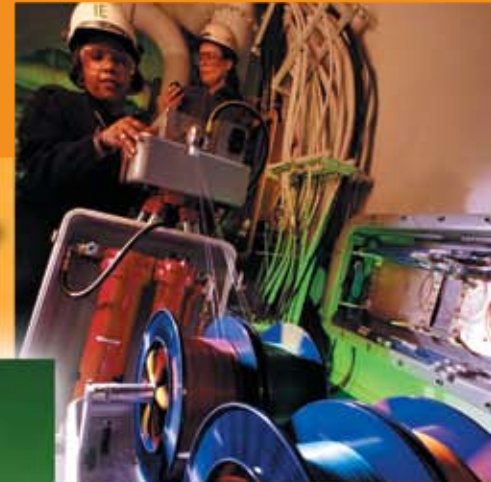
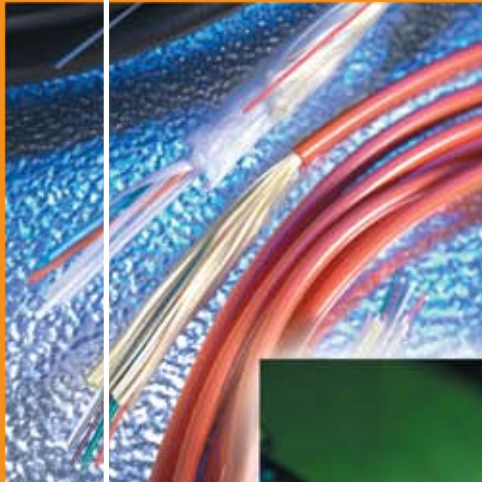


FIBER OPTICS

NEXTGEN[®]
BRAND



FIBER OPTIC CABLE FOR VOICE
AND DATA TRANSMISSION
NOVEMBER 2007



Fiber Optic Cable Products

This catalog contains in-depth information on the General Cable line of fiber optic cable for voice, video and data transmission.

The product and technical sections feature the latest information on fiber optic cable products, from applications and construction to detailed technical and specific data.

Our products are readily available through our network of authorized stocking distributors and distribution centers.

We are dedicated to customer service and satisfaction—so call our team of professionally trained sales personnel to meet your application needs.

Fiber Optic Cable for the 21st Century



All information in this catalog is presented solely as a guide to product selection and is believed to be reliable. All printing errors are subject to correction in subsequent releases of this catalog. Although General Cable has taken precautions to ensure the accuracy of the product specifications at the time of publication, the specifications of all products contained herein are subject to change without notice.

GENERAL CABLE and NEXTGEN are trademarks of General Cable Technologies Corporation.

BLOLITE is a registered trademark of Brand-Rex Limited and is used under license.

©2007. General Cable Technologies Corporation.
Highland Heights, KY 41076
All rights reserved.

Printed in USA.

Quality Assurance Policy

General Cable is committed to developing, producing and marketing products that exceed the performance, quality, value and safety requirements of our customers by continuously improving all areas of our business.

General Cable's goals and objectives reflect this commitment, whether it's through our focus on customer service, continuous improvement and manufacturing excellence demonstrated by our TL9000-registered business management system, the independent third-party certification of our products or the development of new and innovative products. Our aim is to deliver superior performance from all of General Cable's processes and to strive for world-class quality throughout our operations.

We recognize that all General Cable associates play a key part in promoting and delivering these objectives and ensuring product and service quality requirements are met.

Copies of our current ISO 9001:2000 and TL9000 certificates are shown below, together with an example certified test data report, which accompanies each reel when it leaves the factory.



General Cable Franklin, MA - ISO 9001 Certified		CERTIFIED TEST DATA	
Work Order #: 67790	Reference #: N/A	Part #: CG041PNU	
Description: 4 FIBER MULTI-MODE 62.5/125 24-fiber (220-500 MHz/Km) TIGHT BUFFER OFNP DISTRIBUTION CABLE	Attenuation Limits: 3.50 dB/Km @ 850nm 1.00 dB/Km @ 1300nm	CTD Master Reel #: OF67790-01	
Top Footage Mark: 4	Bottom Footage Mark: 2012	Bulk Length (meters): 632 m (feet): 2068.8	
Disposition: PASS	CERTIFICATE OF COMPLIANCE It is hereby certified that all requirements, specifications and drawings as listed are met. Substantiation inspection reports are on file at the seller's plant for review.		
Test Equipment: OTDR, OTS3 Module: MD17	W/H	29-Jan-06	
Attenuation measurements were made in accordance with ANSI/TIA-455-78-B Measurement Methods and Test Procedures - Attenuation Method C.			

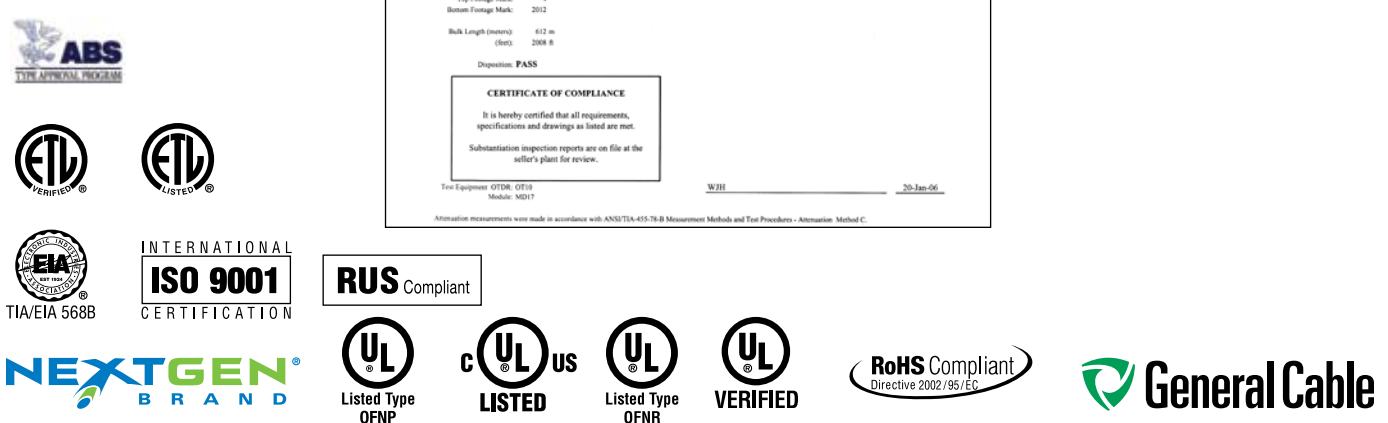


Table of Contents

Section	Pages
1 Fiber Specification and Selection	1-3
<ul style="list-style-type: none"> • General Cable Plus Corning® Optical Fiber 1-2 • Fiber Specification and Selection 3 	
2 Fiber Optic Ordering Information	4-5
<ul style="list-style-type: none"> • Fiber Optic Ordering Information 4-5 	
3 NextGen® Brand Outside Plant Cables	6-15
<ul style="list-style-type: none"> • Central Tube Single Jacket Cable 7 • Reduced Diameter Central Tube Drop Cable 8 • Central Tube Single Jacket Armored Cable 9 • Loose Tube Single Jacket Cable 10 • Loose Tube Dual Jacket Cable 11 • Loose Tube Single Jacket Armored Cable 12 • Loose Tube Dual Jacket Armored Cable 13 • Loose Tube Single Jacket Self-Supporting (Figure-8) Cable 14 • Loose Tube Single Jacket Armored Self-Supporting (Figure-8) Cable 15 	
4 NextGen® Brand Premises Cables	16-23
<ul style="list-style-type: none"> • Tight Buffer Distribution Riser Cable 17 • Tight Buffer Distribution Plenum Cable 18 • Tight Buffer Breakout Riser Cable 19 • Tight Buffer Breakout Plenum Cable 20 • Tight Buffer Distribution Low-Smoke, Zero-Halogen (LSZH) Cable 21 • Tight Buffer Distribution Interlock Armored Riser Cable 22 • Tight Buffer Distribution Interlock Armored Plenum Cable 23 	
5 NextGen® Brand Indoor/Outdoor Cables	24-32
<ul style="list-style-type: none"> • Tight Buffer Distribution Riser Cable 25 • Tight Buffer Distribution Plenum Cable 26 • Central Tube Single Jacket Plenum Cable 27 • Loose Tube Single Jacket Plenum Cable 28 • Loose Tube Single Jacket Riser Cable 29 • Loose Tube Dual Jacket Riser Cable—Chemical-Resistant 30 • Loose Tube Single Jacket Low-Smoke, Zero-Halogen (LSZH) Cable 31 • Loose Tube Dual Jacket Armored Low-Smoke, Zero-Halogen (LSZH) Cable 32 	

Table of Contents

Section	Pages
6 NextGen® Brand Interconnect Cables	33-35
<ul style="list-style-type: none"> • 3.0mm Simplex/Duplex Riser and Plenum Cable 34 • 1.6mm Simplex/Duplex Riser Cable 35 	
7 Blolite®	36-39
<ul style="list-style-type: none"> • Blolite® 36-37 • Blolite® Blowable Fiber 38 • Microduct 38 • Multiduct Cable 39 • Microduct Accessories 39 • Blolite® Installation Equipment 39 	
8 Specialty Cable	40-42
<ul style="list-style-type: none"> • Military Tactical Breakout Cable 41 • Military Tactical Distribution Cable 42 	
9 Technical Information	43-54
<ul style="list-style-type: none"> • Glossary 44-47 • NEC and CSA Fire Resistance Levels 48 • Color Coding Charts 49 • Part Number Index 50-51 • Notes 52-54 	

Now one industry leader focuses its worldwide resources on delivering maximum value to customers. It's the cost-effective advantage of a single resource, a single company that provides the broadest product range, the highest level of commitment to customer and technical support, the most cost-effective manufacturing and

distribution, and the most responsive customer-first service. In today's highly competitive worldwide markets, General Cable provides the single-source solution with benefits that go straight to your bottom line. Ask your representative about other General Cable products.

The Power of ONE



Energy Cables

Underground High-Voltage and Extra-High-Voltage Cables

General Cable's complete line of Silec® insulated high- and extra-high-voltage underground energy cables, from 63kV up to 500kV, and our state-of-the-art accessories—such as pre-molded joints and terminals—enable us to provide turnkey design and engineering services for the global, systems-engineered, electric utility market.

Bare Overhead High-Voltage Transmission and Distribution Cables

Our BICC® Brand cables satisfy the varied and specialized demands of the electric utility marketplace. Our TransPowr® bare aluminum overhead conductors are available in standard ACSR, specialized T-2 designs and high-temperature ACSS/TW designs. Our new ACCC/TW conductors feature an innovative composite core construction which possesses high temperature and increased strength characteristics.

Low- and Medium-Voltage Distribution Cables

General Cable's extensive line of BICC® Brand PowrServ® and EmPowr® copper and aluminum cables serve the total distribution needs of electric utilities, rural electric co-ops and the public power market for both traditional and renewable energy resources.

Industrial & Specialty Cables

Cord and Cordset Products

General Cable's Carol® Brand is the most recognized name in flexible cords for temporary power. Our extensive line includes portable cord, cordsets, portable power cable and premium-grade cable for commercial and industrial applications.

Electronic Cables

Our Carol® Brand products fulfill the complete wire and cable requirements of the fast-changing electronics, sound and security marketplaces. We offer hookup wire; communications cable; computer, coaxial and microphone cables; and special designs for security systems, fire alarms, and audio, video and digital broadcasts.

Industrial Cables

General Cable's industrial instrumentation, power and control cables serve an extensive range of markets, including power generation, refining and petrochemical, natural gas production, steel, pulp and paper, and factory automation.

Specialty Cables

General Cable manufactures a broad range of specialty cables that meet the exacting specifications for original equipment manufacturers (OEMs), military, transit, offshore and marine shipboard, nuclear, and mining applications. General Cable's engineered Brand Rex and Anaconda® Brand wire and cable solutions provide great lifecycle performance and reliability—meeting customer applications requirements today, while setting tomorrow's standards.

Specialty Wire Harnesses

We supply application-specific and custom-designed cable, harnesses and assemblies for a wide variety of OEM applications, including business machines, material handling equipment, factory automation, medical equipment and the automotive aftermarket. General Cable is a global leader in the manufacture of automotive wire and cable—from ignition wire sets and single leads to bulk ignition wire, primary wire and battery starter cable.

Communications Cables

Data Communications Cables

Our GenSPEED® Brand products are on the job wherever enhanced performance is critical—from 10 Gigabit Ethernet, token ring and broadband applications to patch panels, communications closets and plenum applications. We offer one of the most comprehensive lines of enhanced high-speed Category products, including PanGen™ structured cabling system solutions.

Fiber Optic Cables

We provide a full menu of NextGen® Brand fiber optic cables for data communications and voice and video networks. Our products range from tight buffer and armored products for military applications to loose tube and hybrid cables for communications networks. We also offer advanced Blolite® blown fiber systems for Local Area Networks and campus applications.

Telecommunications Cables

Our broad range of industry-standard General Cable outside plant wire and cable products ensures reliable, cost-effective performance. We provide air core, filled core and specialty wire products for aerial, buried and duct applications.



NEXTGEN[®]
BRAND

**Fiber Optic
Products**

Optical Fiber

General Cable, Corning® Optical Fiber. Names that are synonymous with cable and fiber combine to create the ultimate in fiber optics. General Cable partners with Corning® to deliver the world's most reliable and technologically advanced optical fiber cables.



Singlemode

Standard

General Cable utilizes Corning® Fiber SMF-28e+™ as its standard singlemode offering. This is a full-spectrum fiber that is fully backward-compatible with legacy singlemode fiber. It enables twice the optical launch power of legacy singlemode fiber, improved macrobend specifications from 0.05 dB to 0.03 dB, and tighter zero dispersion wavelength (λ_0) tolerance from a range of ± 10 nm to ± 7 nm. This fiber supports all broadband applications and complies with the most stringent industry standards, such as:

- ITU-T G.652 (Tables A, B, C and D)
- IEC 60793-2-50 Type B1.3
- TIA/EIA 492-CAAB
- Telecordia GR-20-CORE

Long-Haul

For long-haul applications, rely on General Cable's long history of cable experience and the technology of Corning® LEAF® fiber. This is the most widely deployed non-zero dispersion shifted (NZ-DSF) fiber in the world and the first low water peak NZ-DSF fiber. Its large effective area and industry-leading polarization mode dispersion (PMD) specifications enable 10 Gb/s and 40 Gb/s network systems of the future.

Multimode

For enterprise networks, turn to General Cable utilizing Corning® InfiniCor® Fibers. These are the world's first laser-optimized™ fibers. These fibers allow higher data aggregation in premise applications compared with non laser-optimized fibers, full compatibility with legacy protocols and applications, superior measurement technology and manufacturing control, and industry-leading CPC® coatings for superior microbend and environmental performance. InfiniCor fiber performance is ensured by minEMBc, the industry's only standards-approved bandwidth measurement for OM3 fibers.

62.5 micron

These fibers support data rates of 1 Gb/s in both the 850 nm and 1300 nm windows. They comply with the most stringent industry standards, such as:

- ISO/IEC 11801, type OM1 fiber
- IEC 60793-2-10, type A1b fiber
- TIA/EIA, 492AAAA-A

50 micron

These fibers support data rates of 10 Gb/s at 850 nm. They also comply with the most stringent industry standards, such as:

- ISO/IEC 11801, type OM2 and OM3 fibers
- IEC 60793-2-10, type A1a.2 and A1a.1 fiber
- TIA/EIA, 492AAAA-A and 492AAAAB

Optical Fiber Code Cross-Reference

Fiber Type	General Cable	Corning® Optical Fiber	Description
Standard Loose Tube SM	AQ	SMF-28e+™	Full spectrum, low water peak single-mode
Performance Loose Tube SM	AT	SMF-28e+™	Full spectrum, high performance low water peak singlemode with 0.35/0.25 attenuation
Tight Buffer SM	AP	SMF-28e+™	Full spectrum, low water peak single-mode with 900µm PVC buffer
Long Haul SM	AL	LEAF®	Large A _{eff} , low water peak, NZ-DSF singlemode
62.5 µm MM	CG	InfiniCor® 300	1 Gb/s over 300 m at 850 nm, OM1* 1 Gb/s over 550 m at 1300 nm
62.5 µm MM	CL	InfiniCor® CL™ 1000	1 Gb/s over 500 m at 850 nm, OM1* 1 Gb/s over 1000 m at 1300 nm
50 µm MM	BG	InfiniCor® 600	1 Gb/s over 600 m at 850 nm, OM2*
50 µm MM	BI	InfiniCor® SXi	10 Gb/s over 150 m at 850 nm, OM2* 1 Gb/s over 750 m at 850 nm
50 µm MM	BE	InfiniCor® SX+	10 Gb/s over 300 m at 850 nm, OM3* 1 Gb/s over 1000 m at 850 nm
50 µm MM	BL	InfiniCor® eSX+	10 Gb/s over 550 m at 850 nm, OM3* 1 Gb/s over 1100 m at 850 nm

* Designation per ISO 11801 Fiber Standards

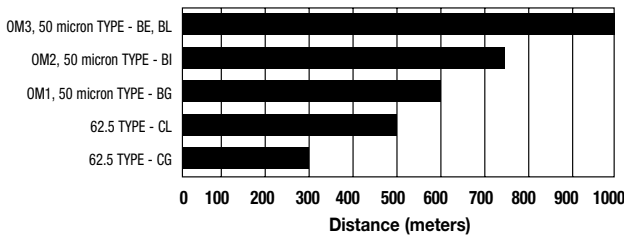
Plus Corning Optical Fiber and SMF-28e+ are trademarks and Corning, LEAF, and InfiniCor are registered trademarks of Corning Incorporated, Corning, NY, U.S.A.

Fiber Specification and Selection

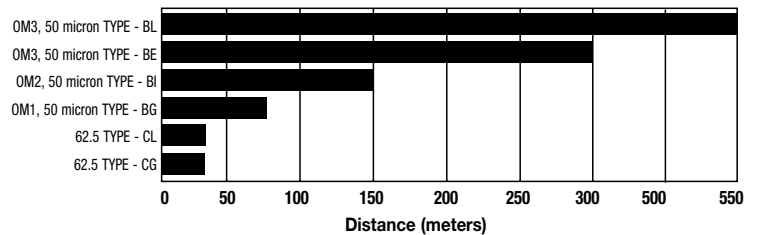
MULTIMODE FIBER SELECTION GUIDE

Optical Characteristics:		50/125 PRODUCT FAMILY				62.5/125 PRODUCT FAMILY		UNITS
		OM1 Type-BG	OM2 Type-BI	OM3 Type-BE	OM3 Type-BL	Type-CG	Type-CL	
Maximum Finished Cable Attenuation Coefficient	@850nm	3.0	3.0	3.0	3.0	3.5	3.5	dB/km
	@1300nm	1.0	1.0	1.0	1.0	1.0	1.0	dB/km
Overfill Launch Bandwidth	@850nm	500	700	1500	3000	200	200	MHz.km
	@1300nm	500	500	500	500	500	500	MHz.km
Laser Bandwidth	@850nm	510	850	2000	4000	220	385	MHz.km
Gigabit Ethernet Link Length (1 Gbps)	1000BASE-SX (850nm)	600	750	1000	1000	300	500	meters
	1000BASE-LX (1300nm)	600	600	600	600	550	1000	meters
Ten Gigabit Ethernet Length (10 Gbps)	10GBASE-SR (850nm)	82	150	300	550	33	33	meters

1 Gbps Link Lengths @ 850nm



10 Gbps Link Lengths @ 850nm



SINGLEMODE FIBER SELECTION GUIDE

FIBER DESCRIPTION	FIBER TYPE	TYPICAL ATTENUATION (dB/km)				GIGABIT ETHERNET DISTANCE (METERS)	10 GIGABIT ETHERNET DISTANCE (METERS)	
		1310nm	1383nm	1550nm	1625nm	1310nm	1310nm	1550nm
Singlemode - Loose Tube								
Premium	AQ	0.40	0.40	0.30	0.35	10,000	5,000	30,000
High Performance	AT	0.35	0.35	0.25	0.30	10,000	5,000	30,000
Singlemode - Tight Buffer								
Super	AP	0.65	-	0.65	-	10,000	5,000	30,000
Breakout	AP	1.00	-	1.00	-	10,000	5,000	30,000

SPECIALTY FIBERS – SINGLEMODE

FIBER DESCRIPTION	FIBER TYPE	TYPICAL ATTENUATION (dB/km)					TYPICAL APPLICATION
		1310nm	1383nm	1550nm	1605nm	1625nm	
Singlemode (NZDS)							
Large Effective Area	AL	-	-	0.30	-	0.30	DWDM
Singlemode (LWPF)							
Bend Insensitive	AB	0.40	0.40	0.30	-	0.30	CWDM

Use the code in the “Fiber Type” column to replace the XX notation in the catalog number shown on the catalog page. This identifies the fiber that will be provided with the cable choice.

The fibers in all completed cables are tested 100% at the factory for attenuation, and each fiber must meet the minimum requirements specified by the customer.

Fiber Optic Ordering Information

We strive to have a variety of cables in stock for immediate delivery to our customers. Should the cable not be in stock, it will be manufactured to your specifications.

To choose a fiber optic cable, you need to know the following:

1) What type and grade of fiber is required?

The system designer will have identified the fiber that is required for the network. Find the fiber type that is needed from the Fiber Specification and Selection Guide. Use the two-digit NextGen® Fiber Type code to identify the fiber. This code becomes the first two digits of the catalog part number, replacing the XX notation.

2) How many fibers are required?

The system designer will also have identified the number of fibers that will be in each cable. Fibers are usually cabled in groups of 6 or 12.

3) What cable construction is needed?

The cable construction that is needed is based on a variety of factors. We have a full range of products for premises, outside plant and indoor/outdoor to solve nearly every application need. Using the catalog as a guide, identify the cable type and construction that is needed.

With the cable construction decided, move down the table on the catalog page to find the number of fibers required. The first column of that row is the catalog part number. Simply replace the XX at the beginning of the catalog number shown with the Fiber Type code found in number one, and the part number is complete.

Fiber Optic Ordering Information

1 2 3 4 5 6 7 8 9 – [SUFFIX]

Fiber Optic Part Number System

Jacket Type: A) Polyethylene; B) PVC (General Purpose); C) Polyurethane; D) PVDF-Plenum; E) CPE; F) Single Armor/PE; G) Single Armor/PVC; H) PE/Nylon; J) Double Armor (Alum./Steel); L) Single Armor, Zero-Halogen; M) Loose Tube Riser; N) Single Armor Fig 8; P) PVDF/Armor; Q) Alum. Armor; R) Riser Grade PVC; S) Double Armor (Steel); T) FEP Teflon/Tefzel; U) Soft Plenum; V) Loose Tube Riser Armored; X) Special - Specify; Y) Non-Armored Fig 8; Z) Zero-Halogen.

Central Strength Member: 1) Dielectric; 2) Steel; 3) Aramid Yarn (Up-Jacketed); N) None; X) Special - Specify.

Cable Construction: A) Dry Water Block - Premise; B) Breakout; C) Commadore; D) ADSS Cables; H) Heavy Duty (Outdoor); K) Buffered Fiber; M) Medium Service (Duct); P) Premise; S) Simplex; U) Single Tube Outdoor (Aerial/Burial); Z) Zipcord; X) Special - Specify.

Buffer Construction: 1) Tight Buffer; 2) Quick Strip; 3) Single Fiber Loose Tube (Gel-Filled); 4) Multi-Fiber Loose Tube (Gel-Filled); 5) Loose Buffer; 6) Bare/Ribbon.

Number of Fibers: 001) 1; 002) 2; 004) 4; 006) 6; 008) 8; 010) 10; 012) 12 (up to 288 fiber in some cable constructions).

Fiber Grade: See Fiber Specification and Selection.

Fiber Size: A) SM; B) 50µm; C) 62.5µm; E) 100µm; F) 200µm; G) 200/230µm; J) 200/230µm HCS; XX) Special - Specify.

Suffixes

- **BK** Black Jacket (UV Resistant)
- **DWB** Dry Water Block Cable Core
- **DT** Dry Tube
- **ILP** Interlock Armor Plenum Steel
- **ILPA** Interlock Armor Plenum Aluminum
- **ILPAS** Interlock Armor Plenum Aluminum w/Subunits
- **ILPS** Interlock Armor Plenum w/Subunits
- **ILR** Interlock Armor Riser Steel
- **ILRA** Interlock Armor Riser Aluminum
- **ILRAS** Interlock Armor Riser Aluminum w/Subunits
- **ILRS** Interlock Armor Riser w/Subunits
- **LS** ADSS Long Span
- **MS** ADSS Medium Span
- **RIP** Ripcord
- **SS** ADSS Short Span

Example: A 6 Fiber 50/125µm OM1 grade Riser/Breakout cable would have a part number BG0061B3R.

Hybrid Cables (SM/MM)

Example: A 12 Fiber Tight Buffer Distribution Plenum cable with 6SM and 6MM Fibers would have the part number AP006/CG0061PNU.

NOTE: For Interlock Armored Premise Plenum Cables, add “-ILPA” to the end of the part number. For Interlock Armored Premise Riser cables, add “-ILRA” to the end of the part number. For Dry Water Blocked Aerial/Burial/Duct cables, add “-DWB” to the end of the part number. For cables with Dry Loose Tubes, add “-DT” to the end of the part number.

NextGen® Brand Outside Plant Cables



NextGen® Brand fiber optic cable is right for any outside plant application.

Applications: Outside plant cables with loose tube constructions are built to withstand adverse environments and provide the maximum fiber protection. These cables perform exceptionally well in wet conditions and during extreme temperature cycles. They can be installed in ducts, direct buried and aerial/lashed, providing the flexibility needed to meet the demands of campus backbones and other outside plant requirements.

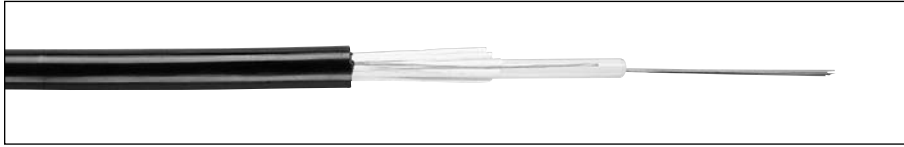
Range of Products: A wide range of cables from 2–312 fibers are manufactured with a variety of designs to meet the demands of most installation conditions.

Features: Only the highest quality materials are used in NextGen fiber optic cables to ensure that the cable strength and optical integrity are not compromised. Rugged jacket materials and the addition of armor provide the right level of protection. The line of outside plant products conforms to TIA/EIA, ICEA, Telcordia and RUS standards.

As with all NextGen fiber optic cables, splitter kits are available to reinforce and assist in preparing the fibers for termination.

Index	Page
Central Tube Single Jacket Cable	7
Reduced Diameter Central Tube Drop Cable	8
Central Tube Single Jacket Armored Cable	9
Loose Tube Single Jacket Cable	10
Loose Tube Dual Jacket Cable	11
Loose Tube Single Jacket Armored Cable	12
Loose Tube Dual Jacket Armored Cable	13
Loose Tube Single Jacket Self-Supporting (Figure-8) Cable	14
Loose Tube Single Jacket Armored Self-Supporting (Figure-8) Cable	15

Central Tube Single Jacket Cable



Product Construction:

Fiber:

- 2–12 fibers
- Central gel-filled tube
- Color-coding per TIA/EIA 598B

Overall Strength Member:

- Aramid yarn overall strength member available upon request

Jacket:

- Black UV- and moisture-resistant polyethylene (PE)
- Sequential footage markings*

Features:

- Very lightweight and flexible
- Compact, user-friendly design
- Loose tube construction provides environmental protection

Performance:

- Temperature:
 - Storage -40°C (-40°F) to +70°C (+158°F)
 - Operating -40°C (-40°F) to +70°C (+158°F)
- Minimum Bend Radius:
 - 20 X OD—Installation
 - 10 X OD—In-Service
- Maximum Crush Resistance:
 - 150 lbs/in (263 N/cm)

Applications:

- Interbuilding voice or data communication backbones
- Installed in ducts, underground conduit or aerial/lashed

Compliances:

- ANSI/TIA/EIA 568B.3
- ICEA S-87-640
- ETL Verified
- GR-20 Verified

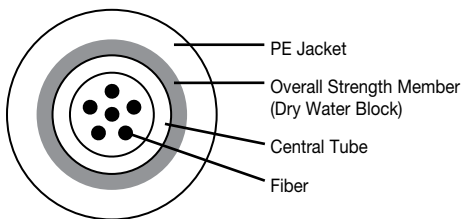
*Sequential meter markings available upon request

CATALOG NUMBER	FIBER COUNT	NO. OF LOOSE TUBES	NOMINAL CABLE DIAMETER		NOMINAL CABLE WEIGHT		MAXIMUM TENSILE LOAD			
			IN	mm	LBS/1000'	kg/km	INSTALLATION		IN-SERVICE	
							LBS	N	LBS	N
XX0024UNA	2	1	0.34	8.6	40	59	600	2670	200	890
XX0044UNA	4	1	0.34	8.6	40	59	600	2670	200	890
XX0064UNA	6	1	0.34	8.6	40	59	600	2670	200	890
XX0084UNA	8	1	0.34	8.6	40	59	600	2670	200	890
XX0124UNA	12	1	0.34	8.6	40	59	600	2670	200	890

XX Denotes glass type.

A complete listing of NextGen® Brand glass types is specified on page 3 of this catalog.

Typical Cross-Section



Hybrid designs (containing singlemode and multimode fiber) and composite designs (containing copper conductors) are also available.

Ordering Part Number Example

AQ0064UNA

Premium singlemode with 6 fibers.

Please see pages 4 and 5 for a complete guide on part number selection and ordering information.



Reduced Diameter Central Tube Drop Cable

Product Construction:

Fiber:

- 2–12 fibers
- Central gel-filled tube
- Color-coding per TIA/EIA 598B

Overall Strength Member:

- Aramid yarn overall strength member available upon request

Jacket:

- Black UV- and moisture-resistant polyethylene (PE)
- Sequential footage markings*

Features:

- All dielectric, lightweight and flexible
- Compact, user-friendly design
- Loose tube construction provides environmental protection

Performance:

- Temperature:
 - Storage -40°C (-40°F) to +70°C (+158°F)
 - Operating -40°C (-40°F) to +70°C (+158°F)
- Minimum Bend Radius:
 - 20 X OD—Installation
 - 10 X OD—In-Service
- Maximum Crush Resistance:
 - 150 lbs/in (263 N/cm)

Applications:

- Interbuilding voice or data communication backbones
- Installed in ducts, underground conduit or aerial/lashed
- FTTX

Compliances:

- ANSI/TIA/EIA 568B.3
- GR-20

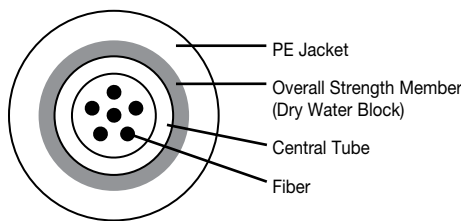
*Sequential meter markings available upon request



CATALOG NUMBER	FIBER COUNT	NO. OF LOOSE TUBES	NOMINAL CABLE DIAMETER		NOMINAL CABLE WEIGHT		MAXIMUM TENSILE LOAD				
			IN	mm	LBS/1000'	kg/km	INSTALLATION		IN-SERVICE		
								LBS	N	LBS	N
XX0024UNA7.1	2	1	0.28	7.1	39	58	300	1334	100	445	
XX0044UNA7.1	4	1	0.28	7.1	39	58	300	1334	100	445	
XX0064UNA7.1	6	1	0.28	7.1	39	58	300	1334	100	445	
XX0084UNA7.1	8	1	0.28	7.1	39	58	300	1334	100	445	
XX0124UNA7.1	12	1	0.28	7.1	39	58	300	1334	100	445	

XX Denotes glass type.
A complete listing of NextGen® Brand glass types is specified on page 3 of this catalog.

Typical Cross-Section



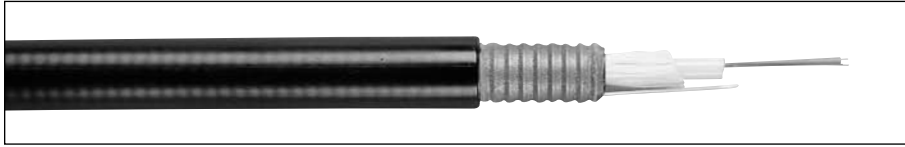
Hybrid designs (containing singlemode and multimode fiber) and composite designs (containing copper conductors) are also available.

Ordering Part Number Example

AQ0064UNA7.1

Premium singlemode with 6 fibers.
Please see pages 4 and 5 for a complete guide on part number selection and ordering information.

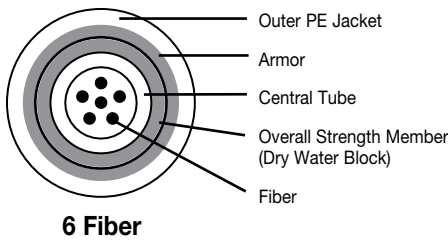
Central Tube Single Jacket Armored Cable



CATALOG NUMBER	FIBER COUNT	NO. OF LOOSE TUBES	NOMINAL CABLE DIAMETER		NOMINAL CABLE WEIGHT		MAXIMUM TENSILE LOAD				
			IN	mm	LBS/1000'	kg/km	INSTALLATION		IN-SERVICE		
								LBS	N	LBS	N
XX0024UNFS	2	1	0.34	8.5	64	95	600	2670	200	890	
XX0044UNFS	4	1	0.34	8.5	64	95	600	2670	200	890	
XX0064UNFS	6	1	0.34	8.5	64	95	600	2670	200	890	
XX0084UNFS	8	1	0.34	8.5	64	95	600	2670	200	890	
XX0124UNFS	12	1	0.34	8.5	64	95	600	2670	200	890	

XX Denotes glass type.
A complete listing of NextGen® Brand glass types is specified on page 3 of this catalog.

Typical Cross-Section



Product Construction:

Fiber:

- 2–12 fibers
- Central tube gel-filled
- Color-coding per TIA/EIA 598B

Overall Strength Member:

- Aramid yarn overall strength member available upon request

Armor:

- 0.006" corrugated coated steel tape

Outer Jacket:

- Black UV- and moisture-resistant polyethylene (PE)
- Sequential footage markings*

Features:

- Compact, user-friendly design
- Central tube armored design provides excellent fiber protection

Performance:

- Temperature:
Storage -40°C (-40°F) to +70°C (+158°F)
Operating -40°C (-40°F) to +70°C (+158°F)
- Minimum Bend Radius:
20 X OD—Installation
10 X OD—In-Service
- Maximum Crush Resistance:
150 lbs/in (440 N/cm)

Applications:

- Interbuilding voice or data communication backbones
- Installed in ducts, underground conduits, aerial/lashed or direct buried
- FTTX

Compliances:

- ANSI/TIA/EIA 568B.3
- GR-20

*Sequential meter markings available upon request

Hybrid designs (containing singlemode and multimode fiber) and composite designs (containing copper conductors) are also available.

Ordering Part Number Example

AQ0064UNFS

Premium singlemode with 6 fibers.

Please see pages 4 and 5 for a complete guide on part number selection and ordering information.

Loose Tube Single Jacket Cable

Product Construction:

Fiber:

- 2–288 fibers
- Loose tube gel-filled
- Color-coding per TIA/EIA 598B

Central Strength Member:

- Epoxy/Glass Rod

Overall Strength Member:

- Aramid yarn overall strength member available upon request

Jacket:

- Black UV- and moisture-resistant polyethylene (PE)
- Sequential footage markings*

Features:

- Loose tube gel-filled construction for superior fiber protection
- UV- and moisture-resistant design
- Dry Water Block cable core for ease of handling

Performance:

- Temperature:
 - Storage -40°C (-40°F) to +75°C (+167°F)
 - Operating -40°C (-40°F) to +70°C (+158°F)
- Minimum Bend Radius:
 - 20 X OD—Installation
 - 10 X OD—In-Service
- Maximum Crush Resistance:
 - 125 lbs/in (220 N/cm)

Applications:

- Interbuilding voice or data communication backbones
- Installed in ducts, underground conduit or aerial/lashed

Compliances:

- ANSI/TIA/EIA 568B.3
- ICEA S-87-640
- Rural Utilities Service (RUS) 7 CFR 1755.900 (REA PE-90)
- GR-20 Verified

Options:

- Gel-free tube versions also available, use “-DT suffix” (XX0124M1A-DT)
- Alternate 6-fiber per tube available upon request

*Sequential meter markings available upon request

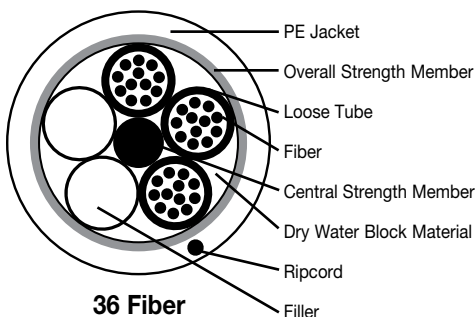


CATALOG NUMBER	FIBER COUNT	NO. OF LOOSE TUBES	NO. OF FILLERS	NOMINAL CABLE DIAMETER		NOMINAL CABLE WEIGHT		MAXIMUM TENSILE LOAD			
				IN	mm	LBS/1000'	kg/km	INSTALLATION		IN-SERVICE	
								LBS	N	LBS	N
XX0023M1A-DWB	2	2	3	.440	11.1	52.0	78.0	600	2670	180	800
XX0044M1A-DWB	4	1	4	.440	11.1	52.0	78.0	600	2670	180	800
XX0064M1A-DWB	6	1	4	.440	11.1	52.0	78.0	600	2670	180	800
XX0084M1A-DWB	8	1	4	.440	11.1	52.0	78.0	600	2670	180	800
XX0124M1A-DWB	12	1	4	.440	11.1	52.0	78.0	600	2670	180	800
XX0184M1A-DWB	18	2	3	.440	11.1	52.0	78.0	600	2670	180	800
XX0244M1A-DWB	24	2	3	.440	11.1	52.0	78.0	600	2670	180	800
XX0364M1A-DWB	36	3	2	.440	11.1	52.0	78.0	600	2670	180	800
XX0484M1A-DWB	48	4	1	.440	11.1	52.0	78.0	600	2670	180	800
XX0604M1A-DWB	60	5	0	.440	11.1	52.0	78.0	600	2670	180	800
XX0724M1A-DWB	72	6	0	.470	12.0	62.0	93.0	600	2670	180	800
XX0964M1A-DWB	96	8	0	.540	13.7	78.0	118.0	600	2670	180	800
XX1204M1A-DWB	120	10	0	.610	15.4	101.0	150.0	600	2670	180	800
XX1444M1A-DWB	144	12	0	.680	17.3	126.0	187.0	600	2670	180	800
XX1924M1A-DWB	192	16	2	.690	17.6	118.0	176.0	600	2670	180	800
XX2164M1A-DWB	216	18	0	.690	17.6	118.0	176.0	600	2670	180	800
XX2404M1A-DWB	240	20	10	.750	19.0	141.0	210.0	600	2670	180	800
XX2644M1A-DWB	264	22	8	.750	19.0	141.0	210.0	600	2670	180	800
XX2884M1A-DWB	288	24	6	.790	20.0	158.0	235.0	600	2670	180	800

XX Denotes glass type.

A complete listing of NextGen® Brand glass types is specified on page 3 of this catalog.

Typical Cross-Section



Hybrid designs (containing singlemode and multimode fiber) and composite designs (containing copper conductors) are also available.

For complete listing of all fiber counts offered, please contact your General Cable sales representative.

Factory-installed eyelet option for quick cable-pull setups available.

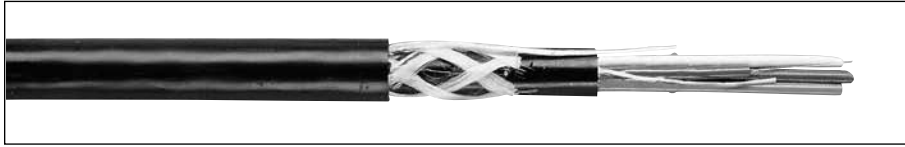
Ordering Part Number Example

AQ0124M1A-DWB

Premium singlemode with 12 fibers.

Please see pages 4 and 5 for a complete guide on part number selection and ordering information.

Loose Tube Dual Jacket Cable



Product Construction:

Fiber:

- 2–288 fibers
- Loose tube gel-filled
- Color-coding per TIA/EIA 598B

Central Strength Member:

- Epoxy/glass rod

Overall Strength Member:

- Aramid yarn overall strength member available upon request

Inner Jacket:

- Black UV- and moisture-resistant polyethylene (PE)

Outer Jacket:

- Black UV- and moisture-resistant polyethylene (PE)
- Sequential footage markings*

Features:

- Loose tube gel-filled construction for superior fiber protection
- UV- and moisture-resistant design
- Added protection of an inner jacket
- Dry Water Block cable core for ease of handling

Performance:

- Temperature: Storage -40°C (-40°F) to +75°C (+167°F) Operating -40°C (-40°F) to +70°C (+158°F)
- Minimum Bend Radius: 20 X OD—Installation 10 X OD—In-Service
- Maximum Crush Resistance: 125 lbs/in (220 N/cm)

Applications:

- Interbuilding voice or data communication backbones
- Installed in ducts, underground conduits, aerial/lashed or direct buried

Compliances:

- ANSI/TIA/EIA 568B.3
- ICEA S-87-640
- Rural Utilities Service (RUS) 7 CFR 1755.900 (REA PE-90)
- GR-20

Options:

- Gel-free tube versions also available, use “-DT suffix” (XX0124H1A-DT)
- Alternate 6-fiber per tube available upon request

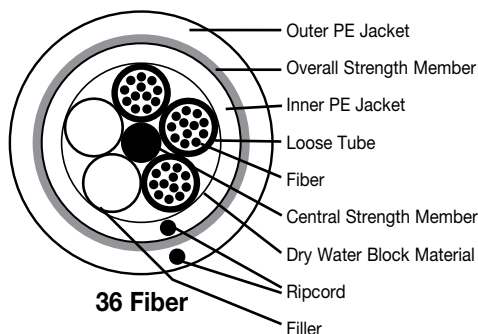
*Sequential meter markings available upon request

CATALOG NUMBER	FIBER COUNT	NO. OF LOOSE TUBES	NO. OF FILLERS	NOMINAL CABLE DIAMETER		NOMINAL CABLE WEIGHT		MAXIMUM TENSILE LOAD			
				IN	mm	LBS/1000'	kg/km	INSTALLATION		IN-SERVICE	
						LBS	N	LBS	N		
XX0023H1A-DWB	2	2	3	0.511	13.0	76.0	113.1	600	2670	200	890
XX0044H1A-DWB	4	1	4	0.511	13.0	76.0	113.1	600	2670	200	890
XX0064H1A-DWB	6	1	4	0.511	13.0	76.0	113.1	600	2670	200	890
XX0084H1A-DWB	8	1	4	0.511	13.0	76.0	113.1	600	2670	200	890
XX0124H1A-DWB	12	1	4	0.511	13.0	76.0	113.1	600	2670	200	890
XX0184H1A-DWB	18	2	3	0.511	13.0	76.6	114.0	600	2670	200	890
XX0244H1A-DWB	24	2	3	0.511	13.0	76.6	114.0	600	2670	200	890
XX0364H1A-DWB	36	3	2	0.511	13.0	77.2	114.9	600	2670	200	890
XX0484H1A-DWB	48	4	1	0.511	13.0	77.8	115.8	600	2670	200	890
XX0604H1A-DWB	60	5	0	0.511	13.0	77.8	115.8	600	2670	200	890
XX0724H1A-DWB	72	6	0	0.540	13.7	90.0	133.9	600	2670	200	890
XX0964H1A-DWB	96	8	0	0.540	13.7	90.0	133.9	600	2670	200	890
XX1204H1A-DWB	120	10	0	0.610	15.4	106.0	158.0	600	2670	200	890
XX1444H1A-DWB	144	12	0	0.748	19.0	167.3	249.0	600	2670	200	890
XX1924H1A-DWB	192	16	2	0.760	19.3	161.2	240.0	600	2670	200	890
XX2164H1A-DWB	216	18	0	0.760	19.3	162.1	241.2	600	2670	200	890
XX2404H1A-DWB	240	20	10	0.827	21.0	189.4	282.0	600	2670	200	890
XX2644H1A-DWB	264	22	8	0.827	21.0	192.2	286.0	600	2670	200	890
XX2884H1A-DWB	288	24	6	0.866	22.0	212.3	316.0	600	2670	200	890

XX Denotes glass type.

A complete listing of NextGen® Brand glass types is specified on page 3 of this catalog.

Typical Cross-Section



Hybrid designs (containing singlemode and multimode fiber) and composite designs (containing copper conductors) are also available.

For complete listing of all fiber counts offered, please contact your General Cable sales representative.

Factory-installed eyelet option for quick cable-pull setups available.

Ordering Part Number Example

AQ0124H1A-DWB

Premium singlemode with 12 fibers.

Please see pages 4 and 5 for a complete guide on part number selection and ordering information.



Loose Tube Single Jacket Armored Cable

Product Construction:

Fiber:

- 2–288 fibers
- Loose tube gel-filled
- Color-coding per TIA/EIA 598B

Central Strength Member:

- Epoxy/Glass Rod

Overall Strength Member:

- Aramid yarn overall strength member available upon request

Armor:

- 0.006" corrugated coated steel tape

Outer Jacket:

- Black UV- and moisture-resistant polyethylene (PE)
- Sequential footage markings*

Features:

- Loose tube gel-filled construction for superior fiber protection
- UV- and moisture-resistant design
- Rodent-resistant construction
- Dry Water Block cable core for ease of handling

Performance:

- Temperature:
 - Storage -40°C (-40°F) to +75°C (+167°F)
 - Operating -40°C (-40°F) to +70°C (+158°F)
- Minimum Bend Radius:
 - 20 X OD—Installation
 - 10 X OD—In-Service
- Maximum Crush Resistance:
 - 125 lbs/in (220 N/cm)

Applications:

- Interbuilding voice or data communication backbones
- Installed in ducts, underground conduits, aerial/lashed or direct buried

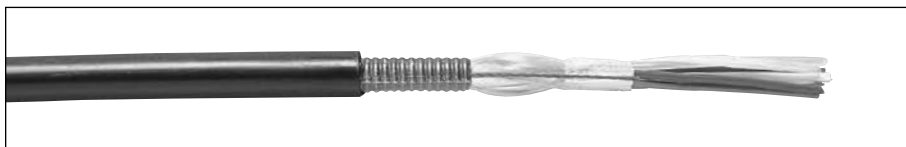
Compliances:

- ANSI/TIA/EIA 568B.3
- ICEA S-87-640
- Rural Utilities Service (RUS) 7 CFR 1755.900 (REA PE-90)
- GR-20 Verified

Options:

- Gel-free tube versions also available, use “-DT suffix” (XX0124M1F-DT)
- Alternate 6-fiber per tube available upon request

*Sequential meter markings available upon request

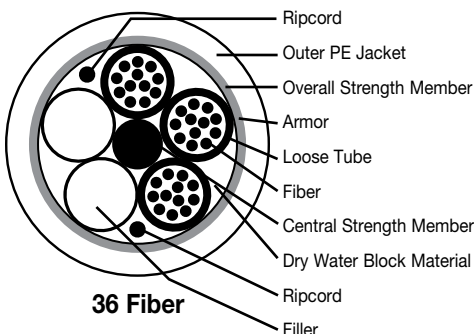


CATALOG NUMBER	FIBER COUNT	NO. OF LOOSE TUBES	NO. OF FILLERS	NOMINAL CABLE DIAMETER		NOMINAL CABLE WEIGHT		MAXIMUM TENSILE LOAD			
				IN	mm	LBS/1000'	kg/km	INSTALLATION		IN-SERVICE	
								LBS	N	LBS	N
XX0023M1F-DWB	2	2	3	.450	12.1	91	135	600	2670	125	220
XX0044M1F-DWB	4	1	4	.450	12.1	91	135	600	2670	125	220
XX0064M1F-DWB	6	1	4	.450	12.1	91	135	600	2670	125	220
XX0084M1F-DWB	8	1	4	.450	12.1	91	135	600	2670	125	220
XX0124M1F-DWB	12	1	4	.450	12.1	91	135	600	2670	125	220
XX0184M1F-DWB	18	2	3	.450	12.1	91	135	600	2670	125	220
XX0244M1F-DWB	24	2	3	.450	12.1	91	135	600	2670	125	220
XX0364M1F-DWB	36	3	2	.450	12.1	91	135	600	2670	125	220
XX0484M1F-DWB	48	4	1	.450	12.1	91	135	600	2670	125	220
XX0604M1F-DWB	60	5	0	.450	12.1	91	135	600	2670	125	220
XX0724M1F-DWB	72	6	0	.540	13.6	109	162	600	2670	125	220
XX0964M1F-DWB	96	8	0	.600	15.3	129	191	600	2670	125	220
XX1204M1F-DWB	120	10	0	.680	17.2	161	239	600	2670	125	220
XX1444M1F-DWB	144	12	0	.750	19.1	193	286	600	2670	125	220
XX1924M1F-DWB	192	16	2	.760	19.4	189	280	600	2670	125	220
XX2164M1F-DWB	216	18	0	.760	19.4	189	280	600	2670	125	220
XX2404M1F-DWB	240	20	10	.810	20.7	212	315	600	2670	125	220
XX2644M1F-DWB	264	22	8	.810	20.7	212	315	600	2670	125	220
XX2884M1F-DWB	288	24	6	.850	21.7	236	350	600	2670	125	220

XX Denotes glass type.

A complete listing of NextGen® Brand glass types is specified on page 3 of this catalog.

Typical Cross-Section



Hybrid designs (containing singlemode and multimode fiber) and composite designs (containing copper conductors) are also available.

For complete listing of all fiber counts offered, please contact your General Cable sales representative.

Factory-installed eyelet option for quick cable-pull setups available.

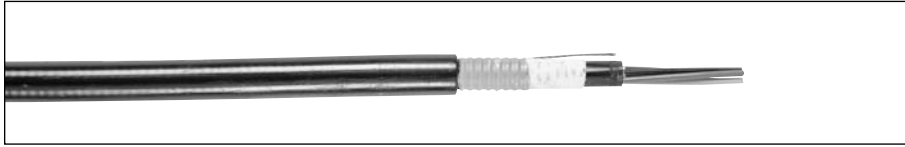
Ordering Part Number Example

AQ0124M1F-DWB

Premium singlemode with 12 fibers.

Please see pages 4 and 5 for a complete guide on part number selection and ordering information.

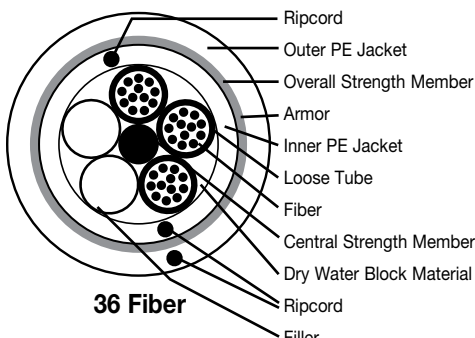
Loose Tube Dual Jacket Armored Cable



CATALOG NUMBER	FIBER COUNT	NO. OF LOOSE TUBES	NO. OF FILLERS	NOMINAL CABLE DIAMETER		NOMINAL CABLE WEIGHT		MAXIMUM TENSILE LOAD			
				IN	mm	LBS/1000'	kg/km	INSTALLATION		IN-SERVICE	
								LBS	N	LBS	N
XX0023H1F-DWB	2	2	3	0.59	15.0	128	190	600	2670	180	800
XX0044H1F-DWB	4	1	4	0.59	15.0	128	190	600	2670	180	800
XX0064H1F-DWB	6	1	4	0.59	15.0	128	190	600	2670	180	800
XX0084H1F-DWB	8	1	4	0.59	15.0	128	190	600	2670	180	800
XX0124H1F-DWB	12	1	4	0.59	15.0	128	190	600	2670	180	800
XX0184H1F-DWB	18	2	3	0.59	15.0	128	190	600	2670	180	800
XX0244H1F-DWB	24	2	3	0.59	15.0	128	190	600	2670	180	800
XX0364H1F-DWB	36	3	2	0.59	15.0	128	190	600	2670	180	800
XX0484H1F-DWB	48	4	1	0.59	15.0	128	190	600	2670	180	800
XX0604H1F-DWB	60	5	0	0.59	15.0	128	190	600	2670	180	800
XX0724H1F-DWB	72	6	0	0.63	15.9	143	212	600	2670	180	800
XX0964H1F-DWB	96	8	0	0.69	17.6	169	251	600	2670	180	800
XX1204H1F-DWB	120	10	0	0.76	19.3	201	298	600	2670	180	800
XX1444H1F-DWB	144	12	0	0.83	21.2	234	347	600	2670	180	800
XX1924H1F-DWB	192	16	2	0.85	21.5	230	341	600	2670	180	800
XX2164H1F-DWB	216	18	0	0.85	21.5	230	341	600	2670	180	800
XX2404H1F-DWB	240	20	10	0.90	22.9	259	384	600	2670	180	800
XX2644H1F-DWB	264	22	8	0.90	22.9	259	384	600	2670	180	800
XX2884H1F-DWB	288	24	6	0.94	23.9	282	418	600	2670	180	800

XX Denotes glass type.
A complete listing of NextGen® Brand glass types is specified on page 3 of this catalog.

Typical Cross-Section



Hybrid designs (containing singlemode and multimode fiber) and composite designs (containing copper conductors) are also available.
For complete listing of all fiber counts offered, please contact your General Cable sales representative.
Factory-installed eyelet option for quick cable-pull setups available.

Ordering Part Number Example

AQ0124H1F-DWB

Premium singlemode with 12 fibers.
Please see pages 4 and 5 for a complete guide on part number selection and ordering information.



RUS Compliant



Product Construction:

Fiber:

- 2–288 fibers
- Loose tube gel-filled
- Color-coding per TIA/EIA 598B

Central Strength Member:

- Epoxy/glass rod

Overall Strength Member:

- Aramid yarn overall strength member available upon request

Inner Jacket:

- Black UV- and moisture-resistant polyethylene (PE)

Armor:

- 0.006” corrugated coated steel tape

Outer Jacket:

- Black UV- and moisture-resistant polyethylene (PE)
- Sequential footage markings*

Features:

- Loose tube gel-filled construction for superior fiber protection
- UV- and moisture-resistant design
- Rodent-resistant construction
- Dry Water Block cable core for ease of handling

Performance:

- Temperature: Storage -40°C (-40°F) to +75°C (+167°F) Operating -40°C (-40°F) to +70°C (+158°F)
- Minimum Bend Radius: 20 X OD—Installation 10 X OD—In-Service
- Maximum Crush Resistance: 125 lbs/in (220 N/cm)

Applications:

- Interbuilding voice or data communication backbones
- Installed in ducts, underground conduits, aerial/lashed or direct buried

Compliances:

- ANSI/TIA/EIA 568B.3
- ICEA S-87-640
- Rural Utilities Service (RUS) 7 CFR 1755.900 (REA PE-90)
- GR-20

Options:

- Gel-free tube versions also available, use “-DT suffix” (XX0124H1F-DT)
- Alternate 6-fiber per tube available upon request

*Sequential meter markings available upon request

Loose Tube Single Jacket Self-Supporting (Figure-8) Cable

Product Construction:

Fiber:

- 2–216 fibers
- Loose tube gel-filled
- Color-coding per TIA/EIA 598B

Central Strength Member:

- Epoxy/glass rod

Overall Strength Member:

- Aramid yarn overall strength member available upon request

Jacket:

- Black UV- and moisture-resistant polyethylene (PE)
- Sequential footage markings*

Messenger Wire:

- 1/4" stranded EHS galvanized steel

Features:

- Loose tube gel-filled construction for superior fiber protection
- UV- and moisture-resistant design
- Self-supporting figure-8 design

Performance:

- Temperature:
 - Storage -40°C (-40°F) to +75°C (+167°F)
 - Operating -40°C (-40°F) to +70°C (+158°F)
- Minimum Bend Radius:
 - 20 X OD—Installation
 - 10 X OD—In-Service
- Maximum Crush Resistance:
 - 125 lbs/in (220 N/cm)

Applications:

- Interbuilding voice or data communication backbones
- Installed aerially

Compliances:

- ANSI/TIA/EIA 568B.3
- ICEA S-87-640
- Rural Utilities Service (RUS) 7 CFR 1755.900 (REA PE-90)
- GR-20

Installation Notes:

- The Maximum Tensile Load in the data table refers to the cable core only. Users should base sag and tension calculations on 1/4" EHS messenger per local guidelines and practices. Additional data is available from General Cable.

Options:

- Gel-free tube versions also available, use "-DT suffix" (XX0124M1Y-DT)
- Alternate 6-fiber per tube available upon request

*Sequential meter markings available upon request

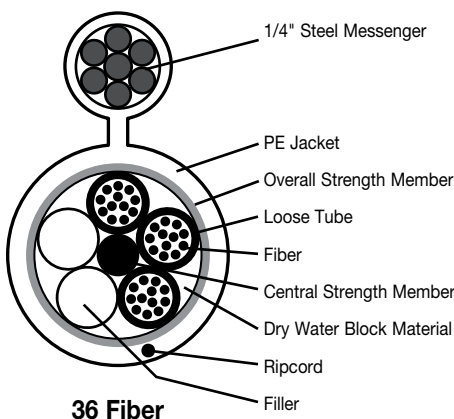


CATALOG NUMBER	FIBER COUNT	NO. OF LOOSE TUBES	NO. OF FILLERS	CABLE O.D. x CABLE HEIGHT		NOMINAL CABLE WEIGHT		MAXIMUM TENSILE LOAD			
				IN	mm	LBS/1000'	kg/km	INSTALLATION		IN-SERVICE	
								LBS	N	LBS	N
XX0023M1Y-DWB	2	2	3	.46 x .92	11.8 x 23.45	208.0	310	600	2670	180	800
XX0044M1Y-DWB	4	1	4	.46 x .92	11.8 x 23.45	208.0	310	600	2670	180	800
XX0064M1Y-DWB	6	1	4	.46 x .92	11.8 x 23.45	208.0	310	600	2670	180	800
XX0084M1Y-DWB	8	1	4	.46 x .92	11.8 x 23.45	208.0	310	600	2670	180	800
XX0124M1Y-DWB	12	1	4	.46 x .92	11.8 x 23.45	208.0	310	600	2670	180	800
XX0184M1Y-DWB	18	2	3	.46 x .92	11.8 x 23.45	208.0	310	600	2670	180	800
XX0244M1Y-DWB	24	2	3	.46 x .92	11.8 x 23.45	208.0	310	600	2670	180	800
XX0364M1Y-DWB	36	3	3	.46 x .92	11.8 x 23.45	208.0	310	600	2670	180	800
XX0484M1Y-DWB	48	4	2	.46 x .92	11.8 x 23.45	208.0	310	600	2670	180	800
XX0604M1Y-DWB	60	5	1	.46 x .92	11.8 x 23.45	208.0	310	600	2670	180	800
XX0724M1Y-DWB	72	6	0	.50 x .96	12.65 x 24.3	217.0	323	600	2670	180	800
XX0964M1Y-DWB	96	8	2	.57 x 1.03	14.4 x 26.0	236.0	351	600	2670	180	800
XX1204M1Y-DWB	120	10	0	.70 x 1.16	17.7 x 29.35	286.0	425	600	2670	180	800
XX1444M1Y-DWB	144	12	0	.70 x 1.16	17.7 x 29.35	286.0	425	600	2670	180	800
XX1924M1Y-DWB	192	18	0	.71 x 1.17	18.0 x 29.65	278.0	413	600	2700	180	800
XX2164M1Y-DWB	216	18	0	.71 x 1.17	18.0 x 29.65	278.0	413	600	2700	180	800

XX Denotes glass type.

A complete listing of NextGen® Brand glass types is specified on page 3 of this catalog.

Typical Cross-Section



Hybrid designs (containing singlemode and multimode fiber) and composite designs (containing copper conductors) are also available.

For complete listing of all fiber counts offered, please contact your General Cable sales representative.

Ordering Part Number Example

AQ0244M1Y-DWB

Premium singlemode with 24 fibers.

Please see pages 4 and 5 for a complete guide on part number selection and ordering information.

Loose Tube Single Jacket Armored Self-Supporting (Figure-8) Cable



Product Construction:

Fiber:

- 2–144 fibers
- Loose tube gel-filled
- Color-coding per TIA/EIA 598B

Central Strength Member:

- Epoxy/glass rod

Overall Strength Member:

- Aramid yarn overall strength member available upon request

Armor:

- 0.006" corrugated coated steel tape

Outer Jacket:

- Black UV- and moisture-resistant polyethylene (PE)
- Sequential footage markings*

Messenger Wire:

- 1/4" stranded EHS galvanized steel

Features:

- Loose tube gel-filled construction for superior fiber protection
- UV- and moisture-resistant design
- Self-supporting figure-8 design

Performance:

- Temperature:
 - Storage -40°C (-40°F) to +75°C (+167°F)
 - Operating -40°C (-40°F) to +70°C (+158°F)
- Minimum Bend Radius:
 - 20 X OD—Installation
 - 10 X OD—In-Service
- Maximum Crush Resistance: 125 lbs/in (220 N/cm)

Applications:

- Interbuilding voice or data communication backbones
- Installed aerially

Compliances:

- ANSI/TIA/EIA 568B.3
- ICEA S-87-640
- Rural Utilities Service (RUS) 7 CFR 1755.900 (REA PE-90)
- GR-20

Options:

- Gel-free tube versions also available, use “-DT suffix” (XX0124M1N-DT)
- Alternate 6-fiber per tube available upon request

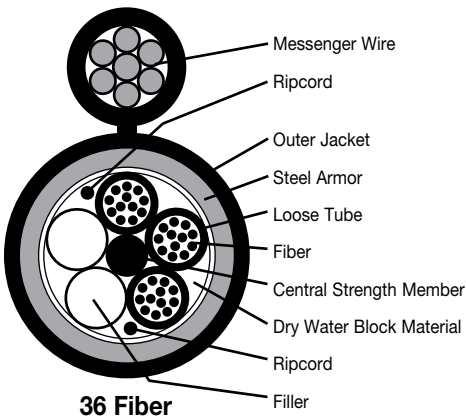
*Sequential meter markings available upon request

CATALOG NUMBER	FIBER COUNT	NO. OF LOOSE TUBES	NO. OF FILLERS	CABLE O.D. x CABLE HEIGHT		NOMINAL CABLE WEIGHT		MAXIMUM TENSILE LOAD			
				IN	mm	LBS/1000'	kg/km	INSTALLATION		IN-SERVICE	
								LBS	N	LBS	N
XX0023M1N-DWB	2	2	3	0.47 X 0.93	11.9 X 23.55	237	352	600	2670	180	800
XX0044M1N-DWB	4	1	4	0.47 X 0.93	11.9 X 23.55	237	352	600	2670	180	800
XX0064M1N-DWB	6	1	4	0.47 X 0.93	11.9 X 23.55	237	352	600	2670	180	800
XX0084M1N-DWB	8	1	4	0.47 X 0.93	11.9 X 23.55	237	352	600	2670	180	800
XX0124M1N-DWB	12	1	4	0.47 X 0.93	11.9 X 23.55	237	352	600	2670	180	800
XX0184M1N-DWB	18	2	3	0.47 X 0.93	11.9 X 23.55	237	352	600	2670	180	800
XX0244M1N-DWB	24	2	3	0.47 X 0.93	11.9 X 23.55	237	352	600	2670	180	800
XX0364M1N-DWB	36	3	3	0.47 X 0.93	11.9 X 23.55	237	352	600	2670	180	800
XX0484M1N-DWB	48	4	2	0.47 X 0.93	11.9 X 23.55	237	352	600	2670	180	800
XX0604M1N-DWB	60	5	1	0.47 X 0.93	11.9 X 23.55	237	352	600	2670	180	800
XX0724M1N-DWB	72	6	0	0.54 X 0.99	13.6 X 25.25	255	379	600	2670	180	800
XX0964M1N-DWB	96	8	8	0.60 X 1.06	15.3 X 26.95	275	409	600	2670	180	800
XX1204M1N-DWB	120	10	6	0.75 X 1.21	19.1 X 30.75	339	505	600	2670	180	800
XX1444M1N-DWB	144	12	4	0.75 X 1.21	19.1 X 30.75	339	505	600	2670	180	800

XX Denotes glass type.

A complete listing of NextGen® Brand glass types is specified on page 3 of this catalog.

Typical Cross-Section



Installation Notes:
The Maximum Tensile Load in the data table refers to the cable core only. Users should base sag and tension calculations on 1/4" EHS messenger per local guidelines and practices. Additional data is available upon request.

Hybrid designs (containing singlemode and multimode fiber) and composite designs (containing copper conductors) are also available.

For complete listing of all fiber counts offered, please contact your General Cable sales representative.

Ordering Part Number Example

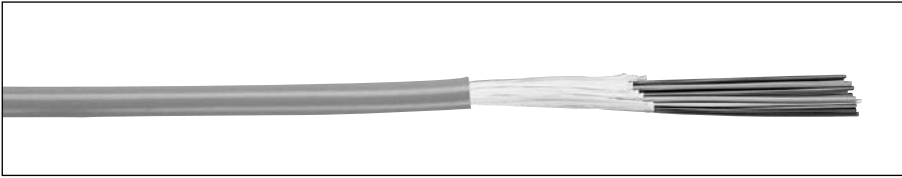
AQ0244M1N-DWB

Premium singlemode with 24 fibers.

Please see pages 4 and 5 for a complete guide on part number selection and ordering information.



NextGen® Brand Premises Cables



NextGen® Brand fiber optic cables are optimized for any premises application.

Applications: Premises cables with 900µm tight buffer constructions are built to withstand the continuous handling and difficult routing typical of building backbones. These fiber optic cables emphasize flexibility, handling and proper fiber termination characteristics. This provides reliable and simple installations every time. These cables are used for intrabuilding vertical (backbone) and horizontal runs.

Range of Products: Includes the manufacture of riser, plenum and Low-Smoke, Zero-Halogen (LSZH) cables. This includes distribution designs as well as breakout style cables. Fiber counts range up to 144 fibers.

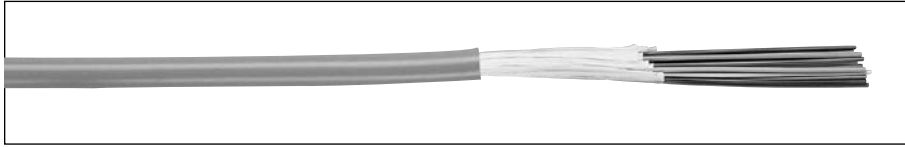
Features: Premises cables have an industry-standard 900µm tight buffer for termination to connectors. The tight buffer diameter is tightly controlled to provide reliable, first-time connections. Breakout cables utilize 2.4mm breakout dimensions for rugged environments and compatibility with connectors. All fibers are color-coded and subgrouped (if necessary) for easy identification for handling.

As with all NextGen Brand fiber optic cables, breakout kits are available for premises cables to reinforce and assist in preparing the fibers for termination.

Index	Page
Tight Buffer Distribution Riser Cable	17
Tight Buffer Distribution Plenum Cable	18
Tight Buffer Breakout Riser Cable	19
Tight Buffer Breakout Plenum Cable	20
Tight Buffer Distribution Low-Smoke, Zero-Halogen (LSZH) Cable	21
Tight Buffer Distribution Interlock Armored Riser Cable	22
Tight Buffer Distribution Interlock Armored Plenum Cable	23

Tight Buffer Distribution Riser Cable

Type OFNR, CSA FT-4



Product Construction:

Fiber:

- 2–144 fibers
- 900µm tight buffer
- Color-coding per TIA/EIA 598B

Central Strength Member:

- Epoxy/glass rod (above 12 fibers)

Overall Strength Member:

- Aramid fiber yarn

Jacket:

- Flame-retardant polyvinyl chloride (PVC)
- Sequential footage markings*
- Orange Jacket—Multimode fibers (except 10 Gbps)
- Aqua Jacket—10 Gbps Multimode fibers
- Yellow Jacket—Singlemode fibers

Features:

- Lightweight, flexible design simplifies installation
- Tight buffer provides individual fiber protection
- Tight buffered fibers are easy to handle and strip for field connectorization
- Sub-units are numbered for identification

Performance:

- Temperature: Storage -40°C (-40°F) to +70°C (+158°F) Operating -20°C (-4°F) to +70°C (+158°F)
- Minimum Bend Radius: 20 X OD—Installation 10 X OD—In-Service
- Maximum Crush Resistance: 850 lbs/in (1485 N/cm)
- Maximum Vertical Rise—1,640 ft (500 m)

Applications:

- Intra-building voice or data communication backbones
- UL Listed Type OFNR for installation in vertical riser and general horizontal applications when installed in accordance with NEC article 770-51 (b) and 770-53 (b)

Compliances:

- UL and c(UL) Listed Type OFNR
- CSA FT-4
- ANSI/TIA/EIA 568B.3
- ICEA S-83-596
- GR-409

Option:

- Ripcord available on PNRs, comes as standard on P1Rs

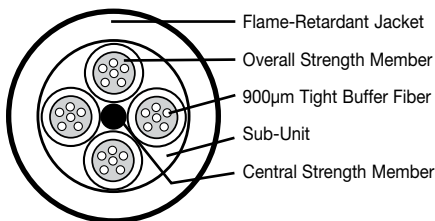
*Sequential meter markings available upon request

CATALOG NUMBER	FIBER COUNT	NO. OF SUB-UNITS	NOMINAL CABLE DIAMETER		NOMINAL CABLE WEIGHT		MAXIMUM TENSILE LOAD			
			IN	mm	LBS/1000'	kg/km	INSTALLATION		IN-SERVICE	
							LBS	N	LBS	N
XX0021PNR	2	—	0.19	5	14	20	225	1000	65	290
XX0041PNR	4	—	0.20	5	16	23	225	1000	65	290
XX0061PNR	6	—	0.22	6	18	27	225	1000	65	290
XX0081PNR	8	—	0.22	6	20	30	245	1090	70	310
XX0101PNR	10	—	0.24	6	23	34	320	1425	112	500
XX0121PNR	12	—	0.25	6	24	36	320	1425	112	500
XX0181P1R	18	3	0.46	12	76	113	600	2670	200	890
XX0181PNR	18	—	0.33	8	45	67	320	1425	112	500
XX0241P1R	24	4	0.52	13	84	125	800	3560	270	1201
XX0241PNR	24	—	0.34	9	47	70	320	1425	112	500
XX0361P1R	36	6	0.65	17	152	226	1000	4448	335	1490
XX0481P1R	48	4	0.63	16	133	197	1000	4448	335	1490
XX0601P1R	60	5	0.69	17	155	231	1200	5338	400	1780
XX0721P1R	72	6	0.76	19	202	301	1500	6672	500	2224
XX0961P1R	96	8	0.89	23	289	430	2000	8896	670	2980
XX1201P1R	120	10	1.00	25	297	442	3000	13345	1000	4448
XX1441P1R	144	12	1.00	25	304	452	3000	13345	1000	4448

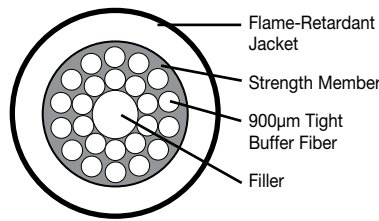
XX Denotes glass type.

A complete listing of NextGen® Brand glass types is specified on page 3 of this catalog.

Typical Cross-Sections



P1R ≥ 18 Fiber



PNR ≤ 24 Fiber

Hybrid designs (containing singlemode and multimode fiber) and composite designs (containing copper conductors) are also available.

Ordering Part Number Example

CG0241PNR or CG0241P1R

62.5 multimode with 24 fibers.

Please see pages 4 and 5 for a complete guide on part number selection and ordering information.



Tight Buffer Distribution Plenum Cable

Type OFNP, CSA FT-6

Product Construction:

Fiber:

- 2–96 fibers
- 900µm tight buffer
- Color-coding per TIA/EIA 598B

Central Strength Member:

- Epoxy/glass rod (above 12 fibers)

Overall Strength Member:

- Aramid fiber yarn

Jacket:

- Flame-retardant polyvinyl chloride (PVC) or fluoropolymer
- Sequential footage markings*
- Orange Jacket—Multimode fibers (except 10 Gbps)
- Aqua Jacket—10 Gbps Multimode fibers
- Yellow Jacket—Singlemode fibers

Features:

- Lightweight, flexible design simplifies installation
- Tight buffer provides individual fiber protection
- Tight buffered fibers are easy to handle and strip for field connectorization
- Sub-units are numbered for identification

Performance:

- Temperature:
Storage -40°C (-40°F) to +70°C (+158°F)
Operating -20°C (-4°F) to +70°C (+158°F)
- Minimum Bend Radius:
20 X OD—Installation
10 X OD—In-Service
- Maximum Crush Resistance:
850 lbs/in (1485 N/cm)
- Maximum Vertical Rise—1,640 ft (500 m)

Applications:

- Intrabuilding voice or data communication backbones
- UL Listed Type OFNP for installation in ducts, plenums and other spaces used as environmental air returns when installed in accordance with NEC article 770-51 (a) and 770-53 (a)

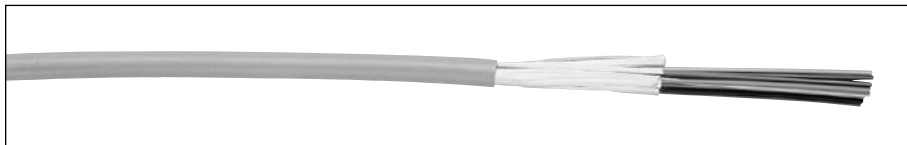
Compliances:

- UL and c(UL) Listed Type OFNP
- CSA FT-6
- ANSI/TIA/EIA 568B.3
- ICEA S-83-596
- GR-409

Option:

- Ripcord available on PNUs, comes as standard on P1Us

*Sequential meter markings available upon request

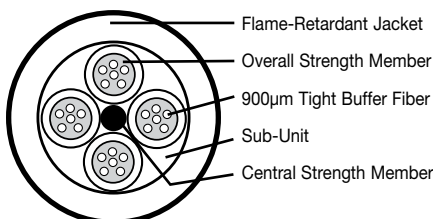


CATALOG NUMBER	FIBER COUNT	NO. OF SUB-UNITS	NOMINAL CABLE DIAMETER		NOMINAL CABLE WEIGHT		MAXIMUM TENSILE LOAD			
			IN	mm	LBS/1000'	kg/km	INSTALLATION		IN-SERVICE	
							LBS	N	LBS	N
XX0021PNU	2	—	.17	4	12	17	225	1000	65	290
XX0041PNU	4	—	.18	5	14	20	225	1000	65	290
XX0061PNU	6	—	.20	5	16	24	225	1000	65	290
XX0081PNU	8	—	.21	5	18	27	245	1090	70	311
XX0121PNU	12	—	.23	6	23	34	320	1423	112	500
XX0181PNU	18	—	.31	8	42	63	320	1423	112	500
XX0241PNU	24	—	.32	8	45	67	320	1423	112	500
XX0361P1D	36	6	.61	16	151	225	1000	4448	335	1490
XX0481P1D	48	4	.58	15	135	200	1000	4448	335	1490
XX0601P1D	60	5	.67	17	186	277	1000	4448	335	1490
XX0721P1D	72	6	.73	19	217	323	1000	4448	335	1490
XX0961P1D	96	8	.86	22	312	464	1500	6672	500	2224

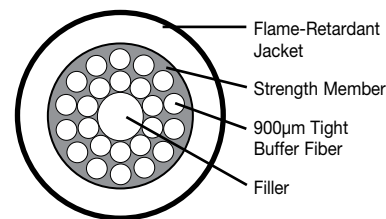
XX Denotes glass type.

A complete listing of NextGen® Brand glass types is specified on page 3 of this catalog.

Typical Cross-Sections



P1D ≥ 36 Fiber



PNU ≤ 24 Fiber

Hybrid designs (containing singlemode and multimode fiber) and composite designs (containing copper conductors) are also available.

Ordering Part Number Example

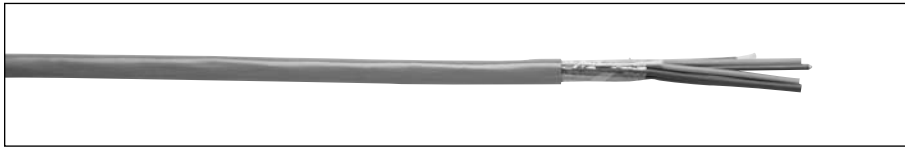
CG0241PNU or CG0361P1D

62.5 multimode with 24 or 36 fibers.

Please see pages 4 and 5 for a complete guide on part number selection and ordering information.

Tight Buffer Breakout Riser Cable

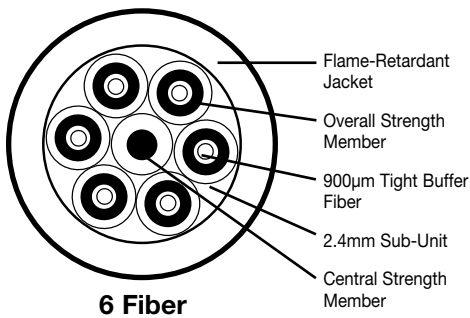
Type OFNR, CSA FT-4



CATALOG NUMBER	FIBER COUNT	NO. OF SUB-UNITS	NOMINAL CABLE DIAMETER		NOMINAL CABLE WEIGHT		MAXIMUM TENSILE LOAD			
			IN	mm	LBS/1000'	kg/km	INSTALLATION		IN-SERVICE	
							LBS	N	LBS	N
XX0021B3R	2	2	.27	7	28	41	270	1200	110	490
XX0041B3R	4	4	.31	8	37	54	450	2000	180	800
XX0061B3R	6	6	.37	9	51	76	450	2000	180	800
XX0081B3R	8	8	.43	11	71	106	600	2670	200	890
XX0121B3R	12	12	.47	12	79	117	790	3515	270	1200
XX0181B3R	18	18	.56	14	111	165	1000	4450	400	1780
XX0241B3R	24	24	.65	16	153	228	1230	5470	450	2000

XX Denotes glass type.
A complete listing of NextGen® Brand glass types is specified on page 3 of this catalog.

Typical Cross-Section



6 Fiber

Hybrid designs (containing singlemode and multimode fiber) and composite designs (containing copper conductors) are also available.

Ordering Part Number Example

CG0121B3R

62.5 multimode with 12 fibers.

Please see pages 4 and 5 for a complete guide on part number selection and ordering information.

Product Construction:

Fiber:

- 2–24 fibers
- 900µm white tight buffer
- 2.4mm jacketed sub-units, with overall jacket color coding

Central Strength Member:

- Aramid yarn
- Optional Epoxy glass rod (BIR)

Overall Strength Member:

- Aramid fiber yarn

Jacket:

- Flame-retardant polyvinyl chloride (PVC)
- Sequential footage markings*
- Orange Jacket—Multimode fibers (except 10 Gbps)
- Aqua Jacket—10 Gbps Multimode fibers
- Yellow Jacket—Singlemode fibers

Features:

- Rugged individual fiber protection
- Easily terminated with fiber sub-units
- Heavy-duty premises applications
- Sub-units are numbered for identification

Performance:

- Temperature: Storage -40°C (-40°F) to +70°C (+158°F)
Operating -20°C (-4°F) to +70°C (+158°F)
- Minimum Bend Radius: 20 X OD—Installation
10 X OD—In-Service
- Maximum Crush Resistance: 1000 lbs/in (1750 N/cm)
- Maximum Vertical Rise—1,640 ft (500 m)

Applications:

- Intra-building voice or data communication backbones
- UL Listed Type OFNR for installation in vertical riser and general horizontal applications when installed in accordance with NEC article 770-51 (b) and 770-53 (b)

Compliances:

- UL and c(UL) Listed Type OFNR
- CSA FT-4
- ANSI/TIA/EIA 568B.3
- ICEA S-83-596
- GR-409

*Sequential meter markings available upon request



Tight Buffer Breakout Plenum Cable

Type OFNP, CSA FT-6

Product Construction:

Fiber:

- 2–48 fibers
- 900µm white tight buffer
- 2.4mm jacketed sub-units, with overall jacket color coding

Central Strength Member:

- Aramid fiber yarn
- Optional epoxy glass rod (B1D)

Overall Strength Member:

- Aramid fiber yarn

Jacket:

- Flame-retardant fluoropolymer
- Sequential footage markings*
- Orange Jacket—Multimode fibers (except 10 Gbps)
- Aqua Jacket—10 Gbps Multimode fibers
- Yellow Jacket—Singlemode fibers

Features:

- Rugged individual fiber protection
- Easily terminated with fiber sub-units
- Heavy-duty premises applications
- Sub-units are numbered for identification

Performance:

- Temperature:
 - Storage -40°C (-40°F) to +70°C (+158°F)
 - Operating -20°C (-4°F) to +70°C (+158°F)
- Minimum Bend Radius:
 - 20 X OD—Installation
 - 10 X OD—In-Service
- Maximum Crush Resistance:
 - 850 lbs/in (1485 N/cm)
- Maximum Vertical Rise—1,640 ft (500 m)

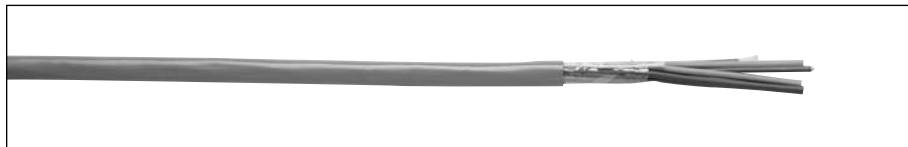
Applications:

- Intrabuilding voice or data communication backbones
- ETL Listed Type OFNP for installation in ducts, plenums and other spaces used as environmental air returns when installed in accordance with NEC article 770-51 (a) and 770-53 (a)

Compliances:

- ETL and c(ETL) Listed Type OFNP
- CSA FT-6
- ANSI/TIA/EIA 568B.3
- ICEA S-83-596

*Sequential meter markings available upon request

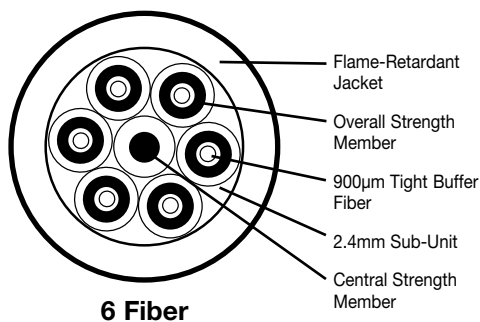


CATALOG NUMBER	FIBER COUNT	NO. OF SUB-UNITS	NOMINAL CABLE DIAMETER		NOMINAL CABLE WEIGHT		MAXIMUM TENSILE LOAD			
			IN	mm	LBS/1000'	kg/km	INSTALLATION		IN-SERVICE	
							LBS	N	LBS	N
XX0021B3D	2	2	.24	6	27	40	270	1200	110	490
XX0041B3D	4	4	.28	7	33	49	450	2000	180	800
XX0061B3D	6	6	.34	9	50	74	450	2000	180	800
XX0081B3D	8	8	.40	10	72	107	600	2670	200	890
XX0121B3D	12	12	.44	11	76	113	790	3515	270	1200
XX0181B3D	18	18	.54	14	122	181	1000	4450	400	1780
XX0241B3D	24	24	.63	16	171	254	1230	5470	450	2000
XX0361B3D	36	36	.73	19	209	311	2000	8896	600	2669
XX0481B3D	48	48	.84	21	261	388	2600	11565	780	3470

XX Denotes glass type.

A complete listing of NextGen® Brand glass types is specified on page 3 of this catalog.

Typical Cross-Section



6 Fiber

Hybrid designs (containing singlemode and multimode fiber) and composite designs (containing copper conductors) are also available.

Ordering Part Number Example

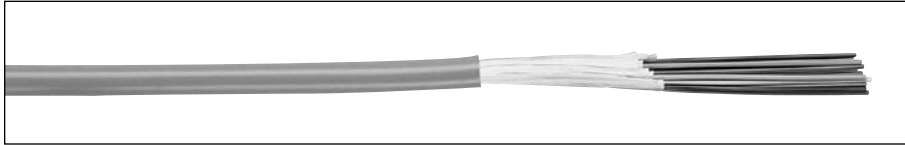
CG0121B3D

62.5 multimode with 12 fibers.

Please see pages 4 and 5 for a complete guide on part number selection and ordering information.

Tight Buffer Distribution Low-Smoke, Zero-Halogen (LSZH) Cable

Type OFNR, CSA FT-4



Product Construction:

Fiber:

- 2–72 fibers
- 900µm tight buffer
- Color-coding per TIA/EIA 598B

Central Strength Member:

- Epoxy/glass rod (above 12 fibers)

Overall Strength Member:

- Aramid fiber yarn

Jacket:

- Flame-retardant LSZH polymer
- Sequential footage markings*
- Orange Jacket—Multimode fibers (except 10 Gbps)
- Aqua Jacket—10 Gbps Multimode fibers
- Yellow Jacket—Singlemode fibers

Features:

- Lightweight, flexible design simplifies installation
- Tight buffer provides individual fiber protection
- Tight buffered fibers are easy to handle and strip for field connectorization
- Sub-units are numbered for identification

Performance:

- Temperature: Storage -40°C (-40°F) to +70°C (+158°F) Operating -20°C (-4°F) to +70°C (+158°F)
- Minimum Bend Radius: 20 X OD—Installation 10 X OD—In-Service
- Maximum Crush Resistance: 850 lbs/in (1485 N/cm)
- Maximum Vertical Rise—1,640 ft (500 m)

Applications:

- Intra-building voice or data communication backbones
- UL Listed Type OFNR for installation in vertical riser and general horizontal applications when installed in accordance with NEC article 770-51 (b) and 770-53 (b)

Compliances:

- UL and c(UL) Listed Type OFNR
- CSA FT-4
- ANSI/TIA/EIA 568B.3
- ICEA S-83-596
- RoHS Compliant Directive 2002/95/EC

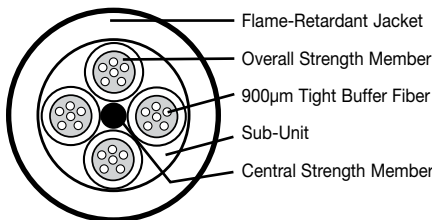
*Sequential meter markings available upon request

CATALOG NUMBER	FIBER COUNT	NO. OF SUB-UNITS	NOMINAL CABLE DIAMETER		NOMINAL CABLE WEIGHT		MAXIMUM TENSILE LOAD			
			IN	mm	LBS/1000'	kg/km	INSTALLATION		IN-SERVICE	
							LBS	N	LBS	N
XX0021PNZ	2	—	.17	4	11	16	225	1000	65	290
XX0041PNZ	4	—	.18	5	13	19	225	1000	65	290
XX0061PNZ	6	—	.20	5	15	22	225	1000	65	290
XX0081PNZ	8	—	.20	5	17	25	245	1090	70	310
XX0121PNZ	12	—	.23	6	21	31	320	1425	112	500
XX0181P1Z	18	3	.47	12	84	125	600	2670	200	890
XX0241P1Z	24	4	.53	13	92	137	800	3560	270	1201
XX0361P1Z	36	6	.64	16	142	211	1000	4448	335	1490
XX0481P1Z	48	4	.61	15	122	182	1000	4448	335	1490
XX0601P1Z	60	5	.67	17	156	232	1200	5338	400	1780
XX0721P1Z	72	6	.74	19	192	286	1500	6672	500	2224

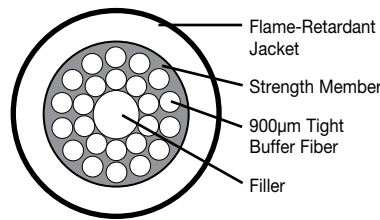
XX Denotes glass type.

A complete listing of NextGen® Brand glass types is specified on page 3 of this catalog.

Typical Cross-Section



P1Z ≥ 18 Fiber



PNZ ≤ 12 Fiber

Hybrid designs (containing singlemode and multimode fiber) and composite designs (containing copper conductors) are also available.

Ordering Part Number Example

CG0121PNZ or CG0241P1Z

62.5 multimode with 12 or 24 fibers.

Please see pages 4 and 5 for a complete guide on part number selection and ordering information.



Tight Buffer Distribution Interlock Armored Riser Cable

Type OFCR, CSA FT-4

Product Construction:

Fiber:

- 2–144 fibers
- 900µm tight buffer
- Color-coding per TIA/EIA 598B

Overall Strength Member:

- Aramid fiber yarn

Inner Jacket:

- Flame-retardant compound

Armor:

- Interlock aluminum (-ILRA)

Option:

- Interlock galvanized steel (-ILR)

Outer Jacket:

- Flame-retardant compound
- Sequential footage markings*
- Orange Jacket—Multimode fibers (except 10 Gbps)
- Aqua Jacket—10 Gbps Multimode fibers
- Yellow Jacket—Singlemode fibers

Features:

- Interlock armor provides outstanding mechanical protection
- Interlock armor is flexible and easy to use
- Tight buffer provides individual fiber protection
- Sub-units are numbered for identification

Performance:

- Temperature:
 - Storage -40°C (-40°F) to +70°C (+158°F)
 - Operating -20°C (-4°F) to +70°C (+158°F)
- Minimum Bend Radius:
 - 20 X OD—Installation
 - 10 X OD—In-Service
- Maximum Crush Resistance:
 - 1,500 lbs/in (2,627 N/cm)

Applications:

- Harsh premises environments requiring heavy-duty protection
- Type OFCR for installation in any premises location when installed in accordance with NEC article 770-51 (b) and 770-53 (b)

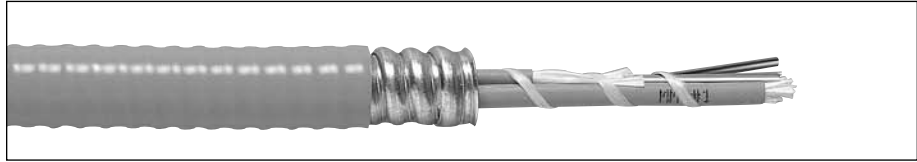
Compliances:

- Listed Type OFCR
- CSA FT-4

Note:

Armored cable without an outer jacket available upon request (-IL)

*Sequential meter markings available upon request

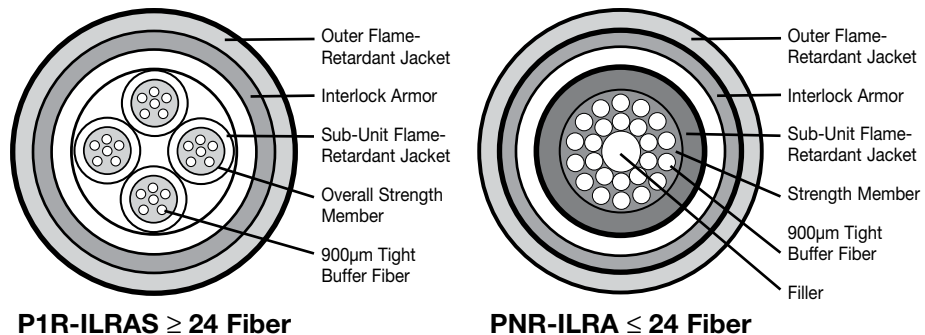


CATALOG NUMBER	FIBER COUNT	NO. OF SUB-UNITS	NOMINAL CABLE DIAMETER		NOMINAL CABLE WEIGHT		MAXIMUM TENSILE LOAD				
			IN	mm	LBS/1000'	kg/km	INSTALLATION		IN-SERVICE		
								LBS	N	LBS	N
XX0021PNR-ILRA	2	—	0.522	13.3	104	154	550	2447	165	734	
XX0041PNR-ILRA	4	—	0.522	13.3	104	154	550	2447	165	734	
XX0061PNR-ILRA	6	—	0.535	13.6	116	173	550	2447	165	734	
XX0121PNR-ILRA	12	—	0.620	15.7	159	237	550	2447	165	734	
XX0241PNR-ILRA	24	—	0.620	5.7	159	237	550	2447	165	734	
XX0241PNR-ILRAS	24	4	0.890	22.6	265	394	1000	4448	300	1334	
XX0361PNR-ILRAS	36	6	0.980	24.9	360	536	1000	4448	300	1334	
XX0481PNR-ILRAS	48	4	1.000	25.4	365	543	1000	4448	300	1334	
XX0601PNR-ILRAS	60	5	1.005	25.5	385	573	1000	4448	300	1334	
XX0721PNR-ILRAS	72	6	1.080	27.4	460	684	1000	4448	300	1334	
XX0961PNR-ILRAS	96	8	1.214	30.8	590	878	1000	4448	300	1334	
XX1201PNR-ILRAS	120	10	1.370	34.8	635	945	1000	4448	300	1334	
XX1441PNR-ILRAS	144	12	1.370	34.8	640	952	1000	4448	300	1334	

XX Denotes glass type.

A complete listing of NextGen® Brand glass types is specified on page 3 of this catalog.

Typical Cross-Sections



P1R-ILRAS ≥ 24 Fiber

PNR-ILRA ≤ 24 Fiber

Hybrid designs (containing singlemode and multimode fiber) and composite designs (containing copper conductors) are also available.

Ordering Part Number Example

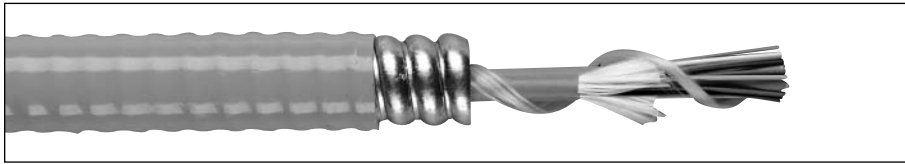
CG0241PNR-ILRA or CG0241PNR-ILRAS

62.5 multimode with 24 fibers.

Please see pages 4 and 5 for a complete guide on part number selection and ordering information.

Tight Buffer Distribution Interlock Armored Plenum Cable

Type OFCP, CSA FT-6

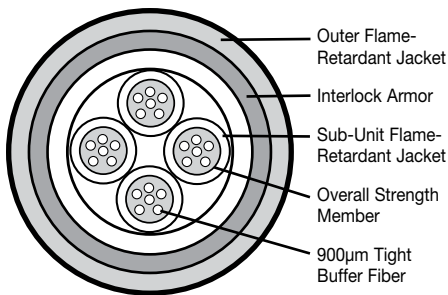


CATALOG NUMBER	FIBER COUNT	NO. OF SUB-UNITS	NOMINAL CABLE DIAMETER		NOMINAL CABLE WEIGHT		MAXIMUM TENSILE LOAD			
			IN	mm	LBS/1000'	kg/km	INSTALLATION		IN-SERVICE	
XX0021PNU-ILPA	2	1	0.48	12.00	217	322	550	2447	165	734
XX0041PNU-ILPA	4	1	0.48	12.00	217	322	550	2447	165	734
XX0061PNU-ILPA	6	1	0.48	12.00	218	324	550	2447	165	734
XX0121PNU-ILPA	12	1	0.59	15.00	255	379	550	2447	165	734
XX0241PNU-ILPAS	24	2	0.74	18.80	342	509	1000	4448	300	1334
XX0361PNU-ILPAS	36	3	0.75	19.05	359	534	1000	4448	300	1334
XX0481PNU-ILPAS	48	4	0.80	20.00	398	592	1000	4448	300	1334
XX0601PNU-ILPAS	60	5	0.86	21.74	441	657	1000	4448	300	1334
XX0721PNU-ILPAS	72	6	0.98	24.92	489	1054	1000	4448	300	1334
XX0961PNU-ILPAS	96	8	1.03	26.16	542	1281	1000	4448	335	1490
XX1201PNU-ILPAS	120	10	1.15	29.21	601	1281	1000	4448	335	1490
XX1441PNU-ILPAS	144	12	1.26	32.00	667	1281	1000	4448	335	1490

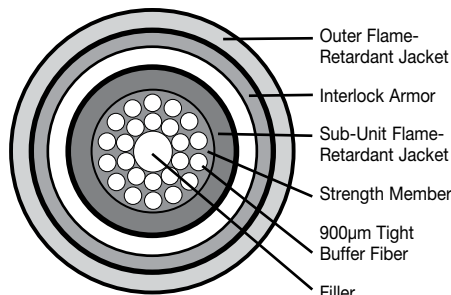
XX Denotes glass type.

A complete listing of NextGen® Brand glass types is specified on page 3 of this catalog.

Typical Cross-Sections



PNU-ILPAS ≥ 24 Fiber



PNU-ILPA ≤ 24 Fiber

Hybrid designs (containing singlemode and multimode fiber) and composite designs (containing copper conductors) are also available.

Ordering Part Number Example

CG0241PNU-ILPA or CG0241PNU-ILPAS

62.5 multimode with 24 fibers.

Please see pages 4 and 5 for a complete guide on part number selection and ordering information.

Product Construction:

Fiber:

- 4–96 fibers
- 900µm tight buffer
- Color-coding per TIA/EIA 598B

Overall Strength Member:

- Aramid fiber yarn

Inner Jacket:

- Flame-retardant material

Armor:

- Interlock aluminum (-ILPA)

Option:

- Interlock galvanized steel

Outer Jacket:

- Sequential footage markings*
- Orange Jacket—Multimode fibers (except 10 Gbps)
- Aqua Jacket—10 Gbps Multimode fibers
- Yellow Jacket—Singlemode fibers

Features:

- Interlock armor provides outstanding mechanical protection
- Interlock armor is flexible and easy to use
- Tight buffer provides individual fiber protection
- Sub-units are numbered for identification

Performance:

- Temperature: Storage -40°C (-40°F) to +70°C (+158°F) Operating -20°C (-4°F) to +70°C (+158°F)
- Minimum Bend Radius 20 X OD—Installation 10 X OD—In-Service
- Maximum Crush Resistance: 1,500 lbs/in (2,627 N/cm)

Applications:

- Harsh premises environments requiring heavy-duty protection
- ETL Type OFCP for installation in any premises location when installed in accordance with NEC article 770-51 (a) and 770-53 (a)

Compliances:

- ETL Listed Type OFCP
- CSA FT-6

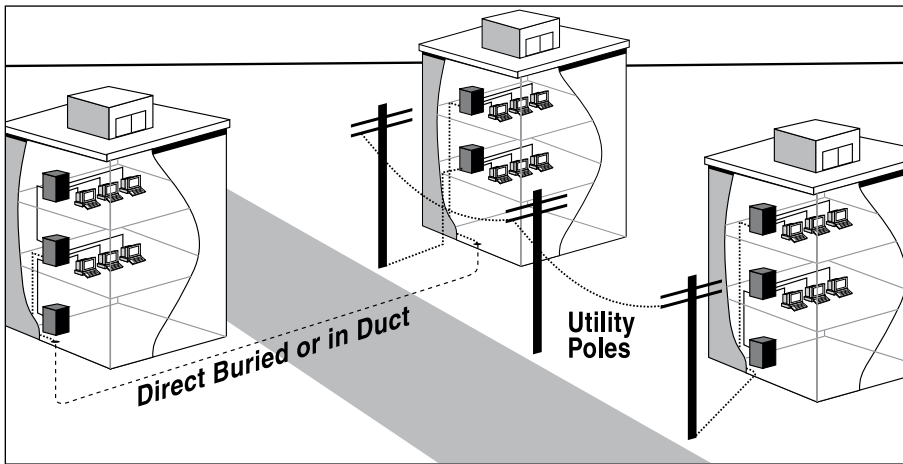
Note:

Armored cable without an outer jacket available upon request (-IL)

*Sequential meter markings available upon request



NextGen® Brand Indoor/Outdoor Cables



The concept, production and application of indoor/outdoor fiber optic cables has been a big part of the NextGen® Brand product line for more than a decade. As a leader in easy-to-use, field-friendly fiber optic cables, the indoor/outdoor product line has been especially well-known to users who appreciate the features it provides.

Applications: Whether primarily for indoor or outdoor use, we have an impressive choice of products that have the ability to route from either a plenum or riser building space to an outdoor run. This eliminates the costly and space-consuming transition point at the building entrance and improves the system loss budget. These cables are most efficient when used to directly connect equipment rooms (on any floor) in different buildings or to connect a manhole location to an equipment room.

Range of Products:

Indoor/outdoor fiber optic cables include loose tube (dry or gel-filled) and tight buffer (900µm) designs. These are available in a variety of configurations and jacket types to cover riser and plenum requirements for indoor cable and the ability to be run in duct, direct buried or aerial/lashed in the outside plant. The following catalog pages provide information on proper interbuilding and intrabuilding applications.

Features: These products reduce the system cost by eliminating splice points, simplifying cable handling and gaining flexibility with the choice of building entrances. All cables meet appropriate NEC requirements and are listed with ETL or UL. Tight buffer designs allow direct termination of fibers with industry-standard connectors and techniques. Loose tube designs provide more fiber protection in

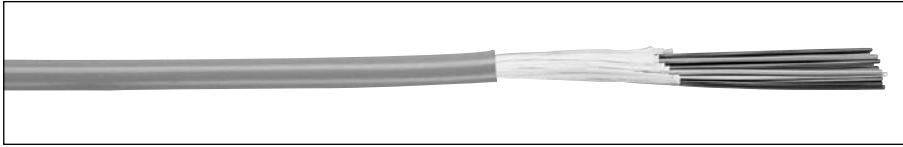
Index	Page
Tight Buffer Distribution Riser Cable	25
Tight Buffer Distribution Plenum Cable	26
Central Tube Single Jacket Plenum Cable	27
Loose Tube Single Jacket Plenum Cable	28
Loose Tube Single Jacket Riser Cable	29
Loose Tube Dual Jacket Riser Cable—Chemical-Resistant	30
Loose Tube Single Jacket Low-Smoke, Zero-Halogen (LSZH) Cable	31
Loose Tube Dual Jacket Armored Low-Smoke, Zero-Halogen (LSZH) Cable	32

harsh outdoor environments and are readily spliced to existing outside plant cables. Most indoor/outdoor fiber optic cables utilize Dry Water Block technology in the cable core to protect the fibers and provide fast, clean fiber preparation.

As with all NextGen fiber optic cables, splitter kits are available to reinforce and assist in preparing the fibers for termination.

Tight Buffer Distribution Riser Cable

Type OFNP, CSA FT-4



Product Construction:

Fiber:

- 2–144 fibers
- 900µm tight buffer
- Color-coding per TIA/EIA 598B

Central Strength Member:

- Epoxy/glass rod (above 12 fibers)

Overall Strength Member:

- Aramid fiber yarn

Jacket:

- UV-resistant black jacket
- Flame-retardant polyvinyl chloride (PVC)
- Sequential footcage markings*

Option:

- Interlock steel or aluminum (-ILR or -ILRA)

Features:

- Dry Water Block cable core for fiber protection
- Improved temperature performance
- Direct termination of connectors on tight buffer
- Sub-units are numbered for identification

Performance:

- Temperature: Storage -40°C (-40°F) to +70°C (+158°F)
Operating -40°C (-40°F) to +70°C (+158°F)
- Minimum Bend Radius:
20 X OD—Installation
10 X OD—In-Service
- Maximum Crush Resistance:
850 lbs/in (1485 N/cm)
- Maximum Vertical Rise—1,640 ft (500 m)

Applications:

- Intrabuilding and interbuilding voice or data communication backbones
- Outdoor use in ducts and underground conduits
- UL Listed Type OFNR for installation in vertical riser and general horizontal applications when installed in accordance with NEC article 770-51 (b) and 770-53 (b)

Compliances:

- UL and c(UL) Listed Type OFNR
- CSA FT-4
- ICEA S-104-696

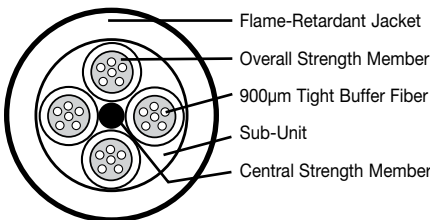
*Sequential meter markings available upon request

CATALOG NUMBER	FIBER COUNT	NO. OF SUB-UNITS	NOMINAL CABLE DIAMETER		NOMINAL CABLE WEIGHT		MAXIMUM TENSILE LOAD			
			IN	mm	LBS/1000'	kg/km	INSTALLATION		IN-SERVICE	
							LBS	N	LBS	N
XX0021ANR.BK	2	—	0.19	5	14	20	300	1334	90	400
XX0041ANR.BK	4	—	0.20	5	16	24	320	1423	96	427
XX0061ANR.BK	6	—	0.22	6	18	27	320	1423	96	427
XX0081ANR.BK	8	—	0.22	6	20	30	320	1423	96	427
XX0101ANR.BK	10	—	0.24	6	23	34	400	1780	120	534
XX0121ANR.BK	12	—	0.25	6	24	36	400	1780	120	534
XX0181A1R.BK	18	3	0.47	12	79	118	750	3336	250	1112
XX0181ANR.BK	18	—	0.33	8	45	67	320	1425	112	500
XX0241A1R.BK	24	4	0.53	13	86	128	1000	4448	300	1334
XX0241ANR.BK	24	—	0.34	9	47	70	320	1425	112	500
XX0361A1R.BK	36	6	0.66	17	147	219	1300	5783	390	1735
XX0481A1R.BK	48	4	0.64	16	137	204	1300	5783	390	1735
XX0601A1R.BK	60	5	0.70	18	168	250	1500	6672	450	2002
XX0721A1R.BK	72	6	0.77	20	207	308	1900	8452	570	2535
XX0961A1R.BK	96	8	0.91	23	289	430	2000	8896	670	2980
XX1201A1R.BK	120	10	1.02	26	313	466	3000	13345	1000	4448
XX1441A1R.BK	144	12	1.02	26	314	467	3000	13345	1000	4448

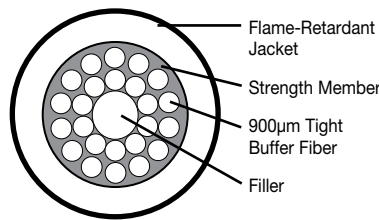
XX Denotes glass type.

A complete listing of NextGen® Brand glass types is specified on page 3 of this catalog.

Typical Cross-Sections



A1R ≥ 18 Fiber



ANR ≤ 24 Fiber

Hybrid designs (containing singlemode and multimode fiber) and composite designs (containing copper conductors) are also available.

Ordering Part Number Example

BE0241ANR.BK or BE0241A1R.BK

50 micron OM-3 multimode with 24 fibers.

Please see pages 4 and 5 for a complete guide on part number selection and ordering information.



Tight Buffer Distribution Plenum Cable

Indoor/Outdoor Dry Water Block, Type OFNP, CSA FT-6

Product Construction:

Fiber:

- 2–96 fibers
- 900µm tight buffer
- Color-coding per TIA/EIA 598B

Central Strength Member:

- Epoxy/glass rod (above 12 fibers)

Overall Strength Member:

- Aramid yarn

Jacket:

- UV-resistant black jacket
- Flame-retardant polymer
- Sequential footage markings*

Option:

- Interlock steel or aluminum (-ILP or -ILPA)

Features:

- Dry Water Block cable core for fiber protection. Improved temperature performance
- Direct termination of connectors on tight buffer. Sub-units are numbered for identification

Performance:

- Temperature:
 - Storage -40°C (-40°F) to +70°C (+158°F)
 - Operating -40°C (-40°F) to +70°C (+158°F)
- Minimum Bend Radius:
 - 20 X OD—Installation
 - 10 X OD—In-Service
- Maximum Crush Resistance: 850 lbs/in (1485 N/cm)
- Maximum Vertical Rise—1,640 ft (500 m)

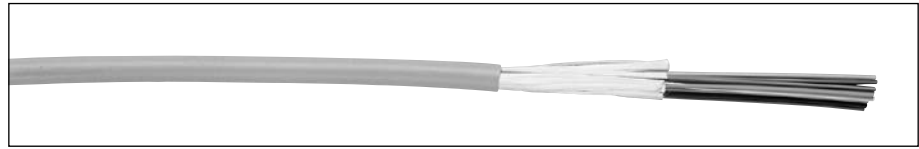
Applications:

- Intrabuilding and interbuilding voice or data communication backbones
- Outdoor use in ducts and underground conduits
- UL Listed Type OFNP for installation in vertical riser and general horizontal applications when installed in accordance with NEC article 770-51 (a) and 770-53 (a)

Compliances:

- UL and c(UL) Listed Type OFNP
- CSA FT-6
- ICEA S-104-696

*Sequential meter markings available upon request



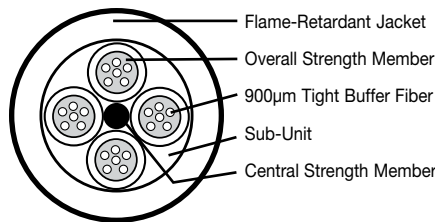
CATALOG NUMBER	FIBER COUNT	NO. OF SUB-UNITS	NOMINAL CABLE DIAMETER		NOMINAL CABLE WEIGHT		MAXIMUM TENSILE LOAD				
			IN	mm	LBS/1000'	kg/km	INSTALLATION		IN-SERVICE		
								LBS	N	LBS	N
XX0021ANU.BK	2	—	0.171	4.3	11.7	17.4	300	1334	90	400	
XX0041ANU.BK	4	—	0.181	4.6	13.7	20.4	320	1423	96	427	
XX0061ANU.BK	6	—	0.195	4.9	16.0	23.8	320	1423	96	427	
XX0081ANU.BK	8	—	0.205	5.2	18.0	26.8	320	1423	96	427	
XX0101ANU.BK	10	—	0.221	5.6	20.7	30.8	400	1780	120	534	
XX0121ANU.BK	12	—	0.227	5.8	22.7	33.8	400	1780	120	534	
XX0181ANU.BK	18	—	0.310	8.0	42.0	63	320	1423	112	500	
XX0241ANU.BK	24	—	0.320	8.0	45.0	67	320	1423	112	500	
XX0361A1D.BK	36	6	0.610	15.5	151	225	1300	5783	390	1735	
XX0481A1D.BK	48	4	0.582	14.8	135	200	1300	5783	390	1735	
XX0601A1D.BK	60	5	0.670	17.0	186	277	1500	6672	450	2002	
XX0721A1D.BK	72	6	0.730	18.5	217	323	1900	8452	570	2535	
XX0961A1D.BK	96	8	0.860	21.8	312	464	2000	8896	670	2980	

XX Denotes glass type.

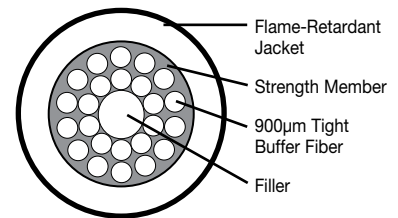
A complete listing of NextGen® Brand glass types is specified on page 3 of this catalog.

* Double Jacket Design

Typical Cross-Sections



A1D.BK ≥ 36 Fiber



ANU.BK ≤ 24 Fiber

Hybrid designs (containing singlemode and multimode fiber) and composite designs (containing copper conductors) are also available.

Ordering Part Number Example

BE0241ANU.BK or BE0361A1D.BK

50 micron OM-3 multimode with 24 or 36 fibers.

Please see pages 4 and 5 for a complete guide on part number selection and ordering information.

Central Tube Single Jacket Plenum Cable

Type OFNP, CSA FT-6

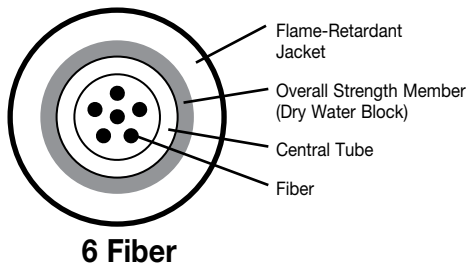


CATALOG NUMBER	FIBER COUNT	NO. OF LOOSE TUBES	NOMINAL CABLE DIAMETER		NOMINAL CABLE WEIGHT		MAXIMUM TENSILE LOAD			
			IN	mm	LBS/1000'	kg/km	INSTALLATION		IN-SERVICE	
							LBS	N	LBS	N
XX0024UNU	2	1	0.26	6.6	35	51	300	1334	100	445
XX0044UNU	4	1	0.26	6.6	35	51	300	1334	100	445
XX0064UNU	6	1	0.26	6.6	35	51	300	1334	100	445
XX0084UNU	8	1	0.26	6.6	35	51	300	1334	100	445
XX0124UNU	12	1	0.26	6.6	35	51	300	1334	100	445

XX Denotes glass type.

A complete listing of NextGen® Brand glass types is specified on page 3 of this catalog.

Typical Cross-Section



Product Construction:

Fiber:

- 2–12 fibers
- Dry central tube with Super Absorbent Polymer
- Color-coding per TIA/EIA 598B

Overall Strength Member:

- Aramid fiber yarn or fiberglass

Jacket:

- Black UV-, moisture-resistant and flame-retardant materials
- Sequential footage markings*

Option:

- Interlock steel or aluminum (-ILP or -ILPA)

Features:

- Simple, flexible design allows for easier installations
- Plenum-rated for indoor applications
- UV- and moisture-resistant for outdoor applications
- Dry loose tube for ease of termination
- Dry Water Block cable core for ease of handling

Performance:

- Temperature: Storage -40°C (-40°F) to +70°C (+158°F)
Operating -20°C (-4°F) to +70°C (+158°F)
- Minimum Bend Radius: 20 X OD—Installation
10 X OD—In-Service
- Maximum Crush Resistance: 150 lbs/in (263 N/cm)
- Maximum Vertical Rise—1,200 ft (366 m)

Applications:

- Intrabuilding voice or data communication backbones
- Installed in ducts, underground conduits or aerial/lashed
- Type OFNP for installation in plenum airways and horizontal applications when installed in accordance with NEC article 770-51 (a) and 770-53 (a)

Compliances:

- ETL Listed Type OFNP
- CSA FT-6
- ICEA S-104-696

*Sequential meter markings available upon request

Hybrid designs (containing singlemode and multimode fiber) and composite designs (containing copper conductors) are also available.

Ordering Part Number Example

BE0124UNU

50 micron OM-3 multimode with 12 fibers.

Please see pages 4 and 5 for a complete guide on part number selection and ordering information.



Loose Tube Single Jacket Plenum Cable

Type OFNP, CSA FT-6

Product Construction:

Fiber:

- 2–144 fibers
- Dry loose tube with Super Absorbent Polymer
- Color-coding per TIA/EIA 598B

Central Strength Member:

- Epoxy/glass rod

Overall Strength Member:

- Aramid fiber yarn or fiberglass

Jacket:

- Black UV-, moisture-resistant and flame-retardant materials; different colors available upon request
- Sequential footage markings*

Option:

- Interlock steel or aluminum (-ILP or -ILPA)

Features:

- Loose tube plenum design provides maximum cable route flexibility
- Dry loose tube for ease of termination
- Enhanced temperature performance
- Excellent chemical-resistant cable for harsh industrial environments

Performance:

- Temperature:
Storage -40°C (-40°F) to +70°C (+158°F)
Operating -20°C (-4°F) to +70°C (+158°F)
- Minimum Bend Radius:
20 X OD—Installation
10 X OD—In-Service
- Maximum Crush Resistance:
150 lbs/in (263 N/cm)

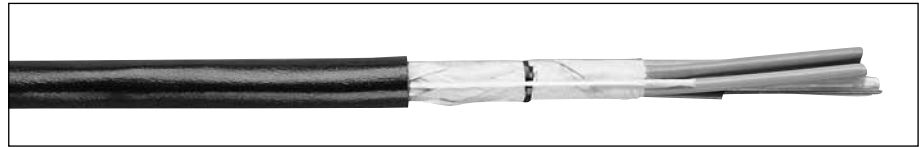
Applications:

- Interbuilding and intrabuilding voice or data communication backbones
- Install in ducts, underground conduits or aerial/lashed
- ETL Listed Type OFNP for installation in plenum airways and horizontal applications when installed in accordance with NEC article 770-51 (a) and 770-53 (a)

Compliances:

- ETL and c(ETL) Listed Type OFNP
- CSA FT-6
- ICEA S-104-696

*Sequential meter markings available upon request



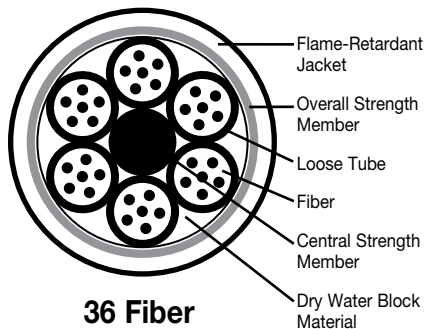
CATALOG NUMBER	FIBER COUNT	NO. OF LOOSE TUBES	NOMINAL CABLE DIAMETER		NOMINAL CABLE WEIGHT		MAXIMUM TENSILE LOAD				
			IN	mm	LBS/1000'	kg/km	INSTALLATION		IN-SERVICE		
								LBS	N	LBS	N
XX0023M1D-DT	2	2	0.31	8	46	69	300	1334	100	445	
XX0044M1D-DT	4	1	0.31	8	47	70	300	1334	100	445	
XX0064M1D-DT	6	1	0.31	8	48	71	300	1334	100	445	
XX0084M1D-DT	8	2	0.31	8	46	69	300	1334	100	445	
XX0124M1D-DT	12	2	0.31	8	47	69	300	1334	100	445	
XX0184M1D-DT	18	3	0.31	8	45	67	300	1334	100	445	
XX0244M1D-DT	24	4	0.31	8	44	65	300	1334	100	445	
XX0364M1D-DT	36	6	0.34	9	50	75	300	1334	100	445	
XX0484M1D-DT	48	4	0.38	10	57	85	300	1334	100	445	
XX0604M1D-DT	60	5	0.38	10	54	80	300	1334	100	445	
XX0724M1D-DT	72	6	0.41	10	65	97	300	1334	100	445	
XX0964M1D-DT	96	8	0.48	12	98	146	300	1334	100	445	
XX1444H1D-DT*	144	12	0.69	18	179	266	300	1334	100	445	

XX Denotes glass type.

A complete listing of NextGen® Brand glass types is specified on page 3 of this catalog.

* Double Jacket Design

Typical Cross-Section



36 Fiber

Hybrid designs (containing singlemode and multimode fiber) and composite designs (containing copper conductors) are also available.

Ordering Part Number Example

BE0124M1D-DT

50 micron OM-3 multimode with 12 fibers.

Please see pages 4 and 5 for a complete guide on part number selection and ordering information.

Loose Tube Single Jacket Riser Cable

Type OFNR, CSA FT-4

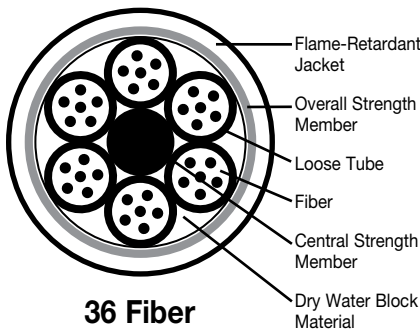


CATALOG NUMBER	FIBER COUNT	NO. OF LOOSE TUBES	NOMINAL CABLE DIAMETER		NOMINAL CABLE WEIGHT		MAXIMUM TENSILE LOAD				
			IN	mm	LBS/1000'	kg/km	INSTALLATION		IN-SERVICE		
								LBS	N	LBS	N
XX0024M1M-DT	2	2	.36	9	52	78	600	2670	200	890	
XX0044M1M-DT	4	1	.36	9	53	79	600	2670	200	890	
XX0064M1M-DT	6	1	.36	9	53	80	600	2670	200	890	
XX0084M1M-DT	8	2	.36	9	52	78	600	2670	200	890	
XX0124M1M-DT	12	2	.36	9	52	78	600	2670	200	890	
XX0184M1M-DT	18	3	.36	9	52	77	600	2670	200	890	
XX0244M1M-DT	24	4	.36	9	51	76	600	2670	200	890	
XX0364M1M-DT	36	6	.38	10	58	86	600	2670	200	890	
XX0484M1M-DT	48	4	.42	11	64	96	600	2670	200	890	
XX0604M1M-DT	60	5	.42	11	62	92	600	2670	200	890	
XX0724M1M-DT	72	6	.45	12	75	112	600	2670	200	890	
XX0964M1M-DT	96	8	.57	14	109	162	600	2670	200	890	
XX1444M1M-DT	144	12	.69	17	169	251	600	2670	200	890	

XX Denotes glass type.

A complete listing of NextGen® Brand glass types is specified on page 3 of this catalog.

Typical Cross-Section



36 Fiber

Hybrid designs (containing singlemode and multimode fiber) and composite designs (containing copper conductors) are also available.

For complete listing of all fiber counts offered, please contact your General Cable sales representative.

Ordering Part Number Example

BE0124M1M-DT

50 micron OM-3 multimode with 12 fibers.

Please see pages 4 and 5 for a complete guide on part number selection and ordering information.

Product Construction:

Fiber:

- 2-144 fibers
- Dry loose tube with Super Absorbent Polymer
- Color-coding per TIA/EIA 598B

Central Strength Member:

- Epoxy/glass rod

Overall Strength Member:

- Aramid fiber yarn

Jacket:

- Black UV-, moisture-resistant and flame-retardant polymer material
- Sequential footage markings*

Option:

- Interlock steel or aluminum (-ILR or -ILRA)

Features:

- Dry Water Block cable core for ease of handling
- Dry loose tube for ease of termination
- Riser rated for indoor applications

Performance:

- Temperature:
 - Storage -40°C (-40°F) to +70°C (+158°F)
 - Operating -40°C (-40°F) to +70°C (+158°F)
- Minimum Bend Radius:
 - 20 X OD—Installation
 - 10 X OD—In-Service
- Maximum Crush Resistance:
 - 150 lbs/in (263 N/cm)
- Maximum Vertical Rise—1,640 ft (500 m)

Applications:

- Interbuilding and intrabuilding voice or data communication backbones
- Installed in ducts, underground conduits or aerial/lashed
- ETL Listed Type OFNR for installation in vertical riser and general horizontal applications when installed in accordance with NEC article 770-51 (b) and 770-53 (b)

Compliances:

- ETL and c(ETL) Listed Type OFNR
- CSA FT-4
- ICEA S-104-696

*Sequential meter markings available upon request

Loose Tube Dual Jacket Riser Cable—Chemical-Resistant

Type OFNR, CSA FT-4

Product Construction:

Fiber:

- 2–216 fibers
- Dry loose tube with Super Absorbent Polymer
- Color-coding per TIA/EIA 598B

Central Strength Member:

- Epoxy/glass rod

Overall Strength Member:

- Aramid fiber yarn or fiberglass

Inner Jacket:

- Orange UV-, moisture-resistant and flame-retardant material

Outer Jacket:

- Black UV-, moisture-resistant and flame-retardant material
- Sequential footage markings*

Option:

- Interlock steel or aluminum (-ILR or -ILRA)

Features:

- Excellent chemical resistance
- Dual-jacketed for harsh environments
- Riser-rated for indoor applications
- UV- and moisture-resistant for outdoor applications
- Dry Water Block cable core for ease of handling
- Dry loose tube for ease of termination

Performance:

- Temperature:
Storage -40°C (-40°F) to +70°C (+158°F)
Operating -40°C (-40°F) to +70°C (+158°F)
- Minimum Bend Radius:
20 X OD—Installation
10 X OD—In-Service
- Maximum Crush Resistance:
500 lbs/in (875 N/cm)
- Maximum Vertical Rise—1,640 ft (500 m)

Applications:

- Interbuilding and intrabuilding voice or data communication backbones
- Installed in ducts, aerial/lashed or direct burial
- UL Listed Type OFNR for installation in vertical riser and general horizontal applications when installed in accordance with NEC article 770-51 (b) and 770-53 (b)

Compliances:

- UL and c(UL) Listed Type OFNR
- CSA FT-4
- CEA S-104-696

*Sequential meter markings available upon request

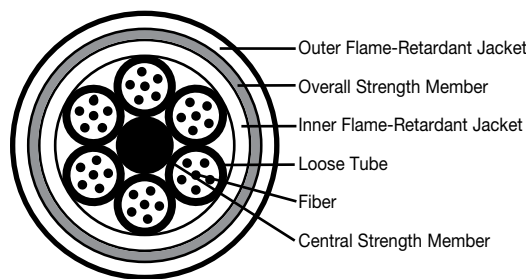


CATALOG NUMBER	FIBER COUNT	NO. OF LOOSE TUBES	NOMINAL CABLE DIAMETER		NOMINAL CABLE WEIGHT		MAXIMUM TENSILE LOAD				
			IN	mm	LBS/1000'	kg/km	INSTALLATION		IN-SERVICE		
								LBS	N	LBS	N
XX0023H1M-DT	2	2	.42	11	75	112	600	2670	200	890	
XX0044H1M-DT	4	1	.42	11	75	112	600	2670	200	890	
XX0064H1M-DT	6	1	.42	11	75	112	600	2670	200	890	
XX0084H1M-DT	8	2	.42	11	75	112	600	2670	200	890	
XX0124H1M-DT	12	2	.42	11	75	112	600	2670	200	890	
XX0184H1M-DT	18	3	.42	11	75	112	600	2670	200	890	
XX0244H1M-DT	24	4	.42	11	75	112	600	2670	200	890	
XX0364H1M-DT	36	6	.45	11	84	125	600	2670	200	890	
XX0484H1M-DT	48	4	.48	12	96	142	600	2670	200	890	
XX0604H1M-DT	60	5	.48	12	94	139	600	2670	200	890	
XX0724H1M-DT	72	6	.52	13	109	162	600	2670	200	890	
XX0964H1M-DT	96	8	.59	15	144	214	600	2670	200	890	
XX1204H1M-DT	120	10	.66	17	171	255	600	2670	200	890	
XX1444H1M-DT	144	12	.73	18	210	312	600	2670	200	890	
XX1924H1M-DT	192	16	.73	19	217	323	600	2670	200	890	
XX2164H1M-DT	216	18	.73	19	210	313	600	2670	200	890	

XX Denotes glass type.

A complete listing of NextGen® Brand glass types is specified on page 3 of this catalog.

Typical Cross-Section



36 Fiber

Hybrid designs (containing singlemode and multimode fiber) and composite designs (containing copper conductors) are also available.

Ordering Part Number Example

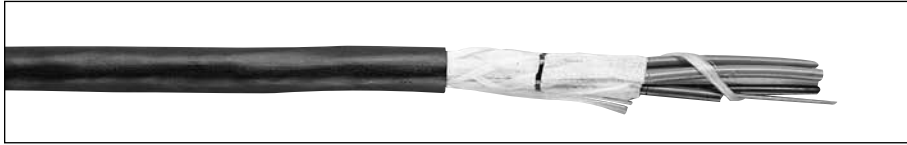
BE0124H1M-DT

50 micron OM-3 multimode with 12 fibers.

Please see pages 4 and 5 for a complete guide on part number selection and ordering information.

Loose Tube Single Jacket Low-Smoke, Zero-Halogen (LSZH) Cable

Type OFN/LS



Product Construction:

Fiber:

- 2-144 fibers
- Loose tube gel-filled
- Color-coding per TIA/EIA 598B

Central Strength Member:

- Epoxy/glass rod

Overall Strength Member:

- Aramid fiber yarn

Jacket:

- Black UV-, moisture-resistant and flame-retardant LSZH polymer
- Sequential footage markings*

Features:

- Dry Water Block cable core for ease of handling
- Loose tube gel-filled for maximum fiber protection
- LSZH jacket for fire protection

Performance:

- Temperature: Storage -40°C (-40°F) to +70°C (+158°F)
Operating -40°C (-40°F) to +70°C (+158°F)
- Minimum Bend Radius: 20 X OD—Installation
10 X OD—In-Service
- Maximum Crush Resistance: 150 lbs/in (263 N/cm)
- Maximum Vertical Rise—1,640 ft (500 m)

Applications:

- Interbuilding and intrabuilding voice or data communication backbones
- Installed in ducts, underground conduits or aerial/lashed
- UL Listed Type OFN/LS for installation in cable trays and general horizontal applications when installed in accordance with NEC article 770-51 (d) and 770-53 (c)

Compliances:

- UL and c(UL) Listed Type OFN/LS
- ICEA S-104-696

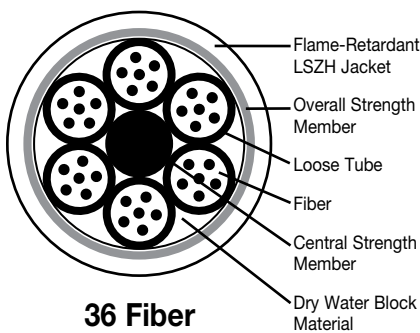
*Sequential meter markings available upon request

CATALOG NUMBER	FIBER COUNT	NO. OF LOOSE TUBES	NOMINAL CABLE DIAMETER		NOMINAL CABLE WEIGHT		MAXIMUM TENSILE LOAD				
			IN	mm	LBS/1000'	kg/km	INSTALLATION		IN-SERVICE		
								LBS	N	LBS	N
XX0023M1Z	2	2	.36	9	59	89	600	2670	200	890	
XX0044M1Z	4	1	.36	9	59	89	600	2670	200	890	
XX0064M1Z	6	1	.36	9	59	89	600	2670	200	890	
XX0084M1Z	8	2	.36	9	59	89	600	2670	200	890	
XX0124M1Z	12	2	.36	9	60	89	600	2670	200	890	
XX0184M1Z	18	3	.36	9	60	89	600	2670	200	890	
XX0244M1Z	24	4	.36	9	61	90	600	2670	200	890	
XX0364M1Z	36	6	.38	10	66	98	600	2670	200	890	
XX0484M1Z	48	4	.41	10	74	110	600	2670	200	890	
XX0604M1Z	60	5	.41	10	74	110	600	2670	200	890	
XX0724M1Z	72	6	.44	11	83	123	600	2670	200	890	
XX0964M1Z	96	8	.51	13	100	148	600	2670	200	890	
XX1204M1Z	120	10	.57	15	127	189	600	2670	200	890	
XX1444M1Z	144	12	.63	16	151	225	600	2670	200	890	

XX Denotes glass type.

A complete listing of NextGen® Brand glass types is specified on page 3 of this catalog.

Typical Cross-Section



Hybrid designs (containing singlemode and multimode fiber) and composite designs (containing copper conductors) are also available.

Ordering Part Number Example

BE0244M1Z

50 micron OM-3 multimode with 24 fibers.

Please see pages 4 and 5 for a complete guide on part number selection and ordering information.



Loose Tube Dual Jacket Armored Low-Smoke, Zero-Halogen (LSZH) Cable

Product Construction:

Fiber:

- 2–144 fibers
- Loose tube gel-filled
- Color-coding per TIA/EIA 598B

Central Strength Member:

- Epoxy/glass rod

Overall Strength Member:

- Aramid fiber yarn or fiberglass

Inner Jacket:

- Black - LSZH polymer

Armor:

- 0.006" corrugated coated steel tape

Outer Jacket:

- Black - LSZH Polymer
- Sequential footage markings*

Features:

- Loose tube gel-filled construction for superior fiber protection
- UV- and moisture-resistant design
- Rodent-resistant construction
- Dry Water Block cable core for ease of handling

Performance:

- Temperature:
 - Storage -40°C (-40°F) to +80°C (+176°F)
 - Operating -40°C (-40°F) to +80°C (+176°F)
 - Installation -20°C (-4°F) to +80°C (+176°F)
- Minimum Bend Radius:
 - 20 X OD—Installation
 - 10 X OD—In-Service
- Maximum Crush Resistance:
 - 500 lbs/in (876 N/cm)

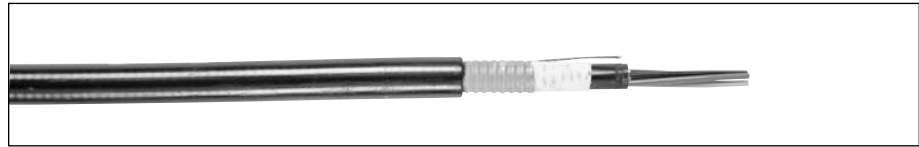
Applications:

- Interbuilding voice or data communication backbones
- Installed in ducts, underground conduits, aerial/lashed or direct buried
- Rapid Transit Systems

Compliances:

- ANSI/TIA/EIA 568B.3
- ICEA S-87-640
- Meets GR-20

*Sequential meter markings available upon request

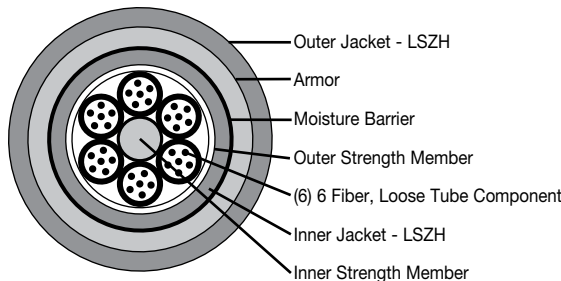


CATALOG NUMBER	FIBER COUNT	NO. OF LOOSE TUBES	NO. OF FILLERS	NOMINAL CABLE DIAMETER		NOMINAL CABLE WEIGHT		MAXIMUM TENSILE LOAD			
				IN	mm	LBS/1000'	kg/km	INSTALLATION		IN-SERVICE	
								LBS	N	LBS	N
XX0023H1L	2	2	3	0.56	15	120	194	600	2670	200	890
XX0044H1L	4	1	4	0.56	15	120	194	600	2670	200	890
XX0064H1L	6	1	4	0.56	15	120	194	600	2670	200	890
XX0084H1L	8	2	3	0.56	15	120	194	600	2670	200	890
XX0124H1L	12	2	3	0.56	15	120	194	600	2670	200	890
XX0184H1L	18	3	2	0.56	15	120	194	600	2670	200	890
XX0244H1L	24	4	1	0.56	15	120	194	600	2670	200	890
XX0364H1L	36	6	0	0.62	16	181	269	600	2670	200	890
XX0484H1L	48	4	1	0.66	17	190	283	600	2670	200	890
XX0604H1L	60	5	0	0.66	17	192	286	600	2670	200	890
XX0724H1L	72	6	0	0.68	17	197	293	600	2670	200	890
XX0964H1L	96	8	0	0.71	18	240	357	600	2670	200	890
XX1204H1L	120	10	0	0.74	19	255	379	600	2670	200	890
XX1444H1L	144	12	0	0.83	21	270	402	600	2670	200	890

XX Denotes glass type.

A complete listing of NextGen® Brand glass types is specified on page 3 of this catalog.

Typical Cross-Section



36 Fiber

Hybrid designs (containing singlemode and multimode fiber) and composite designs (containing copper conductors) are also available.

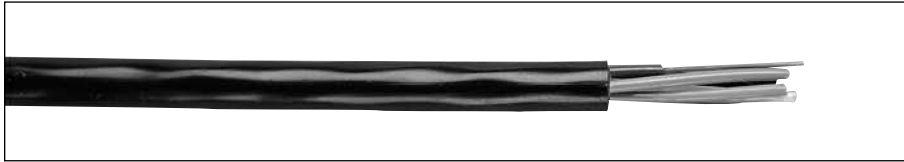
Ordering Part Number Example

BE0244H1L

50 micron OM-3 multimode with 24 fibers.

Please see pages 4 and 5 for a complete guide on part number selection and ordering information.

NextGen® Brand Interconnect Cables



Index	Page
3.0mm Simplex/Duplex Riser and Plenum Cable	34
1.6mm Simplex/Duplex Riser Cable	35

Interconnect cables are used in a variety of Fiber-To-The-Desk (FTTD) and network connection schemes. These cables are constructed to easily terminate with industry-standard connectors such as the SC and ST. To serve the new market evolution into high-density cabling and terminations, we offer an extended cable product line that is compatible with all of the new connection systems, such as MT-RJ, MTP, LC and other Small Form Factor (SFF) components.

Applications: Interconnect cables are generally one- or two-fiber cable constructions for use in horizontal runs (Fiber-To-The-Desk), as patchcords in communication closets and for OEM assemblies. These cables are constructed to easily terminate with industry-standard connectors such as the SC and the ST, as well as the new generation of Small Form Factor (SFF) connector designs.

Range of Products: Low fiber count (≤ 2) cables with riser (OFNR) or plenum (OFNP) listings comprise this family of cables.

Features: The interconnect cables are constructed to have the proper geometry to mate with industry-standard terminations. Generally, no breakout or splitter kits are required. The cables are very small and flexible so that they may be incorporated into high-density cable management systems. Some cables are available with Quik-Strip™ technology for easy removal of the 900µm layer.

3.0mm Simplex/Duplex Riser and Plenum Cable

Type OFNR, CSA FT-4 and Type OFNP, CSA FT-6

Product Construction:

Fiber:

- 1 or 2 fibers
- 900µm tight buffer

Overall Strength Member:

- Aramid fiber yarn

Jacket:

- 3.0mm unit diameters
- Flame-retardant polyvinyl chloride (PVC)
- Sequential footage markings*
- Orange Jacket—Multimode fibers (except 10 Gbps)
- Aqua Jacket—10 Gbps Multimode fibers
- Yellow Jacket—Singlemode fibers

Features:

- Industry-standard design
- Ideal for interconnect and Fiber-To-The-Desk (FTTD)

Performance:

- Temperature:
 - Storage -40°C (-40°F) to +70°C (+158°F)
 - Operating -20°C (-4°F) to +70°C (+158°F)
- Minimum Bend Radius:
 - 20 X OD—Installation
 - 10 X OD—In-Service
- Maximum Crush Resistance:
 - 500 lbs/in (875 N/cm)

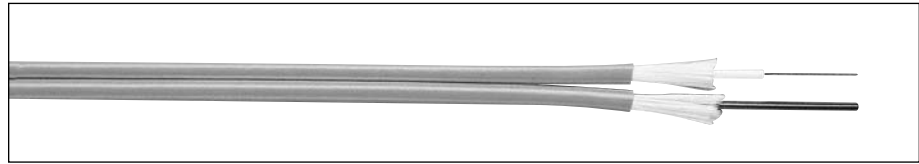
Applications:

- Interconnect design compatible with connectors requiring 3.0mm jacket diameter
- Fiber-To-The-Desk (FTTD)
- UL Listed Type OFNR for installation in vertical riser and general horizontal applications when installed in accordance with NEC article 770-51 (b) and 770-53 (b)
- UL Listed Type OFNP for installation in ducts, plenums and other spaces used as environmental air returns when installed in accordance with NEC article 770-51 (a) and 770-53 (a)

Compliances:

- UL and c(UL) Listed Type OFNR/OFNP
- CSA FT-4, CSA FT-6
- GR-409

*Sequential meter markings available upon request

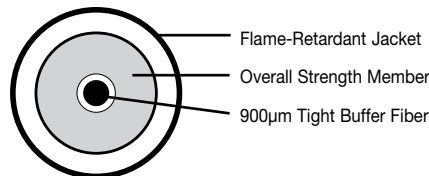


CATALOG NUMBER	FIBER COUNT	NO. OF SUB-UNITS	NOMINAL CABLE DIAMETER		NOMINAL CABLE WEIGHT		MAXIMUM TENSILE LOAD				
			IN	mm	LBS/1000'	kg/km	INSTALLATION		IN-SERVICE		
								LBS	N	LBS	N
Riser											
XX0011SNR3.0	1	—	0.118	3.0	5.5	8.2	110	490	65	290	
XX0021ZNR3.0	2	—	0.114 x 0.247	2.9 x 6.0	10.5	15.6	220	980	160	580	
Plenum											
XX0011SNU3.0	1	—	0.118	3.0	6.5	9.7	110	490	65	290	
XX0021ZNU3.0	2	—	0.114 x 0.247	2.9 x 6.0	12.1	18.0	220	980	160	580	

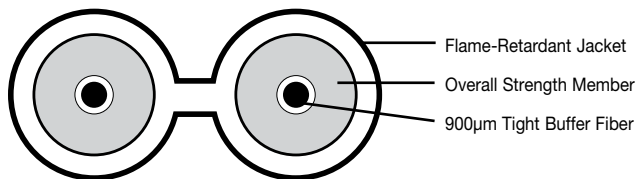
XX Denotes glass type.

A complete listing of NextGen® Brand glass types is specified on page 3 of this catalog.

Typical Cross-Section



Simplex



Duplex

Zipcord

Hybrid designs (containing singlemode and multimode fiber) and composite designs (containing copper conductors) are also available.

Ordering Part Number Example

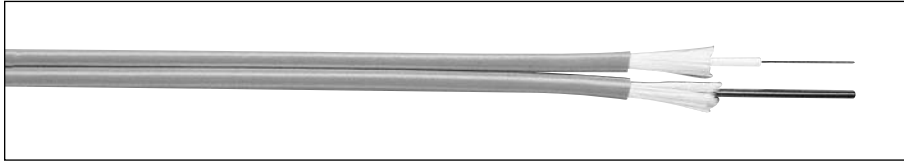
BE0011SNU3.0 or BE0021ZNU3.0

50 micron OM-3 multimode with one or two fibers.

Please see pages 4 and 5 for a complete guide on part number selection and ordering information.

1.6mm Simplex/Duplex Riser Cable

Type OFNR, CSA FT-4

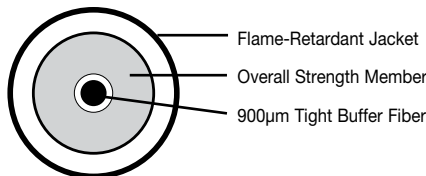


CATALOG NUMBER	FIBER COUNT	NO. OF SUB-UNITS	NOMINAL CABLE DIAMETER		NOMINAL CABLE WEIGHT		MAXIMUM TENSILE LOAD			
			IN	mm	LBS/1000'	kg/km	INSTALLATION		IN-SERVICE	
XX0011SNR1.6	1	—	0.063	1.6	1.7	2.5	25	111	7.5	33
XX0021ZNR1.6	2	—	0.063 x 0.136	1.6 x 3.5	3.5	5.2	50	222	15.0	67

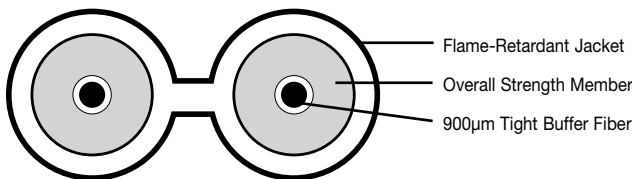
XX Denotes glass type.

A complete listing of NextGen® Brand glass types is specified on page 3 of this catalog.

Typical Cross-Section



Simplex



Duplex

Zipcord

Hybrid designs (containing singlemode and multimode fiber) and composite designs (containing copper conductors) are also available.

Ordering Part Number Example

BE0011SNR1.6 or BE0021ZNR1.6

50 micron OM-3 multimode with one or two fibers.

Please see pages 4 and 5 for a complete guide on part number selection and ordering information.

Product Construction:

Fiber:

- 1 or 2 fibers
- 900µm tight buffer

Overall Strength Member:

- Aramid fiber yarn

Jacket:

- 1.6mm unit diameters
- Flame-retardant polyvinyl chloride (PVC)
- Sequential footage markings*
- Orange Jacket—Multimode fibers (except 10 Gbps)
- Aqua Jacket—10 Gbps Multimode fibers
- Yellow Jacket—Singlemode fibers

Features:

- Compatible with LC connectors
- Ideal for interconnect and Fiber-To-The-Desk (FTTD)

Performance:

- Temperature:
 - Storage -40°C (-40°F) to +70°C (+158°F)
 - Operating -20°C (-4°F) to +70°C (+158°F)
- Minimum Bend Radius:
 - 20 X OD—Installation
 - 10 X OD—In-Service
- Maximum Crush Resistance:
 - 150 lbs/in (263 N/cm)

Applications:

- Interconnect design compatible with LC and other connectors requiring 1.6mm jacket diameter
- Fiber-To-The-Desk (FTTD)
- UL Listed Type OFNR for installation in vertical riser and general horizontal applications when installed in accordance with NEC article 770-51 (b) and 770-53 (b)

Compliances:

- ETL Listed Type OFNR
- CSA FT-4

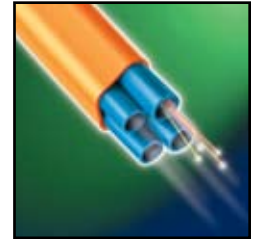
*Sequential meter markings available upon request

Blolite® Blown Fiber Technology— Revolutionizing Fiber Networks



Blown Fiber Technology

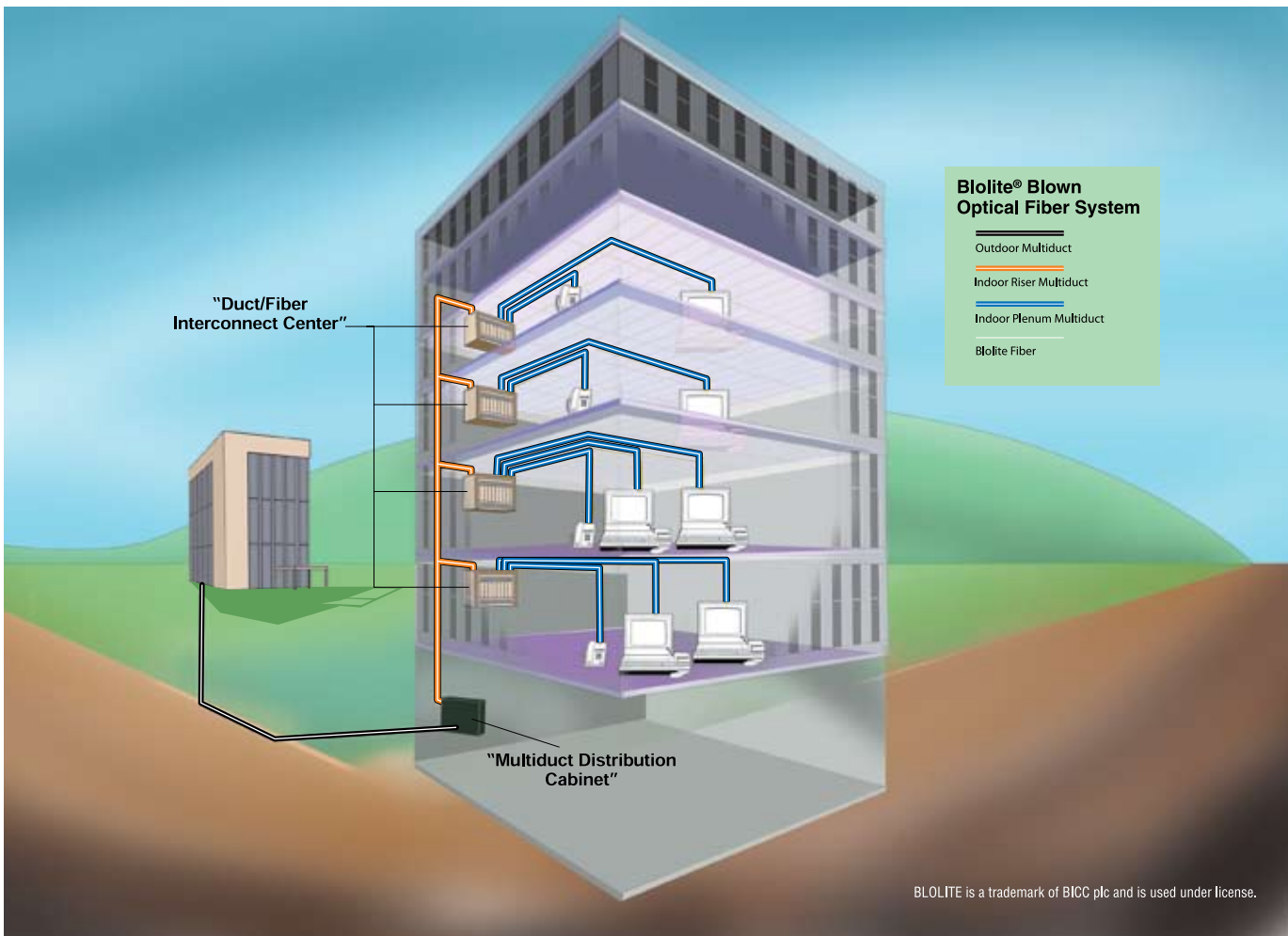
Blolite® blown optical fiber technology provides unparalleled flexibility in network design—anticipating and facilitating future changes as the network evolves. The Blolite system delivers the ultimate fiber solution for backbone and Fiber-To-The-Desk (FTTD) applications. The best long-term choice for your business, Blolite blown optical fiber technology will continue to provide significant and measurable time, cost and service benefits to the network throughout its life cycle.



How Does It Work?

Small, flexible, empty Microduct tubes are initially installed, and compressed air is then used to blow the optical fiber through the Microducts. As a result of our material and design technology, our blown fiber system offers the opportunity to install fiber through difficult runs and further distances where installation of traditional optical fiber would be challenging and expensive. This enhanced feature sets our system apart from others available in today's market. Microduct eliminates potential damage to fibers during installation since empty Microducts are installed initially, and fiber is blown in later.

Because the Blolite system is based upon simultaneously blowing individual fibers into each Microduct, designers have maximum flexibility regarding the number and type of fibers per Microduct. Color-coded fibers are typically supplied on master spools and cut to length during the blowing process. If necessary, routes can even be reconfigured on the fly during the installation process.



The Blolite® System Advantage

“Pay as you grow” Deferred Investment

Future-proof your network by installing only the fiber you need today, reserving Microduct capacity for tomorrow’s requirements. Design tactically to meet present needs, but build strategically for the long term. Pay as you grow.

Extraordinary Design Flexibility

The Blolite® system can adapt to any network architecture or topology changes over the life of your network. Quickly and economically add new destinations, relocate routes, change fiber types and counts, reconfigure LANs and add new services and technologies, as required. New sections of Microduct can be spliced to existing Microduct with a simple push-fit connector.

Adaptable to Any Environment

Blolite technology is compatible with any network topology and nearly every local area network installation environment. Moves, Adds and Changes (MACs) can be accomplished with minimal workplace disruption as your network evolves and changes.

Installation Ease

Microduct tubing and simple push-fit connectors make building a network infrastructure simple. Blolite eliminates potential damage from pulling and overstressing fiber optic cables, as well as resulting costs, delays or latent failures. Point-to-point links, easily achieved with Blolite for situations in which conventional fiber optic cable would require splices, mean lower attenuation, higher performance and increased system integrity.

Capability for Quick Recovery

Disaster recovery from physical damage to the cabling infrastructure with the Blolite system means days versus weeks, resulting in minimal downtime and labor costs. Only the damaged section of Microduct is removed and replaced, then within minutes, new optical fiber is blown in, then terminated. Much faster and a far less costly disaster recovery is one of the many obvious benefits of the Blolite blown fiber system.

Improved Reliability

Because Microduct is installed empty, there is no risk of fiber damage during installation. Optical fibers are blown into place, rather than pulled, with zero tensile stress on the fiber during the installation process. Because point-to-point links are easily accommodated, fiber splice points can be eliminated, lowering attenuation and increasing system performance and integrity.

Installation Cost Savings

Only two people are needed to blow in the optical fiber. Fiber terminations are typically quicker than with conventional cable, since no time needs to be devoted to cable preparation. Additionally, termination and testing is simplified with no dark fiber to contend with.

Blolite® Maximum Blowing Distances

(Tortuous = up to 300-90° bends. Non-tortuous = up to 90-90° bends.)

ROUTE TYPE	DUCT SIZE (mm)	NO. OF FIBERS	ROUTE LENGTH	
			METERS	FEET
Tortuous	5	2-8	300	984
Tortuous	5	10-12	150	500
Tortuous	8	2-8	600	1968
Tortuous	8	10-12	300	984
Non-tortuous	5	2-8	500	1640
Non-tortuous	5	10-12	305	1000
Non-tortuous	8	2-8	1000	3280
Non-tortuous	8	10-12	500	1640

Blolite® Products

Blolite® Blowable Fiber

The Blolite system offers the highest quality of optical fiber from Corning® in standard types of multimode 62.5/125 micron, 50/125 (1 Gb/s) or 50/125 (10 Gb/s), and singlemode 9/125, all with a special 485 micron blowable coating and available in 12 colors. The fibers are stripped and terminated with standard tools and compatible with standard fiber optic connectors.



Blolite Blowable Fiber

CATALOG NUMBER	DESCRIPTION	CATALOG NUMBER	DESCRIPTION
706730	MULTIMODE 50/125 (1 Gb/s) BLUE	707610	MULTIMODE 50/125 (10 Gb/s) BLUE
706740	MULTIMODE 50/125 (1 Gb/s) ORANGE	707620	MULTIMODE 50/125 (10 Gb/s) ORANGE
706750	MULTIMODE 50/125 (1 Gb/s) GREEN	707630	MULTIMODE 50/125 (10 Gb/s) GREEN
706760	MULTIMODE 50/125 (1 Gb/s) BROWN	707640	MULTIMODE 50/125 (10 Gb/s) BROWN
706770	MULTIMODE 50/125 (1 Gb/s) SLATE	707650	MULTIMODE 50/125 (10 Gb/s) SLATE
706780	MULTIMODE 50/125 (1 Gb/s) YELLOW	707660	MULTIMODE 50/125 (10 Gb/s) YELLOW
706790	MULTIMODE 50/125 (1 Gb/s) RED	707670	MULTIMODE 50/125 (10 Gb/s) RED
706800	MULTIMODE 50/125 (1 Gb/s) VIOLET	707680	MULTIMODE 50/125 (10 Gb/s) VIOLET
707730	MULTIMODE 50/125 (1 Gb/s) WHITE	707690	MULTIMODE 50/125 (10 Gb/s) WHITE
707490	MULTIMODE 50/125 (1 Gb/s) BLACK	707700	MULTIMODE 50/125 (10 Gb/s) BLACK
707500	MULTIMODE 50/125 (1 Gb/s) ROSE	707710	MULTIMODE 50/125 (10 Gb/s) ROSE
707510	MULTIMODE 50/125 (1 Gb/s) AQUA	707720	MULTIMODE 50/125 (10 Gb/s) AQUA
705820	MULTIMODE 62.5/125 BLUE	705900	SINGLEMODE BLUE
705830	MULTIMODE 62.5/125 ORANGE	705910	SINGLEMODE ORANGE
705840	MULTIMODE 62.5/125 GREEN	705920	SINGLEMODE GREEN
705850	MULTIMODE 62.5/125 BROWN	705930	SINGLEMODE BROWN
705860	MULTIMODE 62.5/125 SLATE	705940	SINGLEMODE SLATE
705870	MULTIMODE 62.5/125 YELLOW	705950	SINGLEMODE YELLOW
705880	MULTIMODE 62.5/125 RED	705960	SINGLEMODE RED
705890	MULTIMODE 62.5/125 VIOLET	705970	SINGLEMODE VIOLET
707400	MULTIMODE 62.5/125 WHITE	707440	SINGLEMODE WHITE
707410	MULTIMODE 62.5/125 BLACK	707450	SINGLEMODE BLACK
707420	MULTIMODE 62.5/125 ROSE	707460	SINGLEMODE ROSE
707430	MULTIMODE 62.5/125 AQUA	707470	SINGLEMODE AQUA

Blolite® Microduct

Microducts are empty plenum and non-plenum tubes that provide a pathway/conduit for blowing the fiber through the network. Up to 12 fibers can be installed simultaneously into each Microduct using the Blolite installation technique.



Microduct

CATALOG NUMBER	DESCRIPTION
FC9700006	OC-5MM-OFNP
FC9700008	OC-5MM-OFNR
FC9700014	OC-8MM-OFNP
FC9700007	OC-8MM-OFNR

Blolite® Products

Blolite® Multiduct

Multiduct is a jacketed bundle of Microduct tubing available in 2-, 4-, 7- or 19-way configurations. Multiduct cable is offered in plenum and non-plenum for indoor and dry duct outdoor installations or in an armored direct buried configuration.



Multiduct Cable			
Plenum Rated Duct		Outdoor Duct	
CATALOG NUMBER	DESCRIPTION	CATALOG NUMBER	DESCRIPTION
FC9700005	OC-2X5MM-OFNP	FC9700016	OC-2X5MM-OSP
FC9700003	OC-4X5MM-OFNP	FC9700017	OC-4X5MM-OSP
FC9700004	OC-7X5MM-OFNP	FC9700018	OC-7X5MM-OSP
		FC9700113	OC-19X5MM-OSP
		FC9700019	OC-2X8MM-OSP
		FC9700020	OC-4X8MM-OSP
		FC9700021	OC-7X8MM-OSP
		FC9700047	OC-19X8MM-OSP
Riser Rated Duct		Outdoor Direct Buried	
CATALOG NUMBER	DESCRIPTION	CATALOG NUMBER	DESCRIPTION
FC9700009	OC-2X5MM-OFNR	FC9700115	OC-19X5MM-OSP-DBA (ALUMINUM)
FC9700010	OC-4X5MM-OFNR	FC9700114	OC-19X5MM-OSP-DBS (STEEL)
FC9700011	OC-7X5MM-OFNR	FC9700106	OC-19X8MM-OSP-DBA (ALUMINUM)
FC9700013	OC-2X8MM-OFNR	FC9700112	OC-19X5MM-OSP-DBS (STEEL)
FC9700012	OC-4X8MM-OFNR		
FC9700015	OC-7X8MM-OFNR		

Blolite® Connectors and Accessories

Simple push-fit connectors join the Microduct sections and extend the Microduct network to each destination. A transparent center section of the connectors permits visual inspection to verify if the path is empty or populated with optical fiber.

Microduct Accessories	
CATALOG NUMBER	DESCRIPTION
77-7222	END CAPS 8MM
77-7223	END CAPS 5MM
77-7224	STRAIGHT CONN 5MM
77-7225	STRAIGHT CONN 8MM
77-7259	BULKHEAD CONN 5MM
77-7227	8MM>5MM REDUCER
77-7228	TEE CONN 5MM
77-7229	TEE CONN 8MM
77-7230	CONN PLUG 5MM
77-7231	CONN PLUG 8MM
707050	TUBE CUTTER
707060	TUBE CUTTER BLADES
706810	4-FIBER SPLITTER KIT
707600	12-FIBER SPLITTER KIT



Straight Connector



Installation Equipment

Blolite® Installation Equipment

The Blolite installation equipment kit (retail only) consists of an Air Supply Conditioning Unit (ACU)—complete with filtration and air-drying units, and the Installation Module—a blowing head utilizing a mechanically driven system to feed the fibers into the Microduct. A lightweight Tripod is the third component used to support the Installation Module. The equipment operates on standard compressed air at safe, low pressures.

Specialty Cable

Brand Rex Brand Specialty Cable

Brand Rex Brand fiber optic specialty cables are designed, engineered and manufactured to specification for specialized and custom applications for an extensive range of markets in military, marine/oil rig, transit, utility, industrial and other diverse applications.

Commitment

Our commitment to meet even the most stringent demands of our customers with the most advanced products is demonstrated by:

- Technical leadership through the research and development of Low-Smoke, Zero-Halogen (LSZH) cabling systems which inhibit the spread of fire, smoke and toxic fumes
- Our leading role in the development of thermoset jackets which stand up to severe stresses of installation and operation in hostile environments
- Engineering expertise in the design and manufacture of composite cables
- Dedicated state-of-the-art manufacturing facilities
- Comprehensive Total Quality Management programs



Expertise

We play a dedicated role in the design and production of special configurations and jacketing systems for military cables. We have a fully qualified range of shipboard cables to MIL-PRF-85045/13, 15, 16, 17, 18, 20, 21, 22, 23, 24, 25 and 26; additionally, our facilities have been awarded the MIL-STD-790 Product Assurance Program Certification. This program acknowledges and accepts in-house testing of fiber optic cabling system products and components from its inspected manufacturing facilities as full verification of compliance with QPL (Qualified Products List) specifications for military cables and accessories, by the Defense Supply Center, Columbus.

We also manufacture aerospace cables qualified for military-, commercial- and space-flight use. These engineering challenges are met utilizing our rigorous design philosophy, developed over decades of cable manufacturing experience.

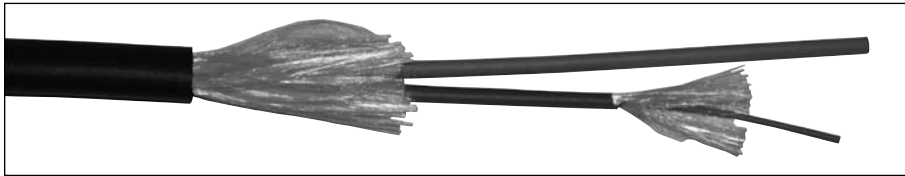
Knowledge

Our knowledgeable sales and engineering staff can assist you in determining the right cable solution designed for high performance and reliability under adverse conditions. Some factors to consider beforehand are:

- Current and future bandwidth requirements
- Acceptable attenuation rate over distance
- Cable dimension requirements
- Environmental and mechanical requirements, e.g., ruggedness, flexibility, flame retardance, abrasion and chemical resistance, temperature extremes
- UL/NEC and IEC requirements and compatibility with existing systems
- Signal source, connectors and terminations
- Cost of installation

By selecting us as your supplier, especially in specialized cabling systems, our products provide you with greater performance and in-service reliability, optimizing the life-cycle costs of your cabling system. Call us. We want to be part of your success.

Military Tactical Breakout Cable



Product Construction:

Fiber:

- 2–12 fibers
- 900µm tight buffer
- Color-coding per TIA/EIA 598B
- 2.0 mm jacketed sub-units

Central Strength Member:

- Epoxy/glass rod

Overall Strength Member:

- Aramid yarn

Jacket:

- Black polyurethane
- Sequential footage markings*
- Optional matte finish

Features:

- Rugged individual fiber protection
- Easy-to-terminate sub-units
- Heavy-duty field applications
- Designed to military standards
- Color-coded units for identification

Performance:

- Temperature:
 - Storage -70°C (-94°F) to +85°C (+185°F)
 - Operating -55°C (-67°F) to +85°C (+185°F)
- Minimum Bend Radius:
 - 16 X OD—Installation
 - 8 X OD—In-Service
- Maximum Crush Resistance:
 - 251 lbs/in (440 N/cm)
 - EIA/TIA-455-41
- Impact Resistance:
 - 200 impacts
 - EIA/TIA-455-25
- Flex Resistance:
 - 2000 cycles
 - EIA/TIA-455-104

Applications:

- Military Tactical field use and commercial applications in re-deployable communication systems
- TV camera applications
- Mining and harsh environments needing Mechanical and Chemical Resistance

Compliances:

- Tested to MIL-PRF-85045

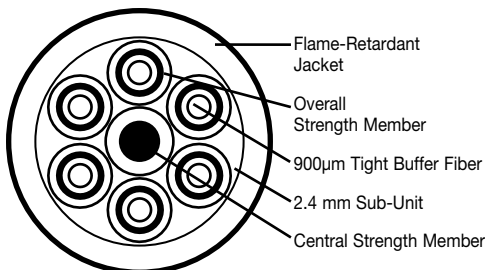
*Sequential meter markings available upon request

CATALOG NUMBER	FIBER COUNT	NO. OF SUB-UNITS	NOMINAL CABLE DIAMETER		NOMINAL CABLE WEIGHT		MAXIMUM TENSILE LOAD				
			IN	mm	LBS/1000'	kg/km	INSTALLATION		IN-SERVICE		
								LBS	N	LBS	N
XX0021B1C	2	2	.260	6.6	20	29	450	2002	149	663	
XX0041B1C	4	4	.290	7.4	24	36	450	2002	149	663	
XX0061B1C	6	6	.340	8.6	29	43	450	2002	149	663	
XX0081B1C	8	8	.390	10.0	36	54	700	3114	231	1028	
XX0101B1C	10	10	.450	11.4	46	68	900	4003	300	1334	
XX0121B1C	12	12	.480	12.2	52	78	1100	4893	360	1601	

XX Denotes glass type.

A complete listing of NextGen® Brand glass types is specified on page 3 of this catalog.

Typical Cross-Section



6 Fibers

Ordering Part Number Example

AP0041B1C

Singlemode with 4 fibers.

Please see pages 4 and 5 for a complete guide on part number selection and ordering information.

Military Tactical Distribution Cable

Product Construction:

Fiber:

- 2–12 fibers
- 900µm tight buffer
- Color-coding per TIA/EIA 598B

Overall Strength Member:

- Aramid yarn

Jacket:

- Black polyurethane
- Sequential footage markings*
- Optional matte finish

Features:

- Lightweight, rugged
- Withstands repeated flexing
- Compact design for ease of deployment
- Excellent mechanical protection for the fibers
- Designed to military standards

Performance:

- Temperature:
 - Storage -70°C (-94°F) to +85°C (+185°F)
 - Operating -55°C (-67°F) to +85°C (+185°F)
- Minimum Bend Radius:
 - 16 X OD—Installation
 - 8 X OD—In-Service
- Maximum Crush Resistance:
 - 251 lbs/in (440 N/cm)
 - EIA/TIA-445-41
- Impact Resistance:
 - 200 impacts
 - EIA/TIA-455-25
- Flex Resistance:
 - 2000 cycles
 - EIA/TIA-455-104

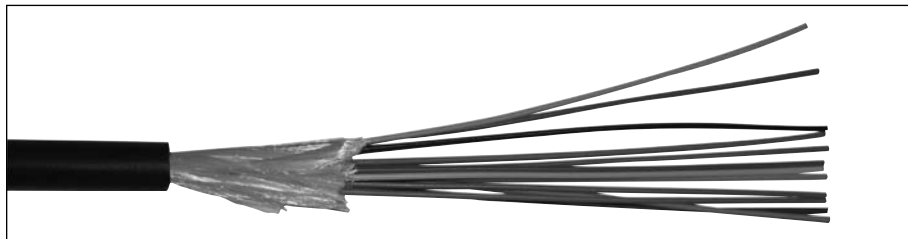
Applications:

- Military Tactical field use and commercial applications in re-deployable communication systems
- TV camera applications
- Mining and harsh environments needing Mechanical and Chemical Resistance

Compliances:

- Tested to MIL-PRF-85045

*Sequential meter markings available upon request

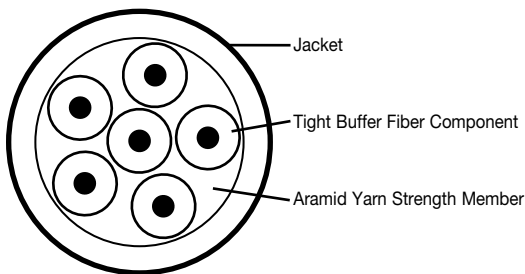


CATALOG NUMBER	FIBER COUNT	NO. OF SUB-UNITS	NOMINAL CABLE DIAMETER		NOMINAL CABLE WEIGHT		MAXIMUM TENSILE LOAD			
			IN	mm	LBS/1000'	kg/km	INSTALLATION		IN-SERVICE	
XX0021ANC	2	2	.200	5.0	15	22	400	1779	130	578
XX0041ANC	4	4	.220	5.6	19	28	400	1779	130	578
XX0061ANC	6	6	.240	6.1	21	31	400	1779	130	578
XX0081ANC	8	8	.250	6.4	25	37	400	1779	130	578
XX0101ANC	10	10	.280	2.2	30	45	450	2002	149	663
XX0121ANC	12	12	.280	2.2	34	51	450	2002	149	663

XX Denotes glass type.

A complete listing of NextGen® Brand glass types is specified on page 3 of this catalog.

Typical Cross-Section



6 Fibers

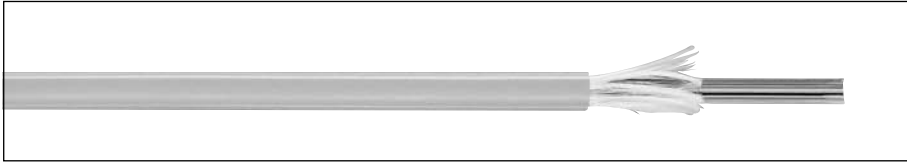
Ordering Part Number Example

AP0041ANC

Singlemode with 4 fibers.

Please see pages 4 and 5 for a complete guide on part number selection and ordering information.

Technical Information



The complexity of today’s telecommunications, voice and data transmissions has generated an increasing demand for more technical information. In the current business world, customer service representatives, engineers, distributors and end-users do not have the time to search for answers to their technical questions.

For additional technical information, please contact your sales representative or our customer service department.

We have included a limited technical section to help simplify these decisions and enable our customers to more expeditiously locate the products needed and answer product-specific questions.

Index	Page
Glossary	44-47
NEC and CSA Fire Resistance Levels	48
Color Coding Charts	49
Part Number Index	50-51
Notes	52-54

Glossary

Absorption: Physical phenomenon that attenuates light traveling in fibers by converting it into heat, there by raising the fiber's temperature. Absorption results from impurities and defects in the glass structure.

Acceptance Angle: The half-angle of the cone within which all incident light is totally internally reflected by the fiber core. For graded index fibers, acceptance angle is a function of position on the entrance face of the core.

Adapter: A mechanical media termination device designed to align and join fiber optic connectors. Often referred to as a coupling, bulkhead, or interconnect sleeve.

Amplitude: Height of a waveform that represents signal strength.

Analog: A format that uses continuous physical variables such as voltage amplitude or frequency variations to transmit information.

Angle of Incidence: The angle between an incident ray and the normal to a reflecting surface.

Angle of Refraction: Angle formed between a refracted ray and the normal to the surface. This angle lies in a common plane with the angle of incidence.

Aramid Yarn: Strength elements that provide tensile strength, support and additional protection of fiber bundles. It is commonly referred to as Kevlar (a DuPont trademark).

Armor: Protective covering, usually metal, used underneath plastic jackets to provide additional environmental protection in harsh environments.

Attenuation: Loss of signal strength between points. Usually measured in decibels per a unit length (e.g., dB/km).

Backbone: The main portion of network cabling connecting equipment rooms or communications closets. These cables often have the largest number of fibers and/or the longest continuous cable runs.

Backscattering: The scattering of light in a direction opposite to the original one.

Bandwidth: A characterization of the information carrying capacity of a multimode optical fiber. It is expressed in terms of frequency and is often normalized to a unit length (e.g., MHz-km).

Bend Loss: A form of increased attenuation in a fiber that results from bending a fiber around a restrictive curvature (a macrobend) or from minute distortions in the fiber (microbends).

Bend Radius: Radius of curvature that a fiber can bend without breaking.

Breakout: Multifiber cable constructed in the tight buffered design with individually jacketed fibers. Designed for ease of connectorization and rugged applications for intra- or interbuilding requirements.

Buffer: Coating used to protect optical fiber from physical damage. Types include tight buffer (indoor) or loose tube (outdoor).

Bundle: Several individual fibers contained within a single jacket or buffer tube. Also a group of buffered fibers distinguished in some fashion from another group in the same cable core.

Cable Assembly: Optical fiber cable that has connectors installed on one or both ends.

Cable Bend Radius: The radius that a fiber can be bent before risking increased attenuation or fiber breaks.

Central Member: A material located in the middle of a cable that provides extra strength and anti-buckling properties.

Chromatic Dispersion: Spreading of a light pulse caused by the difference in refractive indices at different lengths.

Cladding: Dielectric material surrounding the core of an optical fiber.

Coating: Material put on a fiber during the drawing process for mechanical protection.

Conduit: Pipe or tubing through which cables can be pulled and housed.

Connector: A passive device attached at the end of a fiber to couple light from a transmitter to a receiver or between two fibers.

Connector Return Loss: Amount of power reflected from the connector to connector interface, typically expressed in decibels.

Core: Central region of an optical fiber through which light is transmitted.

Core Eccentricity: Measure of the displacement of the center of the core relative to the cladding center.

Core Ellipticity: Measure of the non-roundness of the core.

Coupling Efficiency: Efficiency of optical power transfer between two components.

Coupling Loss: Power loss suffered when coupling light from one optical device to another.

Critical Angle: Smallest angle at which a meridional ray may be totally reflected within a fiber at the core-cladding interface.

Crosstalk: Phenomenon of unwanted light transfer between fibers.

CSA: Abbreviation for Canadian Standards Association.

Decibel (dB): Standard unit used to express the magnitude of signal gain or loss.

Dielectric: Any non-metallic, non-conductive material.

Diffraction: Phenomenon that results when light passes by an opaque edge or through an opening, generating weaker secondary wavefronts. These secondary wavefronts interfere with the primary wavefronts, as well as with each other, to form various patterns.

Digital: Data format that uses two physical levels, ones and zeros, to transmit information.

Glossary

Dispersion: Spread of the signal delay in an optical waveguide. It consists of various components: modal dispersion, material dispersion and waveguide dispersion. As a result of the dispersion, an optical waveguide acts as a low-pass filter for the transmitted signals.

Duplex: Referring to a type of data transmission, either half or full. Half duplex permits only one-way communication. Full duplex allows simultaneous two-way transmission.

Electromagnetic Interference (EMI): Flowing currents generate magnetic fields. Depending on the strength and proximity, these magnetic fields can induce unwanted current in nearby conductive media, negatively affecting signal transfer.

End Finish: Quality of the surface at an optic-fiber's end, commonly described as mirror, mist, hackle, chipped, cracked or specified by final grit size used in polishing.

DDI (Fiber Distributed Data Interface): A standard for a 100 Mbs fiber optic area network.

Fiber: Any filament or fiber made of dielectric materials that guides light.

Fiber Channel: A high speed point-to-point, ANSI Optical Communications Standard that supports data transfer rates up to 1,062.5 Mbs (1 Gps).

Fiber Cleaving: Controlled fracture of an optical fiber along a crystalline plane which results in a smooth surface.

Fiber Optics: Branch of optical technology dealing with the transmission of radiant power through fibers made of transparent materials such as glass, fused silica or plastic.

FOTP: Abbreviation for fiber optic test procedures, which are defined in TIA/EIA Publication Series 455.

Frequency: Number of cycles per unit of time, measured in Hertz (Hz).

Fusion Splice: Splice accomplished by the application of localized heat sufficient to fuse or melt the ends of two lengths of optical fiber, forming a continuous single fiber.

Gigabit: One billion bits of information.

Gigahertz (GHz): One billion Hertz.

Graded-Index Fiber: An optical fiber core that has a nonuniform index of refraction. The core is composed on concentric rings of glass, which have refractive indices that decrease from the center axis. The refractive index is changed in a systematic way from the center to the edges in order to decrease modal dispersion.

Hertz: Measurement unit of frequency.

Hybrid Cable: A fiber optic cable containing two or more different types of fiber (e.g. multimode and singlemode).

Index of Refraction: The ratio of light velocity in a vacuum to its velocity in a given transmission medium.

Infrared (IR): The range of electromagnetic wavelengths between the visible part of the spectrum (750 nm) and microwaves (30 μ m).

Insertion Loss: The attenuation caused by insertion of an optical component such as a connector, splice or coupler.

Intensity: Irradiance.

Interbuilding: Between buildings.

Intrabuilding: Within a building.

Jumper: Fiber optic cable that has connectors terminated on both ends.

KPSI: Abbreviation used to denote a measurement unit of thousands of pounds per square inch. Commonly used in the fiber proof test tensile strength measurement.

Kevlar: DuPont trade name for aramid material (see Aramid Yarn).

Kilometer: Unit of measure for length equal to 1000 meters and about 3,281 feet.

Laser: A device which produces a narrow band of light and is used as a transmitting device for light signals traveling along optical fibers. Laser is an acronym for Light Amplification by Stimulated Emission of Radiation.

Launch Angle: Angle between the propagation direction of the incident light and the optical axis of an optical waveguide.

LED: Acronym for Light Emitting Diode. It is a semiconductor device that emits incoherent light from a p-n junction (when biased with an electrical current).

Light: In the laser and optical communications fields, the portion of the electromagnetic spectrum that can be handled by the basic optical techniques used for the visible spectrum extending from the near ultraviolet region of approximately 0.3 micron, through the visible region and into the mid-infrared region of about 30 microns.

Light Diffusion: Scattering of light by reflection or transmission. Diffuse reflection results when light strikes an irregular surface such as a frosted window or coated light bulb.

Light Emitting Diode: See LED.

Lightwaves: Electromagnetic waves in the region of optical frequencies. The term "light" was originally restricted to radiation visible to the human eye, with wavelengths between 400 and 700 nm. However, it has become customary to refer to radiation in the speed regions adjacent to visible light as "light" to emphasize the physical and technical characteristics they have in common with visible light.

Loose Tube: Type of cable design in which coated fibers are encased in buffer tubes offering excellent fiber protection and segregation. Mainly used in outdoor cable types.

MDPE: Acronym for Medium Density Polyethylene. MDPE is a form of polyethylene commonly used as a jacketing material for outdoor fiber optic cables (see PE).

Macrobending: Macroscopic axial deviations of a fiber from a straight line.

MegaHertz: One million Hertz.

Glossary

Microbending: Curvatures of the fiber which involve axial displacements a few micrometers and spatial wavelengths of a few millimeters. Microbends cause loss of light and consequently increase the attenuation of the fiber.

Micrometer (μm): One millionth of a meter or a micron. Conventional unit of measurement for optical fibers.

Micron: See Micrometer.

Modal Dispersion: Pulse spreading due to multiple light rays traveling different distances and speeds through an optical fiber.

Mode: A term used to describe an independent light path through a fiber, as in multimode or singlemode.

Mode Field Diameter (MFD): The diameter of optical energy in a singlemode fiber. Because the MFD is greater than the core diameter, MFD replaces core diameter as a practical parameter.

Monochromatic: Consisting of a single wavelength. In practice, radiation is never perfectly monochromatic but, at best, displays a narrow band of wavelengths.

Multimode Fiber: An optical waveguide in which light travels in several modes. Typical core and cladding sizes are 62.5 and 125 μm , respectively.

Multiplex: Combining two or more signals into a single bit stream that can be individually recovered.

Nanometer: One billionth of a meter (nm).

National Electric Code (NEC): Defines building flammability requirements for indoor cables.

Numerical Aperture (NA): Measure of the range of angles of incident light transmitted through a fiber. Depends on the differences in index of refraction between the core and the cladding. (The number that expresses the light gathering ability of a fiber.)

Optical Return Loss (ORL): The ratio, expressed in decibels, of optical power reflected by a component or an assembly to the optical power incident on a component or assembly that is induced into a link or system.

Optical Time Domain Reflectometer (OTDR): An instrument used to measure the transmission performance of optical fibers.

Optical Transmitter: See Transmitter.

Optical Waveguide: Dielectric waveguide with a core consisting of optically transparent material of low attenuation (usually silica glass) and with cladding consisting of optically transparent material of lower refractive index than that of the core. It is used for the transmission of signals with lightwaves and is frequently referred to as a fiber. In addition, there are some optical components, such as laser diodes, which are referred to as optical waveguides.

PE: Abbreviation used for polyethylene. Polyethylene is a type of plastic, commonly used as a jacketing material for outside plant cables, that possesses good mechanical properties including good moisture resistance. However, it is very flammable and not suitable for indoor jacketing applications.

PVC: Abbreviation used for polyvinyl chloride. Polyvinyl chloride is a plastic material that is widely used as a jacketing material in indoor cables.

PVDF: Abbreviation denoting polyvinylidene fluoride, a fluoropolymer plastic material often used as a jacket in plenum cables, especially in larger fiber count cables.

Pigtail: A fiber optic connector that is terminated to one end of an optical fiber cable. A short length of optical fiber, permanently fixed to a component, used to couple power between the component and a transmission fiber.

Plenum: The air handling space such as that found above drop-ceiling tiles or in raised floors. It is also the most stringent fire code rating for indoor cables.

Plenum Cable: A cable that meets the most stringent flammability and smoke-generating test and is suitable for installation in a plenum area without a conduit.

Power: The rate at which energy is transferred.

Preform: A glass structure from which an optical fiber waveguide can be drawn.

Primary Coating: The plastic coating applied directly to the cladding surface of the fiber during manufacture to preserve the integrity of the surface.

Receiver: A detector and electronic circuitry to change optical signals into electrical signals.

Reflection: The abrupt change in direction of a light beam at an interface between two dissimilar media so that the light beam returns into the media from which it originated.

Refraction: The bending of a beam of light at an interface between two dissimilar media or in a medium whose refractive index is a continuous function of position (graded index medium).

Refractive Index: The ratio of the velocity of light in a vacuum to that in an optically dense medium.

Repeater: In an optical-fiber communication system, an optoelectronic device or module that receives an optical signal, converts it to electrical form, amplifies it (or in the case of a digital signal, reshapes, retimes or otherwise reconstructs it) and retransmits it in optical form.

Riser: Pathways for indoor cables that pass between floors. It is normally a vertical shaft or space. A riser cable rating indicates good flammability characteristics, but not necessarily low smoke as in a plenum type.

Glossary

Scattering: Property of glass that causes light to deflect from the fiber and contributes to optical attenuation.

Simplex: Transmission in only one direction. Generally a communications system or device capable of transmission in one direction only.

Singlemode Fiber: Optical fiber with a small core diameter (typically 9 μm) in which only a singlemode, the fundamental mode, is capable of propagation. This type of fiber is particularly suitable for wideband transmission over large distances, since its bandwidth is limited only by chromatic dispersion.

Source: A light emitter, either an LED or laser diode, in a fiber optic link; a device that when properly driven will produce information-carrying optical signals.

Spectral Bandwidth: The difference between wavelengths at which the radiant intensity of illumination is half its peak intensity.

Speed of Light: 186,000 miles per second.

Splice: A permanent joint between two optical waveguides.

ST[®] Connector: Type of connector used on fiber optic cable utilizing a spring-loaded twist-and-lock coupling similar to the BNC connectors used with coaxial cabling.

Step Index Fiber: A fiber having a uniform refractive index within the core and a sharp decrease in refractive index at the core/cladding interface.

Strength Member: Part of a fiber optic cable composed of aramid yarn, steel strands or fiberglass filaments that increase the tensile strength of the cable.

Tight Buffer: Type of cable construction whereby each glass fiber is tightly buffered by a protective thermoplastic coating to a diameter of 900 μm . Increased buffering provides ease of handling and connectorization.

Time-Division Multiplex (TDM): The process or device by which more than one signal can be sent over a single channel by using different time intervals for the different signals. This may be done by varying the pulse duration, pulse amplitude and pulse position.

Total Internal Reflection: The total reflection that occurs when light strikes an interface at angles of incidence greater than the critical angle.

Transmitter: A driver and a source used to change electrical signals into optical signals.

UL: Abbreviation for Underwriters Laboratories, Inc., a non-profit organization that rates fiber optic cables according to their flammability characteristics. (See Plenum and Riser.)

VCSEL (Vertical Cavity Surface Emitting Laser): A specialized laser diode used in fiber optic communications to improve efficiency and increase data speeds. These devices emit energy at 850nm and 1300nm. The VCSEL emits a narrow, more nearly circular beam than traditional light emitting diodes (LEDs) or laser diodes, which makes it easier to get the energy from the device into an optical fiber.

Wavelength: The distance, measured in the direction of propagation, of a repetitive electrical pulse or waveform between two successive points that are characterized by the same phase of vibration.

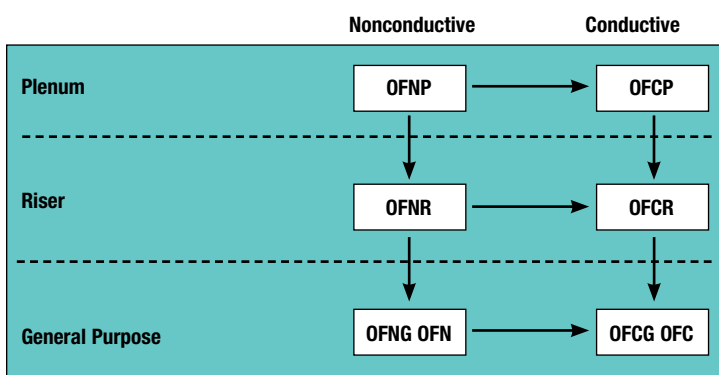
Zero-Dispersion Wavelength: Wavelength at which the chromatic dispersion of an optical fiber is zero. Occurs when waveguide dispersion cancels out material dispersion.

NEC and CSA Fire Resistance Levels

Communications wire and cable for premise installations are in accordance with Article 770, and other applicable parts of the National Electrical Code (NEC), latest issue. Communications wire and cables for Canada are in accordance with the harmonized Canadian Standard Association C22.2 No. 214, Underwriters Laboratories UL 444, latest issue.

FIRE RESISTANCE LEVEL	TEST REQUIREMENT	NEC ARTICLE
		770
(Highest) Plenum Cables	NFPA-262 (Steiner tunnel) CSA-FT6 (Steiner tunnel)	OFNP OFCP
Riser Cables Multiple Floors	UL-1666 (Vertical Shaft) CSA-FT4 (Vertical Tray)	OFNR OFCR
General Purpose Cables	UL-1581 (Vertical Tray) CSA-FT4 (Vertical Tray)	OFNG OFN OFCG OFC

- Notes
1. Cables with a higher fire resistance level may be substituted for those with a lower fire resistance level.
 2. Non-fire rated outside plant telephone cables may not run outside of a rigid metal conduit more than 50 feet from the point of entrance into a building.
 3. Per the latest NEC issue, listed optical fiber cables are permitted in trays.



A → **B** Cable A may be used in place of cable B

CABLE MARKING	TYPE
OFNP	Nonconductive optical fiber plenum cable
OFCP	Conductive optical fiber plenum cable
OFNR	Nonconductive optical fiber riser cable
OFCR	Conductive optical fiber riser cable
OFNG	Nonconductive optical fiber general-purpose cable
OFCG	Conductive optical fiber general-purpose cable
OFN	Nonconductive optical fiber general-purpose cable
OFC	Conductive optical fiber general-purpose cable

Color Coding Charts

Color coding in compliance with TIA/EIA 598B.3

TIGHT BUFFER COLOR CODING

POSITION NUMBER	BASE COLOR AND TRACER	ABBREVIATION
1	Blue	BL
2	Orange	OR
3	Green	GR
4	Brown	BR
5	Slate	SL
6	White	WH
7	Red	RD
8	Black	BK
9	Yellow	YL
10	Violet	VI
11	Pink	PK
12	Aqua	AQ
13	Blue with Black Tracer	D/BL ¹
14	Orange with Black Tracer	D/OR
15	Green with Black Tracer	D/GR
16	Brown with Black Tracer	D/BR
17	Slate with Black Tracer	D/SL
18	White with Black Tracer	D/WH
19	Red with Black Tracer	D/RD
20*	Black with Black Tracer	D/BK
21	Yellow with Black Tracer	D/YL
22	Violet with Black Tracer	D/VI
23	Rose with Black Tracer	D/RS
24	Aqua with Black Tracer	D/AQ

1) "D/" denotes a dashed mark or tracer. That is, D/BL is Dash-Blue, meaning Blue with a tracer.

* Black tracer is visible on black buffer tube.

LOOSE TUBE BUFFER COLOR CODING

POSITION NUMBER	BASE COLOR AND TRACER	ABBREVIATION
1	Blue	BL
2	Orange	OR
3	Green	GR
4	Brown	BR
5	Slate	SL
6	White	WH
7	Red	RD
8	Black	BK
9	Yellow	YL
10	Violet	VI
11	Rose	RS
12	Aqua	AQ
13	Blue with Black Tracer	D/BL ¹
14	Orange with Black Tracer	D/OR
15	Green with Black Tracer	D/GR
16	Brown with Black Tracer	D/BR
17	Slate with Black Tracer	D/SL
18	White with Black Tracer	D/WH
19	Red with Black Tracer	D/RD
20	Black with Yellow Tracer	D/BK
21	Yellow with Black Tracer	D/YL
22	Violet with Black Tracer	D/VI
23	Rose with Black Tracer	D/RS
24	Aqua with Black Tracer	D/AQ

1) "D/" denotes a dashed mark or tracer. That is, D/BL is Dash-Blue, meaning Blue with a tracer.

For loose tube hybrid cable constructions, cables containing both singlemode and multimode fibers, blue loose tubes will contain multimode fibers and yellow loose tubes will contain singlemode fibers.

JACKET COLOR CODING

CONSTRUCTION	FIBER TYPE	JACKET COLOR
TIGHT BUFFER	Multimode	Orange
	10G Multimode	Aqua
	Singlemode	Yellow
	Hybrid	Black
LOOSE TUBE	Multimode	Black
	10G Multimode	
	Singlemode	
	Hybrid	

Part Number Index

CATALOG NUMBER	PAGE	CATALOG NUMBER	PAGE	CATALOG NUMBER	PAGE	CATALOG NUMBER	PAGE
705820.....	38	77-7227	39	FC9700156.....	37	XX0044UNA7.1.....	8
705830.....	38	77-7228	39	XX0011SNR1.6.....	35	XX0044UNFS.....	9
705840.....	38	77-7229	39	XX0011SNR3.0.....	34	XX0044UNU	27
705850.....	38	77-7230	39	XX0011SNU3.0.....	34	XX0061ANC.....	39
705860.....	38	77-7231	39	XX0021ANC.....	39	XX0061ANR.BK.....	25
705870.....	38	77-7259	39	XX0021ANR.BK.....	25	XX0061ANU.BK.....	26
705880.....	38	FC9700000.....	37	XX0021ANU.BK.....	26	XX0061B1C	38
705890.....	38	FC9700001.....	37	XX0021B1C	38	XX0061B3D	20
705900.....	38	FC9700003.....	39	XX0021B3D	20	XX0061B3R	19
705910.....	38	FC9700004.....	39	XX0021B3R	19	XX0061PNR.....	17
705920.....	38	FC9700005.....	39	XX0021PNR.....	17	XX0061PNR-ILRA.....	22
705930.....	38	FC9700006.....	38	XX0021PNR-ILRA.....	22	XX0061PNU.....	18
705940.....	38	FC9700007.....	38	XX0021PNU.....	18	XX0061PNU-ILPA.....	23
705950.....	38	FC9700008.....	38	XX0021PNU-ILPA.....	23	XX0061PNZ.....	21
705960.....	38	FC9700009.....	39	XX0021PNZ.....	21	XX0064H1A-DWB.....	11
705970.....	38	FC9700010.....	39	XX0021ZNR1.6.....	35	XX0064H1F-DWB.....	13
706730.....	38	FC9700011.....	39	XX0021ZNR3.0.....	34	XX0064H1L.....	32
706740.....	38	FC9700012.....	39	XX0021ZNU3.0.....	34	XX0064H1M-DT.....	30
706750.....	38	FC9700013.....	39	XX0023H1A-DWB.....	11	XX0064M1A-DWB.....	10
706760.....	38	FC9700014.....	38	XX0023H1F-DWB.....	13	XX0064M1D-DT.....	28
706770.....	38	FC9700015.....	39	XX0023H1L.....	32	XX0064M1F-DWB.....	12
706780.....	38	FC9700016.....	39	XX0023H1M-DT.....	30	XX0064M1M-DT.....	29
706790.....	38	FC9700017.....	39	XX0023M1A-DWB.....	10	XX0064M1N-DWB.....	15
706800.....	38	FC9700018.....	39	XX0023M1D-DT.....	28	XX0064M1Y-DWB.....	14
706810.....	39	FC9700019.....	39	XX0023M1F-DWB.....	12	XX0064M1Z.....	31
707050.....	39	FC9700020.....	39	XX0023M1N-DWB.....	15	XX0064UNA.....	7
707060.....	39	FC9700021.....	39	XX0023M1Y-DWB.....	14	XX0064UNA7.1.....	8
707400.....	38	FC9700022.....	37	XX0023M1Z.....	31	XX0064UNFS.....	9
707410.....	38	FC9700023.....	37	XX0024M1M-DT.....	29	XX0064UNU	27
707420.....	38	FC9700024.....	37	XX0024UNA.....	7	XX0081ANC.....	39
707430.....	38	FC9700025.....	37	XX0024UNA7.1.....	8	XX0081ANR.BK.....	25
707440.....	38	FC9700026.....	37	XX0024UNFS.....	9	XX0081ANU.BK.....	26
707450.....	38	FC9700027.....	37	XX0024UNU	27	XX0081B1C	38
707460.....	38	FC9700028.....	37	XX0041ANC.....	39	XX0081B3D	20
707470.....	38	FC9700029.....	37	XX0041ANR.BK.....	25	XX0081B3R	19
707490.....	38	FC9700030.....	37	XX0041ANU.BK.....	26	XX0081PNR.....	17
707500.....	38	FC9700047.....	39	XX0041B1C	38	XX0081PNU.....	18
707510.....	38	FC9700069.....	37	XX0041B3D	20	XX0081PNZ.....	21
707600.....	39	FC9700070.....	37	XX0041B3R	19	XX0084H1A-DWB.....	11
707610.....	38	FC9700071.....	37	XX0041PNR.....	17	XX0084H1F-DWB.....	13
707620.....	38	FC9700072.....	37	XX0041PNR-ILRA.....	22	XX0084H1L.....	32
707630.....	38	FC9700073.....	37	XX0041PNU.....	18	XX0084H1M-DT.....	30
707640.....	38	FC9700074.....	37	XX0041PNU-ILPA.....	23	XX0084M1A-DWB.....	10
707650.....	38	FC9700075.....	37	XX0041PNZ.....	21	XX0084M1D-DT.....	28
707660.....	38	FC9700076.....	37	XX0044H1A-DWB.....	11	XX0084M1F-DWB.....	12
707670.....	38	FC9700077.....	37	XX0044H1F-DWB.....	13	XX0084M1M-DT.....	29
707680.....	38	FC9700078.....	37	XX0044H1L.....	32	XX0084M1N-DWB.....	15
707690.....	38	FC9700079.....	37	XX0044H1M-DT.....	30	XX0084M1Y-DWB.....	14
707700.....	38	FC9700080.....	37	XX0044M1A-DWB.....	10	XX0084M1Z.....	31
707710.....	38	FC9700081.....	37	XX0044M1D-DT.....	28	XX0084UNA.....	7
707720.....	38	FC9700095.....	37	XX0044M1F-DWB.....	12	XX0084UNA7.1.....	8
707730.....	38	FC9700106.....	39	XX0044M1M-DT.....	29	XX0084UNFS.....	9
77-7222.....	39	FC9700112.....	39	XX0044M1N-DWB.....	15	XX0084UNU	27
77-7223.....	39	FC9700113.....	39	XX0044M1Y-DWB.....	14	XX0101ANC.....	39
77-7224.....	39	FC9700114.....	39	XX0044M1Z.....	31	XX0101ANR.BK.....	25
77-7225.....	39	FC9700115.....	39	XX0044UNA.....	7	XX0101ANU.BK.....	26

Part Number Index

CATALOG NUMBER	PAGE	CATALOG NUMBER	PAGE	CATALOG NUMBER	PAGE	CATALOG NUMBER	PAGE
XX0101B1C	38	XX0241PNR-ILRA	22	XX0601P1R	17	XX1204H1L	32
XX0101PNR	17	XX0241PNR-ILRAS	22	XX0601P1Z	21	XX1204H1M-DT	30
XX0121ANC	39	XX0241PNU	18	XX0601PNR-ILRAS	22	XX1204M1A-DWB	10
XX0121ANR.BK	25	XX0241PNU-ILPAS	23	XX0601PNU-ILPAS	23	XX1204M1F-DWB	12
XX0121ANU.BK	26	XX0244H1A-DWB	11	XX0604H1A-DWB	11	XX1204M1N-DWB	15
XX0121B1C	38	XX0244H1F-DWB	13	XX0604H1F-DWB	13	XX1204M1Y-DWB	14
XX0121B3D	20	XX0244H1L	32	XX0604H1L	32	XX1204M1Z	31
XX0121B3R	19	XX0244H1M-DT	30	XX0604H1M-DT	30	XX1441A1R.BK	25
XX0121PNR	17	XX0244M1A-DWB	10	XX0604M1A-DWB	10	XX1441P1R	17
XX0121PNR-ILRA	22	XX0244M1D-DT	28	XX0604M1D-DT	28	XX1441PNR-ILRAS	22
XX0121PNU	18	XX0244M1F-DWB	12	XX0604M1F-DWB	12	XX1441PNU-ILPAS	23
XX0121PNU-ILPA	23	XX0244M1M-DT	29	XX0604M1M-DT	29	XX1444H1A-DWB	11
XX0121PNZ	21	XX0244M1N-DWB	15	XX0604M1N-DWB	15	XX1444H1D-DT	28
XX0124H1A-DWB	11	XX0244M1Y-DWB	14	XX0604M1Y-DWB	14	XX1444H1F-DWB	13
XX0124H1F-DWB	13	XX0244M1Z	31	XX0604M1Z	31	XX1444H1L	32
XX0124H1L	32	XX0361A1D.BK	26	XX0721A1D.BK	26	XX1444H1M-DT	30
XX0124H1M-DT	30	XX0361A1R.BK	25	XX0721A1R.BK	25	XX1444M1A-DWB	10
XX0124M1A-DWB	10	XX0361B3D	20	XX0721P1D	18	XX1444M1F-DWB	12
XX0124M1D-DT	28	XX0361P1D	18	XX0721P1R	17	XX1444M1M-DT	29
XX0124M1F-DWB	12	XX0361P1R	17	XX0721P1Z	21	XX1444M1N-DWB	15
XX0124M1M-DT	29	XX0361P1Z	21	XX0721PNR-ILRAS	22	XX1444M1Y-DWB	14
XX0124M1N-DWB	15	XX0361PNR-ILRAS	22	XX0721PNU-ILPAS	23	XX1444M1Z	31
XX0124M1Y-DWB	14	XX0361PNU-ILPAS	23	XX0724H1A-DWB	11	XX1924H1A-DWB	11
XX0124M1Z	31	XX0364H1A-DWB	11	XX0724H1F-DWB	13	XX1924H1F-DWB	13
XX0124UNA	7	XX0364H1F-DWB	13	XX0724H1L	32	XX1924H1M-DT	30
XX0124UNA7.1	8	XX0364H1L	32	XX0724H1M-DT	30	XX1924M1A-DWB	10
XX0124UNFS	9	XX0364H1M-DT	30	XX0724M1A-DWB	10	XX1924M1F-DWB	12
XX0124UNU	27	XX0364M1A-DWB	10	XX0724M1D-DT	28	XX1924M1Y-DWB	14
XX0181A1R.BK	25	XX0364M1D-DT	28	XX0724M1F-DWB	12	XX2164H1A-DWB	11
XX0181ANR.BK	25	XX0364M1F-DWB	12	XX0724M1M-DT	29	XX2164H1F-DWB	13
XX0181ANU.BK	26	XX0364M1M-DT	29	XX0724M1N-DWB	15	XX2164H1M-DT	30
XX0181B3D	20	XX0364M1N-DWB	15	XX0724M1Y-DWB	14	XX2164M1A-DWB	10
XX0181B3R	19	XX0364M1Y-DWB	14	XX0724M1Z	31	XX2164M1F-DWB	12
XX0181P1R	17	XX0364M1Z	31	XX0961A1D.BK	26	XX2164M1Y-DWB	14
XX0181P1Z	21	XX0481A1D.BK	26	XX0961A1R.BK	25	XX2404H1A-DWB	11
XX0181PNR	17	XX0481A1R.BK	25	XX0961P1D	18	XX2404H1F-DWB	13
XX0181PNU	18	XX0481B3D	20	XX0961P1R	17	XX2404M1A-DWB	10
XX0184H1A-DWB	11	XX0481P1D	18	XX0961PNR-ILRAS	22	XX2404M1F-DWB	12
XX0184H1F-DWB	13	XX0481P1R	17	XX0961PNU-ILPAS	23	XX2644H1A-DWB	11
XX0184H1L	32	XX0481P1Z	21	XX0964H1A-DWB	11	XX2644H1F-DWB	13
XX0184H1M-DT	30	XX0481PNR-ILRAS	22	XX0964H1F-DWB	13	XX2644M1A-DWB	10
XX0184M1A-DWB	10	XX0481PNU-ILPAS	23	XX0964H1L	32	XX2644M1F-DWB	12
XX0184M1D-DT	28	XX0484H1A-DWB	11	XX0964H1M-DT	30	XX2884H1A-DWB	11
XX0184M1F-DWB	12	XX0484H1F-DWB	13	XX0964M1A-DWB	10	XX2884H1F-DWB	13
XX0184M1M-DT	29	XX0484H1L	32	XX0964M1D-DT	28	XX2884M1A-DWB	10
XX0184M1N-DWB	15	XX0484H1M-DT	30	XX0964M1F-DWB	12	XX2884M1F-DWB	12
XX0184M1Y-DWB	14	XX0484M1A-DWB	10	XX0964M1M-DT	29		
XX0184M1Z	31	XX0484M1D-DT	28	XX0964M1N-DWB	15		
XX0241A1R.BK	25	XX0484M1F-DWB	12	XX0964M1Y-DWB	14		
XX0241ANR.BK	25	XX0484M1M-DT	29	XX0964M1Z	31		
XX0241ANU.BK	26	XX0484M1N-DWB	15	XX1201A1R.BK	25		
XX0241B3D	20	XX0484M1Y-DWB	14	XX1201P1R	17		
XX0241B3R	19	XX0484M1Z	31	XX1201PNR-ILRAS	22		
XX0241P1R	17	XX0601A1D.BK	26	XX1201PNU-ILPAS	23		
XX0241P1Z	21	XX0601A1R.BK	25	XX1204H1A-DWB	11		
XX0241PNR	17	XX0601P1D	18	XX1204H1F-DWB	13		

Notes

Notes

Notes



General Cable

4 Tesseneer Drive
Highland Heights, Kentucky 41076-9753
U.S.A.

Telephone (800) 424-5666
Fax (800) 547-8249
International Telephone +1 859 572 8000
International Fax +1 859 572 8058

www.generalcable.com

Form No. FOC-0065-R1107