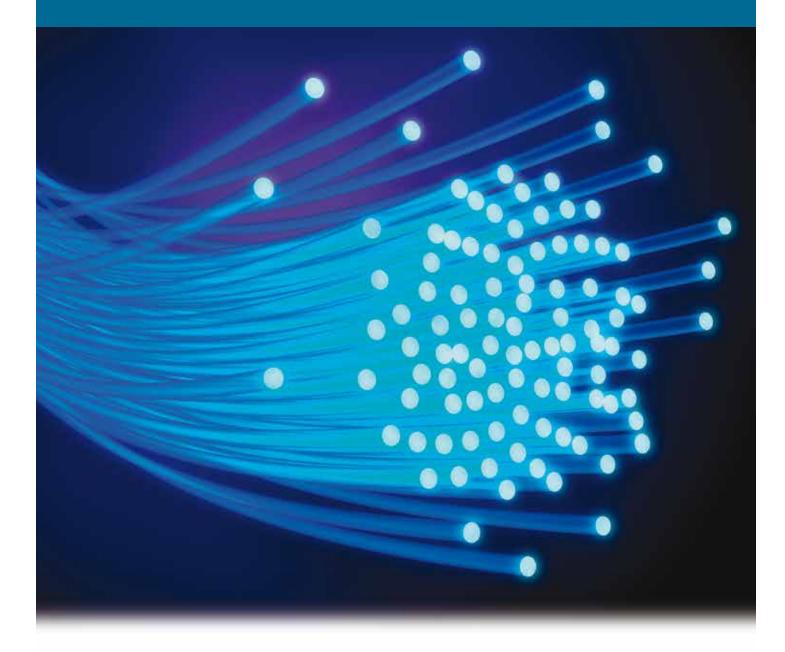
## Fiber Optic Cable—Your Way

Save money and reduce waste with fiber cable cut to the exact length you need.





Have questions? Need a quote? Want to order? 877-732-0671 | blackbox.com/BulkFiber

## The Advantages of Bulk Fiber Optic Cable from Black Box

Reduce waste and save money by ordering bulk fiber optic cable *cut to the exact length* you need. Best of all, there are no minimum lengths.

Choose from a wide selection of guaranteed-for-life distribution-style, zipcord, and loose-tube cable for indoor, indoor/outdoor, and outdoor use. Don't see what you need? Just ask and we'll get it for you.



## **Custom Lengths**

Save money and forget about costly 500- and 1000-meter minimum lengths. With **no minimums**, you can get exactly what you need at Black Box.



## Most In Stock

Save time. Why wait four to six weeks to get your cable? Black Box stocks an extensive selection.



### Ships Today

Get your cable fast. Place your order by 10  $_{\rm A.M.}$  (E.T.), and we'll ship your cable today.





### **Guaranteed for Life**

All Black Box bulk fiber cable is guaranteed for life. No questions asked.

Bend-Insensitive Fiber
Make installation easier and ensure top performance with bend-insensitive fiber.

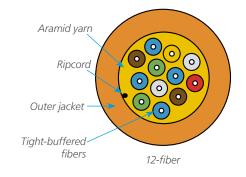


# Indoor Fiber Cable: Use for backbone, horizontal, patching, and harsh-environment runs.

## Indoor Distribution-Style Cable, Tight-Buffered

Designed for intrabuilding backbone runs.

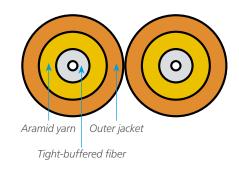
- Ideal for runs between wiring closets and equipment rooms.
- Terminate into loaded patch panels and enclosures.
- OM1 provides Gigabit Ethernet distances of 300 meters at 850 nm and 550 meters at 1300 nm.
- OM3 provides Gigabit Ethernet distances of 1000 meters at 850 nm and 550 meters at 1300 nm. 10-GbE distance is 300 meters at 850 nm.
- OM4 provides Gigabit Ethernet links of 1040 meters at 850 nm and 550 meters at 1300 nm. 10-GbE distance is 550 meters at 850 nm.
- OS2 provides Gigabit Ethernet distances of 5000 meters at 1300 nm.



## General-Purpose Zipcord Cable

Zipcord cable for patching, desktop, and backbone connections.

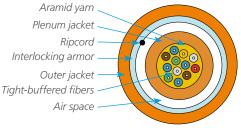
- Use for connections from the closet to the wall outlet and from the wall outlet to the desktop.
- Use with either LED or laser light sources.
- OM1 provides Gigabit Ethernet distances of 300 meters at 850 nm and 550 meters at 1300 nm.
- OM3 provides Gigabit Ethernet distances of 1500 meters at 850 nm and 500 meters at 1300 nm. 10-GbE distance is 300 meters at 850 nm.
- OM4 provides Gigabit Ethernet distances of 3500 meters at 850 nm and 550 meters at 1300 nm. 10-GbE distance is 550 meters at 850 nm.
- OS2 provides Gigabit Ethernet distances of 5000 meters at 1300 nm.



## Indoor Interlocking Armored Distribution-Style Cable, Tight-Buffered

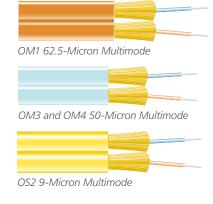
Run this interlocking armored cable anywhere in your building—no ducts required.

- Save on labor and materials. Pull this cable once instead of pulling conduit and then pulling cable.
- Cables are rodent resistant.
- OM1 provides Gigabit Ethernet distances of 300 meters at 850 nm and 550 meters at 1300 nm. 10-GbE distance is 32 meters at 850 nm.
- OM3 provides Gigabit Ethernet distances of 1000 meters at 850 nm and 550 meters at 1300 nm. 10-GbE distance is 300 meters at 850 nm.
- OS2 provides Gigabit Ethernet distances of 5000 meters at 1300 nm. 10-GbE distance is 10,000 meters at 1300 nm.



	OFNP Plenum		OFNR PVC	
OM1 62.5-Micron Multimode	6-Fiber	FOBC55-INM1-OR-06F	6-Fiber	FOBC45-INM1-OR-06F
	12-Fiber	FOBC55-INM1-OR-12F	12-Fiber	FOBC45-INM1-OR-12F
	24-Fiber	FOBC55-INM1-OR-24F	24-Fiber	FOBC45-INM1-OR-24F
	OM3 Laser-Opt	imized 50-Micron		
	OFNP Plenum		OFNR PVC	
	6-Fiber	FOBC55-INM3-AQ-06F	6-Fiber	FOBC45-INM3-AQ-06F
	12-Fiber	FOBC55-INM3-AQ-12F	12-Fiber	FOBC45-INM3-AQ-12F
	24-Fiber	FOBC55-INM3-AQ-24F	24-Fiber	FOBC45-INM3-AQ-24F
	OM4 Laser-Opt	imized 50-Micron Multimode		
OM3 and OM4 50-Micron Multimode	OFNP Plenum		OFNR PVC	
	6-Fiber	FOBC55-INM4-AQ-06F	6-Fiber	FOBC45-INM4-AQ-06F
	12-Fiber	FOBC55-INM4-AQ-12F	12-Fiber	FOBC45-INM4-AQ-12F
	24-Fiber	FOBC55-INM4-AQ-24F	24-Fiber	FOBC45-INM4-AQ-24F
	OS2 9-Micron S	Single-Mode		
	OFNP Plenum		OFNR PVC	
DS2 9-Micron Multimode	6-Fiber	FOBC55-INSM-YL-06F	6-Fiber	FOBC45-INSM-YL-06F
	12-Fiber	FOBC55-INSM-YL-12F	12-Fiber	FOBC45-INSM-YL-12F
	24-Fiber	FOBC55-INSM-YL-24F	24-Fiber	FOBC45-INSM-YL-24F

NOTE: other fiber counts available on request.



#### General-Purpose Zipcord Cable, 2-mm, Custom Lengths

OM1 62.5-Micron Multimode	OFNR PVC Riser	FOBC45-ZPM1-OR-02F
	OFNP Plenum	FOBC55-ZPM1-OR-02F
OM3 50-Micron Multimode	OFNR PVC Riser	FOBC45-ZPM3-AQ-02F
	OFNP Plenum	FOBC55-ZPM3-AQ-02F
OM4 50-Micron Multimode	OFNR PVC Riser	FOBC45-ZPM4-AQ-02F
	OFNP Plenum	FOBC55-ZPM4-AQ-02F
OS2 9-Micron Single-Mode	OFNR PVC Riser	FOBC45-ZPSM-YL-02F
	OFNP Plenum	FOBC55-ZPSM-YL-02F



## Indoor Interlocking Armored Indoor Distribution-Style Cable, Tight-Buffered, Custom Lengths

6-Fiber	FOBC35-INAM1-OR-06F
12-Fiber	FOBC35-INAM1-OR-12F
24-Fiber	FOBC35-INAM1-OR-24F
6-Fiber	FOBC35-INAM3-AQ-06F
12-Fiber	FOBC35-INAM3-AQ-12F
24-Fiber	FOBC35-INAM3-AQ-24F
6-Fiber	FOBC35-INASM-YL-06F
12-Fiber	FOBC35-INASM-YL-12F
24-Fiber	FOBC35-INASM-YL-24F
	12-Fiber 24-Fiber 6-Fiber 12-Fiber 24-Fiber 6-Fiber 12-Fiber

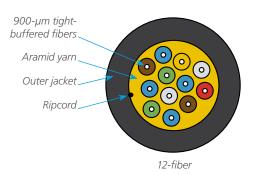
NOTE: other fiber counts available on request.

## Indoor/Outdoor Fiber Cable: Use for campus network cabling runs between and within buildings.

## Indoor/Outdoor Distribution-Style Cable, Tight-Buffered

Plenum rated to run between and within buildings.

- No need to terminate within 50 feet (15.2 m) of a building's entrance.
- Cables are water-blocked and meet GR-20-CORE and ICEA S-104-696 water penetration requirements.
- Jacket resists fungus and moisture. UV stabilizer guards against sun exposure.
- Follows TIA-598-C color standard.



## Interlocking Armored Indoor/Outdoor Distribution-Style Cable, Tight-Buffered

Interlocking armored cable is rodent resistant.

- Cables are water-blocked and meet GR-20-CORE for water penetration.
- Inner jacket is flame-retardant and resists UV rays, fungus, and moisture.
- No need to terminate within 50 feet (15.2 m) of a building's entrance.
- Outer plenum jacket has aluminum interlocking armor.



## Black Box Explains: Three types of indoor and outdoor cable.



Indoor/outdoor

**Indoor/outdoor cable** uses dry-block technology to seal ruptures against moisture seepage and gel-filled buffer tubes to halt moisture migration. Comprised of a ripcord, core binder, a flame-retardant layer, overcoat, aramid yarn, and an outer jacket, indoor/outdoor cable is designed for aerial, duct, tray, plenum, and riser applications.





**Interlocking armored cable** is jacketed in aluminum interlocking armor so it can be run just about anywhere in a building. Ideal for harsh environments, it is rugged and rodent resistant. No conduit is needed, so it's a laborand money-saving alternative to using innerducts for fiber cable runs. It is ideal for out-of-the-way premise links.

#### Indoor/Outdoor Distribution-Style Cable, Tight-Buffered, **OFNP Plenum, Custom Lengths**

OM1 62 5-Micron Multimode

OIVIT 62.5-IVIICION IVIULIMODE				
	6-Fiber	FOBC55-IOM1-BK-06F		
	12-Fiber	FOBC55-IOM1-BK-12F		
	24-Fiber	FOBC55-IOM1-BK-24F		
OM3 Laser-Optimized 50-Micron Multimode				
	6-Fiber	FOBC55-IOM3-BK-06F		
	12-Fiber	FOBC55-IOM3-BK-12F		
	24-Fiber	FOBC55-IOM3-BK-24F		
OM4 Laser-Optimized 50-M	icron Multimode			
	6-Fiber	FOBC55-IOM4-BK-06F		
	12-Fiber	FOBC55-IOM4-BK-12F		
	24-Fiber	FOBC55-IOM4-BK-24F		
OS2 9-Micron Single-Mode	6-Fiber	FOBC55-IOSM-BK-06F		
	12-Fiber	FOBC55-IOSM-BK-12F		
	24-Fiber	FOBC55-IOSM-BK-24F		
NOTE: other fiber counts available on request				

**NOTE:** other fiber counts available on request.

## Interlocking Armored Indoor/Outdoor Distribution-Style, Tight-Buffered, Custom Lengths

OM1 62.5-Micron Multimode

	6-Fiber	FOBC35-IOAM1-BK-06F
	12-Fiber	FOBC35-IOAM1-BK-12F
	24-Fiber	FOBC35-IOAM1-BK-24F
OM3 Laser-Optimized 50-M	icron Multimode	
· · · ·	6-Fiber	FOBC35-IOAM3-BK-06F
	12-Fiber	FOBC35-IOAM3-BK-12F
	24-Fiber	FOBC35-IOAM3-BK-24F
OS2 9-Micron Single-Mode	6-Fiber	FOBC35-IOASM-BK-06F
	12-Fiber	FOBC35-IOASM-BK-12F
	24-Fiber	FOBC35-IOASM-BK-24F
INTEL athor fiber counts avai		

NOTE: other fiber counts available on request.



Outside plant

6-fiber

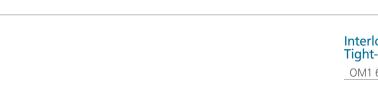
6-fiber

**Outside-plant cable** is used in direct burials. It delivers optimum performance in extreme conditions and is terminated within 50 feet of a building's entrance. It blocks water with dry blocking, absorbent tape, or powder. If it is armored, it will require grounding. Outside-plant cables are also rodent resistant. If they are to be used in aerial applications, they will have a messenger strength member.



#### Fiber Optic Technology.

Want more info on fiber optic cable? How it's made? Core sizes? Standards? Construction? Download this informative white paper at blackbox.com/ WPFiber.



## Outdoor Fiber Cable: designed for runs between buildings in a campus environment.

## Outdoor Cable, Loose-Tube

Gel-free, loose-tube cables designed for aerial installations or ducts.

- Cable incorporates the latest dry water-absorption technology in the buffer tubes resulting in easier handling and terminations.
- UV-stabilized outer jacket resists sun damage for long-term performance in aerial applications.
- Gel-free buffer tubes reduce fiber prep termination time.
- SZ-stranded cable core for easy mid-span access of fiber.
- OM1 has Gigabit Ethernet distances of 300 meters at 850 nm and 550 meters at 1300 nm.
- OS2 has a Gigabit Ethernet distance of 5000 meters at 1300 nm.

## Armored Outdoor Cable, Loose-Tube

Use in direct burial, duct, and aerial lashed outside-plant infrastructures.

- Use between buildings in campus settings.
- Cables are water-blocked and meet GR-20-CORE for water penetration.
- Gel-free buffer tubes reduce fiber termination time.
- Corrugated steel armor is crush and rodent resistant in direct-bury applications.

Polyethylene jacket Corrugated steel armoring Rip cord FRP central member Water-blocking system Optical fibers Gel-free loose buffer tube

Polyethylene jacket

FRP central member.

Water-blocking system

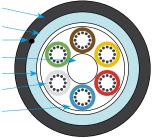
Polyester tape

Optical fibers

Gel-free loose

buffer tube

Rip cord



## Black Box Explains: Loose-tube vs. tight-buffered cable



#### Loose-tube

There are two types of fiber optic cable construction: loose-tube and tight-buffered. Both contain some type of strengthening member, such as aramid yarn, stainless steel wire strands, or even gel-filled sleeves. But each is designed for different environments.

**Loose-tube cable** is designed for harsh outdoor environments. It protects the fiber core, cladding, and coating by enclosing everything within semi-rigid protective sleeves or tubes. Many loose-tube cables also have a water-resistant gel that surrounds the fibers to protect them from moisture, which makes loose-tube cable great for harsh, high-humidity environments where water or condensation can be a problem. The gel-filled tubes can also expand and contract with temperature changes.

Tight-buffered

But gel-filled loose-tube cable is not the best choice when cable needs to be routed around multiple bends, which is often true in indoor applications. Excess cable strain can force fibers to emerge from the gel.

**Tight-buffered cable** is best suited for moderate-length LAN/ WAN connections or long indoor runs. It's easier to install because there's no gel to clean up and it doesn't require a fan-out kit for splicing or termination. You can install connectors directly to each fiber.

When making the transition from outdoor cable to indoor, the loose tube will be connected to a box in the entrance point. Then, the run will be connected to tight-buffered cable for indoor use.



#### Outdoor Cable, Loose-Tube, Custom Lengths

	6-Fiber	FOBC35-ODM1-BK-06F
	12-Fiber	FOBC35-ODM1-BK-12F
	24-Fiber	FOBC35-ODM1-BK-24F
OS2 9-Micron Single-Mode	6-Fiber	FOBC35-ODSM-BK-06F
	12-Fiber	FOBC35-ODSM-BK-12F
	24-Fiber	FOBC35-ODSM-BK-24F

NOTE: other fiber counts available on request.



#### Armored Outdoor Cable, Loose-Tube, Custom Lengths

OM1 62.5-Micron Multimod	е		
	6-Fiber	FOBC35-ODAM1-BK-06F	
	12-Fiber	FOBC35-ODAM1-BK-12F	
	24-Fiber	FOBC35-ODAM1-BK-24F	
OS2 9-Micron Single-Mode	6-Fiber	FOBC35-ODASM-BK-06F	
	12-Fiber	FOBC35-ODASM-BK-12F	
	24-Fiber	FOBC35-ODASM-BK-24F	
NOTE: other fiber counts available on request			

NOTE: other fiber counts available on request.

## What our customers are saying

I wanted to take a moment to express my appreciation of the Black Box Technical Support department. I have called twice in the past six months with technical questions. Both times I have been met with great enthusiasm and eagerness to assist. Not only did I get my questions answered, but I got off the phone with a greater understanding of fiber optics. Great customer service overall.

Mo Harouny, Athena Engineering, Inc.

The crunch was on when the Black Box rep called back. She worked magic and was able to get the custom adapters out to us in two days—literally! Not only were we here at Misys ecstatic, but the client was very happy and relieved. Awesome teamwork!"

Jaime Schisel Instrument Specialist Misys Healthcare Systems

# The right accessories to terminate fiber cable inside your building.

## **NEMA-4 Rated Fiber Wallmount Enclosures**

Protect and terminate fiber cable in damp environments.



- Use a transition box to protect and terminate fiber cable.
- NEMA-4 rated for use in damp environments, basements, and below-ground floors prone to water leakage and seepage.
- Water-tight cable openings prevent condensation and moisture from entering.
- Mount on solid surfaces, such as cinder block walls.

#### NEMA 4 Fiber Wallmount Enclosures

2 Panels	JPM4001A-R2
4 Panels	JPM4000A-R2
NEMA 4 Splice Tray	JPM4002A

### **Rackmount Fiber Cabinet**

Connect up to 288 fibers in high-density applications.



 3U enclosure holds 12 standard adapter panels or MTP<sup>®</sup> MPO-style fiber cassettes.

#### **Rackmount Fiber Cabinet**

3U, 12 Adapter Panels/Cassettes

JPM406A-R6

## **Splice Trays**

Make splices on 12 to 24 fibers.



- Use with single-mode or multimode fiber.
- Mount inside fiber enclosures.
- Include a protective lid.

#### Splice Trays

12 Fiber 24 Fiber JPM441A JPM440A

## Fiber Optic Cassettes and Adapter Panels

Make high-density network connections.



#### OM3 50-Micron MTP® MPO-Style Cassettes (LGX) (MTP to LC) 12 Fiber

12 Strand MTP to (6) LC Duplex Pairs, Type A FOCA20M3-1MP12-12LC 2 x 12 Strand MTP to (12) LC Duplex Pairs, Type A

FOCA20M3-2MP12-24LC

#### 24 Fiber

24 Strand MTP to (12) LC Duplex Pairs, Type AFOCA20M3-1MP24-24LC24 Strand MTP to (12) LC Duplex Pairs, Type BFOCA25M3-1MP24-24LC

#### High-Density Fiber Optic Adapter Panels

(12) LC Duplex	Aqua	JPM468C
	Beige	JPM467B
	Blue	JPM467C-R2

NOTE: many more adapter panels are available at blackbox.com.

### **Pre-Polished Fiber Connectors**

Terminate fiber in a minute.



- No more hand polishing in the field.
- Easy assembly with no need for epoxy.
- Fiber can be reseated.

#### Pre-Polished Fiber Optic Connectors, 6-Pack

OM1 62.5-Micron Multimode	SC	PP-SC-625MM-6PAK
	ST	PP-ST-625MM-6PAK
	LC	PP-LC-625MM-6PAK
OM2 50-Micron Multimode	SC	PP-SC-50MM-6PAK
	ST	PP-ST-50MM-6PAK
	LC	PP-LC-50MM-6PAK
OM3 50-Micron Multimode	SC	PP-SC-50MM-10G-6PAK
	ST	PP-ST-50MM-10G-6PAK
	LC	PP-LC-50MM-10G-6PAK
OS2 9-Micron Single-Mode	SC	PP-SC-SM-6PAK
	LC	PP-LC-SM-6PAK

## Fan-Out Kits

Prepare 6- or 12-fiber loose-tube cables for field termination.



- Color-coded fan-out tubing makes it easy to keep track of connections.
- Snap-together unit—no need for epoxy.

#### Fan-Out Kits

25-inch	EFN06-24
36-inch	EFN06-36
25-inch	EFN12-24
36-inch	EFN12-36
	36-inch 25-inch



## Free 24/7 Tech Support

Not sure what you need? Ask our cabling experts. They're available 24/7 to help you find the right solution.

## Lifetime Support

You have a dedicated IT partner committed to your complete satisfaction today and tomorrow. In fact, Black Box recently serviced some products purchased in 1988.

## Free Application Engineering

Have a special project? Our cabling professionals can put together a solution for your specific application. Black Box specializes in custom cables and adapters and can build a solution to your specifications.

## Helping Customers Since 1976

Black Box has been helping customers solve their technology problems since 1976. 175,000 customers worldwide consider Black Box to be their trusted IT partner.

## 877-732-0671 blackbox.com/BulkFiber



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