Fiber Optic Cable - Bulk Fiber Cable

For voice and data transmission

High-Speed Fiber Cabling Systems

FS provides high bandwidth and mission-critical physical infrastructures in data center, and enterprise networks with comprehensive fiber optic systems that deliver high performance, reliability, and scalability. The deployment of high-speed cabling systems has been increasing rapidly as data centers enable their physical infrastructure with 10 Gb/s capacity to support server virtualization, I/O consolidation, and convergence of backbone applications.

Structured Cabling Infrastructure

A properly designed and implemented cabling infrastructure is a fundamental asset of every business. Carefully planning a structured cabling solution facilitates the delivery of new services, lowers network maintenance costs, and increases productivity. New high-bandwidth applications enable organizations to better fulfill their need for productivity and innovation in a rapidly changing world.
Fiber Optic Ordering Information

We strive to have a variety of cables in stock for immediate delivery to our customers. To choose a fiber optic cable, you need to know the following:

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I. 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 specification below.

II. 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.

III. 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 be used in different application areas.
Cable Flammability Rating Reference Guide

What are plenum, riser, and low-smoke zero halogen ratings, and what are the differences between them?

**Riser (OFNR) rated cable:**

- Defined for usage in vertical tray applications, spaces that cannot be used for environmental air.
- Prevent the flame from traveling up the cable in a vertical burn test.

**LSZH rated cable:**

- Does not produce heavy black soot and smoke common with PVC cables.
- Used mainly outside.

**Plenum (OFNP) rated cable:**

- Allowed in spaces defined as “air plenums”, such as raised flooring systems and air handling ducts.
- Produces less smoke than traditional PVC cables.
**Tight-buffered Distribution Cable**

Tight-Buffered Distribution Cable contains several tight-buffered fibers, kevlar/aramid strength members to stiffen the cable and prevent kinking. Three cable fire ratings, Riser/Plenum/LSZH for your choice to meet different installation environments.

**Non-unitized Tight-buffered Distribution Indoor Cable GJPFJV**

**Features and Applications**

- 900μm tight-buffered fibers can be directly terminated
- FRP central strength member
- For premises wiring
- Work as pigtails and patch cords
- Optical communication cables for inside plant installations
- As backbone in LANs

**Non-unitized Tight-buffered Distribution Indoor Cable GJFJV**

**Features and Applications**

- Flexible, flame-retardant & color coded outer jacket
- Non-unitized designs provide space savings and cost advantages
- Work as pigtails and patch cords
- Optical communication cables for inside plant installations
- Suitable for indoor use, communication equipment
Unitized Tight-buffered Distribution Indoor Cable GJPFJH

Features and Applications

- Unitized design for distributing cables
- Coated FRP central strength member
- For premises wiring
- As backbone in LANs
- Optical communication cables used in fiber enclosures
- Internal cable for horizontal distribution or riser applications

Ribbon Fiber Cables

Ribbon cables are designed for horizontal intrabuilding backbones where limited-smoke and zero-halogen requirements exist, especially used in optical communication equipment rooms and optical distribution frames, optical apparatus and equipments.

Features and Applications

- Flexible, flame-retardant & color coded outer jacket
- Non-unitized designs provide space savings and cost advantages
- Work as pigtails and patch cords
- Optical communication cables for inside plant installations
- Suitable for indoor use, communication equipment
Tight-buffered Breakout Cable

Breakout Cable has individual subcables within a primary outer cable sheath, and each fiber has its own aramid strength member for connector tie-off. It’s installed where direct termination of connectors to sub-units and direct run to panels and equipment is desired.

Armored Tight-buffered Breakout Indoor Cable

Features and Applications

- LSZH Jacket provide good flame resistant performance
- High compression resistant, high tensile resistant, rat–bite resistant
- Used for pigtails and patch cords
- Suitable for indoor level and vertical cabling
- Ideal for use in optical distribution frame

Tight-buffered Breakout Indoor Cable

Features and Applications

- Subcabled fiber is environmentally and mechanically protected
- Non-metal FRP central strength member, anti-electromagnetic interference
- Riser/LSZH jacket, used for backbone, horizontal, and intrabuilding runs. Perfect for horizontal distribution for Fiber-to-the-desk
- Used in optical connections in optical apparatus and equipment
Tight-buffered Interconnect Cable

900μm buffered fiber is surrounded by aramid yarn strength members and a flame-retardant jacket, especially used for optical connection. Three cable fire ratings, Riser/Plenum/LSZH for your choice to meet different installation environments.

Single-Fiber Tight-buffered Interconnect Indoor Cable

**Features and Applications**

- A 900μm buffered fiber
- Kevlar yarn material ensures high tensile strength
- Used as jumpers or pigtails for data center applications
- Installed within walls, under raised floors, and in air-return spaces
- Interconnection in horizontal spaces between fiber optic equipments

900μm Single-Fiber Tight-buffered Interconnect Indoor Cable

**Features and Applications**

- Subcabled fiber is environmentally and mechanically protected
- Non-metal FRP central strength member, anti-electromagnetic interference
- Riser/LSZH jacket, used for backbone, horizontal, and intrabuilding runs. Perfect for horizontal distribution for Fiber-to-the-desk
- Used in optical connections in optical apparatus and equipment
Duplex Double Jacket Flat Tight-buffered Interconnect Indoor Cable

Features and Applications

• Two 900μm buffered fibers
• Flame-retardant and colored outer jacket
• Kevlar yarn material ensures high tensile strength
• Perfect for horizontal distribution for Fiber-to-the-desk
• Installed within walls, under raised floors, and in air-return spaces
• Interconnection in horizontal spaces between fiber optic equipments

Duplex Single Jacket Round Tight-buffered Interconnect Indoor Cable

Features and Applications

• Flame-retardant and colored outer jacket
• Kevlar yarn material ensures high tensile strength
• Flexible, small diameter, 900μm tight-buffered construction
• Used as jumpers or pigtails for data center applications
• Installed within walls, under raised floors, and in air-return spaces
Zipcord Tight-buffered Interconnect Indoor Cable

Features and Applications
- Flame-retardant and colored outer jacket
- Kevlar yarn material ensures high tensile strength
- Used as jumpers or pigtails for data center applications
- Installed within walls, under raised floors, and in air-return spaces
- Interconnection in horizontal spaces between fiber optic equipments

Mining Harsh Environment Cable

With good flame retardant and rodent resistance property, MGTSV mining cable is used in coal, gold, iron ore and other mines, especially for the accident-prone land mines. It can ensure smooth communication and reduce losses when the accident happens.

Features and Applications
- Excellent in environmental protection and flame resistant
- Steel wire used as the central strength member
- Good property of rodent resistant
- Specially used in coal industry
- Certified for use by national authorities
- Intended for mines, mine shafts and cable trays used for mining applications
Non-Armored Loose Tube LSZH Indoor/Outdoor Cable

With LSZH good flame retardant performance, widely used in installation between and within buildings, especially for cable deployment in building backbone wiring. The primary advantage of the cable is the ability to transition from the outdoor to indoor environment.

Features and Applications
- Moisture-resistant and flame-retardant LSZH polymer
- Loose-tube isolates fibers from outside environment and mechanical stresses
- Local area networks
- Cable trays and general horizontal applications
- Interbuilding and intrabuilding voice or data communication backbones

Non-Armored Tight-buffered LSZH Indoor/Outdoor Cable

Tight buffered indoor/outdoor cables are constructed of 900μm buffered fibres surrounded by glass yarn strength members with a flame-retardant LSZH jacket. It is widely used in local area networks and fiber backbones.

Features and Applications
- Lower costs of terminating tight-buffered cables
- LSZH jacket ensures good flame retardant performance
- Glass yarn strength member enhances waterproof performance
- Point-to-point links in cities and buildings
Armored Tight-buffered LSZH Indoor/Outdoor Cable

This cable features a double LSZH jackets with the outer jacket being of UV stabilised, water and moisture resistant. The corrugated steel tape making the cable rodent proof. It is suited for LAN backbones, direct burial, ducts, under floor or ceiling spaces.

Features and Applications

- Outer jacket has good anti-ultraviolet, water blocking performance
- Glass yarn strength members and steel tape armor for rodent resistance
- Installation in trunking, LAN backbones
- Duct/conduit, aerial, direct burial application
- Fiber backbones in riser and horizontal configurations

Armored Tight-buffered Plenum Indoor/Outdoor Cable

This cable features a double LSZH jackets with the outer jacket being of UV stabilised, water and moisture resistant. The corrugated steel tape making the cable rodent proof. It is suited for LAN backbones, direct burial, ducts, under floor or ceiling spaces.

Features and Applications

- Aramid yarns provide excellent tensile strength and flexibility
- Stainless steel tube armor for high crush and rodent resistance
- Ducts & conduits application
- CATV, LAN, WAN and FTTX cabling
- Inter building and intrabuilding voice or data networks
Single-Armored Direct Buried Cables GYFTY53

Stranded Loose Tube Non-metallic Strength Member Water-blocking Armored Cable designed for direct-buried installation, can be buried directly into the ground in a trench or using a vibratory plow, suitable for frequent lightning area and anti electric field.

Features and Applications
- High tensile strength
- FRP Strength Member ensures good anti-electromagnetic interference
- Special material enhances water-blocking & moisture-proof performance
- Ariel and direct buried applications
- Long Haul Networking Building Interconnections (Campus LAN)

Double-Armored Direct Buried Cables

Double-jacket structure provides the cable nice properties of moisture resistance and crush resistance. Double armor structure provides cable good property of rodent-resistance. It can be used for duct and direct buried application, suitable for harsh environments.

Waterproof Outdoor Cable GYTA53

Features and Applications
- Metal strength member provides excellent strain performance
- Double-jacket structure ensures moisture resistance and crush resistance
- Adopted to outdoor distribution
- Specially used where good mechanical performance and rodent resistance are expected
Flame-retardant Outdoor Cable GYFTZA53

Stranded Loose Tube Non-metallic Strength Member Water-blocking Armored Cable designed for direct-buried installation, can be buried directly into the ground in a trench or using a vibratory plow, suitable for frequent lightning area and anti electric field.

Features and Applications

• Steel tape and aluminum tape enhances water-blocking & moisture - proof performance
• Adopted to outdoor distribution and harsh environment
• Suitable for frequent lightning area and anti-electric field
• Specially used where good flame-retardant performance expected

Non-Armored Duct Cable

Non-armored duct cable is designed for duct & aerial installation, are suspended from poles or pylons or mounted on buildings or are air-blown, jetted, pulled or pushed into duct.

Non-Armored Central Loose Tube Outdoor Cable GYXTY

Features and Applications

• PE sheath has good ultraviolet radiation resistance
• Central loose tube minimizes the influence of lateral crush
• Two parallel steel wires ensure tensile strength communication-strong
• Aerial & Duct application
• Trunk power transmission system
• Suitable for the situation where high-density fibers is expected
Non-armored Stranded Loose Tube Outdoor Cable GYFTY

Features and Applications
• FRP ensuring resistance to electromagnetic interference
• Water blocking system ensures reliable waterproof performance
• Non-metal central strength has excellent anti-electromagnetic ability
• Access network and local network in high electromagnetic interfering and frequently lighting areas

Self-Supporting Aerial Cables

The metal strength member is made up of stranded wires as the supporting part are completed with a polyethylene(PE) sheath to be figure 8 structure. It’s suitable for installation in aerial, used for long distance and LAN communication systems.

Central Loose Tube, Figure 8 Self-supporting Aerial Outdoor Cable GYXTC8S

Features and Applications
• Self-supporting stranded wires, easily to install
• Corrugated steel tape and the PE outer sheath ensure crush resistance
• Water blocking system to improve the water proof ability
• Outdoor aerial application
• Used for long-haul communication
• Used for LAN communication
Central Loose Tube, Figure 8 Self-supporting Aerial Outdoor Cable GYXTC8Y

**Features and Applications**

- High strength loose tube that is hydrolysis resistant
- Medium Density Polyethylene Jacket, low friction installation
- Outdoor aerial application
- Subscriber network systems
- Junction communication systems
- CATV & Computer networks system

Stranded Loose Tube, Figure 8 Self-supporting Aerial Outdoor Cable GYTC8S

**Features and Applications**

- Corrugated steel tape and the PE outer sheath ensure crush resistance
- Steel-wire strength member ensures tensile strength
- Water blocking system to improve the water proof ability
- Used for long-haul communication
- Used for LAN communication
- Junction communication systems
- CATV & Computer networks system
All-Dielectric Aerial Cables GYFXTY

The cable is completed with a single polyethylene (PE) sheath. It is especially suitable for installation in aerial for long-distance and bureau communication and wiring in multiple minefields and electromagnetic interfering places.

Features and Applications

- PE sheath protects cable from ultraviolet radiation
- Two parallel non-metal strength members have an excellent anti-electromagnet ability
- Aerial application
- Electromagnetic interfering places
- Long-distance communication and bureau communication

ADSS Outdoor Cable GYFTCY

ADSS cables are ideal for outside plant aerial applications, the lightweight cable and all-dielectric construction allow cost-effective and safe installation in high voltage overhead power lines.

Waterproof Outdoor Cable GYTA53

Features and Applications

- Large span of over 1000m
- PE or AT sheath ensures safety of cable in high voltage environment
- All-dielectric structure and light weight provide easy installation and good electromagnetic resistance
- Railways, power and telecommunication pole routes
- Aerial self-supporting applications at short, medium and long span distances
Armored Aerial Cables

Steel-wire Strength Member Water-blocking Armored Cable designed for aerial or duct installation, can be suspended from poles or pylons or mounted on buildings or are air - blown, jetted, pulled or pushed into duct.

Single-Armored Central Loose Tube Outdoor Cable GYXTW

Features and Applications
- Good tensile strength and crush resistance performance
- Good moisture-resistance, water blocking, and flexibility
- Access network
- Bureaus network
- Metropolitan network
- Aerial & conduit/duct application

Single-Armored Stranded Loose Tube Outdoor Cable GYTA

Features and Applications
- Crush resistance, water blocking and flexibility
- PE sheath protects cable from ultraviolet radiation
- Tube filling compound to ensure critical fiber protection
- Local trunk line
- Rural communication
- Computer networks system
- Aerial & conduit/duct application
Armored Ribbon Cables GYDTA

GYDTA is suitable for aerial and duct application, and with excellent moisture resistance ability, can be also used in cable trench. It is a good option for interoffice communication, outdoor access network.

Features and Applications

- Loose tube structure wrapped by APL tape enhancing water blocking
- PE jacket with low friction installation, excellent protection
- Access network
- Local trunk line
- Interoffice communication
- Aerial and duct application
- Long-distance communication

FTTH Cable Assemblies

With easy accessibility to the fiber and simple installation, FTTH Fiber Patch cable can be directly connected to the homes. It is suitable for connecting with communication equipment, and used as access building cable in premises distribution system.

Features and Applications

- FRP/KFRP strength member ensures anti-electromagnetic and crush resistance
- High bandwidth and excellent communication transmission property
- LAN (Local Area Network)
- Fiber Optic Communication System
- FTTH Indoor Building
- Optical fiber connected and transmitted equipment
Square FTTH Drop cable

BFTTH non-metal central loose tube outdoor cable can be used in outdoor distribution, and suitable for access network and local network in high electromagnetic interfering places.

Features and Applications

- LSZH jacket has good flame retardant performance
- FRP ensures excellent anti-electromagnetic performance
- Outdoor distribution
- Access network and local network
- Trunk power transmission system
- High electromagnetic interfering places

Butterfly Flat FTTH Drop Cable GJXFH

FTTH indoor cable has a much greater bandwidth to carry data and less susceptible to interference than common indoor fiber cables, and it’s ideal for indoor cabling, end users directly cabling, and access network.

Features and Applications

- FRP/KFRP strength member ensures anti-electromagnetic and crush resistance, while Metal strength member ensures high tensile strength and crush resistance
- Local area network (LAN)
- Used end users directly cabling
- FTTH (fiber to the home) indoor cabling and distribution
Self-supporting Flat Drop Cable GJYXFCH

Self-supporting FTTH drop cable is constructed with one or two single-mode fiber (G.657A). The cable is protected by a dielectric strength member, suitable for direct aerial installation into the houses in FTTH projects.

Features and Applications

- Steel wire as additional strength member has high tensile strength
- FRP/KFRP strength member ensures anti-electromagnetic and crush resistance, while Metal strength member ensures high tensile strength and crush resistance
- Outdoor aerial application
- Used in the FTTH projects
- High speed optical routes in building

Outdoor FTTH Duct Cable GJFDC

FTTH duct cables are made for connecting user's devices with outdoor feeder cable, especially suitable for duct installation. Water blocking tape & AL-plastic tape provide good water proof ability.

Features and Applications

- FRP/KFRP strength member ensures anti-electromagnetic and crush resistance, while Metal strength member ensures high tensile strength and crush resistance
- Water-proof tape prevent the ingress of water into the cable
- Suitable for the connection between indoor and outdoor
- Specially used where good insulation performance are expected
All statements, technical information, and recommendations related to the products here are based upon information believed to be reliable or accurate. However, the accuracy or completeness thereof is not guaranteed, and no responsibility is assumed for any inaccuracies. Please contact FS for more information.