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# **CommScope Fiber Optic Cable Products**

Proven Quality and Performance



# $\circ$ The Cable Industry's Fiber Supplier $^{\scriptscriptstyle{ imes}}$

Better fiber equals better fiber optic cable. CommScope provides key optical and geometrical features in its standard singlemode fiber for fusion splice compatibility with other fiber manufacturers and legacy fiber. LightScope ZWP\* singlemode optical fiber cable continues a CommScope tradition of being a leader in manufacturing innovative and performance-enhanced products for the cable industry. LightScope ZWP optical fiber cable makes available 30% more usable transmission spectrum, which can be used for return path, enhanced video services such as video on demand (VOD) or Dedicated Wavelength Services for business or other demanding applications.

CommScope has developed key families of fiber optic cables specifically to be used throughout the HFC communication hierarchy as well as an offering of fiber optic components including connectors and other passive devices that are commonly required in broadband infrastructure.



# LightScope 2000°

# Outside Plant Cables for Standard and Rugged Environments

For direct buried, underground conduit and aerial installations, CommScope offers several designs, which include a variety of loose tube cables, from all-dielectric to double armored, triple-jacketed cables. Design options include Drop Armored, a smaller, lighter weight Central Tube cable construction; Central Tube and Stranded Loose Tube cables. Craft friendly product solutions are a foremost requirement in today's fast paced world. CommScope engineers are committed to offering evolutionary improvements and easy-to-handle constructions in our fiber product offering. The latest example is our new Dry Loose Tube cable design. This family of gel-free stranded loose tube cables uses all-dry water blocking technology and reduced diameter buffer tubes. The design is completely gel-free, yet provides full water blocking protection for outside plant applications. Any of these cables may be factory-installed in a variety of CommScope's ConQuest® premium high density polyethylene conduit including Toneable Conduit" – a patented location and damage prevention solution.

# Indoor/Outdoor Cables for Strength and Safety Including Low-Smoke Zero-Halogen (LSZH) Types

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

## **○ Premise Cables for Safety and Performance**

CommScope's premises cables are designed to handle the unique stresses of indoor applications. Design options include riser and plenum-rated distribution and cordage cables.



# 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 ensure that every meter 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 an individual cable test report to each reel. In addition to the paper copy of the test reports, we also offer WebTrak™, a web program that puts cabling factory results on-line for all of our fiber optic cables. It is our understanding that sometimes this critical test information is misplaced or

never makes it to the end-user. With WebTrak, it is easy to find that important paperwork; CommScope's web interface puts factory testing reports for individual cables on-line for 24 hour immediate access.

The patented and trademarked WebTrak program resides on our commscope.com website for quick access from any computer. For access to the electronic test reports, all the

installers need is the 11 digit serial number printed on the cable jacket and a footage or meter marker



for reference. Installers can then enter this number on the WebTrak portion of the CommScope website and pull up the cable's factory test results from anywhere in the world at any time of the day or night.

- Provides documentation of CommScope fiber optic cable performance, allowing a convenient way to track a reel of cable and verify performance.
- Provides an alternative to managing paper reports. With WebTrak, you can get all the information you need on-line.
- Provides quick verifications to ensure the product meets or exceeds performance requirements, should there be a performance issue in the field.
- Provides easy 24/7 access via the internet.

WebTrak is just one more example of how CommScope listens to our customers and delivers. 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 make networks work — fiber optic cables from CommScope.

# Request a FREE Broadband Applications & Construction Library

CommScope's Broadband Applications & Construction Library includes a 4-piece set of valuable reference manuals plus a DVD containing essential training videos on topics such as connectorization, expansion loop



formation and fiber optic splicing. These tools teach you how to protect the integrity of your broadband plant while lowering operating/installation costs. From construction and installation practices, to performance and testing of cable — CommScope Construction Manuals are simply a "must-have" for anyone upgrading or maintaining broadband networks. Download a PDF version at our website: http://www.commscope.com or request a set by phone at 1-800-982-1708.

# CommScope's Digital Broadband Resource Center

This repository of experience, knowledge, services and tools is provided to CommScope customers to assist installers, technicians, engineers, designers and managers of broadband service providers. Tools in various media and formats include: SpanMaster\* software for cable sag and tension calculations; center conductor sizing guides; attenuation slide rules; and call center spec assistance and review. Call us at 1-866-333-DBRC (3272) or e-mail

DBRC@commscope.com for answers to product questions or issues related to any CommScope broadband product.

# **CommScope 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. We manufacture all loose tube cables with appropriate Excess Fiber Length (EFL) to ensure, that when properly installed, the fiber strands will remain strain-free, which is essential to good optical performance and longevity. Our heavy-duty products are engineered to withstand the rigors of environmental extremes.

There are many cable choices when considering applications that require environmental protection and provide for network diversity. CommScope cable surpasses requirements in the aerial, underground and conduit applications. We offer self-support cable for aerial environments and cable-in-conduit or armored cables for extra protection in burial applications.

CommScope manufactures cables that are lightweight, flexible and especially suited for aerial cable installations. Our loose tube cables are available in armored and all-dielectric versions.



CommScope OSP fiber optic cables are designed to meet or exceed the requirements of Telcordia, EIA/TIA, REA/RUS, IEC and RUS industry standards.

# $\circ$ OSP Fiber Optic Cable Design Options Include:

- Drop a small, lightweight Central Tube cable designed for use when space is at a minimum; features a robust PBT buffer tube and is available in fiber counts up to 12
- Central Tube armored and dielectric construction for point-to-point installations in counts up to 96 arranged in easy-to-handle color-coded subunits of 12 fiber each
- Stranded Loose Tube for direct buried, underground conduit and aerial installations; design variations range from all-dielectric to armored constructions with up to 576 fibers

# Dry Loose Tube

Craft friendly product solutions are a foremost requirement in today's fast paced world. CommScope engineers are committed to offering evolutionary improvements and easy-to-handle constructions in our fiber product offering. The latest example is our new Dry Loose Tube cable design. This family of gel-free stranded loose tube cables uses all-dry water blocking technology and reduced diameter buffer tubes. The design is completely gel-free, yet provides full water blocking protection for outside plant applications and meets all of the requirements for outside plant cable.

#### Arid-Core® Moisture Barrier

CommScope defeats moisture with a unique multi-level approach. In addition to tough outer jacketing and gel filling within the buffer tube, we employ Arid-Core, a superabsorbent polymer technology. Arid-Core is applied between the jacket and the buffer tubes in stranded loose tube cables, and coats the central tubes of drop armored and central tube cables. When moisture meets Arid-Core, the polymer swells to prevent moisture migration - it acts as a mechanical block to prevent further water penetration.

# Custom Hybrids

Broadband operators are increasingly requesting CommScope hybrid designs as a migration path to fiber to the home (FTTH) or fiber to everything else (FTTx). Unique needs in these applications often require optical, RF and power which are best met by a blend of CommScope cabling strengths and products. Low fiber counts combined with coax or twisted pair components yield flexibility and options for future growth in a single cost-effective cable run. When you can't find a cable that fits your application, ask the CommScope product management team to support your unique application. Together, we can combine available options to allow flexibility in creating the ultimate environment for advanced services.

# CommScope Indoor/Outdoor Cables

Riser-Rated and Plenum-Rated Designs are Rugged for Outdoor Yet Safe for Indoor



#### Indoor/Outdoor Cables

These cables offer a unique blend of abilities. They are tough enough to withstand the rigors of the outside plant, yet are riser-rated (NEC 770 OFNR) or plenumrated (NEC 770 OFNP) for indoor use. The advantage of an indoor/outdoor cable is that it can pass from the outside to the inside intact, with no need to transition



Another technical achievement in CommScope's indoor/ outdoor cables is the use of our Arid-Core® dry waterblocking technology. Instead of the traditional hard-toclean flooding gel, Arid-Core remains dry inside the cable. Once exposed to moisture, Arid-Core rapidly swells to form a gel that stops water penetration. The result is a craft-friendly cable that reduces termination time, effort and cost.

# **Among CommScope's Indoor/Outdoor Constructions for Broadband Applications Are:**

#### **Riser-Rated**

- Low-Smoke Zero-Halogen (LSZH) Distribution cables of up to 24 tight buffered fibers
- Triathlon® Low-Smoke Zero-Halogen (LSZH) Cordage cables in simplex, duplex, zipcord and interconnect designs
- Central Tube cables of up to 24 fibers in a robust all dielectric design
- Stranded Loose Tube cables available in counts up to 288 fibers

#### **Plenum-Rated**

 Stranded Loose Tube cables are available in counts up to 144 fibers

# **CommScope Premise Cables**

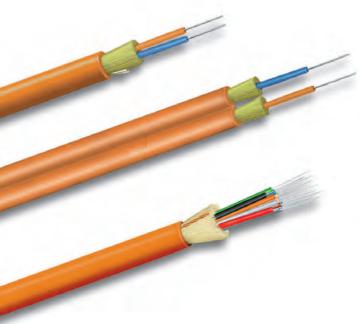
Riser and Plenum-Rated Designs for Indoor Applications



CommScope offers a complete line of riser and plenum rated cables for indoor use and customer premises.

As with Outside Plant cables, CommScope cables for premises are available with application-specific fibers such as LightScope ZWP\* and LaserCore™ fiber optic glass types (type 8W and 5L, respectively).

There are a number of standard singlemode and multimode fiber offerings that provide a diverse range of products that will suit all of your cabling needs. The LaserCore cordage and building cables can be used today with 10-Mbps applications and will carry you into the future for systems that will run 10-Gbps. The total system will carry you from the outside plant through the building entrance up the riser, across the horizontal, all the way to the work station. CommScope's complete system of cable and components will meet your current and future needs.



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



compact cable that easily installs and terminates.

#### **Riser-Rated Premise Cables Include:**

- Riser-Rated Distribution cable designed with up to 144 fibers
- Indoor/Outdoor Distribution cable containing up to 72 fibers
- Stranded Loose Tube design up to 288 fibers
- Riser-Rated Cordage

## **Plenum-Rated Premise Cables Include:**

- Plenum-Rated Distribution cable designed with up to 144 fibers
- Plenum-Rated Cordage

Premises fiber optic cable meet or exceed performance standards as established by Bellcore Telcordia GR-409, ANSI/ICEA-696, TIA/EIA 568B, ICEA 83-596, ANSI X3.166-1990 & X3T9.5 PMD, FDDI, ATM, Fibre Channel and HIPPI.

Riser and Plenum Cables will follow Telcordia GR-409 and ANSI/ICEA-696 jacket color code specs: singlemode is yellow, and multimode and composites are orange.

# **CommScope Hybrid Cables**

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



Revenue generating units, or RGUs, are central to the business model of every broadband service provider and more than any other cable construction, hybrid cable designs are becoming the choice to enable numerous outlets 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 extruding and testing each component of a hybrid cable simultaneously.



(shown above, top to bottom)
Fiber + UTP Hybrid Cable
Fiber + UTP + Coax Hybrid Cable
Fiber + Coax Hybrid Cable

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. These cables are designed to meet ANSI/ICEA-717 Standard for Optical Fiber Drop Cables.

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) 982-1708 to discuss your application.



# **CommScope Hybrid Cables** Features and Benefits



Features	Benefits
May contain copper UTP, coax and fiber optic	<ul> <li>Great for multiple cable drops, phone/data lines, security systems and multi- media requirements</li> </ul>
subunits individually jacketed then cabled in	Saves time and installation dollars
a single bundle under one smooth surface.	Easier materials management
one smoom sortace.	<ul> <li>Components can be easily separated into individually jacketed points for easy termination</li> </ul>
	<ul> <li>Capable of voice transmission, cable location and site powering</li> </ul>
	<ul> <li>Avails future proofing for the demands of advanced data video and telecom- munications for subscribers</li> </ul>
	<ul> <li>Less prone to snags and violations of cable bend radius limits</li> </ul>
	<ul> <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 drop cable components are available in a variety of braid options and treatments 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 critical audio and video signals with extraordinary reliability and clarity. No other medium today can challenge fiber optics in bandwidth, distance and noise immunity</li> </ul>
	<ul> <li>Designed to meet ANSI/ICEA-717 Standard for Optical Fiber Drop Cable</li> </ul>
	<ul> <li>Available in armored constructions for additional rodent and environmental protection</li> </ul>
	<ul> <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	Often used in broadband networks for powering nodes and pedestals
	<ul> <li>Specify Category 5e rather than Cat 5. The cost differential is small compared with the quality and performance advantages gained – including the potential for significantly higher speeds and greater capacity</li> </ul>

# **Fiber Optic Catalog Numbering Key**

Steps to Building the Catalog Number for the Cable You Need!







# **CABLE STYLE (Position 1)**

D.....Dry

O ..... Outdoor (Arid Core® Standard)

S...... Self-Supporting (ADSS)

M....Messenger

P......Plenum

R.....Riser

Z .....Zero Halogen

## FIBER COUNT\* (Positions 2, 3, & 4)

Total Fiber Count (in increments of two)

\*Substitute for "XXX" variable in catalog number

# **CONSTRUCTION (Positions 5 & 6)**

#### **Outside Plant Cables**

LA.....Stranded Loose Tube Armored

LN ......Stranded Loose Tube Non-Armored

L2.....Stranded Loose Tube Double Jacketed, Single Armored

Jingle / Inforce

L3.....Stranded Loose Tube Triple Jacketed,
Double Armored

DA...... Drop Armored

DN ...... Drop Non-Armored

DF.....Flat Drop

MN......Mini-Drop Non-Armored, All-Dielectric

CA...... Central Tube Armored

CN ...... Central Tube Non-Armored, All-Dielectric

CP..... Central Tube Pavement

#### **Indoor & Indoor/Outdoor Cables**

DS ....... Distribution IC ...... Interconnect SP ...... Simplex ZC ..... Zipcord

## FIBER TYPE (Positions 7 & 8)

#### Singlemode

8W......LightScope ZWP\*Dispersion-Unshifted, Matched-Clad, Singlemode Fiber 8M......Matched-Clad, Singlemode Fiber 8T.....LightScope NZD™ Non-Zero Dispersion-Shifted, Singlemode Fiber

#### **Multimode**

6F	.62.5 $\mu$ m, FDDI Grade, Multimode Fiber
5M	LaserCore* 150, 50µm, Multimode Fiber
5L	LaserCore* 300, 50µm, Multimode Fiber
5K	LaserCore* 500, 50µm, Multimode Fiber
CM	Composite (Singlemode & Multimode)

\*XY variable in catalog number

# **CABLE MARKING (Position 9)**

F......Jacket Sequentially Marked in Feet (standard)

M......Jacket Sequentially Marked in Meters

X......Custom Print Required

#### **CABLE CONSTRUCTION SPECIFICS (Position 10)**

- For outdoor and indoor/outdoor loose tube cables, this value indicates the fiber content per subunit: 01-12........ Fiber Count Per Subunit
- For indoor distribution cables, this value indicates additional information pertaining to the cable construction:

SU ...... Single Unit Construction MU..... Multi-Unit Construction

 For cordage cables, this value indicates the outside diameter:

#### **COLOR FIELD (Positions 11 & 12)**

• For outdoor cables, this field designates the tracer/stripe requirements:

• For indoor/outdoor cables, this field designates the jacket color:

BK.....Black

• For indoor cables, this field designates jacket color:

OR...... Orange - multimode and composite cables YL........ Yellow - singlemode cables

AQ..... Aqua - LaserCore® cables

Note: Non-standard jacket colors are available. (minimum order required)
Please contact your Customer Service Representative for additional information.

"ZZ" variable in catalog number

# **NOTES**

When Positions 7 & 8 are CM (composite cables), positions 14-23 are required.

Positions 14 & 15..... Singlemode fiber type

Positions 16 - 18...... Singlemode fiber count (aaa variable in the catalog number)

Positions 19 & 20..... Multimode fiber type

Positions 21 - 23 ...... Multimode fiber count

(bbb variable in the catalog number)

# LightScope Type 8W Singlemode Fiber Specifications Available in All CommScope Cable Types



# Zero Water Peak: Dispersion-Unshifted, Matched-Clad Singlemode Fiber

Physical Characteristics		
Cladding Diameter	$125 \pm 0.7  \mu \text{m}$	
Core/Clad Offset	$\leq$ 0.5 $\mu$ m	
Coating Diameter (uncolored)	$245 \pm 10 \mu m$	
Coating Diameter (colored)	$254 \pm 7  \mu \text{m}$	
Coating/Cladding Concentricity Error, maximum	12 <i>μ</i> m	
Clad Non-Circularity	≤ 1%	

Mechanical Characteristics	
Proof Test	100 kpsi (.69 Gpa)
Coating Strip Force	0.3 - 2.0 lbf (1.3 - 8.9 N)
Fiber Curl	<u>≥</u> 4 m
Dynamic Fatigue Parameter	<u>≥</u> 18 nd
Macrobend 100 turns @ 50 mm mandrel	
1310/1550 nm	0.05 dB maximum
Macrobend 100 turns @ 60 mm mandrel	
1625nm	0.05 dB maximum
Macrobend 1 turn @ 32 mm mandrel	
1550 nm	0.05 dB maximum

Optical Characteristics, Wavelength Specific	
Attenuation, Loose Tube Cable	
1310 nm	0.34 dB/km
1385 nm	0.31 dB/km
1550 nm	0.22 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 <u>+</u> 0.3 μm
1385 nm	9.6 <u>+</u> 0.6 μm
1550 nm	10.4 <u>+</u> 0.5 μm
Group Refractive Index	
1310 nm	1.467
1385 nm	1.468
1550 nm	1.468
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 nm	
Zero Dispersion Wavelength	1302 - 1322 nm	
Zero Dispersion Slope	0.090 ps/(km-nm-nm)	
Polarization Mode Dispersion Link Design Value	$\leq$ 0.06 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	

# **Type 8M Singlemode Fiber Specifications**

Available in All CommScope Cable Types



# **Dispersion-Unshifted, Matched-Clad Singlemode Fiber**

Physical Characteristics	
Cladding Diameter	$125 \pm 1.0 \mu \text{m}$
Core/Clad Offset	$\leq$ 0.5 $\mu$ m
Coating Diameter (uncolored)	$245 \pm 10 \mu \text{m}$
Coating Diameter (colored)	$254 \pm 7 \mu \text{m}$
Coating/Cladding Concentricity Error, maximum	12 μm
Clad Non-Circularity	<u>≤</u> 1%

Mechanical Characteristics	
Proof Test	100 kpsi (.69 Gpa)
Coating Strip Force	0.3 - 2.0 lbf (1.3 - 8.9 N)
Fiber Curl	<u>≥</u> 2 m
Dynamic Fatigue Parameter	≥ 18 nd
Macrobend 100 turns @ 50 mm mandrel	
1310/1550 nm	0.10 dB maximum
Macrobend 1 turn @ 32 mm mandrel	
1550 nm	0.50 dB maximum

Optical Characteristics, Wavelength Specific	
Attenuation, Loose Tube Cable	
1310 nm	0.35 dB/km
1550 nm	0.25 dB/km
Attenuation, Tight Buffer Cable	
1310 nm	0.70 dB/km
1550 nm	0.70 db/km
Mode Field Diameter	
1310 nm	9.2 <u>+</u> 0.3 μm
1550 nm	10.5 <u>±</u> 1.0 μm
Group Refractive Index	
1310 nm	1.466
1550 nm	1.467
Dispersion	
1310 nm	3.2 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 nm	
Zero Dispersion Wavelength	1302 - 1322 nm	
Zero Dispersion Slope	0.090 ps/(km-nm-nm)	
Polarization Mode Dispersion Link Design Value	$\leq$ 0.06 ps/sqrt(km)	

Environmental Characteristics		
Temperature Dependence -60°C to +85°C	<u>&lt;</u> 0.05 dB	
Temperature Humidity Cycling -10°C to +85°C up to 95% RH	<u>&lt;</u> 0.05 dB	
Water Immersion, 23 + 2°C	≤ 0.05 dB	
Heat Aging, 85 + 2°C	≤ 0.05 dB	

# **LightScope NZD™ Type 8T Singlemode Fiber Specifications**Available in CommScope Outside Plant Cable Types



# **Non-Zero Dispersion Shifted Singlemode Fiber**

Physical Characteristics		
Cladding Diameter	125 $\pm$ 0.7 $\mu$ m	
Core/Clad Offset	≤ 0.5 μm	
Coating Diameter (uncolored)	$245 \pm 5~\mu\mathrm{m}$	
Coating Diameter (colored)	$254 \pm 7 \mu \text{m}$	
Coating/Cladding Concentricity Error, maximum	12 μm	
Clad Non-Circularity	<u>≤</u> 1%	

Mechanical Characteristics		
Proof Test	100 kpsi (.69 Gpa)	
Coating Strip Force	0.3 - 2.0 lbf (1.3 - 8.9 N)	
Fiber Curl	≥ 4 m	
Dynamic Fatigue Parameter	≥ 20 nd	
Macrobend 100 turns @ 75mm mandrel		
1550 and 1625 nm	0.05 dB maximum	
Macrobend 1 turn @ 32mm mandrel		
1550 and 1625nm	0.50 dB maximum	

Optical Characteristics, Wavelength Specific	
Attenuation, Loose Tube Cable	
1310 nm	0.45 dB/km
1550 nm	0.25 dB/km
1625 nm	0.34 dB/km
Mode Field Diameter	
1550 nm	8.4 <u>+</u> 0.6 μm
1625 nm	8.9 <u>+</u> 0.6 μm
Group Refractive Index	
1310 nm	1.471
1550 nm	1.470
1625 nm	1.470
Dispersion	
1310 nm	-8 ps/(nm-km) (typical)
1550 nm	2.6 to 6 ps/(nm-km) from 1530 - 1565 nm
1625 nm	4.0 to 8.9 ps/(nm-km) from 1565 - 1625 nm

Optical Characteristics, General	
Attenuation at 1385 nm	1.0 dB/km
Point Defects	0.10 dB
Cutoff Wavelength	≤ 1260 nm
Dispersion Slope	< 0.05 ps/(km-nm-nm) at 1550 nm
Polarization Mode Dispersion Link Design Value	$\leq$ 0.04 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	

# Type 6F Multimode Fiber Specifications Available in All CommScope Cable Types



# **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	$\leq$ 1.0 $\mu$ m
Coating Diameter (uncolored)	$245 \pm 10 \mu \text{m}$
Coating Diameter (colored)	$254 \pm 7 \mu \text{m}$
Coating/Cladding Concentricity Error, maximum	8 μm
Clad Non-Circularity	<u>≤</u> 1%

Mechanical Characteristics	
Proof Test	100 kpsi (.69 Gpa)
Coating Strip Force	0.3 - 2.0 lbf (1.3 - 8.9 N)
Dynamic Fatigue Parameter	≥ 18 nd
Macrobend 100 turns @ 75mm mandrel	
850 nm and 1300 nm	0.50 dB maximum

Optical Characteristics, Wavelength Specific	
Attenuation, Loose Tube Cable	
850 nm	3.0 dB/km
1300 nm	1.0 dB/km
Attenuation, Tight Buffer Cable	
850 nm	3.5 dB/km
1300 nm	1.5 db/km
Bandwidth, OFL (Over-Filled Launch)	
850 nm	220 MHz - km
1300 nm	500 MHz - km
Group Refractive Index	
850 nm	1.496
1300 nm	1.491
1 GB Ethernet Distance	
850 nm	300 m
1300 nm	550 m

Optical Characteristics, General	
Numerical Aperature	$0.275 \pm 0.015$
Point Defects, maximum	0.15 dB
Zero Dispersion Wavelength	1320 - 1365 nm
Zero Dispersion Slope	0.11 ps/(km-nm-nm) for wavelength 1320-1348 nm 0.001 (1458 -wavelength) from 1349-1365 nm

Environmental Characteristics		
Temperature Dependence -60°C to +85°C	$\leq$ 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	

# Laser CORE 150 Type 5M Multimode Fiber Specifications Available in All CommScope Cable Types



# LaserCore 150, 50 micron Multimode Fiber

Physical Characteristics		_
Core Diameter	$50.0 \pm 2.5 \mu{\rm m}$	
Cladding Diameter	$125 \pm 1.0  \mu m$	
Core/Clad Offset	<u>&lt;</u> 1.0 μm	
Coating Diameter (uncolored)	$245 \pm 10  \mu \text{m}$	
Coating Diameter (colored)	$255 \pm 7 \mu \mathrm{m}$	
Coating/Cladding Concentricity Error, maximum	8 µm	
Clad Non-Circularity	<u>&lt;</u> 1%	

Mechanical Characteristics	
Proof Test	100 kpsi (.69 Gpa)
Coating Strip Force	0.3 - 2.0 lbf (1.3 - 8.9 N)
Dynamic Fatigue Parameter	≥ 18 nd
Macrobend 100 turns @ 75mm mandrel	
850 nm and 1300 nm	0.50 dB maximum

Optical Characteristics, Wavelength Specific		
Attenuation, Loose Tube Cable		
850 nm	3.0 dB/km	
1300 nm	1.0 dB/km	
Attenuation, Tight Buffer Cable		
850 nm	3.0 dB/km	
1300 nm	1.0 db/km	
Bandwidth, OFL		
850 nm	700 MHz - km	
1300 nm	500 MHz - km	
Bandwidth, Laser		
850 nm	950 MHz - km	
1300 nm	500 MHz - km	
Differential Mode Delay		
850 nm	0.70 ps/m	
1300 nm	0.88 ps/m	
Group Refractive Index		
850 nm	1.483	
1300 nm	1.479	
1 GB Ethernet Distance		
850 nm	800 m	
1300 nm	600 m	
10 GB Ethernet Distance*		
850 nm	150 m	

Optical Characteristics, General	
Numerical Aperature	0.200 <u>+</u> 0.015
Point Defects, maximum	0.15 dB
Zero Dispersion Wavelength	1295 - 1316 nm
Zero Dispersion Slope	0.105 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	0.10 dB	
Water Immersion, 23 + 2°C	0.10 dB	
Heat Aging, 85 + 2°C	0.10 dB	

 $<sup>^*</sup>$ Compliant with emerging IEEE 802.3ae standards for 10 GB Ethernet transmission at the 850 nm window.

# Laser CORE 300 Type 5L Multimode Fiber Specifications Available in All CommScope Cable Types



# LaserCore 300, 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>≤</u> 1.0 μm
Coating Diameter (uncolored)	$245 \pm 10  \mu \text{m}$
Coating Diameter (colored)	$254 \pm 7 \mu \text{m}$
Coating/Cladding Concentricity Error, maximum	8 µm
Clad Non-Circularity	<u>≤</u> 1%

Mechanical Characteristics		
Proof Test	100 kpsi (.69 Gpa)	
Coating Strip Force	0.3 - 2.0 lbf (1.3 - 8.9 N)	
Dynamic Fatigue Parameter	<u>≥</u> 18 nd	
Macrobend 100 turns @ 75mm mandrel		
850 nm and 1300 nm	0.50 dB maximum	

Attenuation, Loose Tube Cable	
850 nm	3.0 dB/km
1300 nm	1.0 dB/km
Attenuation, Tight Buffer Cable	
850 nm	3.0 dB/km
1300 nm	1.0 db/km
Bandwidth, OFL (Over-Filled Launch)	
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-A
1300 nm	0.88 ps/m
Group Refractive Index	
850 nm	1.483
1300 nm	1.479
1 GB Ethernet Distance	
850 nm	1020 m
1300 nm	600 m
10 GB Ethernet Distance*	
850 nm	300 m

Optical Characteristics, General	
Numerical Aperature	$0.200 \pm 0.015$
Point Defects, maximum	0.15 dB
Zero Dispersion Wavelength	1295 - 1340 nm
Zero Dispersion Slope	0.105 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	< 0.10 dB	
Water Immersion, 23 + 2°C	< 0.10 dB	
Heat Aging, 85 + 2°C	< 0.10 dB	

<sup>\*</sup>Compliant with emerging IEEE 802.3ae standards for 10 GB Ethernet transmission at the 850 nm window.

# Laser CORE 550 Type 5K Multimode Fiber Specifications Available in All CommScope Cable Types



# LaserCore 500, 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)	$245\pm10\mu\mathrm{m}$	
Coating Diameter (colored)	$254 \pm 7  \mu m$	
Coating/Cladding Concentricity Error, maximum	6 μm	
Clad Non-Circularity	<u>≤</u> 1%	

Mechanical Characteristics	
Proof Test	100 kpsi (.69 Gpa)
Coating Strip Force	0.3 - 2.0 lbf (1.3 - 8.9 N)
Dynamic Fatigue Parameter	<u>≥</u> 18
Macrobend 100 turns @ 75mm mandrel	
850 nm and 1300 nm	0.50 dB maximum

Optical Characteristics, Wavelength Specific	
Attenuation, Loose Tube Cable	
850 nm	3.0 dB/km
1300 nm	1.0 dB/km
Attenuation, Tight Buffer Cable	
850 nm	3.0 dB/km
1300 nm	1.0 db/km
Bandwidth, OFL (Over-Filled Launch)	
850 nm	3000 MHz - km
1300 nm	500 MHz - km
Bandwidth, Laser	
850 nm	4000 MHz - km
1300 nm	500 MHz - km
Differential Mode Delay	
850 nm	per TIA-492AAAC-A
1300 nm	0.88 ps/m
Group Refractive Index	
850 nm	1.483
1300 nm	1.479
1 GB Ethernet Distance	
850 nm	1110 m
1300 nm	600 m
10 GB Ethernet Distance*	
850 nm	550 m

Optical Characteristics, General	
Numerical Aperature	$0.200 \pm 0.015$
Point Defects, maximum	0.15 dB
Zero Dispersion Wavelength	1295 - 1340 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	≤ 0.10 dB	
Water Immersion, 23 + 2°C	≤ 0.10 dB	
Heat Aging, 85 + 2°C	≤ 0.10 dB	

<sup>\*</sup>Compliant with emerging IEEE 802.3ae standards for 10 GB Ethernet transmission at the 850 nm window. Specifications are subject to change without notice.

# **Outside Plant Gel-Free Stranded Loose Tube Cable**





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

- 100% dry stranded loose tube cable reduces cable prep time and keeps gel from getting on clothes, workbenches, or splicing equipment
- Lightweight, small design is installer-preferred due to ease of handling
- Flexible 2.5mm buffer tubes improve kink resistance, reduce bend sensitivity, and facilitate route management in closures
- Medium Density Polyethylene (MDPE) jacket is rugged, durable, and easy to strip
- Corrugated steel tape armor is strong yet flexible providing additional crush and rodent protection
- Rural Development Utilities Program (RDUP) listed, a progam administered by the Rural Utilities Service (RUS)

Product Type/ Fiber Count	Catalog Number	Subunits	Outer Diameter inch/mm	Minimum B Loaded inch/cm	end Radius Unloaded inch/cm	Maximum Te Short Term lbs/newtons	ensile Load Long Term lbs/newtons	We lbs/ kft	eight kg/ km
Single Jacket/ Single Armor 2 - 60 Fibers	D- <b>XXX</b> -LA- <b>XY</b> -F12NS	5	0.47/12.0	9.4/24.0	4.7/12.0	607/2700	180/800	85	127
62 - 72 Fibers	D- <b>XXX</b> -LA- <b>XY</b> -F12NS	6	0.49/12.4	9.7/24.8	4.9/12.4	607/2700	180/800	90	134
	D WW IA W FIOLIC	0	0.55/10.0	10.0/07.0	5.5/10.0	/ 07 /0700	100/000	110	1.7
74 - 96 Fibers	D- <b>XXX</b> -LA- <b>XY</b> -F12NS	8	0.55/13.9	10.9/27.8	5.5/13.9	607/2700	180/800	112	167
98 - 120 Fibers	D- <b>XXX</b> -LA- <b>XY</b> -F12NS	10	0.61/15.5	12.2/31.0	6.1/15.5	607/2700	180/800	136	203
122 - 144 Fibers	D- <b>XXX</b> -LA- <b>XY</b> -F12NS	12	0.69/17.6	13.8/35.2	6.9/17.6	607/2700	180/800	166	248
146 - 216 Fibers	D- <b>XXX</b> -LA- <b>XY</b> -F12NS	18	0.69/17.6	13.8/35.2	6.9/17.6	607/2700	180/800	149	222
218 - 288 Fibers	D- <b>XXX</b> -LA- <b>XY</b> -F12NS	24	0.78/20.0	15.7/40.0	7.8/20.0	607/2700	180/800	190	283

Singlemode/Multimode Composite (4-288 Fibers)

D-XXX-LA-CM-F12NS/AAaaa/BBbbb

Refer to above specifications.

#### Variables in the Catalog Number:

XXX = Total Fiber Count

= Fiber Grade

8W LightScope ZWP® Dispersion-Unshifted, Matched-Clad Singlemode Fiber

**8M** Matched-Clad Singlemode Fiber

LightScope NZD™ Non-Zero Dispersion-Shifted Singlemode Fiber

For Composites Only:

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

6F 62.5µm, FDDI Grade Multimode Fiber

5M LaserCore" 150, 50µm, Multimode Fiber

**5L** LaserCore" 300, 50μm, Multimode Fiber

**5K** LaserCore" 500, 50µm, Multimode Fiber

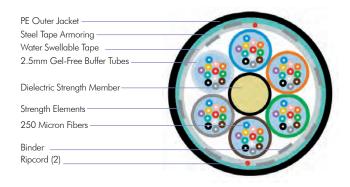
**bbb** is replaced by multimode fiber count **BB** is replaced by multimode type

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 13-24 repeat color sequence with tracer stripe

#### **Gel-Free Stranded Loose Tube Armored Cable**

(72 Fiber Version Shown)



# **Mechanical Properties**

Description	Specification	Test Method
Operating Temperature	-40° to 158°F (-40° to 70°C)	FOTP-3
Installation Temperature	-22° to 140°F (-30° to 60°C)	N/A
Storage Temperature	-40° to 167°F (-40° to 75°C)	N/A
Crush Resistance	250 lbf/in (44 N/mm)	FOTP-41
Impact Resistance	Exceeds	FOTP-25
Flexing	25 Cycles	FOTP-104
Twist Bend	Exceeds	FOTP-85

CommScope Outside Plant Fiber Optic cables are qualified to the requirements of ANSI/ICEA S-87-640-1999, Standard for Optical Fiber Outside Plant Communications Cable, GR-20-CORE, Issue 2 Generic Requirements for OSP Fiber Optic Cable, EN 187105, European Standard for Optical Cable.

# **Outside Plant Gel-Free Stranded Loose Tube Cable**

Non-Armored, All-Dielectric



# For Buried/Underground/Aerial Applications

- 100% dry stranded loose tube cable reduces cable prep time and keeps gel from getting on clothes, workbenches, or splicing equipment
- Lightweight, small design is installer-preferred due to ease of handling
- Flexible 2.5mm buffer tubes improve kink resistance, reduce bend sensitivity, and facilitate route management in closures
- Medium Density Polyethylene (MDPE) jacket is rugged, durable, and easy to strip
- Rural Development Utilities Program (RDUP) listed, a progam administered by the Rural Utilities Service (RUS)

Product Type/ Fiber Count	Catalog Number	Subunits	Outer Diameter inch/mm	Minimum I Loaded inch/cm	Bend Radius Unloaded inch/cm	Maximum 1 Short Term lbs/newtons	Tensile Load Long Term Ibs/newtons	We lbs/ kft	eight kg/ km
Single Jacket/ 2 - 60 Fibers	D- <b>XXX</b> -LN- <b>XY</b> -F12NS	5	0.41/10.5	8.2/21.0	4.1/10.5	607/2700	180/800	48	71
62 - 72 Fibers	D- <b>XXX</b> -LN- <b>XY</b> -F12NS	6	0.43/10.9	8.6/21.8	4.3/10.9	607/2700	180/800	52	77
74 - 96 Fibers	D- <b>XXX</b> -LN- <b>XY</b> -F12NS	8	0.49/12.5	9.8/25.0	4.9/12.5	607/2700	180/800	68	101
98 - 120 Fibers	D- <b>XXX</b> -LN- <b>XY</b> -F12NS	10	0.55/14.1	11.1/28.2	5.5/14.1	607/2700	180/800	87	129
122 - 144 Fibers	D- <b>XXX</b> -LN- <b>XY</b> -F12NS	12	0.63/16.1	12.6/32.2	6.3/16.1	607/2700	180/800	111	166
146 - 216 Fibers	D- <b>XXX</b> -LN- <b>XY</b> -F12NS	18	0.63/16.1	12.6/32.2	6.3/16.1	607/2700	180/800	94	140
218 - 288 Fibers	D- <b>XXX</b> -LN- <b>XY</b> -F12NS	24	0.73/18.5	14.5/37.0	7.3/18.5	607/2700	180/800	127	189
Singlemode/Multimode Composite (4-288 Fibers)	D-XXX-LN-CM-F12NS/	'AAaaa/I	<b>3Bbbb</b> Re	fer to above s	pecifications				

## Variables in the Catalog Number:

XXX = Total Fiber Count XY = Fiber Grade

**8W** LightScope ZWP\* Dispersion-Unshifted, Matched-Clad Singlemode Fiber

**8M** Matched-Clad Singlemode Fiber **8T** LightScope NZD™ Non-Zero Dispersion-Shifted Singlemode Fiber

For Composites Only:

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

**6F** 62.5μm, FDDI Grade Multimode Fiber 5M LaserCore\* 150, 50µm, Multimode Fiber

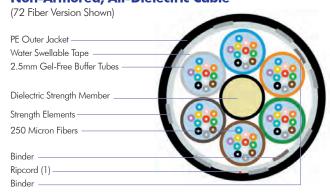
**5L** LaserCore\* 300, 50µm, Multimode Fiber 5K LaserCore\* 500, 50µm, Multimode Fiber

**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 13-24 repeat color sequence with tracer stripe

# **Gel-Free Stranded Loose Tube** Non-Armored, All-Dielectric Cable



# **Mechanical Properties**

Description	Specification	Test Method
Operating Temperature	-40° to 158°F (-40° to 70°C)	FOTP-3
Installation Temperature	-22° to 140°F (-30° to 60°C)	N/A
Storage Temperature	-40° to 167°F (-40° to 75°C)	N/A
Crush Resistance	250 lbf/in (44 N/mm)	FOTP-41
Impact Resistance	Exceeds	FOTP-25
Flexing	25 Cycles	FOTP-104
Twist Bend	Exceeds	FOTP-85

CommScope Outside Plant Fiber Optic cables are qualified to the requirements of ANSI/ ICEA S-87-640-1999, Standard for Optical Fiber Outside Plant Communications Cable, GR-20-CORE, Issue 2 Generic Requirements for OSP Fiber Optic Cable, EN 187105, European Standard for Optical Cable.

# **Outside Plant Gel-Free Stranded Loose Tube Cable**

Double Jacketed, Single Armored



# **Double Jaecket for Buried/Underground/Aerial Applications**

- 100% dry stranded loose tube cable reduces cable prep time and keeps gel from getting on clothes, workbenches, or splicing equipment
- Lightweight, small design is installer-preferred due to ease of handling
- Flexible 2.5mm buffer tubes improve kink resistance, reduce bend sensitivity, and facilitate route management in closures
- Medium Density Polyethylene (MDPE) jacket is rugged, durable, and easy to strip
- Rural Development Utilities Program (RDUP) listed, a progam administered by the Rural Utilities Service (RUS)

Product Type/ Fiber Count	Catalog Number	Subunits	Outer Diameter inch/mm	Minimum B Loaded inch/cm	end Radius Unloaded inch/cm	Maximum Te Short Term lbs/newtons	ensile Load Long Term lbs/newtons	We Ibs/ kft	eight kg/ km
Double Jacket/ Single Armor 2 - 60 Fibers	D- <b>XXX</b> -L2- <b>XY</b> -F12NS	5	0.59/15.1	11.9/30.2	5.9/15.1	607/2700	180/800	131	196
62 - 72 Fibers	D- <b>XXX</b> -L2- <b>XY</b> -F12NS	6	0.61/15.5	12.2/31.0	6.1/15.5	607/2700	180/800	139	208
74 - 96 Fibers	D- <b>XXX</b> -L2- <b>XY</b> -F12NS	8	0.67/17.0	13.3/34.0	6.7/17.0	607/2700	180/800	165	246
98 - 120 Fibers	D- <b>XXX</b> -L2- <b>XY</b> -F12NS	10	0.73/18.6	14.6/37.2	7.3/18.6	607/2700	180/800	195	291
122 - 144 Fibers	D- <b>XXX</b> -L2- <b>XY</b> -F12NS	12	0.81/20.7	16.2/41.4	8.1/20.7	607/2700	180/800	231	344
146 - 216 Fibers	D- <b>XXX</b> -L2- <b>XY</b> -F12NS	18	0.81/20.7	16.2/41.4	8.1/20.7	607/2700	180/800	214	319
218 - 288 Fibers	D- <b>XXX</b> -L2- <b>XY</b> -F12NS	24	0.91/23.1	18.1/46.2	9.1/23.1	607/2700	180/800	263	392
Singlemode/Multimode Composite (4-288 Fibers)									

#### Variables in the Catalog Number:

XXX = Total Fiber Count

XY = Fiber Grade

**8W** LightScope ZWP\* Dispersion-Unshifted, Matched-Clad Singlemode Fiber

 8M Matched-Clad Singlemode Fiber
 8T LightScope NZD" Non-Zero Dispersion-Shifted Singlemode Fiber

For Composites Only:

 ${\bf aaa} \ \hbox{is replaced with single mode fiber count} \\ {\bf AA} \ \hbox{is replaced with single mode type}$ 

**6F** 62.5μm, FDDI Grade Multimode Fiber

5M LaserCore\* 150, 50µm, Multimode Fiber5L LaserCore\* 300, 50µm, Multimode Fiber

**5K** LaserCore\* 500, 50µm, Multimode Fiber

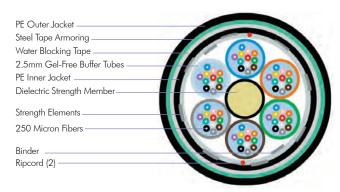
**bbb** is replaced by multimode fiber count **BB** is replaced by multimode type

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 13-24 repeat color sequence with tracer stripe

# Gel-Free Stranded Loose Tube Armored Cable Double Jacketed, Single Armored

(72 Fiber Version Shown)



# **Mechanical Properties**

Description	Specification	Test Method
Operating Temperature	-40° to 158°F (-40° to 70°C)	FOTP-3
Installation Temperature	-22° to 140°F (-30° to 60°C)	N/A
Storage Temperature	-40° to 167°F (-40° to 75°C)	N/A
Crush Resistance	250 lbf/in (44 N/mm)	FOTP-41
Impact Resistance	Exceeds	FOTP-25
Flexing	25 Cycles	FOTP-104
Twist Bend	Exceeds	FOTP-85

CommScope Outside Plant Fiber Optic cables are qualified to the requirements of ANSI/ICEA S-87-640-1999, Standard for Optical Fiber Outside Plant Communications Cable, GR-20-CORE, Issue 2 Generic Requirements for OSP Fiber Optic Cable, EN 187105, European Standard for Optical Cable.

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



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

- Corrugated steel tape armor is strong yet flexible providing additional crush and rodent protection
- Arid-Core water blocking technology helps protect fibers from moisture and reduces termination effort
- Standard color-coding on fibers and buffer tubes helps ease installation
- All buffer tubes are constructed to a nominal OD of 3mm reducing the number of tools required in the field
- Flexible buffer tubes improve kink resistance, reduce bend sensitivity and facilitates route management in closures
- Medium Density Polyethylene (MDPE) jacket is rugged, durable and easy to strip
- Rural Development Utilities Program (RDUP) listed, a progam administered by the Rural Utilities Service (RUS)

Product Type/	Catalog	Subunits	Outer Diameter	Minimum Bend Radius		Maximum Tensile Load		Weight	
Fiber Count	Number	305011113	inch/mm	Loaded inch/cm	Unloaded inch/cm	Short Term lbs/newtons	Long Term lbs/newtons	lbs/ kft	kg/ km
Single Jacket/ Single Armor 2 - 60 Fibers	O- <b>XXX</b> -LA- <b>XY</b> -F12NS	5	0.51/13.1	10.3/26.2	5.1/13.1	607/2700	180/800	102	152
62 - 72 Fibers	O- <b>XXX</b> -LA- <b>XY</b> -F12NS	6	0.55/14.0	11.0/28.0	5.5/14.0	607/2700	180/800	118	176
74 - 96 Fibers	O- <b>XXX</b> -LA- <b>XY</b> -F12NS	8	0.63/16.1	12.6/32.2	6.3/16.1	607/2700	180/800	151	225
98 - 120 Fibers	O- <b>XXX</b> -LA- <b>XY</b> -F12NS	10	0.71/18.2	14.3/36.4	7.1/18.2	607/2700	180/800	185	276
122 - 144 Fibers	O- <b>XXX</b> -LA- <b>XY</b> -F12NS	12	0.80/20.3	15.9/40.6	8.0/20.3	607/2700	180/800	226	337
146 - 216 Fibers	O- <b>XXX</b> -LA- <b>XY</b> -F12NS	18	0.80/20.3	15.9/40.6	8.0/20.3	607/2700	180/800	211	314
218 - 288 Fibers	O- <b>XXX</b> -LA- <b>XY</b> -F12NS	24	0.91/23.3	18.3/46.6	9.1/23.3	607/2700	180/800	272	405
Circulano e da /AAltina e da									

Singlemode/Multimode Composite (4-288 Fibers)

 $\hbox{O-XXX-LA-CM-F12NS/AAaaa/BBbbb}$ 

Refer to above specifications.

## **Variables in the Catalog Number:**

XXX = Total Fiber Count XY = Fiber Grade

**8W** LightScope ZWP\* Dispersion-Unshifted,

Matched-Clad Singlemode Fiber

**8M** Matched-Clad Singlemode Fiber

**8T** LightScope NZD™ Non-Zero Dispersion-Shifted Singlemode Fiber

For Composites Only: aaa is replaced with singlemode fiber count

AA is replaced with singlemode type

**6F** 62.5μm, FDDI Grade Multimode Fiber

**5M** LaserCore\* 150, 50 $\mu$ m, Multimode Fiber

**5L** LaserCore\* 300, 50 $\mu$ m, Multimode Fiber **5K** LaserCore\* 500, 50 $\mu$ m, Multimode Fiber

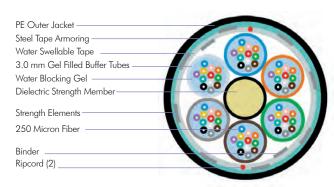
**bbb** is replaced by multimode fiber count **BB** is replaced by multimode type

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 13-24 repeat color sequence with tracer stripe

## **Arid-Core Stranded Loose Tube Armored Cable**

(72 Fiber Version Shown)



# **Mechanical Properties**

Description	Specification	Test Method
Operating Temperature	-40° to 158°F (-40° to 70°C)	FOTP-3
Installation Temperature	-22° to 140°F (-30° to 60°C)	N/A
Storage Temperature	-40° to 167°F (-40° to 75°C)	N/A
Crush Resistance	250 lbf/in (44 N/mm)	FOTP-41
Impact Resistance	Exceeds	FOTP-25
Flexing	25 Cycles	FOTP-104
Twist Bend	Exceeds	FOTP-85

CommScope Outside Plant Fiber Optic cables are qualified to the requirements of ANSI/ICEA S-87-640-1999, Standard for Optical Fiber Outside Plant Communications Cable, GR-20-CORE, Issue 2 Generic Requirements for OSP Fiber Optic Cable, EN 187105, European Standard for Optical Cable.

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

Non-Armored, All-Dielectric



# For Buried/Underground/Aerial Applications

- Arid-Core water blocking technology helps protect fibers from moisture and reduces termination effort
- Standard color-coding on fibers and buffer tubes helps ease installation
- All buffer tubes are constructed to a nominal OD of 3mm reducing the number of tools required in the field
- Flexible buffer tubes improve kink resistance, reduce bend sensitivity and facilitates route management in closures
- Medium Density Polyethylene (MDPE) jacket is rugged, durable and easy to strip
- Rural Development Utilities Program (RDUP) listed, a progam administered by the Rural Utilities Service (RUS)

Product Type/ Fiber Count	Catalog Number	Subunits	Outer Diameter inch/mm	Minimum E Loaded inch/cm	Bend Radius Unloaded inch/cm	Maximum 1 Short Term lbs/newtons	Tensile Load Long Term lbs/newtons	We Ibs/ kft	ight kg/ km
Single Jacket/ 2 - 60 Fibers	O- <b>XXX</b> -LN- <b>XY</b> -F12NS	5	0.46/11.6	9.1/23.2	4.6/11.6	607/2700	180/800	61	91
62 - 72 Fibers	O- <b>XXX</b> -LN- <b>XY</b> -F12NS	6	0.49/12.6	9.9/25.2	4.9/12.6	607/2700	180/800	74	110
74 - 96 Fibers	O- <b>XXX</b> -LN- <b>XY</b> -F12NS	8	0.57/14.6	11.5/29.2	5.7/14.6	607/2700	180/800	99	148
98 - 120 Fibers	O- <b>XXX</b> -LN- <b>XY</b> -F12NS	10	0.66/16.7	13.1/33.4	6.6/16.7	607/2700	180/800	127	189
122 - 144 Fibers	O- <b>XXX</b> -LN- <b>XY</b> -F12NS	12	0.74/18.8	14.8/37.6	7.4/18.8	607/2700	180/800	160	238
146 - 216 Fibers	O- <b>XXX</b> -LN- <b>XY</b> -F12NS	18	0.74/18.8	14.8/37.6	7.4/18.8	607/2700	180/800	145	216
218 - 288 Fibers	O- <b>XXX</b> -LN- <b>XY</b> -F12NS	24	0.86/21.8	17.1/43.6	8.6/21.8	607/2700	180/800	196	292
Singlemode/Multimode Composite (4-288 Fibers)	O-XXX-LN-CM-F12NS,	D-XXX-LN-CM-F12NS/AAaaa/BBbbb Refer to above specifications.							

# **Variables in the Catalog Number:**

XXX = Total Fiber Count

XY = Fiber Grade

**8W** LightScope ZWP\* Dispersion-Unshifted, Matched-Clad Singlemode Fiber

 8M Matched-Clad Singlemode Fiber
 8T LightScope NZD<sup>\*\*</sup> Non-Zero Dispersion-Shifted Singlemode Fiber

For Composites Only:

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

**6F** 62.5 $\mu$ m, FDDI Grade Multimode Fiber

**5M** LaserCore\* 150, 50 $\mu$ m, Multimode Fiber

**5L** LaserCore 300, 50µm, Multimode Fiber

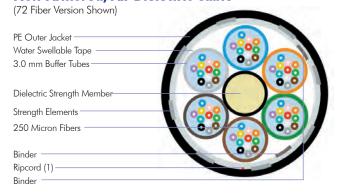
**5K** LaserCore" 500, 50μm, Multimode Fiber

**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 13-24 repeat color sequence with tracer stripe

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



# **Mechanical Properties**

Description	Specification	Test Method
Operating Temperature	-40° to 158°F (-40° to 70°C)	FOTP-3
Installation Temperature	-22° to 140°F (-30° to 60°C)	N/A
Storage Temperature	-40° to 167°F (-40° to 75°C)	N/A
Crush Resistance	250 lbf/in (44 N/mm)	FOTP-41
Impact Resistance	Exceeds	FOTP-25
Flexing	25 Cycles	FOTP-104
Twist Bend	Exceeds	FOTP-85

CommScope Outside Plant Fiber Optic cables are qualified to the requirements of ANSI/ICEA S-87-640-1999, Standard for Optical Fiber Outside Plant Communications Cable, GR-20-CORE, Issue 2 Generic Requirements for OSP Fiber Optic Cable, EN 187105, European Standard for Optical Cable.

# Multi-Jacketed Stranded Loose Tube Cable

Double Jacketed, Single Armored



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

- Corrugated steel tape armor is strong yet flexible providing additional crush and rodent protection
- Arid-Core\* water blocking technology helps protect fibers from moisture and reduces termination effort
- Standard color-coding on fibers and buffer tubes helps ease installation
- All buffer tubes are constructed to a nominal OD of 3mm reducing the number of tools required in the field
- Flexible buffer tubes improve kink resistance, reduce bend sensitivity and facilitates route management in closures
- Medium Density Polyethylene (MDPE) jacket is rugged, durable and easy to strip
- Rural Development Utilities Program (RDUP) listed, a progam administered by the Rural Utilities Service (RUS)

Product Type/ Fiber Count	Catalog Number	Sub Units	Outer Diameter inch/mm	Minimum B Loaded inch/cm	end Radius Unloaded inch/cm	Maximum Te lbs/m Short Term		Wei lbs/ kft	ight kg/ km
Double Jacket/ Single Armor 2 - 60 Fibers	O <b>-XXX-</b> L2- <b>XY</b> -F12NS	5	0.64/16.2	12.7/32.4	6.4/16.2	607/2700	180/800	152	227
62 - 72 Fibers	O- <b>XXX</b> -L2- <b>XY</b> -F12NS	6	0.67/17.1	13.4/34.2	6.7/17.1	607/2700	180/800	172	256
74 - 96 Fibers	O- <b>XXX</b> -L2- <b>XY</b> -F12NS	8	0.75/19.2	15.1/38.4	7.5/19.2	607/2700	180/800	209	312
98 - 120 Fibers	O- <b>XXX</b> -L2- <b>XY</b> -F12NS	10	0.84/21.3	16.7/42.6	8.4/21.3	607/2700	180/800	252	376
122 - 144 Fibers	O- <b>XXX</b> -L2- <b>XY</b> -F12NS	12	0.92/23.4	18.4/46.8	9.2/23.4	607/2700	180/800	296	442
146 - 216 Fibers	O- <b>XXX</b> -L2- <b>XY</b> -F12NS	18	0.92/23.4	18.4/46.8	9.2/23.4	607/2700	180/800	282	420
218 - 288 Fibers	O- <b>XXX</b> -L2- <b>XY</b> -F12NS	24	1.04/26.4	20.7/52.8	10.4/26.4	607/2700	180/800	360	522
Singlemode/Multimode Composite (4-288 Fibers)	O- <b>XXX</b> -L2- <b>CM</b> -F12NS,	/ <b>AA</b> ac	aa/BBbbb	Refer to abov	ve specification	ns.			

#### Variables in the Catalog Number:

XXX = Total Fiber Count

= Fiber Grade

8W LightScope ZWP Dispersion-Unshifted, Matched-Clad Singlemode Fiber

8M Matched-Clad Singlemode Fiber

8T LightScope NZD™ Non-Zero Dispersion-Shifted Singlemode Fiber

For Composites Only:

 $\mathbf{a}\mathbf{a}\mathbf{a}$  is replaced with singlemode fiber count AA is replaced with singlemode type

**6F** 62.5μm, FDDI Grade Multimode Fiber

5M LaserCore\* 150, 50µm, Multimode Fiber

**5L** LaserCore\* 300, 50μm, Multimode Fiber

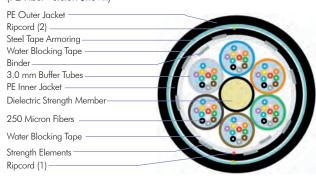
**5K** LaserCore® 500, 50μm, Multimode Fiber

**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

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

(72 Fiber Version Shown)



# **Mechanical Properties**

Description	Specification	Test Method
Operating Temperature	-40° to 158°F (-40° to 70°C)	FOTP-3
Installation Temperature	-22° to 140°F (-30° to 60°C)	N/A
Storage Temperature	-40° to 167°F (-40° to 75°C)	N/A
Crush Resistance	250 lbf/in (44 N/mm)	FOTP-41
Impact Resistance	Exceeds	FOTP-25
Flexing	25 Cycles	FOTP-104
Twist Bend	Exceeds	FOTP-85

CommScope Outside Plant Fiber Optic cables are qualified to the requirements of ANSI/ICEA S-87-640-1999, Standard for Optical Fiber Outside Plant Communications Cable, GR-20-CORE, Issue 2 Generic Requirements for OSP Fiber Optic Cable, EN 187105, European Standard for Optical Cable.

# Multi-Jacketed Stranded Loose Tube Cable

Triple Jacketed, Double Armored



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

- Double armor cable provides additional crush and mechanical protection for areas with severe rodent and lightening problems
- Corrugated steel tape armor is strong yet flexible providing additional crush and rodent protection
- Arid-Core\* water blocking technology helps protect fibers from moisture and reduces termination effort
- Standard color-coding on fibers and buffer tubes helps ease installation
- All buffer tubes are constructed to a nominal OD of 3mm reducing the number of tools required in the field
- Flexible buffer tubes improve kink resistance, reduce bend sensitivity and facilitates route management in closures
- Medium Density Polyethylene (MDPE) jacket is rugged, durable and easy to strip

Product Type/ Fiber Count	Catalog Number	Sub Units	Outer Diameter inch/mm	Minimum Be Loaded inch/cm	end Radius Unloaded inch/cm	Maximum Te lbs/m Short Term		Wei Ibs/ kft	ght kg/ km
Triple Jacket/ Double- Armor 2 - 60 Fibers	O <b>-XXX-</b> L3- <b>XY</b> -F12NS	5	0.81/20.7	16.2/41.4	8.1/20.7	607/2700	180/800	272	406
62 - 72 Fibers	O- <b>XXX</b> -L3- <b>XY</b> -F12NS	6	0.85/21.7	17.0/43.4	8.5/21.7	607/2700	180/800	298	444
74 - 96 Fibers	O- <b>XXX</b> -L3- <b>XY</b> -F12NS	8	0.93/23.8	18.7/47.6	9.3/23.8	607/2700	180/800	348	519
98 - 120 Fibers	O- <b>XXX</b> -L3- <b>XY</b> -F12NS	10	1.02/25.9	20.3/51.8	10.2/25.9	607/2700	180/800	405	604
122 - 144 Fibers	O- <b>XXX</b> -L3- <b>XY</b> -F12NS	12	1.09/27.9	21.9/55.8	10.9/27.9	607/2700	180/800	462	689
146 - 216 Fibers	O- <b>XXX</b> -L3- <b>XY</b> -F12NS	18	1.09/27.9	21.9/55.8	10.9/27.9	607/2700	180/800	447	667
218 - 288 Fibers	O- <b>XXX</b> -L3- <b>XY</b> -F12NS	24	1.21/30.9	24.3/61.8	12.1/30.9	607/2700	180/800	534	796
Singlemode/Multimode Composite (4-288 Fibers)	O- <b>XXX</b> -L3- <b>CM</b> -F12NS,	/AAac	aa/BBbbb	Refer to abov	ve specification	ns.		-	

# Variables in the Catalog Number:

XXX = Total Fiber Count

= Fiber Grade

8W LightScope ZWP® Dispersion-Unshifted, Matched-Clad Singlemode Fiber

8M Matched-Clad Singlemode Fiber

8T LightScope NZD™ Non-Zero Dispersion-Shifted Singlemode Fiber

For Composites Only:

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

**6F** 62.5μm, FDDI Grade Multimode Fiber

5M LaserCore\* 150, 50µm, Multimode Fiber

**5L** LaserCore® 300, 50μm, Multimode Fiber

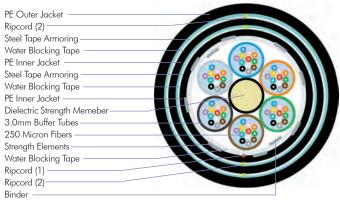
5K LaserCore\* 500, 50µm, Multimode Fiber

**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

# Triple Jacket/Double Armor Loose Tube Cable

(72 Fiber Version Shown)



## **Mechanical Properties**

Description	Specification	Test Method
Operating Temperature	-40° to 158°F (-40° to 70°C)	FOTP-3
Installation Temperature	-22° to 140°F (-30° to 60°C)	N/A
Storage Temperature	-40° to 167°F (-40° to 75°C)	N/A
Crush Resistance	250 lbf/in (44 N/mm)	FOTP-41
Impact Resistance	Exceeds	FOTP-25
Flexing	25 Cycles	FOTP-104
Twist Bend	Exceeds	FOTP-85

CommScope Outside Plant Fiber Optic cables are qualified to the requirements of ANSI/ICEA S-87-640-1999, Standard for Optical Fiber Outside Plant Communications Cable, GR-20-CORE, Issue 2 Generic Requirements for OSP Fiber Optic Cable, EN 187105, European Standard for Optical Cable.

# **Outside Plant Arid-Core® Mini Stranded Loose Tube Cable**

Non-Armored, All-Dielectric



# For Buried/Underground/Aerial Applications

- Arid-Core water blocking technology helps protect fibers from moisture and reduces termination effort
- Standard color-coding on fibers and buffer tubes helps ease installation
- Flexible buffer tubes improve kink resistance, reduce bend sensitivity and facilitates route management in closures
- Medium Density Polyethylene (MDPE) jacket is rugged, durable and easy to strip

Product Type/ Fiber Count	Catalog Number	Subunits	Outer Diameter inch/mm	Minimum E Loaded inch/cm	Bend Radius Unloaded inch/cm	Maximum 1 Short Term lbs/newtons	Tensile Load Long Term Ibs/newtons	We lbs/ kft	ight kg/ km
Single Jacket/ 2 - 72 Fibers	O- <b>XXX</b> -LN- <b>XY</b> -F12NS/20T	6	0.36/9.3	7.3/18.6	3.6/9.3	607/2700	180/800	63	94
74 - 96 Fibers	O- <b>XXX</b> -LN- <b>XY</b> -F12NS/20T	8	0.41/10.4	8.2/20.8	4.1/10.4	607/2700	180/800	77	115
98 - 120 Fibers	O- <b>XXX</b> -LN- <b>XY</b> -F12NS/20T	10	0.46/11.6	9.1/23.2	4.6/11.6	607/2700	180/800	97	145
122 - 144 Fibers	O- <b>XXX</b> -LN- <b>XY</b> -F12NS/20T	12	0.52/13.2	10.4/26.4	5.2/13.2	607/2700	180/800	125	187

# Variables in the Catalog Number: XXX = Total Fiber Count XY = Fiber Grade 8W LightSo

8W LightScope ZWP Dispersion-Unshifted, Matched-Clad Singlemode Fiber

**8M** Matched-Clad Singlemode Fiber

8T LightScope NZD™ Non-Zero Dispersion-Shifted Singlemode Fiber

For Composites Only:

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

6F 62.5µm, FDDI Grade Multimode Fiber

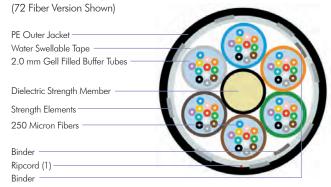
5M LaserCore\* 150, 50µm, Multimode Fiber 5L LaserCore" 300, 50µm, Multimode Fiber

**5K** LaserCore\* 500, 50 $\mu$ m, Multimode Fiber

**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

# **Arid-Core Mini Stranded Loose Tube** Non-Armored, All-Dielectric Cable



# **Mechanical Properties**

Description	Specification	Test Method
Operating Temperature	-40° to 158°F (-40° to 70°C)	FOTP-3
Installation Temperature	-22° to 140°F (-30° to 60°C)	N/A
Storage Temperature	-40° to 167°F (-40° to 75°C)	N/A
Crush Resistance	250 lbf/in (44 N/mm)	FOTP-41
Impact Resistance	Exceeds	FOTP-25
Flexing	25 Cycles	FOTP-104
Twist Bend	Exceeds	FOTP-85

CommScope Outside Plant Fiber Optic cables are qualified to the requirements of ANSI/ ICEA S-87-640-1999, Standard for Optical Fiber Outside Plant Communications Cable, GR-20-CORE, Issue 2 Generic Requirements for OSP Fiber Optic Cable, EN 187105, European Standard for Optical Cable.

# **Outside Plant Stranded Loose Tube Cable**

**High Density Loose Tube** 



# For Buried/Underground/Aerial applications

- Dual-layer stranded core for ease of access
- Dry water-blocking technology for a more craft-friendly, jelly-free cable core
- ROL stranding and ripcords for fast mid-span entry

Product Type/ Fiber Count	Catalog Number	Subunits	Outer Diameter inch/mm	Minimum B Loaded inch/cm	Bend Radius Unloaded inch/cm	Maximum Ter Short Term lbs/newtons	nsile Load Long Term lbs/newtons	We lbs/ kft	ight kg/ km
Armored 290-432 Fibers	O- <b>XXX</b> -LA- <b>XY</b> -F24NS	18	0.90/23.0	18.1/46.0	9.0/23.0	607/2700	180/800	268	399
434-576 Fibers	O- <b>XXX</b> -LA- <b>XY</b> -F24NS	24	1.03/26.2	20.6/52.4	10.3/26.2	607/2700	180/800	345	515
All Dielectric 290-432 Fibers	O- <b>XXX</b> -LN- <b>XY</b> -F24NS	18	0.84/21.5	16.9/43.0	8.4/21.5	607/2700	180/800	192	286
434-576 Fibers	O- <b>XXX</b> -LN- <b>XY</b> -F24NS	24	0.97/24.8	19.5/49.6	9.7/24.8	607/2700	180/800	260	387
Double Jacketed Single Armored 290-432 Fibers	O- <b>XXX</b> -LN- <b>XY</b> -F24NS	18	1.02/26.0	20.4/52.0	10.2/26.0	607/2700	180/800	343	512

# **Variables in the Catalog Number:**

XXX = Total Fiber Count XY = Fiber Grade

**8W** LightScope ZWP\* Dispersion-Unshifted, Matched-Clad Singlemode Fiber

**8M** Matched-Clad Singlemode Fiber

**8T** LightScope NZD™ Non-Zero Dispersion-

Shifted Singlemode Fiber

For Composites Only: aaa is replaced with singlemode fiber count

**AA** is replaced with singlemode type

**6F** 62.5μm, FDDI Grade Multimode Fiber

**5M** LaserCore" 150, 50 $\mu$ m, Multimode Fiber

**5L** LaserCore" 300, 50 $\mu$ m, Multimode Fiber

**5K** LaserCore\* 500, 50 $\mu$ m, Multimode Fiber

**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 13-24 repeat color sequence with tracer stripe

# All-Dielectric High Density Loose Tube Fiber Cable (432 Fiber Version Shown) PE Outer Jacket Strength Elements 3.5 mm Gel Filled Buffer Tube Dielectric Strength Member Fiber Binder Threads Water Swellable Tape 250 Micron Optical Fibers Ripcord (1)

# **Mechanical Properties**

Description	Specification	Test Method
Operating Temperature	-40° to 158°F (-40° to 70°C)	FOTP-3
Installation Temperature	-22° to 140°F (-30° to 60°C)	N/A
Storage Temperature	-40° to 167°F (-40° to 75°C)	N/A
Crust Resistance	250 lbf/in (44 N/mm)	FOTP-41
Impact Resistance	Exceeds	FOTP-25
Flexing	25 Cycles	FOTP-104
Twist/Bend	Exceeds	FOTP-85

CommScope Outside Plant Fiber Optic cables are qualified to the requirements of ANSI/ICEA S-87-640-1999, Standard for Optical Fiber Outside Plant Communications Cable, GR-20-CORE, Issue 2 Generic Requirements for OSP Fiber Optic Cable, EN 187105, European Standard for Optical Cable.

# **ADSS Short Span Loose Tube Cable**

All-Dielectric, Self-Supporting (ADSS) Aerial Design



# For Aerial Long Haul and Metro Applications

- Small cable diameter and bend radius for lightweight and ease of handling and installation
- Designed for short spans
- Single Medium Density Polyethylene (MDPE) jacket for fast convenient cable preparation
- Fully qualified in accordance with Telcordia Technologies, EIA/TIA and IEEE Standards

Product Type/ Fiber Count	Catalog Number	Sub Units	Outer Diameter inch/mm	Minimum Loaded inch/cm	Bend Radius Unloaded Ibs/newtons	Maximum 1 Short Term kft	ensile Load Long Term km	We Ibs/ kft	eight kg/ km
Single Jacket 2-60 Fibers	S- <b>XXX</b> -LN- <b>XY</b> -F12NS	5	0.46/11.8	9.3/23.6	4.6/11.8	607/2700	180/800	66	99

Other ADSS designs are available upon request.

#### Variables in the Catalog Number:

XXX = Total Fiber Count

= Fiber Grade

8W LightScope ZWP® Dispersion-Unshifted, Matched-Clad Singlemode Fiber

8M Matched-Clad Singlemode Fiber

8T LightScope NZD™ Non-Zero Dispersion-

Shifted Singlemode Fiber

For Composites Only:

aaa is replaced with singlemode fiber count

AA is replaced with singlemode type

6F 62.5µm, FDDI Grade Multimode Fiber

5M LaserCore® 150, 50µm, Multimode Fiber

**5L** LaserCore® 300, 50μm, Multimode Fiber

5K LaserCore® 500, 50µm, Multimode Fiber

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

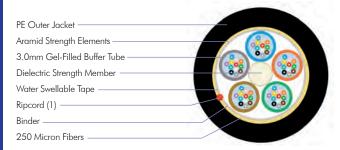
Buffer Tubes/Fiber identification colors: 1/Blue, 2/Orange, 3/Green, 4/Brown, 5/Slate, 6/White, 7/Red, 8/Black, 9/Yellow, 10/Violet, 11/Rose, 12/Aqua Loading Capabilities: Meets the loading conditions of heavy, medium or light storm loading areas as defined in Rule 251 of the National Electrical Safety Code (NESC). Sag and tension tables are available providing the recommended sag or tension. Please contact Technical Services for more information

# Sag and Tension Samples

Fiber Count	Max Span ft/m	ESC Heavy Total Sag at NESC Loading %	NES Max Span ft/m	SC Medium Total Sag at NESC Loading %	NE Max Span ft/m	SC Light Total Sag at NESC Loading %
2-60	205/97	4.62	456/139	4.27	630/192	3.90

# **ADSS Double Jacket Loose Tube All-Dielectric Cable**

(60 Fiber Version Shown)



# **Mechanical Properties**

Description	Specification	Test Method
Operating Temperature	-40° to 158°F (-40° to 70°C)	FOTP-3
Installation Temperature	-22° to 140°F (-30° to 60°C)	N/A
Storage Temperature	-40° to 167°F (-40° to 75°C)	N/A
Crush Resistance	250lbf/in (44 N/mm)	FOTP-41
Impact Resistance	Exceeds	FOTP-25
Flexing	25 Cycles	FOTP-104
Twist Bend	Exceeds	FOTP-85
High Frequency (Aeolian) Vibration	100 Million Cycles	IEEE P1222
Low Frequency (Galloping) Vibration	100,000 Cycles	IEEE P1222
Electrical Space Potential Standard Jacket	up to 12 kV	IEEE P1222
Electrical Space Potential Special AT Jacket	up to 25 kV	IEEE P1222

CommScope Outside Plant Fiber Optic cables are qualified to the requirements of ANSI/ICEA S-87-640-1999, Standard for Optical Fiber Outside Plant Communications Cable, GR-20-CORE, Issue 2 Generic Requirements for OSP Fiber Optic Cable, EN 187105, European Standard for Optical Cable.

# **Outside Plant Self-Supporting Figure-8 Cable**

Messengered Stranded Loose Tube Armored



# **For Aerial Applications**

- Figure-8 cable design allows easy, one-step installation resulting in cost savings
- Arid-Core\* water blocking technology helps protect fibers from moisture and reduces termination effort
- Standard color-coding on fibers and buffer tubes helps ease installation
- All buffer tubes are constructed to a nominal OD of 3mm reducing the number of tools required in the field
- •Uses standard figure-8 cable hardware and installation practices

Product Type/ Fiber Count	Catalog Number	Sub Units	Width inch/mm	Height inch/cm	Minimum Loaded inch/cm	Bend Radius Unloaded lbs/newtons	We lbs/ kft	eight kg/ km
Figure-8 Armored 2 - 60 Fibers	M- <b>XXX</b> -LA- <b>XY</b> -F12NS	5	0.51/13.1	0.95/24.3	20.6/52.4	10.3/26.2	256	382
62 - 72 Fibers	M- <b>XXX</b> -LA- <b>XY</b> -F12NS	6	0.55/14.0	0.99/25.2	22.0/56.0	11.0/28.0	271	404
74 - 144 Fibers	M- <b>XXX</b> -LA- <b>XY</b> -F12NS	12	0.80/20.3	1.24/31.5	31.9/81.2	15.9/40.6	379	565
146 - 216 Fibers	M- <b>XXX</b> -LA- <b>XY</b> -F12NS	18	0.80/20.3	1.24/31.5	31.9/81.2	15.9/40.6	365	545
218-288 Fibers	M- <b>XXX</b> -LA- <b>XY</b> -F12NS	24	0.91/23.3	1.35/34.4	36.6/93.2	18.3/46.6	424	633
Singlemode/Multimode Composite (4-216 Fibers)	M- <b>XXX</b> -LA- <b>CM</b> -F12NS/	<b>AA</b> aaa/	<b>BBbbb</b> Refer	to above specifi	cations.			

# Variables in the Catalog Number:

XXX = Total Fiber Count

XY = Fiber Grade

For Composites Only:

**8W** LightScope ZWP" Dispersion-Unshifted, Matched-Clad Singlemode Fiber

**8M** Matched-Clad Singlemode Fiber

**8T** LightScope NZD™ Non-Zero Dispersion-

Shifted Singlemode Fiber

aaa is replaced with singlemode fiber count

**AA** is replaced with singlemode type

**6F** 62.5μm, FDDI Grade Multimode Fiber

5M LaserCore" 150, 50µm, Multimode Fiber

**5L** LaserCore\* 300, 50μm, Multimode Fiber

**5K** LaserCore\* 500, 50 $\mu$ m, Multimode Fiber

**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 13-24 repeat color sequence with tracer stripe

**Loading Capabilities:** Meets the loading conditions of heavy, medium or light storm loading areas as defined in Rule 251 of the National Electrical Safety Code (NESC). Sag and tension tables are available providing the recommended sag or tension. Please contact Technical Services for more information

#### Figure-8 Armored Cable

(72 Fiber Version Shown)

MPDE Outer Jacket
Stranded 0.25" Galvanized Steel Messenger

Steel Tape Armoring
Binder
Water Swellable Tape

3.0 mm Gel Filled Buffer Tube
Dielectric Strength Member

250 Micron Fibers
Strength Elements
Ripcord (1)
Binder

# **Mechanical Properties**

Description	Specification	Test Method
Operating Temperature	-40° to 158°F (-40° to 70°C)	FOTP-3
Installation Temperature	-22° to 140°F (-30° to 60°C)	N/A
Storage Temperature	-40° to 167°F (-40° to 75°C)	N/A
Crush Resistance	250 lbf/in (44 N/mm)	FOTP-41
Impact Resistance	Exceeds	FOTP-25
Flexing	25 Cycles	FOTP-104
Twist Bend	Exceeds	FOTP-85

CommScope Outside Plant Fiber Optic cables are qualified to the requirements of ANSI/ICEA S-87-640-1999, Standard for Optical Fiber Outside Plant Communications Cable, GR-20-CORE, Issue 2 Generic Requirements for OSP Fiber Optic Cable, EN 187105, European Standard for Optical Cable.

# **Outside Plant Self-Supporting Figure-8 Cable**

Messengered Stranded Loose Tube All-Dielectric



# **For Aerial Applications**

- Figure-8 cable design allows easy, one-step installation resulting in cost savings
- Arid-Core\* water blocking technology helps protect fibers from moisture and reduces termination effort
- Standard color-coding on fibers and buffer tubes helps ease installation
- All buffer tubes are constructed to a nominal OD of 3mm reducing the number of tools required in the field
- •Uses standard figure-8 cable hardware and installation practices

Product Type/ Fiber Count	Catalog Number	Sub Units	Width inch/mm	Height inch/cm	Minimum Loaded inch/cm	Bend Radius Unloaded Ibs/newtons	We Ibs/ kft	ight kg/ km
Figure-8 Non-Armored 2 - 60 Fibers	m- <b>xxx</b> -ln- <b>xy</b> -f12ns	5	0.46/11.6	0.89/22.8	18.2/46.4	9.1/23.2	213	318
2 - 72 Fibers	M- <b>XXX</b> -LN- <b>XY</b> -F12NS	6	0.49/12.6	0.93/23.8	19.8/50.4	9.9/25.2	227	338
74 - 144 Fibers	M <b>-XXX</b> -LN- <b>XY</b> -F12NS	12	0.74/18.8	1.18/30.0	29.5/75.2	14.8/37.6	312	466
146 - 216 Fibers	M <b>-XXX</b> -LN- <b>XY</b> -F12NS	18	0.74/18.8	1.18/30.0	29.5/75.2	14.8/37.6	299	446
218-288 Fibers	M <b>-XXX</b> -LN- <b>XY</b> -F12NS	24	0.86/21.8	1.30/33.0	34.2/87.2	17.1/43.6	349	520
Singlemode/Multimode Composite (4-216 Fibers)	M-XXX-LN-CM-F12NS/A	Aaaa/B	<b>Bbbb</b> Refer	to above specific	cations.			

## **Variables in the Catalog Number:**

XXX = Total Fiber Count XY = Fiber Grade

**8W** LightScope ZWP\* Dispersion-Unshifted, Matched-Clad Singlemode Fiber

8M Matched-Clad Singlemode Fiber
8T LightScape NZD™ Non Zara Disparsion

**8T** LightScope NZD™ Non-Zero Dispersion-Shifted Singlemode Fiber

For Composites Only:

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

**6F** 62.5μm, FDDI Grade Multimode Fiber

5M LaserCore 150, 50μm, Multimode Fiber5L LaserCore 300, 50μm, Multimode Fiber

**5K** LaserCore 500, 50μm, Multimode Fiber

SK LaserCore 300, 30μm, Mollimode Fiber

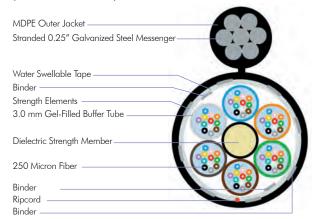
**bbb** is replaced by multimode fiber count **BB** is replaced by multimode type

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 - 24 repeat color sequence with tracer stripes

**Loading Capabilities:** Meets the loading conditions of heavy, medium or light storm loading areas as defined in Rule 251 of the National Electrical Safety Code (NESC). Sag and tension tables are available providing the recommended sag or tension. Please contact Technical Services for more information

# Figure-8 Non-Armored Cable

(72 Fiber Version Shown)



# **Mechanical Properties**

Description	Specification	Test Method
Operating Temperature	-40° to 158°F (-40° to 70°C)	FOTP-3
Installation Temperature	-22° to 140°F (-30° to 60°C)	N/A
Storage Temperature	-40° to 167°F (-40° to 75°C)	N/A
Crush Resistance	250 lbf/in (44 N/mm)	FOTP-41
Impact Resistance	Exceeds	FOTP-25
Flexing	25 Cycles	FOTP-104
Twist Bend	Exceeds	FOTP-85

CommScope Outside Plant Fiber Optic cables are qualified to the requirements of ANSI/ICEA S-87-640-1999, Standard for Optical Fiber Outside Plant Communications Cable, GR-20-CORE, Issue 2 Generic Requirements for OSP Fiber Optic Cable, EN 187105, European Standard for Optical Cable.

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

Riser-Rated



- 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	Sub Units	Outer Diameter inch/mm	Minimum Bend Radius Loaded Unloaded inch/cm inch/cm		Maximum Tensile Load Ibs/meters Short Term Long Term		Weig lbs/ kft	ght kg/ km
Single Jacket 2 - 60 Fibers	R- <b>XXX</b> -LN- <b>XY</b> -F12BK	5	0.49/12.6	9.9/25.2	4.9/12.6	607/2700	180/800	96	143
62 - 72 Fibers	R- <b>XXX</b> -LN- <b>XY</b> -F12BK	6	0.53/13.6	10.7/27.2	5.3/13.6	607/2700	180/800	112	167
74 - 96 Fibers	R- <b>XXX</b> -LN- <b>XY</b> -F12BK	8	0.62/15.7	12.3/31.4	6.2/15.7	607/2700	180/800	149	223
98 - 120 Fibers	R- <b>XXX</b> -LN- <b>XY</b> -F12BK	10	0.69/17.7	13.9/35.4	6.9/17.7	607/2700	180/800	191	285
122 - 144 Fibers	R- <b>XXX</b> -LN- <b>XY</b> -F12BK	12	0.78/19.8	15.5/39.6	7.8/19.8	607/2700	180/800	241	359
146 - 216 Fibers	R- <b>XXX</b> -LN- <b>XY</b> -F12BK	18	0.80/20.5	16.1/41.0	8.0/20.5	607/2700	180/800	222	331
218 - 288 Fibers	R- <b>XXX</b> -LN- <b>XY</b> -F12BK	24	0.92/23.4	18.4/46.8	9.2/23.4	607/2700	180/800	294	438
Singlemode/Multimode Composite (4-288 Fibers)	R- <b>XXX</b> -LN- <b>XY</b> -F12BK/	<b>A</b> Aaaa	/BBbbb R	efer to above s	specifications.				

Available in heavy duty dual jacket up to 96 count (minimum order required).

# Variables in the Catalog Number: XXX = Total Fiber Count XY = Fiber Grade 8W LightSo

**8W** LightScope ZWP\* Dispersion-Unshifted, Matched-Clad Singlemode Fiber

**8M** Matched-Clad Singlemode Fiber

LightScope NZD™ Non-Zero Dispersion-Shifted Singlemode Fiber

For Composites Only: aaa is replaced with singlemode fiber count

AA is replaced with singlemode type

**6F** 62.5μm, FDDI Grade Multimode Fiber

5M LaserCore" 150, 50µm, Multimode Fiber

5L LaserCore 300, 50µm, Multimode Fiber **5K** LaserCore\* 500, 50μm, Multimode Fiber

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

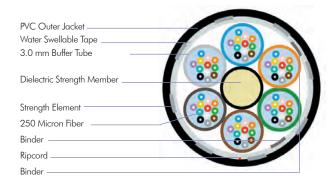
Tight Buffer/Fiber Identification Colors: 1/Blue, 2/Orange, 3/Green, 4/Brown, 5/Slate, 6/White, 7/Red, 8/Black, 9/Yellow, 10/Violet, 11/Rose, 12/Aqua

Buffer Tubes 13 - 18 repeat color sequence with tracer stripes

Jacket Color: Black PVC

# **Riser-Rated Indoor/Outdoor** Stranded Loose Tube Cable

(72 Fiber Version Shown)



# **Mechanical Properties**

Description	Specification	Test Method
Operating Temperature	-40° to 158°F (-40° to 70°C)	FOTP-3
Installation Temperature	-22° to 140°F (-30° to 60°C)	N/A
Storage Temperature	-40° to 167°F (-40° to 75°C)	N/A
Crush Resistance	250 lbf/in (44 N/mm)	FOTP-41
Impact Resistance	4.34 lbf/ft (5.88 N/mm)	FOTP-25
Flexing	25 cycles	FOTP-104
Twist Bend	Exceeds	FOTP-85

CommScope Indoor/Outdoor Fiber Optic Cables are qualified to the requirements of ANSI/ICEA S-87-640-1999, Standard for Optical Fiber Outside Plant Communications Cable, GR-20-CORE, Issue 2 Generic Requirements for OSP Fiber Optic Cable, EN 187-105, European Standard for Optical Cable.

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





- All meet critical NEC/CEC plenum (OFNP) 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	Sub Units	Outer Diameter inch/mm	Minimum B Loaded inch/cm	end Radius Unloaded inch/cm	Maximum Te Ibs/me Short Term		We lbs/ kft	ight kg/ km
Single Jacket 2 - 60 Fibers	P- <b>XXX</b> -LN- <b>XY</b> -F12BK	5	0.42/10.8	8.5/21.6	4.2/10.8	600/2700	180/800	76	114
61 - 72 Fibers	P- <b>XXX</b> -LN- <b>XY</b> -F12BK	6	0.46/11.8	9.3/23.6	4.6/11.8	600/2700	180/800	93	138
74 - 96 Fibers	P- <b>XXX</b> -LN- <b>XY</b> -F12BK	8	0.54/13.8	10.8/27.6	5.4/13.8	600/2700	180/800	129	193
98 - 120 Fibers	P- <b>XXX</b> -LN- <b>XY</b> -F12BK	10	0.62/15.9	12.5/31.8	6.2/15.9	600/2700	180/800	174	260
122 - 144 Fibers	P- <b>XXX</b> -LN- <b>XY</b> -F12BK	12	0.71/18.0	14.1/36.0	7.1/18.0	600/2700	180/800	228	340
Singlemode/Multimode Composite (4-144 Fibers)	P- <b>XXX</b> -LN-CM-F12BK/	AAaa	a/BBbbb	Refer to above s	specifications.			-	

#### **Variables in the Catalog Number:**

XXX = Total Fiber Count XY = Fiber Grade

**8W** LightScope ZWP\* Dispersion-Unshifted, Matched-Clad Singlemode Fiber

**8M** Matched-Clad Singlemode Fiber

**8T** LightScope NZD™ Non-Zero Dispersion-Shifted Singlemode Fiber

For Composites Only:

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

**6F** 62.5μm, FDDI Grade Multimode Fiber **5M** LaserCore\* 150, 50μm, Multimode Fiber

**5L** LaserCore® 300, 50μm, Multimode Fiber

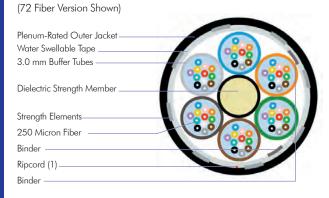
**5K** LaserCore\* 500, 50μm, Multimode Fiber

**bbb** is replaced by multimode fiber count

BB is replaced by multimode type

Tight Buffer/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

# Plenum-Rated Indoor/Outdoor Stranded Loose Tube Cable



# **Mechanical Properties**

Description	Specification	Test Method
Operating Temperature	-40° to 158°F (-40° to 70°C)	FOTP-3
Installation Temperature	-22° to 140°F (-30° to 60°C)	N/A
Storage Temperature	-40° to 167°F (-40° to 75°C)	N/A
Crush Resistance	250 lbf/in (44 N/mm)	FOTP-41
Impact Resistance	Exceeds	FOTP-25
Flexing	25 cycles	FOTP-104
Twist Bend	Exceeds	FOTP-85

CommScope Outside Plant Fiber Optic cables are qualified to the requirements of ANSI/ICEA S-87-640-1999, Standard for Optical Fiber Outside Plant Communications Cable, GR-20-CORE, Issue 2 Generic Requirements for OSP Fiber Optic Cable, EN 187105, European Standard for Optical Cable.

# **Outside Plant Central Tube Cable**

Armored and All-Dielectric Designs



# For Buried/Underground/Aerial Applications

- Robust constructions offer excellent protection of fibers
- Provides easy access to the fibers
- Arid-Core\* water blocking technology helps protect fibers from moisture and reduces termination effort
- Compatible with standard industry hardware and procedures

Product Type/ Fiber Count	Catalog Number	Subunits	Outer Diameter inch/mm	Minimum Be Loaded inch/cm	end Radius Unloaded inch/cm	Maximum T Short Term lbs/newtons	ensile Load Long Term lbs/newtons	We lbs/ kft	ight kg/ km
Armored 2-24 Fibers, 4mm Tube	O <b>-XXX</b> -CA- <b>XY</b> -F12NS	2	0.43/11.0	8.6/22.0	4.3/11.0	607/2700	180/800	93	138
26-48 Fibers, 6mm Tube	O- <b>XXX</b> -CA- <b>XY</b> -F12NS	4	0.51/13.0	10.2/26.0	5.1/13.0	607/2700	180/800	121	181
50-96 Fibers, 8mm Tube	O- <b>XXX</b> -CA- <b>XY</b> -F12NS	8	0.59/15.0	11.8/30.0	5.9/15.0	607/2700	180/800	152	226
All-Dielectric 2-24 Fibers, 4mm Tube	O- <b>XXX</b> -CN- <b>XY</b> -F12NS	2	0.40/10.1	7.9/20.2	4.0/10.1	607/2700	180/800	63	94
26-48 Fibers, 6mm Tube	O- <b>XXX</b> -CN- <b>XY</b> -F12NS	4	0.47/12.1	9.5/24.2	4.7/12.1	607/2700	180/800	86	128
50-96 Fibers, 8mm Tube	O- <b>XXX</b> -CN- <b>XY</b> -F12NS	8	0.55/14.1	11.1/28.2	5.5/14.1	607/2700	180/800	110	164
Singlemode/Multimode Composite (4-96 Fibers)	O- <b>XXX</b> -CA-CM-F12NS O- <b>XXX</b> -CN-CM-F12NS	•	•	to above spe size will vary		on fiber count/	configuration.	)	

# **Variables in the Catalog Number:**

XXX = Total Fiber Count XY = Fiber Grade

**8W** LightScope ZWP Dispersion-Unshifted, Matched-Clad Singlemode Fiber

8M Matched-Clad Singlemode Fiber

**8T** LightScope NZD™ Non-Zero Dispersion-Shifted Singlemode Fiber

For Composites Only:

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

**6F** 62.5μm, FDDI Grade Multimode Fiber

5M LaserCore® 150, 50µm, Multimode Fiber

**5L** LaserCore\* 300, 50μm, Multimode Fiber

5K LaserCore\* 500, 50µm, Multimode Fiber

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

Identification Threads/Fiber 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)

Steel RSM (2)	
Ripcord for Armor Access (2)	
PE Outer Jacket	
Gel	908
4.0 mm Buffer Tube	- OOO 888
Fiber Binder Thread	000
250 Micron Fibers	
Steel Armor	
Ripcord for Jacket Access (2)	

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

(36 Fiber All-Dielectric Version Shown)

Rigid RSM (2)	
PE Outer Jacket —	
Water-Blocking Tape —	000 000
Gel —	000 000
6.0 mm Buffer Tube —	000
Fiber Binder Threads	000
250 Micron Fibers —	200
Ripcord for Jacket Access (2)	

# **Mechanical Properties**

Description	Specification	Test Method
Operating Temperature	-40° to 158°F (-40° to 70°C)	FOTP-3
Installation Temperature	-22° to 140°F (-30° to 60°C)	N/A
Storage Temperature	-40° to 167°F (-40° to 75°C)	N/A
Crush Resistance	250 lbf/in (44 N/mm)	FOTP-41
Impact Resistance	Exceeds	FOTP-25
Flexing	25 Cycles	FOTP-104
Twist Bend	Exceeds	FOTP-85

CommScope Outside Plant Fiber Optic cables are qualified to the requirements of ANSI/ICEA S-87-640-1999, Standard for Optical Fiber Outside Plant Communications Cable, GR-20-CORE, Issue 2 Generic Requirements for OSP Fiber Optic Cable, EN 187105, European Standard for Optical Cable.

# **Outside Plant Pavement Cable**

Central Tube Design with a Copper Sheath



# **For Buried Applications**

- Smooth wall, welded copper armor
- Arid Core\* water-blocking technology helps protect fibers from moisture and reduces termination effort
- Good tensile performance (100 lbs.), compatible with standard micro-trenching techniques
- Provides excellent crush resistance

Product Type/ Fiber Count	Catalog Number	Bundles	Outer Diameter inch/mm	Minimum Be Loaded inch/cm	end Radius Unloaded inch/cm	Maximum Te Short Term lbs/newtons	ensile Load Long Term Ibs/newtons	We Ibs/ kft	ight kg/ km
Pavement Cable 2 - 72 Fibers	O- <b>XXX</b> -CP- <b>XY</b> -F12NS	6	0.35/8.8	6.9/17.6	3.5/8.8	300/1335	90/400	78	116

# Variables in the Catalog Number: XXX = Total Fiber Count

XY = Fiber Grade

8W LightScope ZWP® Dispersion-Unshifted, Matched-Clad Singlemode Fiber

**8M** Matched-Clad Singlemode Fiber

**8T** LightScope NZD™ Non-Zero Dispersion-Shifted Singlemode Fiber

For Composites Only:

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

**6F** 62.5μm, FDDI Grade Multimode Fiber 5M LaserCore® 150, 50µm, Multimode Fiber **5L** LaserCore\* 300, 50μm, Multimode Fiber

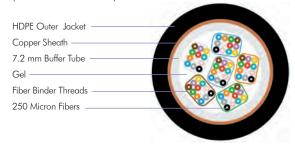
**5K** LaserCore\* 500, 50μm, Multimode Fiber

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

Identification Threads/Fiber 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

# **Outside Plant Pavement Cable**

(72 Fiber Version Shown)



# **Mechanical Properties**

Description	Specification	Test Method
Operating Temperature	-40° to 158°F (-40° to 70°C)	FOTP-3
Installation Temperature	-22° to 140°F (-30° to 60°C)	N/A
Storage Temperature	-40° to 158°F (-40° to 70°C)	N/A
Crush Resistance	250 lbf/in (44 N/mm)	FOTP-41
Impact Resistance	2.17 lbf·ft (2.94 N·m)	FOTP-25
Flexing	25 Cycles	FOTP-104
Twist Bend	Exceeds	FOTP-85

CommScope Outside Plant Fiber Optic cables are qualified to the ANSI/ICEA S-XXX-717-2002 Standard for Optical Drop Cable.

# 5/8" Backer Rod

Closed Cell Foamed Neoprene Rod

Product Type	Catalog Number	Outer Diameter inch/mm
Backer Rod	KIT-TOL-BKR-5/8N	0.625/15.93

## **Mechanical Properties**

Description	Specification	Test Method
Operating Temperature	-40° to 158°F (-40° to 70°C)	N/A
Installation Temperature	-22° to 140°F (-30° to 60°C)	N/A
Storage Temperature	-40° to 167°F (-40° to 75°C)	N/A
Compression Deflection, 25% (psi)	5-9	ASTM D 1056-98
Heat Resistance Oven-aged 7 days @70°C	-1	ASTM D 1056-98
Oven-aged 22 hrs. @ 100°C	0	ASTM D 1056-98
Water Absorption (%)	<5	ASTM D 1056-98
Compression Set (22 hrs. @ 23°C, 50% deflection, 24 hr. recovery, %)	11	ASTM D 1056-98 (suffix B2)
Fluid Resistance (22 hrs.@ 23°C in Reference Fuel B, Change in weight, %)	+123	ASTM D 1056-98
Flamability of Interior Mat.	PASS	FMVSS (suffix Z1)
Fluid Resistance (IRM 903 Oil, 22 hrs. @ 70°C Volume Change, %)	-0.26	ASTM D 471 (suffix Z2)

# **Indoor/Outdoor Central Tube Cables**

Riser-Rated



# **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	Sub Units	Outer Diameter inch/mm	Minimum I Loaded inch/cm	Bend Radius Unloaded inch/cm	Maximum T lbs/m Short Term	ensile Load eters Long Term	Weigh lbs/ kft	nt kg/ km
Single Jacket 2-24 Fibers, 4mm Tube	R- <b>XXX</b> -CN- <b>XY</b> -F12BK	2	0.40/10.1	7.9/20.2	4.0/10.1	607/2700	180/800	87	129

## **Variables in the Catalog Number:**

XXX = Total Fiber Count XY = Fiber Grade

**8W** LightScope ZWP\* Dispersion-Unshifted, Matched-Clad Singlemode Fiber

8M Matched-Clad Singlemode Fiber

**8T** LightScope NZD™ Non-Zero Dispersion-Shifted Singlemode Fiber

For Composites Only:

aaa is replaced with singlemode fiber count

**AA** is replaced with singlemode type

**6F** 62.5μm, FDDI Grade Multimode Fiber

5M LaserCore\* 150, 50µm, Multimode Fiber

**5L** LaserCore\* 300, 50μm, Multimode Fiber

5K LaserCore\* 500, 50µm, Multimode Fiber

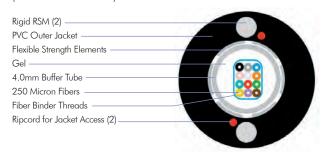
**bbb** is replaced by multimode fiber count **BB** is replaced by multimode type

Identification Threads/Fiber 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

Jacket Color: Black PVC

# **Indoor/Outdoor Central Tube Cable**

(24 Fiber Version Shown)



# **Mechanical Properties**

Description	Specification	Test Method
Operating Temperature	-40° to 158°F (-40° to 70°C)	FOTP-3
Installation Temperature	-22° to 140°F (-30° to 60°C)	N/A
Storage Temperature	-40° to 167°F (-40° to 75°C)	N/A
Crush Resistance	250 lbf/in (44 N/mm)	FOTP-41
Impact Resistance	Exceeds	FOTP-25
Flexing	25 cycles	FOTP-104
Twist Bend	Exceeds	FOTP-85

CommScope Outside Plant Fiber Optic cables are qualified to the requirements of ANSI/ICEA S-87-640-1999, Standard for Optical Fiber Outside Plant Communications Cable, GR-20-CORE, Issue 2 Generic Requirements for OSP Fiber Optic Cable, EN 187105, European Standard for Optical Cable.

# LSZH Indoor/Outdoor Cable

Non-Armored, All-Dielectric



- Black jackets are UV-stable for outdoor use yet meet critical NEC type safety standards OFNR-LS (ETL) and C(ETL)
- Also meets many international flame ratings such as IEC 60332-1, IEC 60332-3, IEC 61034-02, IEC 60754-1, IEC 60754-2 and NES 713
- Riser rating eliminates splice points at the building entrance
- Arid-Core® water blocking technology helps protect fibers from moisture
- Low-Smoke Zero-Halogen (LSZH) gives added protection to building occupants and equipment

Product Type/ Fiber Count	Catalog Number	Sub Units	Outer Diameter inch/mm	Minimum E Loaded inch/cm	Bend Radius Unloaded inch/cm	Maximum To lbs/mo Short Term		Weiç Ibs/ kft	jht kg/ km
Single Jacket 1-24 Fibers	Z- <b>XXX</b> -DN- <b>XY</b> -F12BK	2	0.33/8.3	6.5/16.6	3.3/8.3	337/1500	101/450	48	72

# **Variables in the Catalog Number:**

XXX = Total Fiber Count XY = Fiber Grade

8W LightScope ZWP Dispersion-Unshifted, Matched-Clad Singlemode Fiber

**8M** Matched-Clad Singlemode Fiber

8T LightScope NZD™ Non-Zero Dispersion-Shifted Singlemode Fiber

For Composites Only:

aaa is replaced with singlemode fiber count

**AA** is replaced with singlemode type

6F 62.5µm, FDDI Grade Multimode Fiber 5M LaserCore\* 150, 50µm, Multimode Fiber **5L** LaserCore<sup>®</sup> 300, 50μm, Multimode Fiber

5K LaserCore\* 500, 50µm, Multimode Fiber

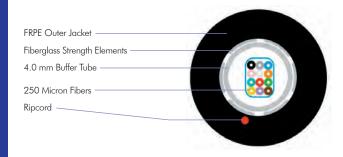
**bbb** is replaced by multimode fiber count BB is replaced by multimode type

Identification Threads/Fiber 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

Cable Jacket: Black flame retardant polyethylene copolymer

# **LSZH All-Dielectric Indoor/Outdoor Cable**

(12 Fiber Version Shown)



# **Mechanical Properties**

Description	Specification	Test Method
Operating Temperature	-4° to 140°F (-20° to +60°C)	IEC 60794-1-2-F1 FOTP-3
Installation Temperature	-4° to 140°F (-20° to +60°C)	IEC 60794-1-2-F1
Storage Temperature	$-40^{\circ}$ to $167^{\circ}$ F ( $-40^{\circ}$ to $+75^{\circ}$ C)	IEC 60794-1-2-F1
Crush Resistance	125 lbf/in (22 N/mm)	EN 187105-5.5.3 IEC 60794-1-2-E4 FOTP-41
Impact Resistance	2.17 lb/ft (2.94 N/m)	EN 187105-7.5.2 IEC 60794-1-2-E6 FOTP-25
Repeated Bending Resistance	35 cycles	EN 187105-7.5.6 IEC 60794-1-2-E6 FOTP-104
Torsion Resistance	5 cycles	EN 187105-7.5.5 IEC 60794-1-2-E7 FOTP-85
Bend Resistance	4 Wraps @ 164mm	EN 187105-7.5.1 IEC 60794-1-2-E11

CommScope Outside Plant Fiber Optic cables are qualified to the requirements of ANSI/ICEA S-87-640-1999, Standard for Optical Fiber Outside Plant Communications Cable, GR-20-CORE, Issue 2 Generic Requirements for OSP Fiber Optic Cable, EN 187105, European Standard for Optical Cable.

# **Outside Plant Drop Cable**

# Armored Design



# For Buried/Underground/Aerial Applications

- Arid-Core\* water blocking technology helps protect fibers from moisture and reduces termination effort
- Small, lightweight cable increases ease of installation, routing and termination
- Cost effective, low fiber count cable for outside plant applications
- An outstanding choice when space is at a premium
- Medium Density Polyethylene (MDPE) jacket is rugged, durable and easy to strip
- Rural Development Utilities Program (RDUP) listed, a progam administered by the Rural Utilities Service (RUS)

Product Type/ Fiber Count	Catalog Number	Subunits	Outer Diameter inch/mm	Minimum B Loaded inch/cm	end Radius Unloaded inch/cm	Maximum Te Short Term lbs/newtons	ensile Load Long Term lbs/newtons	We lbs/ kft	ight kg/ km
Armored 1-12 Fibers	O- <b>XXX</b> -DA- <b>XY</b> -F12NS	1	0.31/8.0	6.3/16.0	3.11/8.0	300/1335	90/400	48	72
Singlemode/Multimode Composite (4-12 Fibers)  O-XXX-DA-CM-F12NS/AAaaa/BBbbb  Refer to above specifications.									

# Variables in the Catalog Number:

XXX = Total Fiber Count XY = Fiber Grade

8W LightScope ZWP® Dispersion-Unshifted, Matched-Clad Singlemode Fiber

8M Matched-Clad Singlemode Fiber

8T LightScope NZD™ Non-Zero Dispersion-

Shifted Singlemode Fiber

For Composites Only:

 $\mathbf{a}\mathbf{a}\mathbf{a}$  is replaced with singlemode fiber count

AA is replaced with singlemode type

**6F** 62.5μm, FDDI Grade Multimode Fiber

5M LaserCore\* 150, 50µm, Multimode Fiber

5L LaserCore\* 300, 50µm, Multimode Fiber **5K** LaserCore\* 500, 50μm, Multimode Fiber

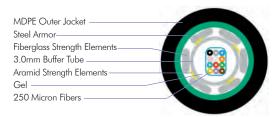
**bbb** is replaced by multimode fiber count

**BB** is replaced by multimode type

Identification Threads/Fiber 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

#### **Drop Armored Cable**

(12 fiber version shown)



# **Mechanical Properties**

Description	Specification	Test Method
Operating Temperature	-40° to 158°F (-40° to 70°C)	FOTP-3
Installation Temperature	-22° to 140°F (-30° to 60°C)	N/A
Storage Temperature	-40° to 158°F (-40° to 70°C)	N/A
Crush Resistance	125 lbf/in (22 N/mm)	FOTP-41
Impact Resistance	2.17 lbf·ft (2.94 N·mm)	FOTP-25
Flexing	25 Cycles	FOTP-104
Twist Bend	Exceeds	FOTP-85

CommScope Outside Plant Fiber Optic cables are qualified to the ANSI/ICEA S-110-717-2002 Standard for Optical Fiber Drop Cable.

#### **Outside Plant Drop Cable**

All-Dielectric Design



#### For Buried/Underground/Aerial Applications

- Arid-Core\* water blocking technology helps protect fibers from moisture and reduces termination effort
- Small, lightweight cable increases ease of installation, routing and termination
- Cost effective, low fiber count cable for outside plant applications
- An outstanding choice when space is at a premium
- Medium Density Polyethylene (MDPE) jacket is rugged, durable and easy to strip
- Rigid dielectric strength members support placement in power utility easements

Product Type/ Fiber Count	Catalog Number	Subunits	Outer Diameter inch/mm	Minimum Be Loaded inch/cm	end Radius Unloaded inch/cm	Maximum 1 Short Term lbs/newtons	Tensile Load Long Term lbs/newtons	Wei Ibs/ kft	ight kg/ km
All-Dielectric 1 - 12 Fibers	O <b>-xxx</b> -dn- <b>xy</b> -f12ns/30t	1	0.341/8.7	6.81/17.4	3.4/8.7	300/1335	90/400	46	69
Singlemode/Multimode Composite (4-12 Fibers)	O- <b>XXX</b> -DN-CM-F12NS/ <b>AA</b>	aaa/BB	S <b>bbb</b> Refer	to above spec	cifications.				

#### Variables in the Catalog Number:

XXX = Total Fiber Count

= Fiber Grade

8W LightScope ZWP® Dispersion-Unshifted,

Matched-Clad Singlemode Fiber 8T LightScope NZD™ Non-Zero Dispersion-

Shifted Singlemode Fiber

For Composites Only:

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

6F 62.5µm, FDDI Grade Multimode Fiber

**5M** LaserCore\* 150, 50μm, Multimode Fiber

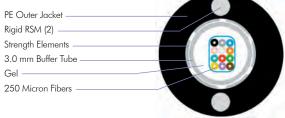
5L LaserCore" 300, 50µm, Multimode Fiber 5K LaserCore\* 500, 50µm, Multimode Fiber

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

Identification Threads/Fiber 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

#### **All-Dielectric Drop Cable**

(12 fiber version shown)



#### **Mechanical Properties**

Description	Specification	Test Method
Operating Temperature	-40° to 158°F (-40° to 70°C)	FOTP-3
Installation Temperature	-22° to 140°F (-30° to 60°C)	N/A
Storage Temperature	-40° to 158°F (-40° to 70°C)	N/A
Crush Resistance	125 lbf/in (22 N/mm)	FOTP-41
Impact Resistance	2.17 lbf·ft (2.94 N·mm)	FOTP-25
Flexing	25 Cycles	FOTP-104
Twist Bend	Exceeds	FOTP-85

#### **Outside Plant Self-Supporting Figure 8 Drop Cable**

1 - 12 Fiber Arid-Core Construction



#### **For Aerial Applications**

- •Small, lightweight cable allowing for increased ease of installation, routing and termination
- Cost effective, low fiber count cable for outside plant applications
- Medium Density Polyethylene (MDPE) jacket is rugged, durable and easy to strip
- Solid steel messenger member for simplified aerial applications
- Flexible design allows ease of routing and placement
- Rural Development Utilities Program (RDUP) listed, a progam administered by the Rural Utilities Service (RUS)

Product Type/ Fiber Count	Catalog Number	Diameter Over Messenger inch/mm	Diameter Over Fiber inch/mm	Minimum I Loaded inch/cm	Bend Radius Unloaded inch/cm	We lbs/ kft	ight kg/ km
Figure 8 Drop 1 - 12 Fibers	M- <b>XXX</b> -DN- <b>XY</b> -F12NS/ GSM/40T	0.13/3.4	0.26/6.6	10.4/26.4	5.2/13.2	47	70

#### Variables in the Catalog Number:

XXX = Total Fiber Count XY = Fiber Grade

**8W** LightScope ZWP\* Dispersion-Unshifted, Matched-Clad Singlemode Fiber

8M Matched-Clad Singlemode Fiber

**8T** LightScope NZD\*\* Non-Zero Dispersion-Shifted Singlemode Fiber

For Composites Only:

aaa is replaced with singlemode fiber count

AA is replaced with singlemode type

**6F** 62.5μm, FDDI Grade Multimode Fiber

5M LaserCore\* 150, 50µm, Multimode Fiber

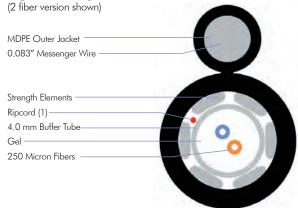
5L LaserCore® 300, 50µm, Multimode Fiber

5K LaserCore\* 500, 50µm, Multimode Fiber

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

Identification Threads/Fiber 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

#### Figure 8 Drop Cable



#### **Mechanical Properties**

Description	Specification	Test Method
Operating Temperature	-40° to 158°F (-40° to 70°C)	FOTP-3
Installation Temperature	-22° to 140°F (-30° to 60°C)	N/A
Storage Temperature	-40° to 158°F (-40° to 70°C)	N/A
Crush Resistance	125 lbf/in (22 N/mm)	FOTP-41
Impact Resistance	2.17 lbf·ft (2.94 N·mm)	FOTP-25
Flexing	25 Cycles	FOTP-104
Twist Bend	Exceeds	FOTP-85

# Outside Plant Self-Supporting Figure 8 Mini-Drop Cable 1 - 6 Fiber Arid-Core Construction Copper Clad Steel Messenger



#### **For Aerial Applications**

- Arid-Core\* water blocking technology helps protect fibers from moisture and reduces termination effort
- •Small, lightweight cable increases ease of installation, routing and termination
- Cost effective, low fiber count cable for outside plant applications
- Solid steel messenger member can be used for toning
- Flexible design allows ease of routing and placement
- Rural Development Utilities Program (RDUP) listed, a progam administered by the Rural Utilities Service (RUS)

Product Type/ Fiber Count	Catalog Number	Diameter Over Messenger inch/mm	Diameter Over Fiber inch/mm	Minimum Loaded inch/cm	Bend Radius Unloaded inch/cm	We Ibs/ kft	ight kg/ km
Figure 8 Mini-Drop 1 - 6 Fibers	M- <b>XXX</b> -MN- <b>XY</b> -F12NS/ CCS	0.16/4.0	0.15/3.8	6.0/15.2	3.0/7.6	27	40

# Variables in the Catalog Number: XXX = Total Fiber Count XY = Fiber Grade 8W LightSo

**8W** LightScope ZWP\* Dispersion-Unshifted, Matched-Clad Singlemode Fiber

8M Matched-Clad Singlemode Fiber

**8T** LightScope NZD\*\* Non-Zero Dispersion-Shifted Singlemode Fiber

For Composites Only:

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

Fiber Identification Colors: 1/Blue, 2/Orange, 3/Green, 4/Brown, 5/Slate, 6/White

**6F** 62.5μm, FDDI Grade Multimode Fiber 5M LaserCore\* 150, 50µm, Multimode Fiber 5L LaserCore® 300, 50µm, Multimode Fiber

5K LaserCore 500, 50µm, Multimode Fiber

**bbb** is replaced by multimode fiber count

**BB** is replaced by multimode type

#### Figure 8 Mini-Drop Cable (6 fiber version shown) Linear Low Density Polyethylene Outer Jacket Solid Steel Messenger 2.5mm Gel Filled Buffer Tube 250 Micron Fibers

#### **Mechanical Properties**

Description	Specification	Test Method
Operating Temperature	-40° to 158°F (-40° to 70°C)	FOTP-3
Installation Temperature	-22° to 140°F (-30° to 60°C)	N/A
Storage Temperature	-40° to 158°F (-40° to 70°C)	N/A
Crush Resistance	125 lbf/in (22 N/mm)	FOTP-41
Impact Resistance	2.17 lbf·ft (2.94 N·mm)	FOTP-25
Flexing	25 Cycles	FOTP-104
Twist Bend	Exceeds	FOTP-85

# Outside Plant Self-Supporting Figure 8 Mini-Drop Cable 1 - 6 Fiber Arid-Core Construction Stranded Steel Messenger



#### **For Aerial Applications**

- Small, lightweight cable increases ease of installation, routing and termination
- Medium Density Polyethylene (MDPE) jacket is rugged, durable and easy to strip
- Stranded steel messenger member for increased flexibility
- Flexible design allows ease of routing and placement

Product Type/ Fiber Count	Catalog Number	Diameter Over Messenger inch/mm	Diameter Over Fiber inch/mm	Minimum I Loaded inch/cm	Bend Radius Unloaded inch/cm	Weig Ibs/ kft	ht kg/ km
Figure 8 Mini-Drop 1 - 6 Fibers	M- <b>XXX</b> -MN- <b>XY</b> -F12NS/ BSS	0.16/4.0	0.15/3.8	6.0/15.2	3.0/7.6	28	42

# Variables in the Catalog Number: XXX = Total Fiber Count XY = Fiber Grade 8W LightSa

**8W** LightScope ZWP\* Dispersion-Unshifted, Matched-Clad Singlemode Fiber

8M Matched-Clad Singlemode Fiber

8T LightScope NZD™ Non-Zero Dispersion-Shifted Singlemode Fiber

For Composites Only:

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

Fiber Identification Colors: 1/Blue, 2/Orange, 3/Green, 4/Brown, 5/Slate, 6/White

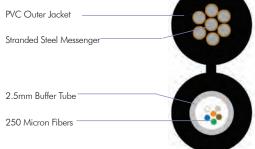
**6F** 62.5μm, FDDI Grade Multimode Fiber

5M LaserCore\* 150, 50µm, Multimode Fiber

**5L** LaserCore\* 300, 50 $\mu$ m, Multimode Fiber **5K** LaserCore" 500, 50μm, Multimode Fiber

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

#### Figure 8 Mini-Drop Cable (6 fiber version shown)



#### **Mechanical Properties**

Description	Specification	Test Method
Operating Temperature	-40° to 158°F (-40° to 70°C)	FOTP-3
Installation Temperature	-22° to 140°F (-30° to 60°C)	N/A
Storage Temperature	-40° to 158°F (-40° to 70°C)	N/A
Crush Resistance	125 lbf/in (22 N/mm)	FOTP-41
Impact Resistance	2.17 lbf·ft (2.94 N·mm)	FOTP-25
Flexing	25 Cycles	FOTP-104
Twist Bend	Exceeds	FOTP-85

#### **Outside Plant All-Dielectric Flat Drop Cable**



1 - 6 Fiber Arid-Core Construction Aerial Self-Support or Direct Burial

#### **For Aerial Applications**

- All dielectric cable design, which requires no bonding or grounding
- Dry tube construction which decreases cable prep time by eliminating an extra cleaning step
- Cost effective, low fiber count cable for outside plant applications
- Small, lightweight cable increases ease of installation, routing and termination

Product Type/ Fiber Count	Catalog Number	Diameter Over Messenger inch/mm	Diameter Over Fiber inch/mm	Minimum Be Loaded inch/cm	end Radius Unloaded inch/cm	Weig lbs/ kft	jht kg/ km
All-Dielectric Flat Drop 1 - 6 Fibers	O- <b>XXX</b> -DF- <b>XY</b> -F12NS	0.18/4.5	0.32/8.2	12.9/32.8	6.4/16.4	24	36

# Variables in the Catalog Number: XXX = Total Fiber Count XY = Fiber Grade 8W LightSa

**8W** LightScope ZWP\* Dispersion-Unshifted, Matched-Clad Singlemode Fiber

8M Matched-Clad Singlemode Fiber

8T LightScope NZD\*\* Non-Zero Dispersion-Shifted Singlemode Fiber

For Composites Only: aaa is replaced with singlemode fiber count AA is replaced with singlemode type

Fiber Identification Colors: 1/Blue, 2/Orange, 3/Green, 4/Brown, 5/Slate, 6/White

6F 62.5µm, FDDI Grade Multimode Fiber 5M LaserCore® 150, 50µm, Multimode Fiber **5L** LaserCore® 300, 50μm, Multimode Fiber **5K** LaserCore\* 500, 50μm, Multimode Fiber

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

#### Figure 8 Mini-Drop Cable (6 fiber version shown) MDPE Outer Jacket **GRP** Rods 2.0mm Buffer Tube 250 Micron Fibers Ripcords (2)

#### **Mechanical Properties**

Description	Specification	Test Method
Operating Temperature	-40° to 158°F (-40° to 70°C)	FOTP-3
Installation Temperature	-22° to 140°F (-30° to 60°C)	N/A
Storage Temperature	-40° to 158°F (-40° to 70°C)	N/A
Crush Resistance	125 lbf/in (22 N/mm)	FOTP-41
Impact Resistance	2.17 lbf·ft (2.94 N·mm)	FOTP-25
Flexing	25 Cycles	FOTP-104
Twist Bend	Exceeds	FOTP-85

#### ConQuest® Toneable Conduit™

Installed with Central Tube Fiber Optic Products



#### Fiber In ConQuest Toneable Conduit Cuts Installation Effort and Costs

- High strength 18 gauge copper clad steel tone wire saves installation dollars
- Moisture resistant polymer coated tone wire accurately detectable over various depths and lengths
- Tone wire embedded in the wall of the HDPE conduit results in easy wire removal
- Internally reinforced HDPE wall works with standard conduit connections

Cable Type/ Count	Fiber Part Number & Conduit Description	Cable OD & Weight (kft)	Available Conduit OD	Available Wall Thicknesses	SDR 11	Weight (lb/kft) SDR 13.5	* Fiber SCH 40
Central Tube Dielectric 2 - 24 Fibers	O- <b>XXX</b> -CN- <b>XY</b> -F12NS Specify Conduit OD, Wall Thickness and Color	0.40" 63 lbs.	1" 1'/4" 1'/2" 2"	SDR 11 or 13.5 SDR 11 or 13.5 SDR 11 or 13.5 SDR 13.5 or SCH 40	265 381 477	230 326 405 593	533
Central Tube Dielectric 26 - 48 Fibers	O- <b>XXX</b> -CN- <b>XY</b> -F12NS Specify Conduit OD, Wall Thickness and Color	0.47" 86 lbs.	1" 1'/4" 1'/2" 2"	SDR 11 or 13.5 SDR 11 or 13.5 SDR 11 or 13.5 SDR 13.5 or SCH 40	273 389 485	238 334 413 601	541
Central Tube Dielectric 50 - 96 Fibers	O- <b>XXX</b> -CN- <b>XY</b> -F12NS Specify Conduit OD, Wall Thickness and Color	0.55" 110 lbs.	1" 1'/4" 1'/2" 2"	SDR 11 or 13.5 SDR 11 or 13.5 SDR 11 or 13.5 SDR 13.5 or SCH 40	291 407 503	256 352 431 619	559

Other cables and wall sizes may be available upon request. For more information, please see the Conduit section of this catalog.

# Variables in the Catalog Number: XXX = Total Fiber Count XY = Fiber Grade 8W LightSc

**8W** LightScope ZWP® Dispersion-Unshifted, Matched-Clad Singlemode Fiber

**8M** Matched-Clad Singlemode Fiber

8T LightScope NZD™ Non-Zero Dispersion-Shifted Singlemode Fiber

For Composites Only:

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

**6F** 62.5μm, FDDI Grade Multimode Fiber

5M LaserCore\* 150, 50µm, Multimode Fiber

**5L** LaserCore" 300, 50μm, Multimode Fiber

**5K** LaserCore<sup>®</sup> 500, 50μm, Multimode Fiber

**bbb** is replaced by multimode fiber count 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

#### **Central Tube Fiber-In-Conduit**

(24 Fiber Construction in Toneable Conduit Shown) Copper Clad Steel Tone Wire High-Grade Polyethylene Conduit Silicon-Based Lubricant Central Tube Cable

<sup>\*</sup> Weight does not include reel.

#### ConQuest® Toneable Conduit™





#### Fiber-In-Conduit

All of CommScope's fiber cables can be pre-installed in conduit, including the gel free, Dry Loose Tube cable. Available in five different diameters - 3/4", 1", 11/4", 11/2" and 2" and three different wall thicknesses - SDR 11, SDR 13.5 and SCH 40. For more information or specifications on Fiber Optic cables, please visit our website at www.commscope.com.

Cable Type/ Count	Fiber Part Number & Conduit Description	Cable OD & Weight (kft)	Available Conduit OD	Available Wall Thicknesses	SDR 11	Weight (lb/kft)* SDR 13.5	Fiber SCH 40
Dry (gel free) Loose Tube Dielectric 2 - 60 Fibers	D- <b>XXX</b> -LN- <b>XY</b> -F12NS Specify Conduit OD, Wall Thickness and Color	0.41" 47 lbs.	3/ <sub>4</sub> " 1" 1 <sup>1</sup> / <sub>4</sub> " 2"	SDR 11 or 13.5 SDR 11 or 13.5 SDR 11 or 13.5 SDR 11 or 13.5 SDR 13.5 or SCH 40	177 251 357 463	158 216 266 391 579	519
Dry (gel free) Loose Tube Dielectric 62 - 72 Fibers	D- <b>XXX</b> -LN- <b>XY</b> -F12NS Specify Conduit OD, Wall Thickness and Color	0.43" 52 lbs.	3/4" 1" 11/4" 11/2" 2"	SDR 11 or 13.5 SDR 11 or 13.5 SDR 11 or 13.5 SDR 11 or 13.5 SDR 13.5 or SCH 40	182 256 372 468	163 221 317 396 584	524
Dry (gel free) Loose Tube Dielectric 74 - 96 Fibers	D- <b>XXX</b> -LN- <b>XY</b> -F12NS Specify Conduit OD, Wall Thickness and Color	0.49" 69 lbs.	3/4" 1" 11/4" 11/2" 2"	SDR 11 or 13.5 SDR 11 or 13.5 SDR 11 or 13.5 SDR 11 or 13.5 SDR 13.5 or SCH 40	199 273 389 485	180 238 334 413 601	541
Dry (gel free) Loose Tube Dielectric 98 - 120 Fibers	D- <b>XXX</b> -LN- <b>XY</b> -F12NS Specify Conduit OD, Wall Thickness and Color	0.55" 87 lbs.	1" 1 <sup>1</sup> / <sub>4</sub> " 1 <sup>1</sup> / <sub>2</sub> " 2"	SDR 11 or 13.5 SDR 11 or 13.5 SDR 11 or 13.5 SDR 13.5 or SCH 40	291 407 503	256 352 431 619	559
Dry (gel free) Loose Tube Dielectric 122 - 144 Fibers	D- <b>XXX</b> -LN- <b>XY</b> -F12NS Specify Conduit OD, Wall Thickness and Color	0.62" 104 lbs.	1" 11/4" 11/2" 2"	SDR 11 or 13.5 SDR 11 or 13.5 SDR 11 or 13.5 SDR 13.5 or SCH 40	308 424 520	273 369 448 636	576
Dry (gel free) Loose Tube Dielectric 146 - 216 Fibers	D- <b>XXX</b> -LN- <b>XY</b> -F12NS Specify Conduit OD, Wall Thickness and Color	0.63" 93 lbs.	1" 11/4" 11/2" 2"	SDR 11 or 13.5 SDR 11 or 13.5 SDR 11 or 13.5 SDR 13.5 or SCH 40	297 413 509	262 358 437 625	565
Dry (gel free) Loose Tube Dielectric 218 - 288 Fibers	D- <b>XXX</b> -LN- <b>XY</b> -F12NS Specify Conduit OD, Wall Thickness and Color	0.73" 127 lbs.	1 <sup>1</sup> / <sub>4</sub> " 1 <sup>1</sup> / <sub>2</sub> " 2"	SDR 11 or 13.5 SDR 11 or 13.5 SDR 13.5 or SCH 40	447 543	392 471 659	599

Other cables and wall sizes may be available upon request.

\* Weight does not include reel.

#### Variables in the Catalog Number:

XXX = Total Fiber Count XY = Fiber Grade

**8W** LightScope ZWP\* Dispersion-Unshifted, Matched-Clad Singlemode Fiber

8M Matched-Clad Singlemode Fiber

**8T** LightScope NZD™ Non-Zero Dispersion-Shifted Singlemode Fiber

For Composites Only:

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

**6F** 62.5μm, FDDI Grade Multimode Fiber

5M LaserCore\* 150, 50µm, Multimode Fiber

**5L** LaserCore\* 300, 50μm, Multimode Fiber

**5K** LaserCore\* 500, 50 $\mu$ m, Multimode Fiber

**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

# Dry Loose Tube Fiber-In-Conduit (72 Fiber Construction in Toneable Conduit Shown) Copper Clad Steel Tone Wire High-Grade Polyethylene Conduit Silicon-Based Lubricant Dry Loose Tube Cable

Specifications are subject to change without notice.

\* Weight does not include reel.

#### ConQuest® Toneable Conduit™

Pre-Installed with CommScope Arid-Core® Fiber Optic Cable



#### Fiber-In-ConQuest Toneable Conduit Cuts Installation Effort and Costs

All of CommScope's fiber cables can be pre-installed in conduit, including the Arid-Core Loose Tube cable. Available in five different diameters - 3/4", 1", 11/4", 11/2" and 2" and three different wall thicknesses - SDR 11, SDR 13.5 and SCH 40. For more information or specifications on Fiber Optic cables, please visit our website at www.commscope.com.

Cable Type/ Count	Fiber Part Number & Conduit Description	Cable OD & Weight (kft)	Available Conduit OD	Available Wall Thicknesses	SDR 11	Weight (lb/kft)* SDR 13.5	Fiber SCH 40
Arid-Core Loose Tube Dielectric 2 - 60 Fibers	O- <b>XXX</b> -LN- <b>XY</b> -F12NS Specify Conduit OD, Wall Thickness and Color	0.46" 64 lbs.	3/4" 1" 11/4" 11/2" 2"	SDR 11 or 13.5 SDR 11 or 13.5 SDR 11 or 13.5 SDR 11 or 13.5 SDR 13.5 or SCH 40	194 268 384 480	175 233 329 408 596	536
Arid-Core Loose Tube Dielectric 62 - 72 Fibers	O- <b>XXX</b> -LN- <b>XY</b> -F12NS Specify Conduit OD, Wall Thickness and Color	0.49" 78 lbs.	3/4" 1" 11/4" 11/2" 2"	SDR 11 or 13.5 SDR 11 or 13.5 SDR 11 or 13.5 SDR 11 or 13.5 SDR 13.5 or SCH 40	208 282 398 494	189 247 343 422 610	550
Arid-Core Loose Tube Dielectric 74 - 96 Fibers	O- <b>XXX</b> -LN- <b>XY</b> -F12NS Specify Conduit OD, Wall Thickness and Color	0.57" 101 lbs.	1" 11/4" 11/2" 2"	SDR 11 or 13.5 SDR 11 or 13.5 SDR 11 or 13.5 SDR 13.5 or SCH 40	305 421 517	300 366 445 610	550
Arid-Core Loose Tube Dielectric 98 - 120 Fibers	O- <b>XXX</b> -LN- <b>XY</b> -F12NS Specify Conduit OD, Wall Thickness and Color	0.66" 125 lbs.	1 <sup>1</sup> /4" 1 <sup>1</sup> /2" 2"	SDR 11 or 13.5 SDR 11 or 13.5 SDR 13.5 or SCH 40	445 541	418 497 685	597
Arid-Core Loose Tube Dielectric 122 - 144 Fibers	O- <b>XXX</b> -LN- <b>XY</b> -F12NS Specify Conduit OD, Wall Thickness and Color	0.74" 153 lbs.	1 <sup>1</sup> / <sub>4</sub> " 1 <sup>1</sup> / <sub>2</sub> " 2"	SDR 11 or 13.5 SDR 11 or 13.5 SDR 13.5 or SCH 40	473 569	418 497 685	625
Arid-Core Loose Tube Dielectric 146 - 216 Fibers	O- <b>XXX</b> -LN- <b>XY</b> -F12NS Specify Conduit OD, Wall Thickness and Color	0.74" 150 lbs.	1 1/4" 1 1/2" 2"	SDR 11 or 13.5 SDR 11 or 13.5 SDR 13.5 or SCH 40	470 566	415 494 682	622
Arid-Core Loose Tube Dielectric 218 - 288 Fibers	O- <b>XXX</b> -LN- <b>XY</b> -F12NS Specify Conduit OD, Wall Thickness and Color	0.86" 197 lbs.	1 <sup>1</sup> /2" 2"	SDR 11 or 13.5 SDR 13.5 or SCH 40	613	541 729	669

Other cables and wall sizes may be available upon request.

#### **Variables in the Catalog Number:**

XXX = Total Fiber Count XY = Fiber Grade

**8W** LightScope ZWP\* Dispersion-Unshifted, Matched-Clad Singlemode Fiber

**8M** Matched-Clad Singlemode Fiber **8T** LightScope NZD™ Non-Zero Dispersion-

Shifted Singlemode Fiber

For Composites Only:

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

**6F** 62.5μm, FDDI Grade Multimode Fiber

5M LaserCore" 150, 50µm, Multimode Fiber

**5L** LaserCore" 300, 50µm, Multimode Fiber **5K** LaserCore\* 500, 50μm, Multimode Fiber

**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

#### Arid-Core Loose Tube Fiber-In-Conduit

(72 Fiber Construction in Toneable Conduit Shown) Copper Clad Steel High-Grade Polyethylene Conduit Silicon-Based Lubricant Arid-Core Loose Tube Cable

Specifications are subject to change without notice.

\* Weight does not include reel. Other cables and wall sizes may be available upon request.

<sup>\*</sup> Weight does not include reel.

#### ConQuest® Conduit

#### Pre-Installed with CommScope Fiber Drop Cable



#### **Fiber-In-Conduit**

All of CommScope's fiber cables can be pre-installed in conduit, including the Fiber Drop cables. Available in 1/2" or 3/4" and two different wall thicknesses - SDR 11 or SDR 13.5. For more information or specifications on Fiber Optic cables, please visit our website at www.commscope.com.

#### Figure-8 Fiber Drop Cable In Conduit

Cable Type/ Fiber Count	Catalog Number (Description)	Cable OD & Weight (kft)	Available Conduit OD	Available Wall Thickness	Weight (lb/kft)* SDR 11 SDR 13		
Fiber Drop Messengered 1 - 6 Fibers	M- <b>XXX</b> -MN- <b>XY</b> -F <b>ZZ</b> NS/BSS (Stranded Steel Construction) Specify Conduit OD, Wall Thickness and Color	0.16"x 0.31" 29 lbs.	1/2" 3/4"	SDR 11 or 13.5	114 159	100 140	
Fiber Drop Messengered 1 - 6 Fibers	M- <b>XXX</b> -MN- <b>XY</b> -F <b>ZZ</b> NS/CCS (Solid Steel Construction) Specify Conduit OD, Wall Thickness and Color	0.16"x 0.31" 27 lbs.	½" ¾"	SDR 11 or 13.5	112 157	98 138	

NOTE: The solid or stranded steel messengers can be used to pull the cable during installation, and for locating after burial.

#### **All-Dielectric Flat Drop Cable In Conduit**

Cable Type/	Catalog Number	Cable OD &			Weight (lb/kft)*		
Fiber Count	(Description)	Weight (kft)			SDR 11 SDR 13.5		
<b>Flat Drop</b> 1 - 6 Fibers	O- <b>XXX</b> -DF- <b>XY</b> -F <b>ZZ</b> NS Specify Conduit OD, Wall Thickness and Color	0.18"x 0.32" 30 lbs.	½" 3/4"	SDR 11 or 13.5	115 160	101 141	

<sup>\*</sup>Other size conduits may be available upon request.

#### Variables in the Catalog Number:

XXX = Total Fiber Count XY = Fiber Grade

**8W** LightScope ZWP\* Dispersion-Unshifted, Matched-Clad Singlemode Fiber

**8M** Matched-Clad Singlemode Fiber

**8T** LightScope NZD™ Non-Zero Dispersion-Shifted Singlemode Fiber

For Composites Only:

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

**6F** 62.5μm, FDDI Grade Multimode Fiber **5M** LaserCore\* 150, 50μm, Multimode Fiber

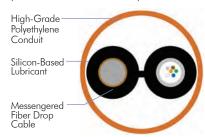
5L LaserCore\* 300, 50µm, Multimode Fiber5K LaserCore\* 500, 50µm, Multimode Fiber

**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

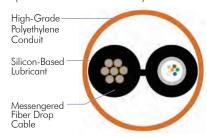
#### Solid Steel Messengered Fiber Drop In ConQuest Conduit

(6 Fiber Construction Shown)



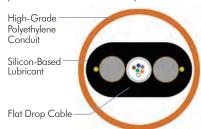
#### Stranded Steel Messengered Fiber Drop in ConQuest Conduit

(6 Fiber Construction Shown)



#### All-Dielectric Flat Drop Cable in ConQuest Conduit

(6 Fiber Construction Shown)



Drawings are not to scale Specifications are subject to change without notice

<sup>\*</sup> Weight does not include reel.

# **CommScope Hybrid Cable**Fiber/6 Series Drop Cable (BrightWire\*)



#### **Features & Benefits**

- The BrightWire drop cable leg is designed to carry video
- The optical leg is designed to carry voice and data
- Only a single installation is required
- Small, very flexible cable allowing for increased ease of installation, routing and termination
- The legs can be easily separated as needed

Prodcut Type/ Fiber Count	Catalog Number	Diameter Over Coax inch/mm	Diameter Over Fiber inch/mm	Minimum I Loaded inch/cm	Bend Radius Unloaded inch/cm	Maximum To Short term lbs./ Newtons	ensile Load Long term lbs./Newtons	We Ibs/ kft	ight kg/ km
1 - 12 Fibers	O- <b>XXX</b> -DN-HY-F12NS/ <b>XYXXX</b> /F6SSBW/40T	0.40/10.3	0.26/6.6	10.4/26.4	5.2/13.2	300 /1335	90/400	56	83

# Variables in the Catalog Number: XXX = Total Fiber Count XY = Fiber Grade 8W LightSa

**8W** LightScope ZWP\* Dispersion-Unshifted, Matched-Clad Singlemode Fiber

**8M** Matched-Clad Singlemode Fiber

**8T** LightScope NZD™ Non-Zero Dispersion-Shifted Singlemode Fiber

6F 62.5µm, FDDI Grade Multimode Fiber

5M LaserCore® 150, 50µm, Multimode Fiber

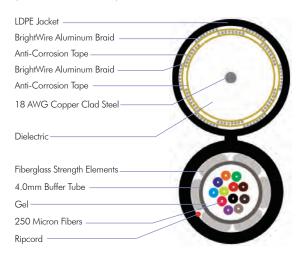
**5L** LaserCore® 300, 50μm, Multimode Fiber

**5K** LaserCore\* 500, 50μm, Multimode Fiber

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 Jacket Color: Black Medium Density Polyethylene

#### **Arid-Core Construction Fiber Coax Hybrid Cable**

(12 Fiber Version Shown)



#### **Mechanical Properties**

Description	Specification	Test Method		
Operating Temperature	-40° to 158°F (-40° to 70°C)	FOTP-3		
Installation Temperature	-22° to 140°F (-30° to 60°C)	N/A		
Storage Temperature	-40° to 158°F (-40° to 70°C)	N/A		
Crush Resistance	125 lbf/in (22 N/mm)	FOTP-41		
Impact Resistance	2.17 lbf·ft (2.94 N·m)	FOTP-25		
Flexing	25 Cycles	FOTP-104		
Twist Bend	Exceeds	FOTP-85		

#### **CommScope Hybrid Cable**

Fiber/6 Series Drop Cable (BrightWire\*)



#### **Features & Benefits**

- The BrightWire drop cable leg is designed to carry video
- The optical leg is designed to carry voice and data
- Only a single installation is required
- Small, very flexible cable allowing for increased ease of installation, routing and termination
- The legs can be easily separated as needed

Prodcut Type/ Fiber Count	Catalog Number	Diameter Over Coax inch/mm	Diameter Over Fiber inch/mm	Diameter Over Msg. inch/cm		Send Radius Unloaded inch/cm	Maximum To Short term lbs./Newtons		lbs/	ight kg/ km
1 - 12 Fibers	M- <b>XXX</b> -DN-HY-F12NS/ <b>XYXXX</b> /F6SSBW/ GSM/40T	0.29/7.5	0.26/6.6	0.13/3.4	10.4/26.4	5.2/13.2	300 /1335	90/400	73	109

#### Variables in the Catalog Number:

XXX = Total Fiber Count XY = Fiber Grade

**8W** LightScope ZWP\* Dispersion-Unshifted, Matched-Clad Singlemode Fiber

8M Matched-Clad Singlemode Fiber

**8T** LightScope NZD™ Non-Zero Dispersion-Shifted Singlemode Fiber **6F** 62.5μm, FDDI Grade Multimode Fiber **5M** LaserCore\* 150, 50μm, Multimode Fiber

**5L** LaserCore\* 300, 50 $\mu$ m, Multimode Fiber

**5K** LaserCore\* 500, 50μm, Multimode Fiber

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 Jacket Color: Black Linear Low Density Polyethylene

### Arid-Core Construction Self-Supporting Hybrid Cable

(12 Fiber Version with Messenger Shown)



#### **Mechanical Properties**

Description	Specification	Test Method
Operating Temperature	-40° to 158°F (-40° to 70°C)	FOTP-3
Installation Temperature	-22° to 140°F (-30° to 60°C)	N/A
Storage Temperature	-40° to 158°F (-40° to 70°C)	N/A
Crush Resistance	125 lbf/in (22 N/mm)	FOTP-41
Impact Resistance	2.17 lbf·ft (2.94 N·m)	FOTP-25
Flexing	25 Cycles	FOTP-104
Twist Bend	Exceeds	FOTP-85

# CommScope Hybrid Cable Fiber/11 Series Drop Cable (BrightWire\*)



#### **Features & Benefits**

- The BrightWire drop cable leg is designed to carry video
- The optical leg is designed to carry voice and data
- Only a single installation is required
- Small, very flexible cable allowing for increased ease of installation, routing and termination
- The legs can be easily separated as needed

Prodcut Type/ Fiber Count	Catalog Number	Diameter Over Coax inch/mm	Diameter Over Fiber inch/mm	Minimum B Loaded inch/cm	end Radius Unloaded inch/cm	Maximum Te Short term lbs./ Newtons	ensile Load Long term lbs./Newtons	We Ibs/ kft	ight kg/ km
1 - 12 Fibers	O- <b>XXX</b> -DN-HY-F12NS/ <b>XYXXX</b> /F11SSBW/40T	0.40/10.3	0.26/6.60	10.4/26.4	5.2/13.2	300 /1335	90/400	56	83

# Variables in the Catalog Number: XXX = Total Fiber Count XY = Fiber Grade 8W LightSa

8W LightScope ZWP® Dispersion-Unshifted, Matched-Clad Singlemode Fiber

8M Matched-Clad Singlemode Fiber

LightScope NZD™ Non-Zero Dispersion-

Shifted Singlemode Fiber

6F 62.5µm, FDDI Grade Multimode Fiber

**5M** LaserCore\* 150, 50μm, Multimode Fiber

**5L** LaserCore® 300, 50μm, Multimode Fiber

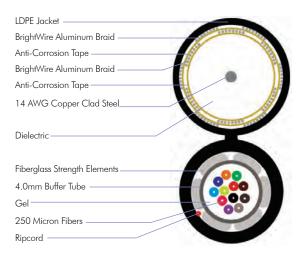
5K LaserCore\* 500, 50µm, Multimode Fiber

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

Jacket Color: Black Linear Low Density Polyethylene

#### **Arid-Core Construction Fiber Coax Hybrid Cable**

(12 Fiber Version Shown)



#### **Mechanical Properties**

Description	Specification	Test Method		
Operating Temperature	-40° to 158°F (-40° to 70°C)	FOTP-3		
Installation Temperature	-22° to 140°F (-30° to 60°C)	N/A		
Storage Temperature	-40° to 158°F (-40° to 70°C)	N/A		
Crush Resistance	125 lbf/in (22 N/mm)	FOTP-41		
Impact Resistance	2.17 lbf·ft (2.94 N·m)	FOTP-25		
Flexing	25 Cycles	FOTP-104		
Twist Bend	Exceeds	FOTP-85		

#### **CommScope Hybrid Cable**

Fiber / 22 AWG Copper Shielded Pairs



#### **Features & Benefits**

- The copper leg is designed to provide low voltage DC power for the optical components
- The optical leg is designed to carry voice, data and video
- Only a single installation is required
- Small, very flexible cable allowing for increased ease of installation, routing and termination
- The two legs can be easily separated as needed

Prodcut Type/ Fiber Count/Pair Count	Catalog Number	Diameter Over Tw. Pair inch/mm	Diameter Over Fiber inch/mm	Minimum E Loaded inch/cm	Bend Radius Unloaded inch/cm	Maximum To Short term lbs./ Newtons	ensile Load Long term lbs./Newtons	We Ibs/ kft	ight kg/ km
1 - 12 Fibers 1 - 6 22 AWG Pairs	O- <b>XXX</b> -DN-HY-F12NS/ <b>XYXXX</b> /NX22STP	0.34/8.6	0.22/5.6	8.8/22.4	4.4/11.2	300 /1335	90/400	78	116

#### **Variables in the Catalog Number:**

XXX = Total Fiber Count XY = Fiber Grade

= Fiber Grade

**8W** LightScope ZWP\* Dispersion-Unshifted, Matched-Clad Singlemode Fiber

**8M** Matched-Clad Singlemode Fiber

**8T** LightScope NZD™ Non-Zero Dispersion-Shifted Singlemode Fiber

6F 62.5µm, FDDI Grade Multimode Fiber

5M LaserCore" 150, 50µm, Multimode Fiber

**5L** LaserCore" 300, 50 $\mu$ m, Multimode Fiber

**5K** LaserCore 500, 50μm, Multimode Fiber

**N** = Number of Copper Pairs

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 Jacket Color: Black Medium Density Polyethylene

#### **Arid-Core Construction Hybrid Cable**

(12 Fiber Version Shown)



#### **Mechanical Properties**

Description	Specification	Test Method		
Operating Temperature	-40° to 158°F (-40° to 70°C)	FOTP-3		
Installation Temperature	-22° to 140°F (-30° to 60°C)	N/A		
Storage Temperature	-40° to 158°F (-40° to 70°C)	N/A		
Crush Resistance	125 lbf/in (22 N/mm)	FOTP-41		
Impact Resistance	2.17 lbf·ft (2.94 N·m)	FOTP-25		
Flexing	25 Cycles	FOTP-104		
Twist Bend	Exceeds	FOTP-85		

CommScope Outside Plant Fiber Optic cables are qualified to the ANSI/ S-110-717-2002 Standard for Optical Fiber Drop Cable.

#### **Hybrid Single Jacket Outdoor Cable**

Armored



#### **Features & Benefits**

- Corrugated steel tape armor is strong yet flexible, providing additional crush and rodent protection
- Designed for tone locating when digging and for communications
- Used for powering optoelectrical equipment down the line
- Provides line fault detection and location

Product Type/ Fiber Count/Pair Count	Catalog Number	Sub Units	Outer Diameter inch/mm	Minimum Bend Radius Loaded Unloaded inch/cm inch/cm		Maximum Tensile Load lbs/meters Short Term Long Term		Weight lbs/ kg/ kft km	
2 - 48 Fibers 1-2 Pairs	O-XXX-LA-HY-FZZNS/ XYXXX/NX22UTP	5	0.51/13.1	10.3/26.2	5.1/13.1	607/2700	180/800	103	154
48 - 60 Fibers 1-2 Pairs	O-XXX-LA-HY-F <b>ZZ</b> NS/ XYXXX/ <b>N</b> X22UTP	6	0.55/14.0	11.0/28.0	5.5/14.0	607/2700	180/800	119	178
14 - 84 Fibers 1-4 Pairs	O-XXX-LA-HY-F <b>ZZ</b> NS/ XYXXX/ <b>N</b> X22UTP	8	0.63/16.1	12.6/32.2	6.3/16.1	607/2700	180/800	154	229
38 - 108 Fibers 1-5 Pairs	O-XXX-LA-HY-F <b>ZZ</b> NS/ XYXXX/ <b>N</b> X22UTP	10	0.71/18.2	14.3/36.4	7.1/18.2	607/2700	180/800	184	274
62 - 132 Fibers 1-5 Pairs	O-XXX-LA-HY-F <b>ZZ</b> NS/ XYXXX/ <b>N</b> X22UTP	12	0.80/20.3	15.9/40.6	8.0/20.3	607/2700	180/800	219	327
86 - 204 Fibers 1-5 Pairs	O-XXX-LA-HY-F <b>ZZ</b> NS/ XYXXX/NX22UTP	18	0.80/20.3	15.9/40.6	8.0/20.3	607/2700	180/800	212	316
158 - 276 Fibers 1-5 Pairs	O-XXX-LA-HY-F <b>ZZ</b> NS/ XYXXX/ <b>N</b> X22UTP	24	0.91/23.3	18.3/46.6	9.1/23.3	607/2700	180/800	273	407

#### **Variables in the Catalog Number:**

XXX = Total Fiber Count XY = Fiber Grade

**8W** LightScope ZWP\* Dispersion-Unshifted, Matched-Clad Singlemode Fiber

8M Matched-Clad Singlemode Fiber

**8T** LightScope NZD™ Non-Zero Dispersion-Shifted Singlemode Fiber

**6F** 62.5μm, FDDI Grade Multimode Fiber

5M LaserCore\* 150, 50µm, Multimode Fiber

5L LaserCore® 300, 50µm, Multimode Fiber

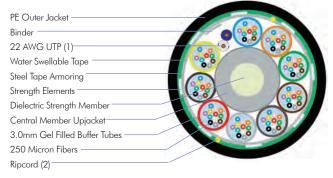
**5K** LaserCore\* 500, 50μm, Multimode Fiber

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 Jacket Color: Black Linear Low Density Polyethylene

Copper Twisted Pairs are identified with standard color coding: 1/White/Blue, 2/White/Orange, 3/White/Green, 4/White/Brown, 5/White/Grey

#### **Hybrid Single Jacket Armored Cable**

(108 Fiber Version Shown)



#### **Mechanical Properties**

Description	Specification	Test Method
Operating Temperature	-40° to 158°F (-40° to 70°C)	FOTP-3
Installation Temperature	-22° to 140°F (-30° to 60°C)	N/A
Storage Temperature	-40° to 167°F (-40° to 75°C)	N/A
Crush Resistance	250 lbf/in (44 N/mm)	FOTP-41
Impact Resistance	Exceeds	FOTP-25
Flexing	25 Cycles	FOTP-104
Twist Bend	Exceeds	FOTP-85

CommScope Outside Plant Fiber Optic cables are qualified to the requirements of ANSI/ICEA S-87-640-1999, Standard for Optical Fiber Outside Plant Communications Cable, GR-20-CORE, Issue 2 Generic Requirements for OSP Fiber Optic Cable, EN 187105, European Standard for Optical Cable.

#### **Hybrid Single Jacket Outdoor Cable**

All-Dielectric



#### **Features & Benefits**

- Arid-Core® water blocking technology helps protect fibers from moisture and reduces termination effort
- Designed for communications and tone locating when digging
- Used for powering optoelectrical equipment down the line
- Provides line fault detection and location

Product Type/ Fiber Count/Pair Count	Catalog Number	Sub Units	Outer Diameter inch/mm	Minimum Loaded inch/cm	Bend Radius Unloaded inch/cm	Maximu lbs/m Short Term	m Tensile leters Long Term	Load Ibs/ kft	Weight kg/ km
2 - 48 Fibers 1-2 Pairs	O <b>-XXX-</b> LN-HY-F <b>ZZ</b> NS/ <b>XYXXX/N</b> X22UTP	5	0.46/11.6	9.1/23.2	4.6/11.6	607/2700	180/800	62	93
2 - 60 Fibers 1-2 Pairs	O-XXX-LN-HY-FZZNS/ XYXXX/NX22UTP	6	0.49/12.6	9.9/25.2	4.9/12.6	607/2700	180/800	75	112
14 - 84 Fibers 1-4 Pairs	O-XXX-LN-HY-FZZNS/ XYXXX/NX22UTP	8	0.57/14.6	11.5/2 9.2	2 5.7/14.6	607/2700	180/800	102	152
38 - 108 Fibers 1-5 Pairs	O-XXX-LN-HY-FZZNS/ XYXXX/NX22UTP	10	0.66/16.7	13.1/33.4	6.6/16.7	607/2700	180/800	126	188
62 - 132 Fibers 1-5 Pairs	O <b>-XXX-</b> LN-HY-F <b>ZZ</b> NS/ <b>XYXXX/N</b> X22UTP	12	0.74/18.8	14.8/37.6	7.4/18.8	607/2700	180/800	154	229
86 - 204 Fibers 1-5 Pairs	O-XXX-LN-HY-F <b>ZZ</b> NS/ XYXXX/NX22UTP	18	0.74/18.8	14.8/37.6	7.4/18.8	607/2700	180/800	146	218
158 - 276 Fibers 1-5 Pairs	O-XXX-LN-HY-F <b>ZZ</b> NS/ XYXXX/NX22UTP	24	0.86/18.8	17.1/43.6	8.6/21.8	607/2700	180/800	197	294

#### Variables in the Catalog Number:

XXX = Total Fiber Count XY = Fiber Grade

= Fiber Grade

**8W** LightScope ZWP® Dispersion-Unshifted, Matched-Clad Singlemode Fiber

**8M** Matched-Clad Singlemode Fiber

8T LightScope NZD™ Non-Zero Dispersion-

Shifted Singlemode Fiber

For Composites Only:

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

**6F** 62.5μm, FDDI Grade Multimode Fiber

5M LaserCore\* 150, 50µm, Multimode Fiber

**5L** LaserCore® 300, 50μm, Multimode Fiber

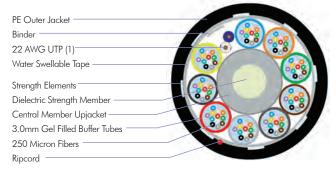
**5K** LaserCore\* 500, 50μm, Multimode Fiber

**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 Copper Twisted Pairs are identified with standard color coding: 1/White/Blue, 2/White/Orange, 3/White/Green, 4/White/Brown, 5/White/Grey

#### **Hybrid Single Jacket** All-Dielectric Cable

(108 Fiber Version Shown)



#### **Mechanical Properties**

Description	Specification	Test Method
Operating Temperature	-40° to 158°F (-40° to 70°C)	FOTP-3
Installation Temperature	-22° to 140°F (-30° to 60°C)	N/A
Storage Temperature	-40° to 167°F (-40° to 75°C)	N/A
Crush Resistance	250 lbf/in (44 N/mm)	FOTP-41
Impact Resistance	Exceeds	FOTP-25
Flexing	25 Cycles	FOTP-104
Twist Bend	Exceeds	FOTP-85

CommScope Outside Plant Fiber Optic cables are qualified to the requirements of ANSI/ICEA S-87-640-1999, Standard for Optical Fiber Outside Plant Communications Cable, GR-20-CORE, Issue 2 Generic Requirements for OSP Fiber Optic Cable, EN 187105, European Standard for Optical Cable.

#### Hybrid Single Jacket Outdoor Cable + Conductor



Armored

#### **Features & Benefits**

- · Corrugated steel tape armor is strong yet flexible, providing additional crush and rodent protection
- Designed for tone locating when digging
- Provides line fault detection and location

Product Type/ Fiber Count/Conductor Count	Catalog Number	Sub Units	Outer Diameter inch/mm	Minimum B Loaded inch/cm	Bend Radius Unloaded inch/cm	Maximum Ibs/m Short Term	Tensile Load eters Long Term	lbs/ kft	eight kg/ km
2 - 48 Fibers 1-4 Conductors	O-XXX-LA-HY-F <b>ZZ</b> NS/ XYXXX/NX12AWG	5	0.51/13.1	10.3/26.2	5.1/13.1	607/2700	180/800	121	180
50 - 60 Fibers 1-4 Conductors	O-XXX-LA-HY-FZZNS/ XYXXX/NX12AWG	6	0.55/14.0	11.0/28.0	5.5/14.0	607/2700	180/800	137	204
62 - 84 Fibers 1-4 Conductors	O-XXX-LA-HY-F <b>ZZ</b> NS/ XYXXX/NX12AWG	8	0.63/16.1	12.6/32.2	6.3/16.1	607/2700	180/800	170	253
86 - 108 Fibers 1-4 Conductors	O <b>-XXX-</b> LA-HY-F <b>ZZ</b> NS/ <b>XYXXX/N</b> X12AWG	10	0.71/18.2	14.3/36.4	7.1/18.2	607/2700	180/800	204	304
110 - 132 Fibers 1-4 Conductors	O-XXX-LA-HY-F <b>ZZ</b> NS/ XYXXX/ <b>N</b> X12AWG	12	0.80/20.3	15.9/40.6	8.0/20.3	607/2700	180/800	245	365
134 - 204 Fibers 1-4 Conductors	O-XXX-LA-HY-FZZNS/ XYXXX/NX12AWG	18	0.80/20.3	15.9/40.6	8.0/20.3	607/2700	180/800	230	343
206 - 276 Fibers 1-4 Conductors	O-XXX-LA-HY-FZZNS/ XYXXX/NX12AWG	24	0.91/23.3	18.3/46.6	9.1/23.3	607/2700	180/800	290	433

# Variables in the Catalog Number: XXX = Total Fiber Count XY = Fiber Grade 8W LightSo

8W LightScope ZWP® Dispersion-Unshifted, Matched-Clad Singlemode Fiber **8M** Matched-Clad Singlemode Fiber

LightScope NZD™ Non-Zero Dispersion-

Shifted Singlemode Fiber

For Composites Only:

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

6F 62.5µm, FDDI Grade Multimode Fiber

5M LaserCore® 150, 50µm, Multimode Fiber

**5L** LaserCore® 300, 50μm, Multimode Fiber

**5K** LaserCore\* 500, 50μm, Multimode Fiber

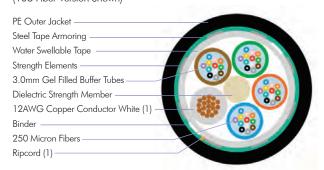
**bbb** is replaced by multimode fiber count **BB** is replaced by multimode type

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 Note: buffer tubes 13-24 repeat the color sequences with tracer stripes

Copper Conductors Color Coding: Specified by customer

#### **Hybrid Single Jacket** All-Dielectric Cable

(108 Fiber Version Shown)



#### **Mechanical Properties**

Description	Specification	Test Method
Operating Temperature	-40° to 158°F (-40° to 70°C)	FOTP-3
Installation Temperature	-22° to 140°F (-30° to 60°C)	N/A
Storage Temperature	-40° to 167°F (-40° to 75°C)	N/A
Crush Resistance	250 lbf/in (44 N/mm)	FOTP-41
Impact Resistance	Exceeds	FOTP-25
Flexing	25 Cycles	FOTP-104
Twist Bend	Exceeds	FOTP-85

CommScope Outside Plant Fiber Optic cables are qualified to the requirements of ANSI/ICEA S-87-640-1999, Standard for Optical Fiber Outside Plant Communications Cable, GR-20-CORE, Issue 2 Generic Requirements for OSP Fiber Optic Cable, EN 187105, European Standard for Optical Cable.

#### Hybrid Single Jacket Outdoor Cable + Conductor



All-Dielectric

#### **Features & Benefits**

- Arid-Core® water blocking technology helps protect fibers from moisture and reduces termination effort
- Designed for tone locating when digging
- Provides line fault detection and location

Product Type/ Fiber Count/Conductor Count	Catalog Number	Sub Units	Outer Diameter inch/mm	Minimum B Loaded inch/cm	Bend Radius Unloaded inch/cm	Maximum Ibs/m Short Term	Tensile Load eters Long Term	Wo lbs/ kft	eight kg/ km
2 - 48 Fibers 1-4 Conductors	O-XXX-LN-HY-FZZNS/ XYXXX/NX12AWG	5	0.46/11.6	9.1/23.2	4.6/11.6	607/2700	180/800	759	118
50 - 60 Fibers 1-4 Conductors	O <b>-XXX-</b> LN-HY-F <b>ZZ</b> NS/ <b>XYXXX/N</b> X12AWG	6	0.49/12.6	9.9/25.2	4.9/12.6	607/2700	180/800	92	137
62 - 84 Fibers 1-4 Conductors	O-XXX-LN-HY-FZZNS/ XYXXX/NX12AWG	8	0.57/14.6	11.5/29.2	5.7/14.6	607/2700	180/800	118	176
86 - 108 Fibers 1-4 Conductors	O-XXX-LN-HY-FZZNS/ XYXXX/NX12AWG	10	0.66/16.7	13.1/33.4	6.6/16.7	607/2700	180/800	146	217
110 - 132 Fibers 1-4 Conductors	O-XXX-LN-HY-FZZNS/ XYXXX/NX12AWG	12	0.74/18.8	14.8/37.6	7.4/18.8	607/2700	180/800	178	266
134 - 204 Fibers 1-4 Conductors	O-XXX-LN-HY-FZZNS/ XYXXX/NX12AWG	18	0.74/18.8	14.8/32.6	7.4/18.8	607/2700	180/800	164	244
206 - 276 Fibers 1-4 Conductors	O-XXX-LN-HY-FZZNS/ XYXXX/NX12AWG	24	0.86/21.8	17.1/43.6	8.6/21.8	607/2700	180/800	215	321

# Variables in the Catalog Number: XXX = Total Fiber Count XY = Fiber Grade 8W LightSo

**8W** LightScope ZWP® Dispersion-Unshifted, Matched-Clad Singlemode Fiber

**8M** Matched-Clad Singlemode Fiber

8T LightScope NZD™ Non-Zero Dispersion-Shifted Singlemode Fiber

For Composites Only:

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

6F 62.5µm, FDDI Grade Multimode Fiber

5M LaserCore\* 150, 50µm, Multimode Fiber

**5L** LaserCore\* 300, 50 $\mu$ m, Multimode Fiber

**5K** LaserCore\* 500, 50 $\mu$ m, Multimode Fiber

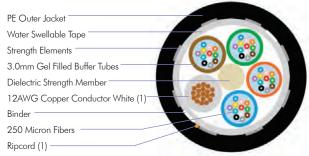
**bbb** is replaced by multimode fiber count **BB** is replaced by multimode type

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 Note: buffer tubes 13-24 repeat the color sequences with tracer stripes

Copper Conductors are identified with standard color codling: 1/Red, 2/Black, 3/Green, 4/Brown

#### **Hybrid Single Jacket** All-Dielectric Cable

(108 Fiber Version Shown)



#### **Mechanical Properties**

Description	Specification	Test Method
Operating Temperature	-40° to 158°F (-40° to 70°C)	FOTP-3
Installation Temperature	-22° to 140°F (-30° to 60°C)	N/A
Storage Temperature	-40° to 167°F (-40° to 75°C)	N/A
Crush Resistance	250 lbf/in (44 N/mm)	FOTP-41
Impact Resistance	Exceeds	FOTP-25
Flexing	25 Cycles	FOTP-104
Twist Bend	Exceeds	FOTP-85

CommScope Outside Plant Fiber Optic cables are qualified to the requirements of ANSI/ICEA S-87-640-1999, Standard for Optical Fiber Outside Plant Communications Cable, GR-20-CORE, Issue 2 Generic Requirements for OSP Fiber Optic Cable, EN 187105, European Standard for Optical Cable.

#### Single Jacket Single Armor Outdoor Cable + Conductor

Armored and Non-Armored, All Dielectric



#### **Features & Benefits**

- Arid-Core® water blocking technology helps protect fibers from moisture and reduces termination effort
- Designed for tone locating when digging
- Provides line fault detection and location

Product Type/ Fiber Count	Catalog Number	Subunits	Outer Diameter inch/mm	Minimum B Loaded inch/cm	end Radius Unloaded inch/cm	Maximum Ter Short Term lbs/newtons	nsile Load Long Term lbs/newtons	We lbs/ kft	ight kg/ km
Armored 277-408 Fibers 1-4 Conductors	O-XXX-LA-HY-F24NS/ XYXXX/NX12AWG	18	0.86/21.8	17.1/43.6	8.6/21.8	607/2700	180/800	201	300
409-552 Fibers 1-4 Conductors	O-XXX-LA-HY-F24NS/ XYXXX/NX12AWG	24	1.03/26.2	20.6/52.4	10.3/26.2	607/2700	180/800	371	554
All-Dielectric 277-408 Fibers 1-4 Conductors	O-XXX-LN-HY-F24NS/ XYXXX/NX12AWG	18	0.84/21.5	16.9/43.0	8.6/21.8	607/2700	180/800	213	318
409-552 Fibers 1-4 Conductors	O- <b>XXX</b> -LN- <b>HY</b> -F24NS/ <b>XYXXX</b> / <b>N</b> X12AWG	24	0.97/24.8	19.5/49.6	9.7/24.8	607/2700	180/800	286	426

<sup>\*</sup>Weights were calculated using a single 12 AWG conductor. Providing number of conductors, custom tables are available upon request.

#### Variables in the Catalog Number:

XXX = Total Fiber Count XY = Fiber Grade

**8W** LightScope ZWP\* Dispersion-Unshifted, Matched-Clad Singlemode Fiber

**8M** Matched-Clad Singlemode Fiber

**8T** LightScope NZD™ Non-Zero Dispersion-

Shifted Singlemode Fiber

For Composites Only:

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

**6F** 62.5 $\mu$ m, FDDI Grade Multimode Fiber

**5M** LaserCore\* 150, 50 $\mu$ m, Multimode Fiber

**5L** LaserCore\* 300, 50μm, Multimode Fiber **5K** LaserCore\* 500, 50μm, Multimode Fiber

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**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 13-23 repeat color sequence with tracer stripe

Copper Conductors Color Coding: specified by customer

#### Single Jacket Single Armor Outdoor



#### **Mechanical Properties**

Description	Specification	Test Method
Operating Temperature	-40° to 158°F (-40° to 70°C)	FOTP-3
Installation Temperature	-22° to 140°F (-30° to 60°C)	N/A
Storage Temperature	-40° to 167°F (-40° to 75°C)	N/A
Crust Resistance	250 lbf/in (44 N/mm)	FOTP-41
Impact Resistance	Exceeds	FOTP-25
Flexing	25 Cycles	FOTP-104
Twist/Bend	Exceeds	FOTP-85

CommScope Outside Plant Fiber Optic cables are qualified to the requirements of ANSI/ICEA S-87-640-1999, Standard for Optical Fiber Outside Plant Communications Cable, GR-20-CORE, Issue 2 Generic Requirements for OSP Fiber Optic Cable, EN 187105, European Standard for Optical Cable.

#### Indoor/Outdoor LSZH Distribution Cable

Low-Smoke Zero-Halogen, Riser-Rated



#### **LSZH Construction Permits Riser Applications 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 (LSZH) gives added protection to building occupants and equipment
- Tight buffered construction reduces installation cost

Fiber Count	Catalog Number	Outer Diameter	Minimum B Loaded	end Radius Unloaded	Maximum Te Short term	ensile Load Long term	Wei lbs/kft	ight kg/km		
2 Fibers (no central member)	z-øø2-ds- <b>xy</b> -fsubk	0.15/3.8	3.0/7.7	1.5/3.8	225/1001	68/300	7.8	11.6		
4 Fibers (no central member)	Z-ØØ4-DS- <b>XY</b> -FSUBK	0.20/5.1	4.0/10.1	2.0/5.1	300/1335	90/400	13.5	20.1		
6 Fibers	Z-ØØ6-DS- <b>XY</b> -FSUBK	0.22/5.5	4.4/11.1	2.2/5.5	300/1335	90/400	17.6	26.3		
8 Fibers	Z-ØØ8-DS- <b>XY</b> -FSUBK	0.25/6.3	5.0/12.6	2.5/6.3	300/1335	90/400	23.7	35.3		
12 Fibers	Z-Ø12-DS- <b>XY</b> -FSUBK	0.28/7.2	5.6/14.2	2.8/7.1	300/1335	90/400	32.6	48.6		
18 Fibers	Z-Ø18-DS- <b>XY</b> -FSUBK	0.31/7.9	6.2/15.7	3.1/7.9	300/1335	90/400	37.0	55.0		
24 Fibers	Z-Ø24-DS- <b>XY</b> -FSUBK	0.34/8.7	6.8/17.4	3.4/8.7	300/1335	90/400	45.2	67.3		
36 Fibers	Z-Ø36-DS- <b>XY</b> -FMUBK	0.70/17.8	14.0/35.6	7.0/17.8	800/3560	240/1068	162.4	241.6		
48 Fibers	Z-Ø48-DS- <b>XY</b> -FMUBK	0.80/20.2	16.0/40.6	8.0/20.3	800/3560	240/1068	206.6	307.4		
60 Fibers	Z-Ø60-DS- <b>XY</b> -FMUBK	0.87/22.0	17.4/44.2	8.7/22.1	1000/4450	300/1335	260.7	387.9		
72 Fibers	Z-Ø72-DS- <b>XY</b> -FMUBK	0.95/24.1	19.0/48.2	9.5/24.1	1000/4450	300/1335	320.5	477.0		
Singlemode/Multimode	Z-ØØØ-DS- <b>CM</b> -FSUBK,	-ØØØ-DS- <b>CM</b> -FSUBK/ <b>AAaaa/BBbbb</b> Custom design - sizes/specs will vary depending on fiber count								

#### Variables in the Catalog Number:

XXX = Total Fiber Count XY = Fiber Grade

Composite (4 - 72 Fibers)

8W LightScope ZWP Dispersion-Unshifted, Matched-Clad Singlemode Fiber

Z-ØØØ-DS-CM-FMUBK/AAaaa/BBbbb

8M Matched-Clad Singlemode Fiber

8T LightScope NZD™ Non-Zero Dispersion-Shifted Singlemode Fiber

For Composites Only:

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

**6F** 62.5μm, FDDI Grade Multimode Fiber

Custom design - sizes/specs will vary depending on fiber count

5M LaserCore" 150, 50µm, Multimode Fiber

5L LaserCore 300, 50µm, Multimode Fiber

5K LaserCore" 500, 50µm, Multimode Fiber

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

Tight Buffer/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 Jacket Color: UV Stabilized Black

#### LSZH Indoor/Outdoor **Riser-Rated Distribution Cable (Multi-Unit)**



#### 12 Fiber Unit (Single Unit)

LSZH Jacket	
Aramid Yarn	000m
Central Strength Member	
900 Micron Tight-Buffered 250 Micron Fiber 🚤	
Ripcord	
Water Blocking Thread	
5	

#### **Mechanical Properties**

Description	Specification	Test Method
Operating Temperature	-40° to 158°F (-40° to 70°C)	FOTP-3
Installation Temperature	-22° to 158°F (-30° to 70°C)	N/A
Storage Temperature	-40° to 167°F (-40° to 75°C)	N/A
Crush Resistance	Exceeds 126 lbf/in (22 N/mm)	FOTP-41
Impact Resistance	Exceeds 4.34 lb·ft (5.88 N·m)	FOTP-25
Flexing	Exceeds 100 cycles	FOTP-104
Twist Bend	Exceeds	FOTP-85

CommScope Fiber Optic Premises cables are qualified to the requirements of Telcordia GR-409-CORE, Issue 1. Water penetration performance meets the requirements of Telcordia GR-20-CORE, Issue 2.

#### **Indoor/Outdoor LSZH Cordage Cable**

Low-Smoke Zero-Halogen, Riser-Rated



#### **LSZH Construction Permits Riser Applications 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 and zipcord cables are available in a variety of sizes
- Designed for ease of handling and termination

Cable Type/Unit Size	Catalog Number	Outer Diameter inch/mm	Minimun Loaded inch/cm	n Bend Radius Unloaded inch/cm	Maximum Short term lbs./ Newtons	Tensile Load Long term lbs./Newtons	lbs/ kft	Weight kg/ km
Simplex/1.6mm	Z-ØØ1-SP- <b>XY</b> -F16BK	0.067/1.70	2.0/5.0	1.2/3.0	35/156	11/47	1.9	2.9
Simplex/2.5mm	Z-ØØ1-SP- <b>XY</b> -F25BK	0.098/2.50	2.0/5.0	1.2/3.0	60/267	18/80	4.5	6.7
Simplex/2.9mm	Z-ØØ1-SP- <b>XY</b> -F29BK	0.114/2.90	2.3/5.8	1.2/3.0	60/267	18/80	6.2	9.2
Zipcord/1.6mm	Z-ØØ2-ZC- <b>XY</b> -F16BK	0.067 x 0.138/ 1.70 x 3.50	2.0/5.0	1.2/3.0	70/311	21/93	3.8	5.6
Zipcord/2.5mm	Z-ØØ2-ZC- <b>XY</b> -F25BK	0.098 x 0.201/ 2.50 x 5.10	2.0/5.0	1.2/3.0	90/400	27/120	9.0	13.4
Zipcord/2.9mm	Z-ØØ2-ZC- <b>XY</b> -F29BK	0.114 x 0.232/ 2.90 x 5.90	2.3/5.8	1.2/3.0	90/400	27/120	12.4	18.5
Interconnect/2.9mm	Z-ØØ2-IC- <b>XY</b> -F29BK	0.114/2.90	2.3/5.8	1.2/3.0	70/311	21/93	5.0	7.4

#### **Variables in the Catalog Number:**

XXX = Total Fiber Count XY = Fiber Grade

**8W** LightScope ZWP\* Dispersion-Unshifted, Matched-Clad Singlemode Fiber

**8M** Matched-Clad Singlemode Fiber

**8T** LightScope NZD™ Non-Zero Dispersion-Shifted Singlemode Fiber

For Composites Only:

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

Tight Buffer/Fiber Identification Colors: 1/Blue, 2/Orange

Jacket Color: UV Stabilized Black

**6F** 62.5μm, FDDI Grade Multimode Fiber

5M LaserCore" 150, 50µm, Multimode Fiber

**5L** LaserCore\* 300, 50µm, Multimode Fiber

**5K** LaserCore<sup>®</sup> 500, 50μm, Multimode Fiber

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

#### **Indoor/Outdoor LSZH Simplex Cable**

LSZH Riser Rated Outer Jacket	
Water Blocking System Aramid Yarn	
900µm Tight Buffer	

# Indoor/Outdoor LSZH 2-Fiber Interconnect Cable

LSZH Riser Rated Outer Jacket	
Aramid Yarn Water Blocking System 900µm Tight Buffer	
250µm Optical Fibers	

Specifications are subject to change without notice.

#### **Indoor/Outdoor LSZH Zipcord Cable**

LSZH Riser Rated Outer Jacket	
Aramid Yarn — Water Blocking System	
900µm Tight Buffer	

#### **Mechanical Properties**

Description	Specification	Test Method
Operating Temperature	-40° to 158°F (-40° to 70°C)	FOTP-3
Installation Temperature	-22° to 158°F (-30° to 70°C)	N/A
Storage Temperature	-40° to 167°F (-40° to 75°C)	N/A
Crush Resistance	Exceeds 57 lbf/in (10 N/mm)	FOTP-41
Impact Resistance	Exceeds 0.54 lbf·ft (0.74 N·m)	FOTP-25
Flexing	Exceeds 300 cycles	FOTP-104
Twist Bend	Exceeds	FOTP-85

CommScope Fiber Optic Premise cables are qualified to the requirements of Telcordia GR-409-CORE, Issue 1. Water penetration performance meets the requirements of Telcordia GR-20-CORE, Issue2.

#### **Premise Riser-Rated Distribution Cable**



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

Fiber Count	Catalog Number	Outer Diameter inch/mm	Minimum I Loaded inch/cm	Bend Radius Unloaded inch/cm	Maximum 1 Short term lbs./ Newtons	ensile Load Long term lbs./Newtons	We Ibs/ kft	eight kg/ km					
2 Fibers	R-ØØ2-DS- <b>XY</b> -FSU <b>ZZ</b>	0.16/4.1	3.2/8.1	1.6/4.1	225/1001	68/300	8.6	12.9					
4 Fibers	R-ØØ4-DS- <b>XY</b> -FSU <b>ZZ</b>	0.19/4.8	3.8/9.5	1.9/4.8	300/1335	90/400	13.1	19.4					
6 Fibers	R-ØØ6-DS- <b>XY</b> -FSU <b>ZZ</b>	0.20/5.1	4.1/10.3	2.0/5.1	300/1335	90/400	15.2	22.7					
8 Fibers	R-ØØ8-DS- <b>XY</b> -FSU <b>ZZ</b>	0.22/5.5	4.3/11.0	2.2/5.5	300/1335	90/400	17.2	25.7					
12 Fibers	R-Ø12-DS- <b>XY</b> -FSU <b>ZZ</b>	0.24/6.0	4.7/12.1	2.4/6.0	300/1335	90/400	21.7	32.2					
18 Fibers	R-Ø18-DS- <b>XY</b> -FSU <b>ZZ</b>	0.30/7.7	6.0/15.4	3.0/7.7	300/1335	90/400	32.1	47.7					
24 Fibers	R-Ø24-DS- <b>XY</b> -FSU <b>ZZ</b>	0.33/8.4	6.6/16.7	3.3/8.4	300/1335	90/400	37.9	56.4					
<b>36 Fibers</b> (3 subunits)	R-Ø36-DS- <b>XY</b> -FMU <b>ZZ</b>	0.58/14.6	11.5/29.3	5.8/14.6	800/3560	240/1068	112.0	167.0					
48 Fibers (4 subunits)	R-Ø48-DS- <b>XY</b> -FMU <b>ZZ</b>	0.63/16.1	12.7/32.2	6.3/16.1	800/3560	240/1068	143.0	212.0					
<b>60 Fibers</b> (5 subunits)	R-Ø6Ø-DS- <b>XY</b> -FMU <b>ZZ</b>	0.71/18.0	14.2/36.1	7.1/18.0	1000/4450	300/1335	188.0	279.0					
<b>72 Fibers</b> (6 subunits)	R-Ø72-DS- <b>XY</b> -FMU <b>ZZ</b>	0.79/20.0	15.8/40.1	7.9/20.0	1000/4450	300/1335	232.0	345.0					
96 Fibers (8 subunits)	R-Ø96-DS- <b>XY</b> -FMU <b>ZZ</b>	0.93/23.7	18.7/47.5	9.3/23.7	1000/4450	300/1335	337.0	502.0					
144 Fibers (12 subunits)	R-144-DS- <b>XY</b> -FMU <b>ZZ</b>	1.03/26.1	20.5/52.2	10.3/26.1	1000/4450	300/1335	350.0	522.0					
Singlemode/Multimode Composite (4 - 144 Fibers)	· ·	•	(	ustom design	- sizes/specs will	vary depending	R-XXX-DS-CM-FSUOR/AAaaa/BBbbb R-XXX-DS-CM-FMUOR/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** LightScope ZWP Dispersion-Unshifted, Matched-Clad Singlemode Fiber

8M Matched-Clad Singlemode Fiber

**8T** LightScope NZD™ Non-Zero Dispersion-

Shifted Singlemode Fiber

For Composites Only:

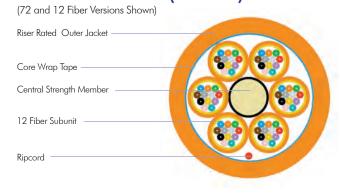
aaa is replaced with singlemode fiber count AA is replaced with singlemode type

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

Tight Buffer/Fiber 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 color-coded in the same manner.

#### **Riser Distribution Cable (Multi-Unit)**



12 Fiber Unit (Single Unit)

Riser Rated Outer Jacket  Aramid Yarn  900    m Tight Buffer  250   m Optical Fiber  Ripcord	
Mechanical Properties	

**6F** 62.5μm, FDDI Grade Multimode Fiber

5M LaserCore® 150, 50µm, Multimode Fiber

**5L** LaserCore\* 300, 50μm, Multimode Fiber

5K LaserCore\* 500, 50µm, Multimode Fiber

Description	Specification	Test Method
Operating Temperature	-4° to 158°F (-20° to 70°C)	FOTP-3
Installation Temperature	-4° to 158°F (-20° to 70°C)	N/A
Storage Temperature	-40° to 158°F (-40° to 70°C)	N/A
Crush Resistance	Exceeds 57 lbf/in (10N/mm)	FOTP-41
Impact Resistance	Exceeds 4.34 lb·ft (5.88 N·m)	FOTP-25
Flexing	Exceeds 100 cycles	FOTP-104
Twist Bend	Exceeds	FOTP-85

CommScope Fiber Optic Premises Cables are qualified to the requirements of Telcordia GR-409-CORE, Issue 1.

#### **Premise Riser-Rated Cordage Cable**

Several Constructions Available for a Variety of Applications



- Meets critical NEC/CEC riser (OFNR) safety standards
- Simplex and zipcord cables are available in a variety of sizes
- Designed for ease of handling and termination

Cable Type/Unit Size	Catalog Number	Outer Diameter inch/mm	Minimum Loaded inch/cm	Bend Radius Unloaded inch/cm	Maximum 1 Short term lbs./ Newtons	Tensile Load Long term lbs./Newtons	We Ibs/ kft	ight kg/ km
Simplex/1.6mm	R-ØØ1-SP- <b>XY</b> -F16ZZ	0.067/1.70	2.0/5.0	1.2/3.0	35/156	11/47	1.8	2.7
Simplex/2.0mm	R-ØØ1-SP- <b>XY</b> -F20ZZ	0.079/2.00	2.0/5.0	1.2/3.0	50/222	15/67	2.8	4.1
Simplex/2.5mm	R-ØØ1-SP- <b>XY</b> -F25ZZ	0.098/2.50	2.0/5.0	1.2/3.0	60/267	18/80	4.2	6.3
Simplex/2.9mm	R-ØØ1-SP- <b>XY</b> -F29ZZ	0.114/2.90	2.3/5.8	1.2/3.0	60/267	18/80	5.8	8.7
Zipcord/1.6mm	R-ØØ2-ZC- <b>XY</b> -F16ZZ	0.067 x 0.138/ 1.70 x 3.50	2.0/5.0	1.2/3.0	70/311	21/93	3.7	5.5
Zipcord/2.0mm	R-ØØ2-ZC- <b>XY</b> -F20ZZ	0.079 x 0.161/ 2.00 x 4.10	2.0/5.0	1.2/3.0	80/356	24/107	5.4	8.0
Zipcord/2.5mm	R-ØØ2-ZC- <b>XY</b> -F25ZZ	0.098 x 0.201/ 2.50 x 5.10	2.0/5.0	1.2/3.0	90/400	27/120	8.5	12.6
Zipcord/2.9mm	R-ØØ2-ZC- <b>XY</b> -F29ZZ	0.114 x 0.232/ 2.90 x 5.90	2.3/5.8	1.2/3.0	90/400	27/120	11.7	17.4
Interconnect /2.9mm	R-ØØ2-IC- <b>XY</b> -F29ZZ	0.114/2.90	2.3/5.8	1.2/3.0	70/311	21/93	4.7	7.0

# Variables in the Catalog Number: XXX = Total Fiber Count XY = Fiber Grade 8W LightSa

**8W** LightScope ZWP\* Dispersion-Unshifted, Matched-Clad Singlemode Fiber

**8M** Matched-Clad Singlemode Fiber

LightScope NZD™ Non-Zero Dispersion-Shifted Singlemode Fiber

**ZZ** = **Standard Jacket Color YL** (Yellow - Singlemode Cable)

Fiber IdentificationColors: 1/Blue, 2/Orange

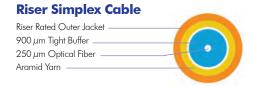
**6F** 62.5μm, FDDI Grade Multimode Fiber

5M LaserCore" 150, 50µm, Multimode Fiber

5L LaserCore" 300, 50µm, Multimode Fiber

**5K** LaserCore<sup>®</sup> 500, 50μm, Multimode Fiber

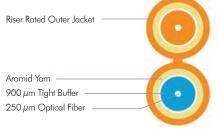
**OR** (Orange - Multimode or Composite Cable) **AQ** (Aqua - LaserCore Cable)



#### **Riser 2-Fiber Interconnect Cable**

Riser Rated Outer Jacket —	
Aramid Yarn	
900 $\mu$ m Tight Buffer ——————	
250 µm Optical Fiber	

#### **Riser Zipcord Cable**



#### **Mechanical Properties**

Description	Specification	Test Method
Operating Temperature	-4° to 158°F (-20° to 70°C)	FOTP-3
Installation Temperature	-4° to 158°F (-20° to 70°C)	N/A
Storage Temperature	-40° to 158°F (-40° to 70°C)	N/A
Crush Resistance	Exceeds 57 lbf/in (10N/mm)	FOTP-41
Impact Resistance	Exceeds 0.54 lb·ft (0.74 N·m)	FOTP-25
Flexing	Exceeds 300 cycles	FOTP-104
Twist Bend	Exceeds	FOTP-85

CommScope Fiber Optic Premises Cables are qualified to the requirements of Telcordia GR-409-CORE, Issue 1.

#### **Premise Plenum-Rated Distribution Cable**



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

Fiber Count	Catalog Number	Outer Diameter inch/mm	Mininum B Loaded inch/cm	end Radius Unloaded inch/cm	Maximum Short term Ibs./ Newtons	Tensile Load Long term lbs./Newtons	We Ibs/ kft	eight kg/ km	
2 Fibers	P-ØØ2-DS- <b>XY</b> -FSU <b>ZZ</b>	0.15/3.9	3.1/7.8	1.5/3.9	225/1001	68/300	8.8	13.1	
4 Fibers	P-ØØ4-DS- <b>XY</b> -FSU <b>ZZ</b>	0.17/4.4	3.4/8.7	1.7/4.4	300/1335	90/400	12.2	18.2	
6 Fibers	P-ØØ6-DS- <b>XY</b> -FSU <b>ZZ</b>	0.19/4.8	3.8/9.7	1.9/4.8	300/1335	90/400	15.1	22.5	
8 Fibers	P-ØØ8-DS- <b>XY</b> -FSU <b>ZZ</b>	0.20/5.1	4.0/10.2	2.0/5.1	300/1335	90/400	16.8	24.9	
12 Fibers	P-Ø12-DS- <b>XY</b> -FSU <b>ZZ</b>	0.23/5.8	4.6/11.7	2.3/5.8	300/1335	90/400	20.8	30.9	
18 Fibers	P-Ø18-DS- <b>XY</b> -FSU <b>ZZ</b>	0.31/7.9	6.2/15.8	3.1/7.9	300/1335	90/400	40.9	60.9	
24 Fibers	P-Ø24-DS- <b>XY</b> -FSU <b>ZZ</b>	0.33/8.5	6.7/16.9	3.3/8.5	300/1335	90/400	47.3	70.4	
<b>36 Fibers</b> (3 subunits)	P-Ø36-DS- <b>XY</b> -FMU <b>ZZ</b>	0.54/13.7	10.8/27.4	5.4/13.7	800/3560	240/1068	128.0	191.0	
<b>48 Fibers</b> (4 subunits)	P-Ø48-DS- <b>XY</b> -FMU <b>ZZ</b>	0.59/15.1	11.9/30.2	5.9/15.1	800/3560	240/1068	138.0	205.0	
<b>60 Fibers</b> (5 subunits)	P-Ø6Ø-DS- <b>XY</b> -FMU <b>ZZ</b>	0.68/17.2	13.6/34.4	6.8/17.2	1000/4450	300/1335	190.0	282.0	
<b>72 Fibers</b> (6 subunits)	P-Ø72-DS- <b>XY</b> -FMU <b>ZZ</b>	0.75/19.1	15.1/38.2	7.5/19.1	1000/4450	300/1335	237.0	353.0	
<b>96 Fibers</b> (8 subunits)	P-Ø96-DS- <b>XY</b> -FMU <b>ZZ</b>	0.91/23.1	18.2/46.1	9.1/23.1	1000/4450	300/1335	361.0	537.0	
144 Fibers (12 subunits)	P-144-DS- <b>XY</b> -FMU <b>ZZ</b>	0.97/24.8	19.5/49.5	9.7/24.8	1000/4450	300/1335	357.0	531.0	
Singlemode/Multimode Composite (4 - 144 Fibers)	,	PXXX-DS-CM-FSUOR/AAaaa/BBbbb PXXX-DS-CM-FMUOR/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 LightSa

**8W** LightScope ZWP® Dispersion-Unshifted, Matched-Clad Singlemode Fiber

**8M** Matched-Clad Singlemode Fiber **8T** LightScope NZD™ Non-Zero Dispersion-Shifted Singlemode Fiber

For Composites Only:

AA is replaced with singlemode type

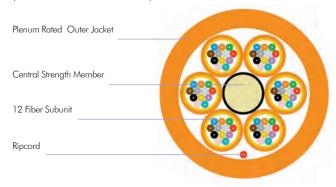
**Tight Buffer/Fiber Colors:** 

aaa is replaced with singlemode fiber count

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 color-coded for easy identification

#### **Plenum Distribution Cable (Multi-Unit)**

(72 and 12 Fiber Versions Shown)



#### 12 Fiber Unit (Single Unit)

Riser Rated Outer Jacket	
Aramid Yarn	<b>[000]</b>
900 μm Tight Buffer	000
250 μm Optical Fiber ————	<b>300</b>
Ripcord	-

**6F** 62.5μm, FDDI Grade Multimode Fiber

5M LaserCore\* 150, 50µm, Multimode Fiber

**5L** LaserCore<sup>®</sup> 300, 50μm, Multimode Fiber

**5K** LaserCore\* 500, 50μm, Multimode Fiber

**bbb** is replaced by multimode fiber count

**BB** is replaced by multimode type

#### **Mechanical Properties**

Description	Specification	Test Method
Operating Temperature	-4° to 158°F (-20° to 70°C)	FOTP-3
Installation Temperature	32° to 158°F (0° to 70°C)	N/A
Storage Temperature	-40° to 158°F (-40° to 70°C)	N/A
Crush Resistance	Exceeds 57 lbf/in (10N/mm)	FOTP-41
Impact Resistance	Exceeds 4.34 lb·ft (5.88 N·m)	FOTP-25
Flexing	Exceeds 100 cycles	FOTP-104
Twist Bend	Exceeds	FOTP-85

CommScope Fiber Optic Premises Cables are qualified to the requirements of Telcordia GR-409-CORE, Issue 1.

#### **Premise Plenum-Rated Cordage Cable**

Several Constructions Available for a Variety of Uses

CommScope<sup>®</sup>

- Meets critical NEC/CEC plenum (OFNP) safety standards
- Simplex and zipcord cables are available in a variety of sizes
- Designed for ease of handling and termination

Cable Type/Unit Size	Catalog Number	Outer Diameter inch/mm	Minimum I Loaded inch/cm	Bend Radius Unloaded inch/cm	Maximum Te Short term lbs./ Newtons	ensile Load Long term lbs./Newtons	We Ibs/ kft	ight kg/ km
Simplex/1.6mm	P-ØØ1-SP- <b>XY</b> -F16ZZ	0.067/1.70	2.0/5.0	1.2/3.0	35/156	11/47	2.0	3.0
Simplex/2.0mm	P-ØØ1-SP- <b>XY</b> -F20ZZ	0.079/2.00	2.0/5.0	1.2/3.0	50/222	15/67	3.0	4.5
Simplex/2.5mm	P-ØØ1-SP- <b>XY</b> -F25ZZ	0.098/2.50	2.0/5.0	1.2/3.0	60/267	18/80	4.9	7.3
Simplex/2.9mm	P-ØØ1-SP- <b>XY</b> -F29ZZ	0.114/2.90	2.3/5.8	1.2/3.0	60/267	18/80	6.8	10.1
Zipcord/1.6mm	P-ØØ2-ZC- <b>XY</b> -F16ZZ	0.067 x 0.138/ 1.70 x 3.50	2.0/5.0	1.2/3.0	70/311	21/93	4.0	6.0
Zipcord/2.0mm	P-ØØ2-ZC- <b>XY</b> -F20ZZ	0.079 x 0.161/ 2.00 x 4.10	2.0/5.0	1.2/3.0	80/356	24/107	5.9	8.8
Zipcord/2.5mm	P-ØØ2-ZC- <b>XY</b> -F25ZZ	0.098 x 0.201/ 2.50 x 5.10	2.0/5.0	1.2/3.0	90/400	27/120	9.8	14.6
Zipcord/2.9mm	P-ØØ2-ZC <b>-XY</b> -F29ZZ	0.114 x 0.232/ 2.90 x 5.90	2.3/5.8	1.2/3.0	90/400	27/120	13.6	20.2
Interconnect/2.9mm	P-ØØ2-IC- <b>XY</b> -F29ZZ	0.114/2.90	2.3/5.8	1.2/3.0	70/311	21/93	5.8	8.6

# Variables in the Catalog Number: XXX = Total Fiber Count XY = Fiber Grade 8W LightSa

**8W** LightScope ZWP\* Dispersion-Unshifted, Matched-Clad Singlemode Fiber

8M Matched-Clad Singlemode Fiber

8T LightScope NZD™ Non-Zero Dispersion-Shifted Singlemode Fiber

**ZZ** = Standard Jacket Color YL (Yellow - Singlemode Cable)

Fiber IdentificationColors: 1/Blue, 2/Orange

**6F** 62.5μm, FDDI Grade Multimode Fiber

5M LaserCore\* 150, 50µm, Multimode Fiber

**5L** LaserCore" 300, 50µm, Multimode Fiber

**5K** LaserCore 500, 50μm, Multimode Fiber

**OR** (Orange - Multimode or Composite Cable)

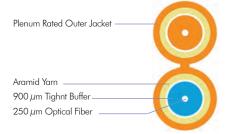
AQ (Aqua - LaserCore Cable)

#### **Plenum Simplex Cable** Plenum Rated Outer Jacket 900 $\mu$ m Tight Buffer 250 μm Optical Fiber Aramid Yarn

#### **Plenum 2-Fiber Interconnect Cable**

Plenum Rated Outer Jacket	
Aramid Yarn	
900 μm Tight Buffer ——————————	
250 μm Optical Fiber	

#### **Plenum Zipcord Cable**



#### **Mechanical Properties**

Description	Specification	Test Method
Operating Temperature	-4° to 158°F (-20° to 70°C)	FOTP-3
Installation Temperature	32° to 158°F (0° to 70°C)	N/A
Storage Temperature	-40° to 158°F (-40° to 70°C)	N/A
Crush Resistance	Exceeds 57 lbf/in (10N/mm)	FOTP-41
Impact Resistance	Exceeds 0.54 lb·ft (0.74 N·m)	FOTP-25
Flexing	Exceeds 300 cycles	FOTP-104
Twist Bend	Exceeds	FOTP-85

CommScope Fiber Optic Premises Cables are qualified to the requirements of Telcordia

#### **Fiber Optic Cable**

#### Packaging and 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.

# Flange Diameter Drum Diameter

#### 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.



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

Flange x Drum x Traverse	Reel Weight (lbs)	2-60F 5@1	62-72F 6@1	74-96F 8@1	98-120F 10@1	122-144F 12@1	146-216F 12@6@1	218-288F 15@9@1
35 x 16.5 x 18	70	3,749	3,302	2,774	2,115	1,752	1,752	1,416
42 x 24 x 25	109	6,365	6,181	4,686	3,859	3,203	3,203	2,280
42 x 22 x 29.75	118	8,903	7,968	6,298	5,266	3,997	3,997	3,261
48 x 22 x 32.5	176	14,224	13,027	10,704	8,695	6,369	6,369	5,300
54 x 24 x 28	370	15,868	14,803	11,514	9,540	7,246	7,246	5,383
60 x 30 x 32	433	21,280	19,637	15,543	12,822	9,706	9,706	7,752
66 x 30 x 32	506	28,649	25,652	20,932	16,857	13,258	13,258	10,279
72 x 36 x 36	627	36,198	32,593	26,521	21,628	16,947	16,947	13,050
78 x 36 x 36	758	44,704	40,711	32,579	27,141	20,824	20,824	16,475
84 x 40 x 40	913	57,164	51,818	41,707	33,424	25,671	25,671	20,655
88 x 40 x 40	958	N/A	58,744	47,916	39,012	29,315	29,315	23,945
96 x 44 x 46	1,020	N/A	N/A	60,000	53,242	40,797	40,797	31,726

All Units in Feet 2"Flange Clearance

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

Flange x Drum x Traverse	Reel Weight (lbs)	2-60F 5@1	62-72F 6@1	74-96F 8@1	98-120F 10@1	122-144F 12@1	146-216F 12@6@1	218-288F 15@9@1
35 x 16.5 x 18	70	4,756	4,266	3,302	2,774	2,125	2,061	1,450
42 x 24 x 25	109	8,757	7,971	6,181	4,686	3,873	3,790	2,721
42 x 22 x 29.75	118	11,231	10,207	7,968	6,298	4,709	4,728	3,375
48 x 22 x 32.5	176	18,238	16,719	13,027	10,704	7,974	7,961	6,073
54 x 24 x 28	370	20,913	19,466	14,803	11,514	9,005	8,854	6,520
60 x 30 x 32	433	27,909	25,764	19,637	15,543	11,888	11,710	8,594
66 x 30 x 32	506	37,565	33,798	25,652	20,932	15,795	15,571	11,227
72 x 36 x 36	627	47,366	42,863	32,593	26,521	20,332	20,078	14,486
78 x 36 x 36	758	58,728	53,702	40,711	32,579	25,701	25,397	19,043
84 x 40 x 40	913	60,000	60,000	51,818	41,707	33,087	31,419	23,636
88 x 40 x 40	958	N/A	N/A	58,744	47,916	37,217	35,456	27,128
96 x 44 x 46	1,020	N/A	N/A	N/A	60,000	51,045	50,639	36,663
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All Units in Feet 2"Flange Clearance

#### Outside Plant Dry Loose Tube Double Jacket, Single Armor (D-L2) Cables

Flange x Drum x Traverse	Reel Weight (lbs)	2-60F 5@1	62-72F 6@1	74-96F 8@1	98-120F 10@1	122-144F 12@1	146-216F 12@6@1	218-288F 15@9@1
35 x 16.5 x 18	70	2,408	2,115	1,737	1,450	N/A	N/A	N/A
42 x 24 x 25	109	4,023	3,859	3,271	2,721	2,155	2,155	1,717
42 x 22 x 29.75	118	5,437	5,266	4,060	3,375	2,761	2,761	2,208
48 x 22 x 32.5	176	8,924	8,698	6,990	6,073	4,769	4,769	3,921
54 x 24 x 28	370	10,466	9,540	7,885	6,520	5,593	5,593	4,328
60 x 30 x 32	433	13,975	12,822	10,516	8,594	7,457	7,457	5,874
66 x 30 x 32	506	18,181	16,857	13,410	11,227	9,269	9,269	7,500
72 x 36 x 36	627	23,221	21,628	17,120	14,486	11,839	11,839	9,459
78 x 36 x 36	758	28,922	27,141	22,035	19,043	15,103	15,103	11,621
84 x 40 x 40	913	35,467	33,424	27,539	23,636	19,063	19,063	14,639
88 x 40 x 40	958	41,212	39,012	31,317	27,128	22,223	22,223	15,661
96 x 44 x 46	1,020	55,872	53,242	43,228	36,663	29,684	29,684	23,913

All Units in Feet 2"Flange Clearance

**Fiber Optic Cable**Packaging and Shipping Information



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

Flange x Drum x Traverse	Reel Weight (lbs)	2-60F 5@1	62-72F 6@1	74-96F 8@1	98-120F 10@1	122-144F 12@1	146-216F 12@6@1	218-288F 15@9@1
35 x 16.5 x 18	70	3,249	2,774	2,061	1,699	1,365	1,365	N/A
42 x 24 x 25	109	5,501	4,686	3,790	2,785	2,220	2,220	1,717
42 x 22 x 29.75	118	7,203	6,298	4,728	3,840	3,197	3,197	2,208
48 x 22 x 32.5	176	11,869	10,704	7,861	6,154	4,750	4,750	3,921
54 x 24 x 28	370	13,508	11,514	8,854	7,135	5,732	5,732	4,328
60 x 30 x 32	433	18,041	15,543	11,710	9,576	7,619	7,619	5,874
66 x 30 x 32	506	23,794	20,932	15,571	12,361	10,116	10,116	7,500
72 x 36 x 36	627	30,383	26,521	20,078	15,541	12,865	12,865	9,459
78 x 36 x 36	758	38,211	32,579	25,397	19,248	15,381	15,381	11,621
84 x 40 x 40	913	48,919	41,707	31,419	25,459	20,420	20,420	14,639
88 x 40 x 40	958	55,644	47,916	35,456	27,860	22,578	22,578	17,404
96 x 44 x 46	1,020	60,000	60,000	50,639	38,413	31,457	31,457	23,913

All Units in Feet 2"Flange Clearance

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

Flange x Drum x Traverse	Reel Weight (lbs)	2-60F 5@1	62-72F 6@1	74-96F 8@1	98-120F 10@1	122-144F 12@1	146-216F 12@6@1	218-288F 15@9@1
35 x 16.5 x 18	70	3,823	3,302	2,462	1,796	1,455	1,455	N/A
42 x 24 x 25	109	6,989	6,181	4,513	3,261	2,649	2,649	2,110
42 x 22 x 29.75	118	8,994	7,968	6,122	4,582	3,387	3,387	2,647
48 x 22 x 32.5	176	14,329	13,027	9,798	7,101	5,464	5,464	4,070
54 x 24 x 28	370	16,800	14,803	10,781	8,036	6,378	6,378	4,946
60 x 30 x 32	433	22,463	19,637	14,344	10,691	8,628	8,628	6,649
66 x 30 x 32	506	28,856	25,652	19,541	14,401	11,279	11,279	8,370
72 x 36 x 36	627	36,908	32,593	24,853	18,322	14,249	14,249	10,499
78 x 36 x 36	758	47,051	40,711	30,736	22,336	17,807	17,807	13,559
84 x 40 x 40	913	59,221	51,818	39,551	29,119	23,743	23,743	17,278
88 x 40 x 40	958	N/A	58,744	44,069	32,995	26,066	26,066	19,256
96 x 44 x 46	1,020	N/A	60,000	60,000	45,289	36,252	36,252	26,116

All Units in Feet 2"Flange Clearance

#### Outside Plant Double Jacketed Single Armored (O-L2) Cables

Flange x Drum x Traverse	Reel Weight (lbs)	2-60F 5@1	62-72F 6@1	74-96F 8@1	98-120F 10@1	122-144F 12@1	146-216F 12@6@1	218-288F 15@9@1
35 x 16.5 x 18	70	2,071	1,737	1,461	N/A	N/A	N/A	N/A
42 x 24 x 25	109	3,414	3,271	2,657	2,099	1,721	1,721	1,330
42 x 22 x 29.75	118	4,647	4,060	3,313	2,709	2,214	2,214	1,717
48 x 22 x 32.5	176	7,747	6,990	5,488	4,585	3,532	3,532	2,892
54 x 24 x 28	370	8,700	7,885	6,408	5,059	4,345	4,345	3,228
60 x 30 x 32	433	11,765	10,516	8,461	6,781	5,725	5,725	4,337
66 x 30 x 32	506	15,656	13,410	11,067	9,145	7,313	7,313	5,730
<b>72</b> x 36 x 36	627	19,821	17,120	14,307	11,427	9,491	9,491	7,349
78 x 36 x 36	758	23,997	22,035	17,888	13,778	11,664	11,664	9,254
84 x 40 x 40	913	31,082	27,539	22,291	17,518	14,691	14,691	11,890
88 x 40 x 40	958	35,086	31,317	25,704	20,545	16,524	16,524	13,535
96 x 44 x 46	1,020	47,805	43,228	35,836	27,682	24,005	24,005	18,777

All Units in Feet

2"Flange Clearance

Reel Weights subject to change without notice.



#### **Outside Plant Triple Jacketed Double Armored (O-L3) Cables**

Flange x Drum x Traverse	Reel Weight (lbs)	2-60F 5@1	62-72F 6@1	74-96F 8@1	98-120F 10@1	122-144F 12@1	146-216F 12@6@1	218-288F 15@9@1
35 x 16.5 x 18	70	1,191	N/A	N/A	N/A	N/A	N/A	N/A
42 x 24 x 25	109	2,155	2,105	1,661	1,325	1,231	1,231	N/A
42 x 22 x 29.75	118	2,761	2,717	2,150	1,770	1,676	1,676	N/A
48 x 22 x 32.5	176	4,769	4,164	3,443	2,875	2,748	2,748	N/A
54 x 24 x 28	370	5,593	4,926	3,968	3,330	2,827	2,827	N/A
60 x 30 x 32	433	7,457	6,626	5,245	4,457	3,826	3,826	3,152
66 x 30 x 32	506	9,269	8,337	7,340	5,882	5,154	5,154	4,358
72 x 36 x 36	627	11,839	10,717	9,278	7,521	6,643	6,643	5,498
78 x 36 x 36	758	15,103	13,834	11,407	9,464	8,480	8,480	6,578
84 x 40 x 40	913	19,063	17,586	14,743	12,126	10,676	10,676	8,718
88 x 40 x 40	958	22,223	19,595	16,586	12,796	12,232	12,232	10,141
96 x 44 x 46	1,020	29,684	27,797	22,430	19,074	17,192	17,192	13,329

All Units in Feet

2"Flange Clearance

## Outside Plant Stranded Loose Tube Armored (O-LA), Loose Tube Non-Armored (O-LN) and Loose Tube Double Jacket, Single Armored (O-L2) High Density Cables

		Armore	d (O-LA)	Non-Armo	ored (O-LN)	Double Jacket, Single Armored (O-L2)
Flange x Drum x Traverse	Reel Weight (lbs)	290-432F 12@6@1	434-576F 15@9@1	290-432F 12@6@1	434-576F 15@9@1	290-432F 12@6@1
35 x 16.5 x 18	70	N/A	N/A	N/A	N/A	N/A
42 x 24 x 25	109	1,713	1,327	2,099	1,612	1,325
42 x 22 x 29.75	118	2,270	1,713	2,709	2,104	1,770
48 x 22 x 32.5	176	4,019	2,884	4,585	3,387	2,875
54 x 24 x 28	370	4,456	3,341	5,059	3,757	3,330
60 x 30 x 32	433	5,855	4,469	6,781	4,998	4,457
66 x 30 x 32	506	7,472	5,902	9,145	6,483	5,882
72 x 36 x 36	627	9,670	7,327	11,427	8,484	7,521
78 x 36 x 36	758	12,648	9,224	13,778	10,545	9,464
84 x 40 x 40	913	15,844	11,853	17,518	13,389	12,126
88 x 40 x 40	958	17,740	13,489	20,545	15,143	13,796
96 x 44 x 46	1,020	24,298	18,714	27,682	20,696	19,074

All Units in Feet

2"Flange Clearance

#### Outside Plant Arid Core® Mini Loose Tube Mini (O-LN) Cables

Flange x Drum x Traverse	Reel Weight (lbs)	2-72F 6@1	74-96F 8@1	98-120F 10@1	122-144F 12@1
35 x 16.5 x 18	70	6,515	4,756	3,823	2,899
42 x 24 x 25	109	11,142	8,757	6,989	5,412
42 x 22 x 29.75	118	14,773	11,231	8,994	7,115
48 x 22 x 32.5	176	23,965	18,238	14,329	11,756
54 x 24 x 28	370	27,567	20,913	16,800	13,348
60 x 30 x 32	433	36,620	57,909	22,463	17,854
66 x 30 x 32	506	47,524	37,565	28,856	22,575
72 x 36 x 36	627	60,000	47,366	36,908	28,895
78 x 36 x 36	758	N/A	58,728	47,051	36,574
84 x 40 x 40	913	N/A	60,000	59,221	46,372
88 x 40 x 40	958	N/A	N/A	60,000	52,908
96 x 44 x 46	1,020	N/A	N/A	N/A	60,000

All Units in Feet

2"Flange Clearance

# Outside Plant ADSS Loose Tube (S-LN) Cables

Flange x Drum x Traverse	Reel Weight (lbs)	2-60F 5@1
35 x 16.5 x 18	70	3,737
42 x 24 x 25	109	6,877
42 x 22 x 29.75	118	8,878
48 x 22 x 32.5	176	14,175
54 x 24 x 28	370	16,078
60 x 30 x 32	433	21,212
66 x 30 x 32	506	28,543
72 x 36 x 36	627	36,555
78 x 36 x 36	758	45,127
84 x 40 x 40	913	59,434
88 x 40 x 40	958	60,000
96 x 44 x 46	1,020	N/A

All Units in Feet

2"Flange Clearance

Reel Weights subject to change without notice.

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**Fiber Optic Cable**Packaging and Shipping Information



#### Outside Plant Figure-8 Armored (M-LA) and Non-Armored (M-LN) Cables

			Arm	ored (M LA)			Non-Ar	mored (M LN)	- 111
Flange x Drum x Traverse	Reel Weight (lbs)	6@1 2-72	12@1 74-144	12@6@1 146-216	15@9@1 218-288	6@1 2-72	12@1 74-144	12@6@1 146-216	15@9@1 218-288
35 x 16.5 x 18	70	1,560	1,117	1,117	N/A	1,743	1,152	1,152	N/A
42 x 24 x 25	109	2,604	1,791	1,791	1,590	3,151	2,087	2,087	1,892
42 x 22 x 29.75	118	3,382	1,987	1,987	1,518	4,117	2,117	2,117	1,713
48 x 22 x 32.5	176	5,806	3,088	3,088	2,689	6,711	3,431	3,431	2,750
54 x 24 x 28	370	6,448	3,603	3,603	2,886	7,531	3,965	3,965	3,246
60 x 30 x 32	433	8,575	4,762	4,762	3,860	10,272	5,217	5,217	4,313
66 x 30 x 32	506	11,549	6,322	6,322	4,928	13,418	6,820	6,820	5,429
72 x 36 x 36	627	14,689	8,291	8,291	6,306	16,966	8,905	8,905	6,914
78 x 36 x 36	758	18,044	9,912	9,912	7,747	21,192	11,129	11,129	8,929
84 x 40 x 40	913	23,170	13,069	13,069	9,873	26,869	14,509	14,509	11,268
88 x 40 x 40	958	26,620	14,450	14,450	12,952	30,460	15,929	15,929	13,814
96 x 44 x 46	1,020		20,419	20,419	16,261		22,219	22,219	17,246

All Units in Feet 2" Flange Clearance

#### Indoor/Outdoor Stranded Loose Tube Riser Non-Armored (R-LN) Cables

Flange x Drum x Traverse	Reel Weight (lbs)	2-60F 5@1	62-72F 6@1	74-96F 8@1	98-120F 10@1	122-144F 12@1	146-216F 12@6@1	218-288F 15@9@1
35 x 16.5 x 18	70	3,302	2,829	2,125	1,752	1,416	N/A	N/A
42 x 24 x 25	109	6,181	5,321	3,873	3,203	2,280	2,220	1,721
42 x 22 x 29.75	118	7,968	7,025	4,709	3,997	3,261	3,197	2,214
48 x 22 x 32.5	176	13,024	10,933	7,974	6,369	5,300	4,750	3,532
54 x 24 x 28	370	14,803	12,497	9,005	7,246	5,683	5,732	4,345
60 x 30 x 32	433	19,637	16,776	11,888	9,706	7,752	7,619	5,725
66 x 30 x 32	506	25,652	22,351	15,795	13,258	10,279	10,116	7,313
<b>72</b> x 36 x 36	627	32,593	28,221	20,332	16,947	13,050	12,865	9,491
78 x 36 x 36	758	40,711	34,446	25,701	20,824	16,475	15,381	11,664

All Units in Feet 2"Flange Clearance

#### Indoor/Outdoor Stranded Loose Tube Plenum Non-Armored (P-LN) Cables

Flange x Drum x Traverse	Reel Weight (lbs)	2-60F 5@1	62-72F 6@1	74-96F 8@1	98-120F 10@1	122-144F 12@1
35 x 16.5 x 18	70	4,679	3,823	2,845	2,125	1,699
42 x 24 x 25	109	8,067	6,989	4,772	3,873	2,785
42 x 22 x 29.75	118	10,988	8,994	6,385	4,709	3,840
48 x 22 x 32.5	176	17,918	14,329	10,820	7,974	6,154
54 x 24 x 28	370	19,605	16,800	12,337	9,005	7,135
60 x 30 x 32	433	26,276	22,463	16,589	11,888	9,576
66 x 30 x 32	506	35,664	28,856	21,158	15,795	12,361
72 x 36 x 36	627	45,094	36,908	26,779	20,332	15,541
78 x 36 x 36	758	56,198	47,051	34,150	25,701	19,248

All Units in Feet

2"Flange Clearance



#### **Outside Plant Central Tube Armored (O-CA) Cables**

Reel Weight (lbs)	CA 2-24F	CA 26-48F	CA 50-96F
70	4,266	3,249	2,408
109	7,971	5,501	4,023
118	10,207	7,203	5,437
176	16,719	11,869	8,924
370	19,466	13,508	10,466
433	25,764	18,041	13,975
506	33,798	23,794	18,181
627	42,863	30,383	23,221
758	53,702	38,211	28,922
913	60,000	48,919	35,467
	Weight (lbs) 70 109 118 176 370 433 506 627 758	Weight (lbs)         2-24F           70         4,266           109         7,971           118         10,207           176         16,719           370         19,466           433         25,764           506         33,798           627         42,863           758         53,702	Weight (lbs)         2-24F         26-48F           70         4,266         3,249           109         7,971         5,501           118         10,207         7,203           176         16,719         11,869           370         19,466         13,508           433         25,764         18,041           506         33,798         23,794           627         42,863         30,383           758         53,702         38,211

All Units in Feet 2" Flange Clearance

#### **Outside Plant Central Tube Non-Armored (R-CN, O-CN) Cables**

Flange x Drum x Traverse	Reel Weight (lbs)	RCN 2-24F	CN 2-24F	CN 24-48F	CN 50-96
35 x 16.5 x 18	70	4,756	5,305	3,302	2,462
42 x 24 x 25	109	8,757	8,999	6,181	4,513
42 x 22 x 29.75	118	11,231	12,205	7,968	6,122
48 x 22 x 32.5	176	18,238	19,475	13,027	9,798
54 x 24 x 28	370	20,913	22,255	14,803	10,781
60 x 30 x 32	433	27,909	29,581	19,637	14,344
66 x 30 x 32	506	37,565	39,000	25,652	19,541
72 x 36 x 36	627	39,000	N/A	32,593	24,853
78 x 36 x 36	758	N/A	N/A	39,000	30,736

All Units in Feet 2" Flange Clearance

#### Outside Plant Central Tube Pavement (O-CP) Cables

Flange x Drum x Traverse	Reel Weight (lbs)	CP 2-72F
30 x 12 x 12	18	3,618
35 x 16.5 x 18	70	7,352
44 x 24 x 24	109	12,555
42 x 22 x 29.75	118	16,301
48 x 22 x 32.5	176	26,986
54 x 24 x 28	370	30,911
60 x 30 x 32	433	37,500

All Units in Feet 2" Flange Clearance

#### LSZH Indoor/Outdoor (Z-DN) Cables

Flange x Drum x Traverse	Reel Weight (lbs)	ZDN 1-24F
22 x 12 x 12	8.5	1,411
30 x 12 x 12	12	3,925
35 x 16.5 x 18	70	7,287
42 x 24 x 25	92	13,361
42 x 22 x 32.5	118	17,624
48 x 22 x 28	176	28,691
54 x 24 x 28	370	32,433
60 x 30 x 32	433	40,000

All Units in Feet 2" Flange Clearance

#### Outside Plant Drop (O-DF, O-DA, O-DN, M-MN and M-DN) Cables

Flange x Drum x Traverse	Reel Weight (lbs)	DF 1-6F	DA 2-12F	DN 2-12F	MMN 1-6F	MDN 2-12
22 x 12 x 12	8.5	2,450	N/A	1,186	1,161	1,500
30 x 12 x 12	12	7,117	N/A	3,552	5,273	3,444
35 x 16.5 x 18	70	14,246	8,611	6,589	10,414	6,712
42 x 24 x 25	92	24,561	14,846	12,101	18,613	12,069
42 x 22 x 29.75	118	N/A	19,238	15,201	24,997	16,439
48 x 22 x 32.5	176	N/A	32,199	25,319	40,000	28,805
54 x 24 x 28	370	N/A	36,328	29,407	े ठ	33,864
60 x 30 x 32	433	N/A	40,000	38,883	Stranded	40,000
66 x 30 x 32	627	N/A	N/A	40,000	or Stro	N/A
72 x 36 x 36	758	N/A	N/A	N/A	<u> </u>	N/A
78 x 36 x 36	913	N/A	N/A	N/A	Solid	N/A

All Units in Feet 2" Flange Clearance

**Fiber Optic Cable**Packaging and Shipping Information



#### Hybrid Loose Tube Armored/Twisted Pair or Copper Conductor (O-LA-HY) Cables

				1:	2 FIBERS PER 1	TUBE			24 FIBERS	PER TUBE
Flange x Drum x Traverse	Reel Weight (lbs)	2-48 5@1	2-60 6@1	14-84 8@1	38-108 10@1	62-132 12@1	86-204 12@6@1	158-276 15@9@1	278-408 12@6@1	410-552 15@9@1
35 x 16.5 x 18	70	3,249	2,774	2,061	1,699	1,365	1,365	N/A	N/A	N/A
42 x 24 x 25	109	5,501	4,686	3,790	2,785	2,220	2,220	1,717	2,110	1,327
42 x 22 x 29.75	118	7,203	6,298	4,728	3,840	3,197	3,197	2,208	2,647	1,713
48 x 22 x 32.5	176	11,869	10,704	7,861	6,154	4,750	4,750	3,921	4,070	2,884
54 x 24 x 28	370	13,508	11,514	8,854	7,135	5,732	5,732	4,328	4,946	3,341
60 x 30 x 32	433	18,041	15,543	11,710	9,576	7,619	7,619	5,874	6,649	4,469
66 x 30 x 32	506	23,794	20,932	15,571	12,361	10,116	10,116	7,500	8,370	5,902
72 x 36 x 36	627	27,000	26,521	20,078	15,541	12,865	12,865	9,459	10,499	7,327
78 x 36 x 36	758	N/A	27,000	25,397	19,248	15,381	15,381	11,621	13,559	9,224
84 x 40 x 40	913	N/A	N/A	27,000	25,459	20,420	20,420	14,639	17,278	11,853
88 x 40 x 40	958	N/A	N/A	N/A	27,000	22,578	22,578	17,404	19,256	13,489
96 x 44 x 46	1,020	N/A	N/A	N/A	N/A	27,000	27,000	23,913	26,116	18,714

All Units in Feet 2"Flange Clearance

#### Hybrid Loose Tube Non-Armored/Twisted Pair or Copper Conductor (O-LN-HY) Cables

			12 FIBERS PER TUBE							
Flange x Drum x Traverse	Reel Weight (lbs)	2-48 5@1	2-60 6@1	14-84 8@1	38-108 10@1	62-132 12@1	86-204 12@6@1	158-276 15@9@1	278-408 12@6@1	410-552 15@9@1
35 x 16.5 x 18	70	3,823	3,302	2,462	1,796	1,455	1,455	N/A	N/A	N/A
42 x 24 x 25	109	6,989	6,181	4,513	3,261	2,649	2,649	2,110	2,099	1,612
42 x 22 x 29.75	118	8,994	7,968	6,122	4,582	3,387	3,387	2,647	2,709	2,104
48 x 22 x 32.5	176	14,329	13,027	9,798	7,101	5,464	5,464	4,070	4,585	3,387
54 x 24 x 28	370	16,800	14,803	10,781	8,036	6,378	6,378	4,946	5,059	3,757
60 x 30 x 32	433	22,463	19,637	14,344	10,691	8,628	8,628	6,649	6,781	4,998
66 x 30 x 32	506	28,856	25,652	19,541	14,401	11,279	11,279	8,370	9,145	6,483
72 x 36 x 36	627	36,908	32,593	24,853	18,322	14,249	14,249	10,499	11,427	8,484
78 x 36 x 36	758	45,000	40,711	30,736	22,336	17,807	17,807	13,559	13,778	10,545
84 x 40 x 40	913	N/A	45,000	39,551	29,119	23,743	23,743	17,278	17,518	13,389
88 x 40 x 40	958	N/A	N/A	44,069	32,995	26,066	26,066	19,256	20,545	15,143
96 x 44 x 46	1,020	N/A	N/A	45,000	45,000	36,252	36,252	26,116	27,682	20,696

All Units in Feet 2"Flange Clearance

#### Hybrid Loose Tube Non-Armored/Coax (O-DN-HY, M-DN-HY) Cables

Flange x Drum x Traverse	Reel Weight (lbs)	Fiber + Coax Hybrid DN (1-12F)	Self Supporting Fiber + Coax Hybrid DN (1-12F)
30 x 12 x 12	18	2,482	1,861
35 x 16.5 x 18	70	4,850	3,718
42 x 24 x 25	109	6,218	6,484
42 x 22 x 29.75	118	10,715	8,309
48 x 22 x 32.5	176	17,583	13,350
54 x 24 x 28	370	19,921	15,157
60 x 30 x 32	433	26,699	20,654
66 x 30 x 32	506	35,704	27,620
72 x 36 x 36	627	40,000	35,035
78 x 36 x 36	758	N/A	40,000

All Units in Feet 2" Flange Clearance



#### Low-Smoke Zero-Halogen (LSZH) Distribution (Z-DS) Cables

Fiber	Construction Type	18x12x12 FT	22x12x12 FT	30x12x12 FT	35x16.5x18 FT	35x16.5x18 FT	42x24x25 FT	42x22x29.75 FT	48x22x32.5 FT	54x24x28 FT	60x30x32 FT	66x30x32 FT	72x36x36 FT	78x36x36 FT
2	SU	4,090	8,991	22,563	28,000	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
4	SU	2,419	5,278	12,881	24,443	N/A	28,000	N/A	N/A	N/A	N/A	N/A	N/A	N/A
6	SU	1,976	4,287	10,420	19,855	N/A	28,000	N/A	N/A	N/A	N/A	N/A	N/A	N/A
8	SU	1,583	3,418	8,294	15,862	N/A	27,646	28,000	N/A	N/A	N/A	N/A	N/A	N/A
12	SU	1,228	2,626	6,326	12,375	N/A	21,514	28,000	N/A	N/A	N/A	N/A	N/A	N/A
18	SU	N/A	N/A	N/A	10,069	N/A	17,289	23,123	28,000	N/A	N/A	N/A	N/A	N/A
24	SU	N/A	N/A	N/A	8,393	N/A	14,595	18,966	28,000	N/A	N/A	N/A	N/A	N/A
18	MU	N/A	N/A	N/A	N/A	2,115	3,859	5,266	8,695	9,540	12,822	16,857	21,628	27,141
24	MU	N/A	N/A	N/A	N/A	1,737	3,271	4,060	6,990	7,885	10,516	13,410	17,120	22,035
36	MU	N/A	N/A	N/A	N/A	1,692	3,125	3,919	6,262	7,282	9,536	12,302	15,784	20,524
48	MU	N/A	N/A	N/A	N/A	1,365	2,220	3,197	4,750	5,732	7,619	10,116	12,865	15,381
60	MU	N/A	N/A	N/A	N/A	N/A	2,043	2,655	4,085	4,547	5,963	8,176	10,536	12,816
72	MU	N/A	N/A	N/A	N/A	N/A	1,669	2,162	3,466	3,864	5,122	6,639	8,431	11,188

#### Riser-Rated Distribution (R-DS) Cables

Fiber	Construction Type	18x12x12 FT	22x12x12 FT	30x12x12 FT	35x16.5x18 FT	35x16.5x18 FT	42x24x25 FT	42x22x29.75 FT	48x22x32.5 FT	54x24x28 FT	60x30x32 FT	66x30x32 FT	72x36x36 FT	78x36x36 FT
2	SU	3,553	8,168	20,028	28,000	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
4	SU	2,522	5,802	14,170	26,713	N/A	28,000	N/A	N/A	N/A	N/A	N/A	N/A	N/A
6	SU	2,419	5,278	12,881	24,443	N/A	28,000	N/A	N/A	N/A	N/A	N/A	N/A	N/A
8	SU	1,976	4,287	10,420	19,855	N/A	28,000	N/A	N/A	N/A	N/A	N/A	N/A	N/A
12	SU	1,640	3,525	8,866	16,947	N/A	28,000	N/A	N/A	N/A	N/A	N/A	N/A	N/A
18	SU	N/A	N/A	N/A	10,820	N/A	18,657	24,907	28,000	N/A	N/A	N/A	N/A	N/A
24	SU	N/A	N/A	N/A	9,097	N/A	15,669	20,392	28,000	N/A	N/A	N/A	N/A	N/A
18	MU	N/A	N/A	N/A	N/A	3,673	6,273	8,058	13,136	15,714	20,784	26,930	28,000	N/A
24	MU	N/A	N/A	N/A	N/A	2,529	4,600	6,211	9,912	11,586	15,357	19,768	25,111	28,000
36	MU	N/A	N/A	N/A	N/A	2,475	4,531	5,522	9,036	10,625	14,161	18,409	23,479	28,000
48	MU	N/A	N/A	N/A	N/A	2,061	3,790	4,728	7,861	8,854	11,710	15,571	20,078	25,397
60	MU	N/A	N/A	N/A	N/A	1,699	2,785	3,840	6,154	7,135	9,576	12,361	15,541	19,248
72	MU	N/A	N/A	N/A	N/A	1,360	2,215	3,186	4,849	5,707	7,591	10,072	12,815	16,187
96	MU	N/A	N/A	N/A	N/A	N/A	1,661	2,150	3,443	3,968	5,245	7,340	9,278	11,407
144	MU	N/A	N/A	N/A	N/A	N/A	1,327	1,713	288	3,341	4,469	5,902	7,327	9,224

#### Plenum-Rated Distribution (P-DS) Cables

Fiber	Construction Type	18x12x12 FT	22x12x12 FT	30x12x12 FT	35x16.5x18 FT	35x16.5x25 FT	42x24x25 FT	42x22x29.75 FT	48x22x32.5 FT	54x24x28 FT	60x30x32 FT	66x30x32 FT	72x36x36 FT	78x36x36 FT
2	SU	4,090	8,991	22,563	28,000	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
4	SU	3,050	6,998	17,584	28,000	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
6	SU	2,522	5,802	14,170	26,713	N/A	28,000	N/A	N/A	N/A	N/A	N/A	N/A	N/A
8	SU	2,419	5,278	12,881	24,443	N/A	28,000	N/A	N/A	N/A	N/A	N/A	N/A	N/A
12	SU	1,696	3,899	9,444	18,048	N/A	28,000	N/A	N/A	N/A	N/A	N/A	N/A	N/A
18	SU	N/A	N/A	N/A	10,069	N/A	17,289	23,123	28,000	N/A	N/A	N/A	N/A	N/A
24	SU	N/A	N/A	N/A	9,097	N/A	15,669	20,392	28,000	N/A	N/A	N/A	N/A	N/A
18	MU	N/A	N/A	N/A	N/A	4,679	8,067	10,988	17,918	19,605	26,276	28,000	N/A	N/A
24	MU	N/A	N/A	N/A	N/A	3,302	6,181	7,968	13,027	14,803	19,637	25,652	28,000	N/A
36	MU	N/A	N/A	N/A	N/A	2,845	4,772	6,385	10,820	12,337	16,589	21,158	26,779	28,000
48	MU	N/A	N/A	N/A	N/A	2,408	4,023	5,437	8,924	10,466	13,975	18,181	23,227	28,000
60	MU	N/A	N/A	N/A	N/A	1,745	3,193	3,982	6,878	7,926	10,562	13,478	16,872	20,721
72	MU	N/A	N/A	N/A	N/A	1,461	2,657	3,313	5,488	6,408	8,461	11,067	14,307	17,888
96	MU	N/A	N/A	N/A	N/A	N/A	1,717	2,208	3,921	4,328	5,874	7,500	9,459	11,621
144	MU	N/A	N/A	N/A	N/A	N/A	1,612	2,104	3,387	3,757	4,998	6,483	8,484	10,545

Reel Weights subject to change without notice.

# **Fiber Optic Cable**Packaging and Shipping Information



#### Riser, Plenum and LSZH\* Simplex (SP) Cables

Fiber	Size	18x12x12 FT	22x12x12 FT	30x12x12 FT
1	1.6	19,602	28,000	N/A
1	2.0	14,364	28,000	N/A
1	2.5	9,363	20,848	28,000
1	2.9	6,897	15,824	28,000

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

#### Riser, Plenum and LSZH\* Zipcord (ZC) Cables

Fiber	Size	24 x 12 x 19.25 FT	35 x 16.5 x 18 FT
2	1.6	28,000	N/A
2	2.0	28,000	N/A
2	2.5	21,983	28,000
2	2.9	15,965	28,000

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

#### Riser, Plenum and LSZH\* Interconnect (IC) Cables

Fiber	Size	18x12x12 FT	22x12x12 FT	30x12x12 FT
2	2.9	6,897	15,824	28,000

All reels calculated using 2" flange clearance

# **Fiber Optic Cable**Packaging and Shipping Information

#### **International Packaging - Weights and Dimensions**

Reel Dimensions	Reels per Layer	Layers	Cube Size (in.) (l x w x h)	Lagging Weight (lbs.)	Reel Weight (lbs.)	Pallet Weight (lbs.)	Total Weight (lbs.)
18 x 12 x 12	5	1	44 x 44 x19	N/A	10	32	82
18 x 12 x 12	5	2	44 x 44 x 32	N/A	10	32	132
18 x 12 x 12	5	3	44 x 44 x 45	N/A	10	32	182
18 x 12 x 12	4	1	36 x 36 x 19	N/A	10	23	63
18 x 12 x 12	4	2	36 x36 x 32	N/A	10	23	103
18 x 12 x 12	4	3	36 x 36 x 45	N/A	10	23	143
22 x 12 x 12	4	1	44 x 44 x 19.25	N/A	12	32	80
22 x 12 x 12	4	2	44 x 44 x 32.5	N/A	12	32	128
22 x 12 x 12	4	3	44 x 44 x 45.75	N/A	12	32	176
24 x 12 x 19.2	<b>5</b> 1	1	36 X 24 X 30	N/A	17	32	49
30 x 12 x 12	1	1	42 x 42 x 19.25	N/A	22	30	52
35 x 16.5 x 18	<b>.5</b> 1	N/A	39 X 25 X 41	60	70	36	166
42 x 22 x 29.7	<b>5</b> 1	N/A	44 X 40 X 52	189	118	43	350
42 x 24 x 24	1	N/A	44 X 33 X 52	189	109	41	339
48 x 22 x 32.5	1	N/A	51 x 42 x 58	169	140	78	387
54 x 24 x 28	1	N/A	57 x 42 x 64	188	350	78	616
60 x 30 x 32	1	N/A	63 X 45 X 70	215	433	138	786
66 x 30 x 32	1	N/A	69 X 45 X 75	241	580	138	959
72 x 36 x 36	1	N/A	75 X 48 X 82	333	627	197	1157
78 x 36 x 36	1	N/A	81 x 48 x 88	360	758	197	1315
84 x 40 x 40	1	N/A	85 x 52 x 92	387	850	210	1447
88 x40 x 40	1	N/A	91 x 52 x 97	414	958	210	1582
96 x 44 x 40	1	N/A	not palletized	450	1125	0	1575

NOTE: Units per container can be limited due to product weight