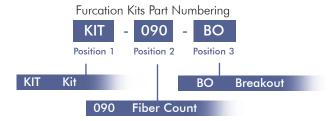
Fiber Enclosure Accessories Catalog Number	Description
WFE-ADT-RFE	WFE Frame Mounting Panel
WFE-HLD-RBO	WFE Mini fanout holder for inside box
WFE-WMT	WFE External fiber routing protection from cable into
	2 adjacent columns
WFE-WMV-2D	WFE Vertical Jumper Trough
WFE-WMH-4D	WFE Horizontal Jumper Trough
WFE-WMV-3D-DR	WFE Vertical trough with hinge face and plastic latch
WFE-WMV-3D	WFE Vertical Jumper Trough

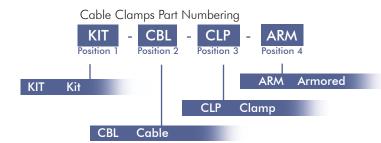
<sup>\*</sup>See page 97 for ordering Wall Mounted Fiber Enclosures.



Furcation Kits Catalog Number	Description
KIT-090-BO	Buffer tubing and cable prep materials for direct termination
KIT-090-006	6 fiber buffer tubing furcation kit
KIT-090-012	12 fiber buffer furcation tubing

Cable Clamps Catalog Number	Description
KIT-CBL-CLP-ARM	Clamp hardware with grounding for metallic cable
KIT-CBL-CLP	Clamp hardware for non-metallic cable





### **Combination Enclosures**



The enclosure facilitates easy and fast network builds by providing a convenient means for quick splicing and terminating. Includes:

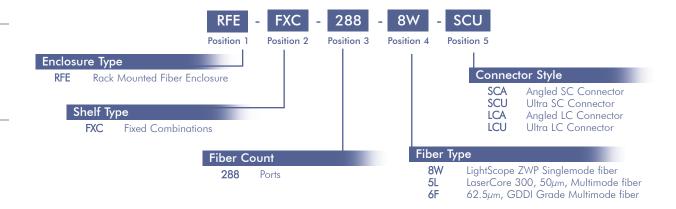
- Adapters
- Panels
- Ribbon breakout
- Assemblies
- Preterminated and pretested shelves
- On-Frame splicing
- Fits 19", 23" and ETSI frames
- Splice shelves



RFE-FXC-288-RBO-12LB09-8W-LCU

#### Catalog Number & Description

Catalog Number	Description
RFE-FXC-288-RBO-8W-SCU	Rackmount, fixed combination, 288 Ribbon
	Breakout, 12 ct. 900µm loose buffered fiber, sm, SC
RFE-FXC-288-RBO-6F-SCU	Rackmount, fixed combination, 288 Ribbon
	Breakout, 12 ct. 900µm loose buffered fiber, Mm, SC
RFE-FXC-288-RBO-8W-LCU	Rackmount, fixed combination, 288 Ribbon
	Breakout, 12 ct. 900µm loose buffered fiber, sm, LC
RFE-FXC-288-RBO-6F-LCU	Rackmount, fixed combination, 288 Ribbon
	Breakout, 12 ct. 900µm loose buffered fiber, Mm, LC



#### **Jumpers**

CommScope offers an extensive line of jumpers, including LightScope ZWP, LaserCore, and FDDI grade fiber types. They are available in a wide variety of connector types, cordage cable designs and jumper lengths. CommScope's fiber optic jumpers connect the patch panel/shelf to the equipment bay. Our quality cable and connector components, combined with precision connectorization assembly methods, provide the excellent transmission characteristics required to support state-of-th-art application requirements.



RFJ-01ZC16-8W-LCU-01-LCU



RFJ-01ZC16-8W-SCU-01-SCU

LaserCore 300, 50µm, Multimode fiber

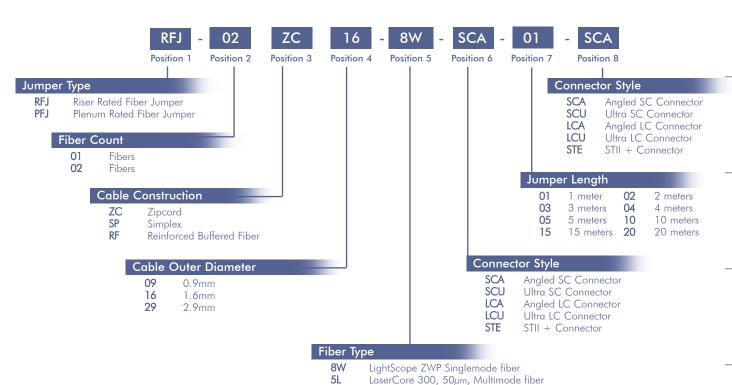
62.5μm, GDDI Grade Multimode fiber

#### Features:

- High quality factory termination
- Variety of fiber types and connector types
- GR-326 compliant
- 100% termination tested with test data included
- Designed for multiple applications

#### Benefits:

- Lowest possible loss providing improved system performance
- Maintains optical contact under load (pullproof), and helps prevent accidental disconnects
- · Reduces maintenance and ensures consistent optical performance



6F

# Multimode Lasercore (5L)

**Jumpers** 

Catalog Number	Length	# Fibers	Connector Type	Cordage
RFJ-02ZC16-5L-STE-01-STE	1M	2	ST-ST	1.6
RFJ-02ZC16-5L-STE-02-STE	2M	2	ST-ST	1.6
RFJ-02ZC16-5L-STE-03-STE	3M	2	ST-ST	1.6
RFJ-02ZC16-5L-STE-04-STE	4M	2	ST-ST	1.6
RFJ-02ZC16-5L-STE-05-STE	5M	2	ST-ST	1.6
RFJ-02ZC16-5L-STE-10-STE	10M	2	ST-ST	1.6
RFJ-02ZC16-5L-STE-15-STE	15M	2	ST-ST	1.6
RFJ-02ZC16-5L-STE-20-STE	20M	2	ST-ST	1.6
RFJ-02ZC16-5L-LCU-01-STE	1M	2	LC-ST	1.6
RFJ-02ZC16-5L-LCU-02-STE	2M	2	LC-ST	1.6
RFJ-02ZC16-5L-LCU-03-STE	3M	2	LC-ST	1.6
RFJ-02ZC16-5L-LCU-04-STE	4M	2	LC-ST	1.6
RFJ-02ZC16-5L-LCU-05-STE	5M	2	LC-ST	1.6
RFJ-02ZC16-5L-LCU-10-STE	10M	2	LC-ST	1.6
RFJ-02ZC16-5L-LCU-15-STE	15M	2	LC-ST	1.6
RFJ-02ZC16-5L-LCU-20-STE	20M	2	LC-ST	1.6
RFJ-02ZC16-5L-LCU-01-LCU	1M	2	LC-LC	1.6
RFJ-02ZC16-5L-LCU-02-LCU	2M	2	LC-LC	1.6
RFJ-02ZC16-5L-LCU-03-LCU	3M	2	LC-LC	1.6
RFJ-02ZC16-5L-LCU-04-LCU	4M	2	LC-LC	1.6
RFJ-02ZC16-5L-LCU-05-LCU	5M	2	LC-LC	1.6
RFJ-02ZC16-5L-LCU-10-LCU	10M	2	LC-LC	1.6
RFJ-02ZC16-5L-LCU-15-LCU	15M	2	LC-LC	1.6
RFJ-02ZC16-5L-LCU-20-LCU	20M	2	LC-LC	1.6
RFJ-02ZC16-5L-LCU-01-SCU	1M	2	LC-SC	1.6
RFJ-02ZC16-5L-LCU-02-SCU	2M	2	LC-SC	1.6
RFJ-02ZC16-5L-LCU-03-SCU	3M	2	LC-SC	1.6
RFJ-02ZC16-5L-LCU-04-SCU	4M	2	LC-SC	1.6
RFJ-02ZC16-5L-LCU-05-SCU	5M	2	LC-SC	1.6
RFJ-02ZC16-5L-LCU-10-SCU	10M	2	LC-SC	1.6
RFJ-02ZC16-5L-LCU-15-SCU	15M	2	LC-SC	1.6
RFJ-02ZC16-5L-LCU-20-SCU	20M	2	LC-SC	1.6
RFJ-02ZC16-5L-SCU-01-SCU	1M	2	SC-SC	1.6
RFJ-02ZC16-5L-SCU-02-SCU	2M	2	SC-SC	1.6
RFJ-02ZC16-5L-SCU-03-SCU	3M	2	SC-SC	1.6
RFJ-02ZC16-5L-SCU-04-SCU	4M	2	SC-SC	1.6
RFJ-02ZC16-5L-SCU-05-SCU	5M	2	SC-SC	1.6
RFJ-02ZC16-5L-SCU-10-SCU	10M	2	SC-SC	1.6
RFJ-02ZC16-5L-SCU-15-SCU	15M	2	SC-SC	1.6
RFJ-02ZC16-5L-SCU-20-SCU	20M	2	SC-SC	1.6

Catalog Number	Length	# Fibers	Connector Type	Cordage
RFJ-02ZC16-5L-SCU-01-STE	1M	2	SC-ST	1.6
RFJ-02ZC16-5L-SCU-02-STE	2M	2	SC-ST	1.6
RFJ-02ZC16-5L-SCU-03-STE	3M	2	SC-ST	1.6
RFJ-02ZC16-5L-SCU-04-STE	4M	2	SC-ST	1.6
RFJ-02ZC16-5L-SCU-05-STE	5M	2	SC-ST	1.6
RFJ-02ZC16-5L-SCU-10-STE	10M	2	SC-ST	1.6
RFJ-02ZC16-5L-SCU-15-STE	15M	2	SC-ST	1.6
RFJ-02ZC16-5L-SCU-20-STE	20M	2	SC-ST	1.6
RFJ-02ZC16-5L-LCU-01-MJU	1M	2	LC-MJ	1.6
RFJ-02ZC16-5L-LCU-02-MJU	2M	2	LC-MJ	1.6
RFJ-02ZC16-5L-LCU-03-MJU	3M	2	LC-MJ	1.6
RFJ-02ZC16-5L-LCU-04-MJU	4M	2	LC-MJ	1.6
RFJ-02ZC16-5L-LCU-05-MJU	5M	2	LC-MJ	1.6
RFJ-02ZC16-5L-LCU-10-MJU	10M	2	LC-MJ	1.6
RFJ-02ZC16-5L-LCU-15-MJU	15M	2	LC-MJ	1.6
RFJ-02ZC16-5L-LCU-20-MJU	20M	2	LC-MJ	1.6
RFJ-02ZC16-5L-SCU-01-MJS	1M	2	SC-MJ	1.6
RFJ-02ZC16-5L-SCU-02-MJU	2M	2	SC-MJ	1.6
RFJ-02ZC16-5L-SCU-03-MJU	3M	2	SC-MJ	1.6
RFJ-02ZC16-5L-SCU-04-MJU	4M	2	SC-MJ	1.6
RFJ-02ZC16-5L-SCU-05-MJU	5M	2	SC-MJ	1.6
RFJ-02ZC16-5L-SCU-10-MJU	10M	2	SC-MJ	1.6
RFJ-02ZC16-5L-SCU-15-MJU	15M	2	SC-MJ	1.6
RFJ-02ZC16-5L-SCU-20-MJU	20M	2	SC-MJ	1.6

# **Jumpers**

# Multimode : Standard (6F)





RFJ-01ZC16-8W-LCU-01-LCU

RFJ-01ZC16-8W-SCU-01-SCU

Catalog Number	Length	#Fibers	Connector Type	Cordage
RFJ-02ZC16-6F-STE-01-STE	1M	2	ST-ST	1.6
RFJ-02ZC16-6F-STE-02-STE	2M	2	ST-ST	1.6
RFJ-02ZC16-6F-STE-03-STE	3M	2	ST-ST	1.6
RFJ-02ZC16-6F-STE-04-STE	4M	2	ST-ST	1.6
RFJ-02ZC16-6F-STE-05-STE	5M	2	ST-ST	1.6
RFJ-02ZC16-6F-STE-10-STE	10M	2	ST-ST	1.6
RFJ-02ZC16-6F-STE-15-STE	15M	2	ST-ST	1.6
RFJ-02ZC16-6F-STE-20-STE	20M	2	ST-ST	1.6
RFJ-02ZC16-6F-STE-01-SCU	1M	2	ST-SC	1.6
RFJ-02ZC16-6F-STE-02-SCU	2M	2	ST-SC	1.6
RFJ-02ZC16-6F-STE-03-SCU	3M	2	ST-SC	1.6
RFJ-02ZC16-6F-STE-04-SCU	4M	2	ST-SC	1.6
RFJ-02ZC16-6F-STE-05-SCU	5M	2	ST-SC	1.6
RFJ-02ZC16-6F-STE-10-SCU	10M	2	ST-SC	1.6
RFJ-02ZC16-6F-STE-15-SCU	15M	2	ST-SC	1.6
RFJ-02ZC16-6F-STE-20-SCU	20M	2	ST-SC	1.6
RFJ-02ZC16-6F-LCU-01-STE	1M	2	LC-ST	1.6
RFJ-02ZC16-6F-LCU-02-STE	2M	2	LC-ST	1.6
RFJ-02ZC16-6F-LCU-03-STE	3M	2	LC-ST	1.6
RFJ-02ZC16-6F-LCU-04-STE	4M	2	LC-ST	1.6
RFJ-02ZC16-6F-LCU-05-STE	5M	2	LC-ST	1.6
RFJ-02ZC16-6F-LCU-10-STE	10M	2	LC-ST	1.6
RFJ-02ZC16-6F-LCU-15-STE	15M	2	LC-ST	1.6
RFJ-02ZC16-6F-LCU-20-STE	20M	2	LC-ST	1.6
RFJ-02ZC16-6F-LCU-01-LCU	1M	2	LC-LC	1.6
RFJ-02ZC16-6F-LCU-02-LCU	2M	2	LC-LC	1.6
RFJ-02ZC16-6F-LCU-03-LCU	3M	2	LC-LC	1.6
RFJ-02ZC16-6F-LCU-04-LCU	4M	2	LC-LC	1.6
RFJ-02ZC16-6F-LCU-05-LCU	5M	2	LC-LC	1.6
RFJ-02ZC16-6F-LCU-10-LCU	10M	2	LC-LC	1.6
RFJ-02ZC16-6F-LCU-15-LCU	15M	2	LC-LC	1.6
RFJ-02ZC16-6F-LCU-20-LCU	20M	2	LC-LC	1.6
RFJ-02ZC16-6F-LCU-01-SCU	1M	2	LC-SC	1.6
RFJ-02ZC16-6F-LCU-02-SCU	2M	2	LC-SC	1.6
RFJ-02ZC16-6F-LCU-03-SCU	3M	2	LC-SC	1.6
RFJ-02ZC16-6F-LCU-04-SCU	4M	2	LC-SC	1.6
RFJ-02ZC16-6F-LCU-05-SCU	5M	2	LC-SC	1.6
RFJ-02ZC16-6F-LCU-10-SCU	10M	2	LC-SC	1.6
RFJ-02ZC16-6F-LCU-15-SCU	15M	2	LC-SC	1.6
RFJ-02ZC16-6F-LCU-20-SCU	20M	2	LC-SC	1.6

Catalog Number	Length	#Fibers	Connector Type	Cordage
RFJ-02ZC16-6F-SCU-01-SCU	1M	2	SC-SC	1.6
RFJ-02ZC16-6F-SCU-02-SCU	2M	2	SC-SC	1.6
RFJ-02ZC16-6F-SCU-03-SCU	3M	2	SC-SC	1.6
RFJ-02ZC16-6F-SCU-04-SCU	4M	2	SC-SC	1.6
RFJ-02ZC16-6F-SCU-05-SCU	5M	2	SC-SC	1.6
RFJ-02ZC16-6F-SCU-10-SCU	10M	2	SC-SC	1.6
RFJ-02ZC16-6F-SCU-15-SCU	15M	2	SC-SC	1.6
RFJ-02ZC16-6F-SCU-20-SCU	20M	2	SC-SC	1.6
RFJ-02ZC29-6F-STE-01-STE	1M	2	ST-ST	2.9
RFJ-02ZC29-6F-STE-02-STE	2M	2	ST-ST	2.9
RFJ-02ZC29-6F-STE-03-STE	3M	2	ST-ST	2.9
RFJ-02ZC29-6F-STE-04-STE	4M	2	ST-ST	2.9
RFJ-02ZC29-6F-STE-05-STE	5M	2	ST-ST	2.9
RFJ-02ZC29-6F-STE-10-STE	10M	2	ST-ST	2.9
RFJ-02ZC29-6F-STE-15-STE	15M	2	ST-ST	2.9
RFJ-02ZC29-6F-STE-20-STE	20M	2	ST-ST	2.9
RFJ-02ZC29-6F-STE-01-SCU	1M	2	ST-SC	2.9
RFJ-02ZC29-6F-STE-02-SCU	2M	2	ST-SC	2.9
RFJ-02ZC29-6F-STE-03-SCU	3M	2	ST-SC	2.9
RFJ-02ZC29-6F-STE-04-SCU	4M	2	ST-SC	2.9
RFJ-02ZC29-6F-STE-05-SCU	5M	2	ST-SC	2.9
RFJ-02ZC29-6F-STE-10-SCU	10M	2	ST-SC	2.9
RFJ-02ZC29-6F-STE-15-SCU	15M	2	ST-SC	2.9
RFJ-02ZC29-6F-STE-20-SCU	20M	2	ST-SC	2.9
RFJ-02ZC29-6F-SCU-01-SCU	1M	2	SC-SC	2.9
RFJ-02ZC29-6F-SCU-02-SCU	2M	2	SC-SC	2.9
RFJ-02ZC29-6F-SCU-03-SCU	3M	2	SC-SC	2.9
RFJ-02ZC29-6F-SCU-04-SCU	4M	2	SC-SC	2.9
RFJ-02ZC29-6F-SCU-05-SCU	5M	2	SC-SC	2.9
RFJ-02ZC29-6F-SCU-10-SCU	10M	2	SC-SC	2.9
RFJ-02ZC29-6F-SCU-15-SCU	15M	2	SC-SC	2.9
RFJ-02ZC29-6F-SCU-20-SCU	20M	2	SC-SC	2.9

# **Jumpers**



Singlemode : LightScope ZWP™ (8W)

Catalog Number	Length	#Fibers	Connector Type	Cordage
RFJ-01SP16-8W-SCU-01-SCU	1M	1	SC-SC	1.6mm
RFJ-01SP16-8W-SCU-02-SCU	2M	1	SC-SC	1.6mm
RFJ-01SP16-8W-SCU-03-SCU	3M	1	SC-SC	1.6mm
RFJ-01SP16-8W-SCU-04-SCU	4M	1	SC-SC	1.6mm
RFJ-01SP16-8W-SCU-05-SCU	5M	1	SC-SC	1.6mm
RFJ-01SP16-8W-SCU-10-SCU	10M	1	SC-SC	1.6mm
RFJ-01SP16-8W-SCU-15-SCU	15M	1	SC-SC	1.6mm
RFJ-01SP16-8W-SCU-20-SCU	20M	1	SC-SC	1.6mm
RFJ-01SP16-8W-FCU-01-FCU	1M	1	FC-FC	1.6mm
RFJ-01SP16-8W-FCU-02-FCU	2M	1	FC-FC	1.6mm
RFJ-01SP16-8W-FCU-03-FCU	3M	1	FC-FC	1.6mm
RFJ-01SP16-8W-FCU-04-FCU	4M	1	FC-FC	1.6mm
RFJ-01SP16-8W-FCU-05-FCU	5M	1	FC-FC	1.6mm
RFJ-01SP16-8W-FCU-10-FCU	10M	1	FC-FC	1.6mm
RFJ-01SP16-8W-FCU-15-FCU	15M	1	FC-FC	1.6mm
RFJ-01SP16-8W-FCU-20-FCU	20M	1	FC-FC	1.6mm
RFJ-01SP16-8W-LCU-01-LCU	1M	1	LC-LC	1.6mm
RFJ-01SP16-8W-LCU-02-LCU	2M	1	LC-LC	1.6mm
RFJ-01SP16-8W-LCU-03-LCU	3M	1	LC-LC	1.6mm
RFJ-01SP16-8W-LCU-04-LCU	4M	1	LC-LC	1.6mm
RFJ-01SP16-8W-LCU-05-LCU	5M	1	LC-LC	1.6mm
RFJ-01SP16-8W-LCU-10-LCU	10M	1	LC-LC	1.6mm
RFJ-01SP16-8W-LCU-15-LCU	15M	1	LC-LC	1.6mm
RFJ-01SP16-8W-LCU-20-LCU	20M	1	LC-LC	1.6mm
RFJ-01SP16-8W-SCU-01-FCU	1M	1	SC-FC	1.6mm
RFJ-01SP16-8W-SCU-02-FCU	2M	1	SC-FC	1.6mm
RFJ-01SP16-8W-SCU-03-FCU	3M	1	SC-FC	1.6mm
RFJ-01SP16-8W-SCU-04-FCU	4M	1	SC-FC	1.6mm
RFJ-01SP16-8W-SCU-05-FCU	5M	1	SC-FC	1.6mm
RFJ-01SP16-8W-SCU-10-FCU	10M	1	SC-FC	1.6mm
RFJ-01SP16-8W-SCU-15-FCU	15M	1	SC-FC	1.6mm
RFJ-01SP16-8W-SCU-20-FCU	20M	1	SC-FC	1.6mm
RFJ-01SP16-8W-LCU-01-FCU	1M	1	LC-FC	1.6mm
RFJ-01SP16-8W-LCU-02-FCU	2M	1	LC-FC	1.6mm
RFJ-01SP16-8W-LCU-03-FCU	3M	1	LC-FC	1.6mm
RFJ-01SP16-8W-LCU-04-FCU	4M	1	LC-FC	1.6mm
RFJ-01SP16-8W-LCU-05-FCU	5M	1	LC-FC	1.6mm
RFJ-01SP16-8W-LCU-10-FCU	10M	1	LC-FC	1.6mm
RFJ-01SP16-8W-LCU-15-FCU	15M	1	LC-FC	1.6mm
RFJ-01SP16-8W-LCU-20-FCU	20M	1	LC-FC	1.6mm
RFJ-01SP16-8W-LCU-01-SCU	1M	1	LC-SC	1.6mm
RFJ-01SP16-8W-LCU-02-SCU	2M	1	LC-SC	1.6mm
RFJ-01SP16-8W-LCU-03-SCU	3M	1	LC-SC	1.6mm
RFJ-01SP16-8W-LCU-04-SCU	4M	1	LC-SC	1.6mm
RFJ-01SP16-8W-LCU-05-SCU	5M	1	LC-SC	1.6mm
RFJ-01SP16-8W-LCU-10-SCU	10M	1	LC-SC	1.6mm
RFJ-01SP16-8W-LCU-15-SCU	15M	1	LC-SC	1.6mm
RFJ-01SP16-8W-LCU-20-SCU	20M	1	LC-SC	1.6mm

Catalog Number	Length	#Fibers	Connector Type	Cordage
RFJ-01SP16-8W-SCA-01-SCA	1	1	Angled SC-Angled SC	1.6mm
RFJ-01SP16-8W-SCA-02-SCA	2	1	Angled SC-Angled SC	1.6mm
RFJ-01SP16-8W-SCA-03-SCA	3	1	Angled SC-Angled SC	1.6mm
RFJ-01SP16-8W-SCA-04-SCA	4	1	Angled SC-Angled SC	1.6mm
RFJ-01SP16-8W-SCA-05-SCA	5	1	Angled SC-Angled SC	1.6mm
RFJ-01SP16-8W-SCA-10-SCA	10	1	Angled SC-Angled SC	1.6mm
RFJ-01SP16-8W-SCA-15-SCA	15	1	Angled SC-Angled SC	1.6mm
RFJ-01SP16-8W-SCA-20-SCA	20	1	Angled SC-Angled SC	1.6mm
RFJ-01SP16-8W-FCA-01-FCA	1	1	Angled FC-Angled FC	1.6mm
RFJ-01SP16-8W-FCA-02-FCA	2	1	Angled FC-Angled FC	1.6mm
RFJ-01SP16-8W-FCA-03-FCA	3	1	Angled FC-Angled FC	1.6mm
RFJ-01SP16-8W-FCA-04-FCA	4	1	Angled FC-Angled FC	1.6mm
RFJ-01SP16-8W-FCA-05-FCA	5	1	Angled FC-Angled FC	1.6mm
RFJ-01SP16-8W-FCA-10-FCA	10	1	Angled FC-Angled FC	1.6mm
RFJ-01SP16-8W-FCA-15-FCA	15	1	Angled FC-Angled FC	1.6mm
RFJ-01SP16-8W-FCA-20-FCA	20	1	Angled FC-Angled FC	1.6mm
RFJ-01SP16-8W-LCA-01-LCA	1	1	Angled LC-Angled LC	1.6mm
RFJ-01SP16-8W-LCA-02-LCA	2	1	Angled LC-Angled LC	1.6mm
RFJ-01SP16-8W-LCA-03-LCA	3	1	Angled LC-Angled LC	1.6mm
RFJ-01SP16-8W-LCA-04-LCA	4	1	Angled LC-Angled LC	1.6mm
RFJ-01SP16-8W-LCA-05-LCA	5	1	Angled LC-Angled LC	1.6mm
RFJ-01SP16-8W-LCA-10-LCA	10	1	Angled LC-Angled LC	1.6mm
RFJ-01SP16-8W-LCA-15-LCA	15	1	Angled LC-Angled LC	1.6mm
RFJ-01SP16-8W-LCA-20-LCA	20	1	Angled LC-Angled LC	1.6mm
RFJ-01SP16-8W-LCA-01-SCA	1	1	Angled LC-Angled SC	1.6mm
RFJ-01SP16-8W-LCA-02-SCA	2	1	Angled LC-Angled SC	1.6mm
RFJ-01SP16-8W-LCA-03-SCA	3	1	Angled LC-Angled SC	1.6mm
RFJ-01SP16-8W-LCA-04-SCA	4	1	Angled LC-Angled SC	1.6mm
RFJ-01SP16-8W-LCA-05-SCA	5	1	Angled LC-Angled SC	1.6mm
RFJ-01SP16-8W-LCA-10-SCA	10	1	Angled LC-Angled SC	1.6mm
RFJ-01SP16-8W-LCA-15-SCA	15	1	Angled LC-Angled SC	1.6mm
RFJ-01SP16-8W-LCA-20-SCA	20	1	Angled LC-Angled SC	1.6mm
RFJ-01SP16-8W-LCA-01-FCA	1	1	Angled LC-Angled FC	1.6mm
RFJ-01SP16-8W-LCA-02-FCA	2	1	Angled LC-Angled FC	1.6mm
RFJ-01SP16-8W-LCA-03-FCA	3	1	Angled LC-Angled FC	1.6mm
RFJ-01SP16-8W-LCA-04-FCA	4	1	Angled LC-Angled FC	1.6mm
RFJ-01SP16-8W-LCA-05-FCA	5	1	Angled LC-Angled FC Angled LC-Angled FC	1.6mm
RFJ-01SP16-8W-LCA-10-FCA	10	1		1.6mm
RFJ-01SP16-8W-LCA-15-FCA	15	1	Angled LC Angled FC	1.6mm
RFJ-01SP16-8W-LCA-20-FCA RFJ-01SP16-8W-SCA-01-FCA	20	1	Angled LC-Angled FC Angled SC-Angled FC	1.6mm 1.6mm
RFJ-01SP16-8W-SCA-02-FCA	2	1	Angled SC-Angled FC	1.6mm
RFJ-01SP16-8W-SCA-03-FCA	3	1	Angled SC-Angled FC	1.6mm
RFJ-01SP16-8W-SCA-04-FCA	4	1	Angled SC-Angled FC	1.6mm
RFJ-01SP16-8W-SCA-05-FCA	5	1	Angled SC-Angled FC	1.6mm
RFJ-01SP16-8W-SCA-10-FCA	10	1	Angled SC-Angled FC	1.6mm
RFJ-01SP16-8W-SCA-15-FCA	15	1	Angled SC-Angled FC	1.6mm
RFJ-01SP16-8W-SCA-20-FCA	20	1	Angled SC-Angled FC	1.6mm
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Twisted Pair

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Residential

Office

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Singlemode : LightScope ZWP™ (8W)

Catalog Number	Length	#Fibers	Connector Type	Cordage
RFJ-02ZC16-8W-STE-01-STE	1M	2	ST-ST	1.6mm
RFJ-02ZC16-8W-STE-02-STE	2M	2	ST-ST	1.6mm
RFJ-02ZC16-8W-STE-03-STE	3M	2	ST-ST	1.6mm
RFJ-02ZC16-8W-STE-04-STE	4M	2	ST-ST	1.6mm
RFJ-02ZC16-8W-STE-05-STE	5M	2	ST-ST	1.6mm
RFJ-02ZC16-8W-STE-10-STE	10M	2	ST-ST	1.6mm
RFJ-02ZC16-8W-STE-15-STE	15M	2	ST-ST	1.6mm
RFJ-02ZC16-8W-STE-20-STE	20M	2	ST-ST	1.6mm
RFJ-02ZC16-8W-STE-01-SCU	1M	2	ST-SC	1.6mm
RFJ-02ZC16-8W-STE-02-SCU	2M	2	ST-SC	1.6mm
RFJ-02ZC16-8W-STE-03-SCU	3M	2	ST-SC	1.6mm
RFJ-02ZC16-8W-STE-04-SCU	4M	2	ST-SC	1.6mm
RFJ-02ZC16-8W-STE-05-SCU	5M	2	ST-SC	1.6mm
RFJ-02ZC16-8W-STE-10-SCU	10M	2	ST-SC	1.6mm
RFJ-02ZC16-8W-STE-15-SCU	15M	2	ST-SC	1.6mm
RFJ-02ZC16-8W-STE-20-SCU	20M	2	ST-SC	1.6mm
RFJ-02ZC16-8W-LCU-01-STE	1M	2	LC-ST	1.6mm
RFJ-02ZC16-8W-LCU-02-STE	2M	2	LC-ST	1.6mm
RFJ-02ZC16-8W-LCU-03-STE	3M	2	LC-ST	1.6mm
RFJ-02ZC16-8W-LCU-04-STE	4M	2	LC-ST	1.6mm
RFJ-02ZC16-8W-LCU-05-STE	5M	2	LC-ST	1.6mm
RFJ-02ZC16-8W-LCU-10-STE	10M	2	LC-ST	1.6mm
RFJ-02ZC16-8W-LCU-15-STE	15M	2	LC-ST	1.6mm
RFJ-02ZC16-8W-LCU-20-STE	20M	2	LC-ST	1.6mm
RFJ-02ZC16-8W-LCU-01-LCU	1M	2	LC-LC	1.6mm
RFJ-02ZC16-8W-LCU-02-LCU	2M	2	LC-LC	1.6mm
RFJ-02ZC16-8W-LCU-03-LCU	3M	2	LC-LC	1.6mm
RFJ-02ZC16-8W-LCU-04-LCU	4M	2	LC-LC	1.6mm
RFJ-02ZC16-8W-LCU-05-LCU	5M	2	LC-LC	1.6mm
RFJ-02ZC16-8W-LCU-10-LCU	10M	2	LC-LC	1.6mm
RFJ-02ZC16-8W-LCU-15-LCU	15M	2	LC-LC	1.6mm
RFJ-02ZC16-8W-LCU-20-LCU	20M	2	LC-LC	1.6mm
RFJ-02ZC16-8W-LCU-01-SCU	1M	2	LC-SC	1.6mm
RFJ-02ZC16-8W-LCU-02-SCU	2M	2	LC-SC	1.6mm
RFJ-02ZC16-8W-LCU-03-SCU	3M	2	LC-SC	1.6mm
RFJ-02ZC16-8W-LCU-04-SCU	4M	2	LC-SC	1.6mm
RFJ-02ZC16-8W-LCU-05-SCU	5M	2	LC-SC	1.6mm
RFJ-02ZC16-8W-LCU-10-SCU	10M	2	LC-SC	1.6mm
RFJ-02ZC16-8W-LCU-15-SCU	15M	2	LC-SC	1.6mm
RFJ-02ZC16-8W-LCU-20-SCU	20M	2	LC-SC	1.6mm
RFJ-02ZC16-8W-SCU-01-SCU	1M	2	SC-SC	1.6mm
RFJ-02ZC16-8W-SCU-02-SCU	2M	2	SC-SC	1.6mm
RFJ-02ZC16-8W-SCU-03-SCU	3M	2	SC-SC	1.6mm
RFJ-02ZC16-8W-SCU-04-SCU	4M	2	SC-SC	1.6mm
RFJ-02ZC16-8W-SCU-05-SCU	5M	2	SC-SC	1.6mm
RFJ-02ZC16-8W-SCU-10-SCU	10M	2	SC-SC	1.6mm
RFJ-02ZC16-8W-SCU-15-SCU	15M	2	SC-SC	1.6mm
RFJ-02ZC16-8W-SCU-20-SCU	20M	2	SC-SC	1.6mm

Catalog Number	Length	#Fibers	Connector Type	Cordage
RFJ-02ZC16-8W-FCU-01-FCU	1M	2	FC-FC	1.6mm
RFJ-02ZC16-8W-FCU-02-FCU	2M	2	FC-FC	1.6mm
RFJ-02ZC16-8W-FCU-03-FCU	3M	2	FC-FC	1.6mm
RFJ-02ZC16-8W-FCU-04-FCU	4M	2	FC-FC	1.6mm
RFJ-02ZC16-8W-FCU-05-FCU	5M	2	FC-FC	1.6mm
RFJ-02ZC16-8W-FCU-10-FCU	10M	2	FC-FC	1.6mm
RFJ-02ZC16-8W-FCU-15-FCU	15M	2	FC-FC	1.6mm
RFJ-02ZC16-8W-FCU-20-FCU	20M	2	FC-FC	1.6mm
RFJ-02ZC16-8W-LCU-01-FCU	1M	2	LC-FC	1.6mm
RFJ-02ZC16-8W-LCU-02-FCU	2M	2	LC-FC	1.6mm
RFJ-02ZC16-8W-LCU-03-FCU	3M	2	LC-FC	1.6mm
RFJ-02ZC16-8W-LCU-04-FCU	4M	2	LC-FC	1.6mm
RFJ-02ZC16-8W-LCU-05-FCU	5M	2	LC-FC	1.6mm
RFJ-02ZC16-8W-LCU-10-FCU	10M	2	LC-FC	1.6mm
RFJ-02ZC16-8W-LCU-15-FCU	15M	2	LC-FC	1.6mm
RFJ-02ZC16-8W-LCU-20-FCU	20M	2	LC-FC	1.6mm
RFJ-02ZC16-8W-SCU-01-FCU	1M	2	SC-FC	1.6mm
RFJ-02ZC16-8W-SCU-02-FCU	2M	2	SC-FC	1.6mm
RFJ-02ZC16-8W-SCU-03-FCU	3M	2	SC-FC	1.6mm
RFJ-02ZC16-8W-SCU-04-FCU	4M	2	SC-FC	1.6mm
RFJ-02ZC16-8W-SCU-05-FCU	5M	2	SC-FC	1.6mm
RFJ-02ZC16-8W-SCU-10-FCU	10M	2	SC-FC	1.6mm
RFJ-02ZC16-8W-SCU-15-FCU	15M	2	SC-FC	1.6mm
RFJ-02ZC16-8W-SCU-20-FCU	20M	2	SC-FC	1.6mm
RFJ-01SP29-8W-SCU-01-SCU	1M	1	SC-SC	2.9mm
RFJ-01SP29-8W-SCU-02-SCU	2M	1	SC-SC	2.9mm
RFJ-01SP29-8W-SCU-03-SCU	3M	1	SC-SC	2.9mm
RFJ-01SP29-8W-SCU-04-SCU	4M	1	SC-SC	2.9mm
RFJ-01SP29-8W-SCU-05-SCU	5M	1	SC-SC	2.9mm
RFJ-01SP29-8W-SCU-10-SCU	10M	1	SC-SC	2.9mm
RFJ-01SP29-8W-SCU-15-SCU	15M	1	SC-SC	2.9mm
RFJ-01SP29-8W-SCU-20-SCU	20M	1	SC-SC	2.9mm
RFJ-01SP29-8W-FCU-01-FCU	1M	1	FC-FC	2.9mm
RFJ-01SP29-8W-FCU-02-FCU	2M	1	FC-FC	2.9mm
RFJ-01SP29-8W-FCU-03-FCU	3M	1	FC-FC	2.9mm
RFJ-01SP29-8W-FCU-04-FCU	4M	1	FC-FC	2.9mm
RFJ-01SP29-8W-FCU-05-FCU	5M	1	FC-FC	2.9mm
RFJ-01SP29-8W-FCU-10-FCU	10M	1	FC-FC	2.9mm
RFJ-01SP29-8W-FCU-15-FCU	15M	1	FC-FC	2.9mm
RFJ-01SP29-8W-FCU-20-FCU	20M	1	FC-FC	2.9mm
RFJ-01SP29-8W-FCU-01-SCU	1M	1	FC-SC	2.9mm
RFJ-01SP29-8W-FCU-02-SCU	2M	1	FC-SC	2.9mm
RFJ-01SP29-8W-FCU-03-SCU	3M	1	FC-SC	2.9mm
RFJ-01SP29-8W-FCU-04-SCU	4M	1	FC-SC	2.9mm
RFJ-01SP29-8W-FCU-05-SCU	5M	1	FC-SC	2.9mm
RFJ-01SP29-8W-FCU-10-SCU	10M	1	FC-SC	2.9mm
RFJ-01SP29-8W-FCU-15-SCU	15M	1	FC-SC	2.9mm
RFJ-01SP29-8W-FCU-20-SCU	20M	1	FC-SC	2.9mm

# **Jumpers**

Singlemode : LightScope ZWP™ (8W)

Catalog Number	Length	#Fibers	Connector Type	Cordage
RFJ-01SP29-8W-SCA-01-SCA	1M	1	SC Angled-SC Angled	2.9mm
RFJ-01SP29-8W-SCA-02-SCA	2M	1	SC Angled-SC Angled	2.9mm
RFJ-01SP29-8W-SCA-03-SCA	3M	1	SC Angled-SC Angled	2.9mm
RFJ-01SP29-8W-SCA-04-SCA	4M	1	SC Angled-SC Angled	2.9mm
RFJ-01SP29-8W-SCA-05-SCA	5M	1	SC Angled-SC Angled	2.9mm
RFJ-01SP29-8W-SCA-10-SCA	10M	1	SC Angled-SC Angled	2.9mm
RFJ-01SP29-8W-SCA-15-SCA	15M	1	SC Angled-SC Angled	2.9mm
RFJ-01SP29-8W-SCA-20-SCA	20M	1	SC Angled-SC Angled	2.9mm
RFJ-01SP29-8W-FCA-01-FCA	1M	1	FC Angled-FC Angled	2.9mm
RFJ-01SP29-8W-FCA-02-FCA	2M	1	FC Angled-FC Angled	2.9mm
RFJ-01SP29-8W-FCA-03-FCA	3M	1	FC Angled-FC Angled	2.9mm
RFJ-01SP29-8W-FCA-04-FCA	4M	1	FC Angled-FC Angled	2.9mm
RFJ-01SP29-8W-FCA-05-FCA	5M	1	FC Angled-FC Angled	2.9mm
RFJ-01SP29-8W-FCA-10-FCA	10M	1	FC Angled-FC Angled	2.9mm
RFJ-01SP29-8W-FCA-15-FCA	15M	1	FC Angled-FC Angled	2.9mm
RFJ-01SP29-8W-FCA-20-FCA	20M	1	FC Angled-FC Angled	2.9mm
RFJ-01SP29-8W-FCA-01-SCA	1M	1	FC Angled-SC Angled	2.9mm
RFJ-01SP29-8W-FCA-02-SCA	2M	1	FC Angled-SC Angled	2.9mm
RFJ-01SP29-8W-FCA-03-SCA	3M	1	FC Angled-SC Angled	2.9mm
RFJ-01SP29-8W-FCA-04-SCA	4M	1	FC Angled-SC Angled	2.9mm
RFJ-01SP29-8W-FCA-05-SCA	5M	1	FC Angled-SC Angled	2.9mm
RFJ-01SP29-8W-FCA-10-SCA	10M	1	FC Angled-SC Angled	2.9mm
RFJ-01SP29-8W-FCA-15-SCA	15M	1	FC Angled-SC Angled	2.9mm
RFJ-01SP29-8W-FCA-20-SCA	20M	1	FC Angled-SC Angled	2.9mm
RFJ-02ZC29-8W-STE-01-STE	1M	2	ST-ST	2.9mm
RFJ-02ZC29-8W-STE-02-STE	2M	2	ST-ST	2.9mm
RFJ-02ZC29-8W-STE-03-STE	3M	2	ST-ST	2.9mm
RFJ-02ZC29-8W-STE-04-STE	4M	2	ST-ST	2.9mm
RFJ-02ZC29-8W-STE-05-STE	5M	2	ST-ST	2.9mm
RFJ-02ZC29-8W-STE-10-STE	10M	2	ST-ST	2.9mm
RFJ-02ZC29-8W-STE-15-STE	15M	2	ST-ST	2.9mm
RFJ-02ZC29-8W-STE-20-STE	20M	2	ST-ST	2.9mm
RFJ-02ZC29-8W-STE-01-SCU	1M	2	ST-SC	2.9mm
RFJ-02ZC29-8W-STE-02-SCU	2M	2	ST-SC	2.9mm
RFJ-02ZC29-8W-STE-03-SCU	3M	2	ST-SC	2.9mm
RFJ-02ZC29-8W-STE-04-SCU	4M	2	ST-SC	2.9mm
RFJ-02ZC29-8W-STE-05-SCU	5M	2	ST-SC	2.9mm
RFJ-02ZC29-8W-STE-10-SCU	10M	2	ST-SC	2.9mm
RFJ-02ZC29-8W-STE-15-SCU	15M	2	ST-SC	2.9mm
RFJ-02ZC29-8W-STE-20-SCU	20M	2	ST-SC	2.9mm
RFJ-02ZC29-8W-SCU-01-SCU	1 <i>M</i>	2	SC-SC	2.9mm
RFJ-02ZC29-8W-SCU-02-SCU	2M	2	SC-SC	2.9mm
RFJ-02ZC29-8W-SCU-03-SCU	3M	2	SC-SC	2.9mm
RFJ-02ZC29-8W-SCU-04-SCU	4M	2	SC-SC	2.9mm
RFJ-02ZC29-8W-SCU-05-SCU	5M	2	SC-SC	2.9mm
RFJ-02ZC29-8W-SCU-10-SCU	10M	2	SC-SC	2.9mm
RFJ-02ZC29-8W-SCU-15-SCU	15M	2	SC-SC	2.9mm
RFJ-02ZC29-8W-SCU-20-SCU	20M	2	SC-SC	2.9mm

Catalog Number	Length	#Fibers	Connector Type	Cordage
RFJ-02ZC29-8W-FCU-01-FCU	1M	2	FC-FC	2.9mm
RFJ-02ZC29-8W-FCU-02-FCU	2M	2	FC-FC	2.9mm
RFJ-02ZC29-8W-FCU-03-FCU	3M	2	FC-FC	2.9mm
RFJ-02ZC29-8W-FCU-04-FCU	4M	2	FC-FC	2.9mm
RFJ-02ZC29-8W-FCU-05-FCU	5M	2	FC-FC	2.9mm
RFJ-02ZC29-8W-FCU-10-FCU	10M	2	FC-FC	2.9mm
RFJ-02ZC29-8W-FCU-15-FCU	15M	2	FC-FC	2.9mm
RFJ-02ZC29-8W-FCU-20-FCU	20M	2	FC-FC	2.9mm
RFJ-02ZC29-8W-FCU-01-SCU	1M	2	FC-SC	2.9mm
RFJ-02ZC29-8W-FCU-02-SCU	2M	2	FC-SC	2.9mm
RFJ-02ZC29-8W-FCU-03-SCU	3M	2	FC-SC	2.9mm
RFJ-02ZC29-8W-FCU-04-SCU	4M	2	FC-SC	2.9mm
RFJ-02ZC29-8W-FCU-05-SCU	5M	2	FC-SC	2.9mm
RFJ-02ZC29-8W-FCU-10-SCU	10M	2	FC-SC	2.9mm
RFJ-02ZC29-8W-FCU-15-SCU	15M	2	FC-SC	2.9mm
RFJ-02ZC29-8W-FCU-20-SCU	20M	2	FC-SC	2.9mm

# **Pigtails**

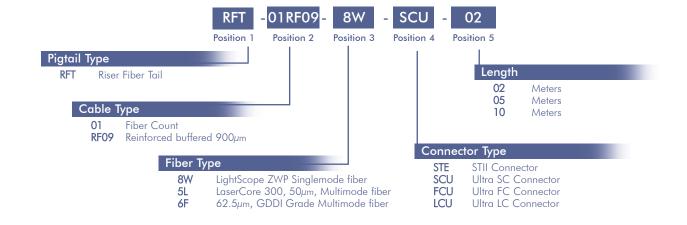
Single-ended connectorized buffered fiber for use in splicing to building or outside plant cables.

Catalog Number	Description
RFT-01RF09-8W-SCU-02	Riser, Simplex 9.2 MFD singlemode, Ultra SC
RFT-01RF09-8W-SCU-05	Riser, Simplex 9.2 MFD singlemode, Ultra SC
RFT-01RF09-8W-SCU-10	Riser, Simplex 9.2 MFD singlemode, Ultra SC
RFT-01RF09-8W-STE-02	Riser, Simplex 9.2 MFD singlemode, Ultra ST
RFT-01RF09-8W-STE-05	Riser, Simplex 9.2 MFD singlemode, Ultra ST
RFT-01RF09-8W-STE-10	Riser, Simplex 9.2 MFD singlemode, Ultra ST
RFT-01RF09-8W-FCU-02	Riser, Simplex 9.2 MFD singlemode, Ultra FC
RFT-01RF09-8W-FCU-05	Riser, Simplex 9.2 MFD singlemode, Ultra FC
RFT-01RF09-8W-FCU-10	Riser, Simplex 9.2 MFD singlemode, Ultra FC
RFT-01RF09-8W-LCU-02	Riser, Simplex 9.2 MFD singlemode, Ultra LC
RFT-01RF09-8W-LCU-05	Riser, Simplex 9.2 MFD singlemode, Ultra LC
RFT-01RF09-8W-LCU-10	Riser, Simplex 9.2 MFD singlemode, Ultra LC
RFT-01RF09-6F-SCU-02	Riser, Simplex with Multimode, Ultra SC
RFT-01RF09-6F-SCU-05	Riser, Simplex with Multimode, Ultra SC
RFT-01RF09-6F-SCU-10	Riser, Simplex with Multimode, Ultra SC
RFT-01RF09-6F-STE-02	Riser, Simplex with Multimode, Ultra ST
RFT-01RF09-6F-STE-05	Riser, Simplex with Multimode, Ultra ST
RFT-01RF09-6F-STE-10	Riser, Simplex with Multimode, Ultra ST
RFT-01RF09-6F-LCU-02	Riser, Simplex with Multimode, Ultra LC
RFT-01RF09-6F-LCU-05	Riser, Simplex with Multimode, Ultra LC
RFT-01RF09-6F-LCU-10	Riser, Simplex with Multimode, Ultra LC
RFT-01RF09-5L-SCU-02	Riser, Simplex with LaserCore <sup>™</sup> , Ultra SC
RFT-01RF09-5L-SCU-05	Riser, Simplex with LaserCore <sup>™</sup> , Ultra SC
RFT-01RF09-5L-SCU-10	Riser, Simplex with LaserCore <sup>™</sup> , Ultra SC
RFT-01RF09-5L-STE-02	Riser, Simplex with LaserCore <sup>™</sup> , Ultra ST
RFT-01RF09-5L-STE-05	Riser, Simplex with LaserCore™, Ultra ST
RFT-01RF09-5L-STE-10	Riser, Simplex with LaserCore™, Ultra ST
RFT-01RF09-5L-LCU-02	Riser, Simplex with LaserCore™, Ultra LC
RFT-01RF09-5L-LCU-05	Riser, Simplex with LaserCore™, Ultra LC
RFT-01RF09-5L-LCU-10	Riser, Simplex with LaserCore™, Ultra LC



CommScope

RFT-01RF09-8W-SCU-02



# **Cable Assembly Selection Guide**



Cable assemblies offer many advantages over field termination. With cable that is factory connectorized, overall installation time is faster and easier, field terminations are eliminated, and performance is assured through factory testing. Before accepting an order for cable assemblies, there are a few questions that need to be answered.

#### What type of cable does the application require?

Premise Tight Buffer (Riser or Plenum) Indoor/Outdoor (Distribution or Loose Tube) Outside Plant (Stranded Loose Tube or Central Loose Tube)

#### What type of connectors does the application require?

Singlemode (ST, SC, LC, FC) Multimode (ST, SC, LC, FC)

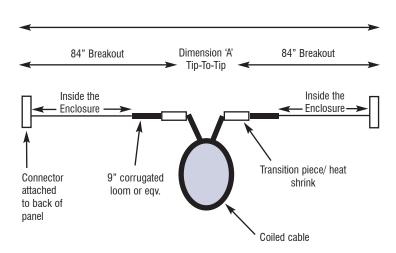
#### What is the length (tip-to-tip or enclosure-to-enclosure)?

If enclosure-to-enclosure, what is the standard break out inside the enclosure? Is the cable connectorized on one end or both? \*Remember, connectors are priced per end and the cable is easier to pull in with connector on one end only.

#### Is a pulling apparatus, such as a Pulling Eye, required?

A pulling apparatus is required if connectors are on both ends and the cable will be pulled.

#### Are there any special preparations, delivery, or packaging requirements?



#### **Sample Part Number**

PFC - 144 - DS - 8W - SCU - 140 - SCU - PE

Position 1: Cable Style

PFC - 144 - DS - 8W - SCU - 140 - SCU - PE

OFC Outside Fiber Connectorized PFC Plenum Fiber Connectorized RFC Riser Fiber Connectorized

Position 2: Fiber Count

PFC - 144 - DS - 8W - SCU - 140 - SCU - PE

Total Fiber Count (in increments of two) \*XXX variable in catalog number.

### Position 3: Cable Construction PFC - 144 - DS - 8W - SCU - 140 - SCU - PE

 LA
 Stranded Loose Tube Armored
 L2
 Stranded Loose Tube Dual Jacket/Single Armor
 DA
 Drop Armored

 LN
 Stranded Loose Tube Non Armored All Dielectric
 L3
 Stranded Loose Tube Triple Jacket/Dual Armor
 CA
 Central Tube Armored

 LD
 Stranded Loose Tube All Dielectric/Dual Jacket
 LH
 Stranded Loose Tube Heavy Duty Non Armored
 CN
 Central Tube All Dielectric

Indoor & Indoor/Outdoor Cable Constructions

 DS
 Distribution
 DU
 Duplex

 IC
 Interconnect
 SP
 Simplex

 ZC
 Zipcord
 BO
 Breakout

FiberGuard<sup>™</sup> Use first character of the construction code above plus one of the following:

W Steel Armor, No Jacket

Y Aluminum Armor, No Jacket

X Steel Armor w/Jacket

Z Aluminum Armor w/Jacket

## Position 4: Fiber Type PFC - 144 - DS - 8W - SCU - 140 - SCU - PE

8W 9.2 MFD LightScope ZWP<sup>\*</sup>, singlemode
 6F 62.5/125μm FDDI Grade, multimode
 5H Standard 50μm, multimode
 5L 50μm, LaserCore<sup>\*</sup> 300, multimode
 5M 50μm, LaserCore<sup>\*</sup> 150, multimode

## Position 5: Connector Type PFC - 144 - DS - 8W - SCU - 140 - SCU - PE

 FCU
 Ultra FC connector(s)
 SCU Ultra SC connector(s)
 LCA Angled LC connector(s)

 LCU
 Ultra LC connector(s)
 STU Ultra ST connector(s)
 SCA Angled SC connector(s)

 MUU
 Ultra MTRJ connector(s)
 FCA Angled FC connector(s)

## Position 6: Cable Length PFC - 144 - DS - 8W - SCU - 140 - SCU - PE

Minimum is 10 feet.

Maximum is cable construction length per reel.

### Position 7: Connector Type PFC - 144 - DS - 8W - SCU - 140 - SCU - PE

 FCU
 Ultra FC connector(s)
 SCU
 Ultra SC connector(s)
 LCA
 Angled LC connector(s)

 LCU
 Ultra LC connector(s)
 STU
 Ultra ST connector(s)
 SCA
 Angled SC connector(s)

 MJU
 Ultra MTRJ connector(s)
 FCA
 Angled FC connector(s)

### Positions 8: Pulling Apparatus PFC - 144 - DS - 8W - SCU - 140 - SCU - PE

**PE** Pulling Eye

# **Splitter Modules**



Splitter, Dual Band 1310, 1550 1X2



RFE-SPL-1X3-33/33/33-SCU01

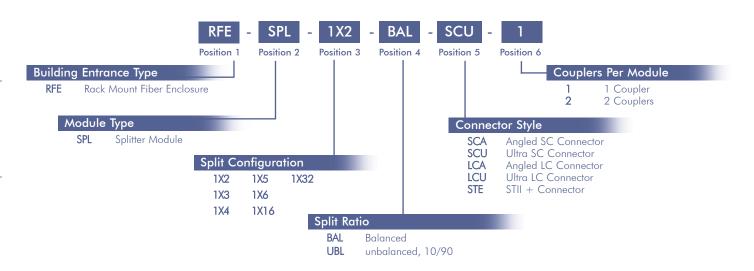
Catalog Number	Power Output Ratio %	Adapter On Module	Couplers/Pkg
RFE-SPL-1X2-UBL-SCU1	10/90	SCU	1
RFE-SPL-1X2-UBL-SCA1	10/90	SCA	1
RFE-SPL-1X2-UBL-LCA1	10/90	LCA	1
RFE-SPL-1X2-BAL-SCU1	50/50	SCU	1
RFE-SPL-1X2-BAL-SCA1	50/50	SCA	1
RFE-SPL-1X2-BAL-LCA1	50/50	LCA	1
RFE-SPL-1X2-UBL-STU2	10/90	STU	2
RFE-SPL-1X2-BAL-STU2	50/50	STU	2
RFE-SPL-1X3-BAL-SCU1	33/33/33	SCU	1
RFE-SPL-1X3-BAL-SCA1	33/33/33	SCA	1
RFE-SPL-1X3-BAL-LCA1	33/33/33	LCA	1

Splitter, Du	al Band	1310,	1550	1X4
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RFE-SPL-1X4-BAL-SCU1	33/33/33	SCU	1
RFE-SPL-1X4-BAL-SCA1	33/33/33	SCA	1
RFE-SPL-1X4-BAL-LCA1	33/33/33	LCA	1

<sup>&</sup>lt;sup>1</sup> Order Separately

Inside plant slitter modules shown above. Other modules can be made available.



<sup>\*</sup> Use in 8" diameter pedestal

Twisted Pair

Components

Residentic

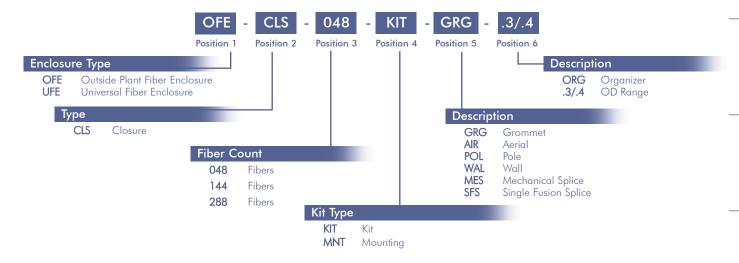
Central Office

CommScope provides a variety of closures, such as the OFE-CLS-288 splice closure and the OFE-CLS-048 splice closure UFE.



OFE-CLS-048

Catalog Number	Product	Description	
OFE-CLS-048 Closure Kits			
OFE-CLS-048	Closure	Closure assembly with grommet & grip kit for	
		two 0.4 to 0.85 inch (10 to 21.6mm) cables,	
		and splice holders for 48 single fusion splices.	
OFE-CLS-144-MF	Closure	Closure assembly with grommet & grip kit for	
		two 0.4 to 0.85 inch (10 to 21.6mm) cables,	
		and splice holders for 144 mass fusion splices.	
Grommet & Grip Kits			
OFE-CLS-048-KIT-GRG3/.4	0.3-0.4 Grip	Grommets & sheath grips, for one or two	
	& Grommet	0.3 to 0.4 (7 to 10mm) cables.	
OFE-CLS-048-KIT-GRG4/.85	0.4-0.85 Grip	Grommets & sheath grips, for one or two	
	& Grommet	0.4-0.85 (10 to 21.6mm) cables. Includes	
		bond clamps for loose tube cables.	
Mounting Kits			
OFE-CLS-048-MNT-AIR	Mounting	Two aluminum hangers to suspend closure under	
	Bracket	aerial cable strand.	
OFE-CLS-048-MNT-POL/WAL	Mounting	Galvanized steel bracket to mount closure to pole	
	Bracket	or wall.	



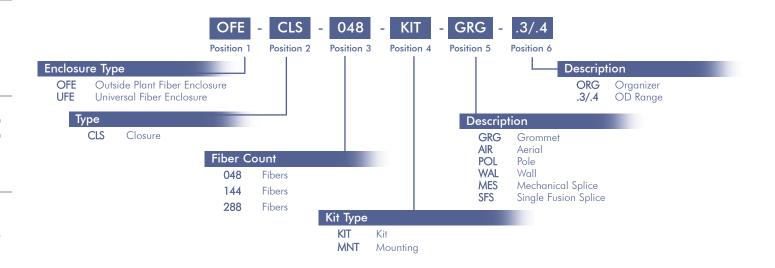
# Closures





OFE-CLS-288

Catalog Number	Product	Description
OFE-CLS-288 Ordering Info. Closure Kits		
OFE-CLS-288	Closure	OFE-CLS-288 Closure Assembly with one
		0.4-0.85 grommet & grip kit and two 36 single
		fusion splice trays.
0 10 0 1/2		
Grommet & Grip Kits	0.2.0.4.0.:	
OFE-CLS-288-KIT-GRG3/.4	0.3-0.4 Grip	Grommets & sheath grips, for one or two
	& Grommet	0.3 to 0.4 (7 to 10 mm) cables.
Closure Kits		
OFE-CLS-288-MNT-AIR	Mounting	Two stainless steel straps hangers to suspend
	Bracket	closure under aerial cable strand.
OFE-CLS-288-MNT-POL	Mounting	Galvanized steel bracket, hangers and bar to
	Bracket	mount closure to pole.
OFE-CLS-288-MNT-WAL	Mounting	Hardware to mount closure to wall
	Bracket	
OFE-CLS-288-KIT-Reseal	Sealing	Kit contains replacement "O" rings, seals
		& lubricant
OFE-CLS-288-KIT-MES/SFS-ORG	Add 36 fiber single fusion splice trays.	
Closure Accessories		
KIT-Sealant	Sealing	Sealant/lubricant for closures. One 3 ounce tube.
		No shelf life requirement.
KIT-GROUND	Grounding	Kit contains hardware for Bonding and
	9	grounding one metallic fiber optic cable.





Contains all components necessary to complete a 48 single-fiber splice installation\*. Fits all outside plant cables from 0.40 in. to 0.96 in. (11 mm to 24.4 mm) outer diameter.

\*Other applications may require encapsulation.



UFE-CLS-144 (closed)



UFE-CLS-144 (open)

Catalog Number	Product	Description
UFE-CLS-144 Ordering Info. Closure Kits		
UFE-CLS-144	Closure	UFE-CLS-144 Closure Assembly with two
		0.4-0.96 grommet & grip kit and two 24 single
		fusion splice trays.
Grommet & Grip Kits		
UFE-CLS-144-KIT-GRG2/.4	0.3-0.4 Grip	Grommets & sheath grips, for one or two
	& Grommet	0.2 to 0.4 (5 to 11 mm) cables.
UFE-CLS-144-KIT-GRG4/.96	0.4-0.96 Grip	Grommets & sheath grips, for one or two
	& Grommet	0.4 to 0.96 (11 to 24.4 mm) cables.
Kits		
UFE-CLS-144-KIT-MES/SFS-ORG		Three 24 fiber single fusion splice trays
UFE-CLS-COVER		Outer Cover that allows the UFE-CLS-144
		to be buried and placed in a vault.

