



Building a futuristic digital world
CORSIS TECHNOLOGIES

PRATAP DIGITAL COMMUNICATIONS PVT. LTD



We create, innovate & deliver quality products that connect the world with the highest communication speed

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PRATAP GROUP OF COMPANIES

Pratap Group of Companies is a conglomerate having diversified in different verticals including **Telecom, Manufacturing, Power, Infrastructure, Hospitality, Education, Automobile, GIS Services, Mining, and Agriculture**. Established in 1987 by Mr. **Pratap Singh Shekhawat**, a marine engineer by profession (Ex-Indian Navy), Pratap Group of Companies has garnered a strong hold in multiple business sectors across the nation.

We are a strong team of 15,000+ employees catering to the client base of more than 100 renowned companies in India.

Pratap Group of companies has a reach in 28 States and 8 UTs across the nation. Our flagship company of Telecom sector, Pratap Technocrats Pvt. Ltd. has reached new heights by becoming **one of India's largest Telecom, IT Infra Services delivery providers**. We have established a trusted relationship with various IPs & Telcos with PAN India presence because of our exceptional quality products and services.

Pratap Group of Companies has **24+ years of rich experience** in the Tower sector including OME/ IME/ E2E, Fiber Managed Services-O&M, and set up of Network Operation Centers. Our expertise enables us to manage the bigger portfolio of towers and fiber in both urban and rural areas. Currently, we are overseeing more than **1 lacs telecom cell sites** and **1.53 lacs KMs of optical fiber cable** for different telecom operators and telecom infrastructure providers along with successful execution of approximately **50,000 kms of underground OFC lay**.

The company currently has a strong foothold in various geographies, successfully serving multiple operators and telecom infrastructure providers. Pratap Group of Companies has earned several **prestigious awards** by Telecom Operators and Infra Providers for our outstanding performance.



PRATAP TECHNOCRATS PVT LTD.
Managed Service Provider



TELECRATS INDIA PVT LTD.
Maintenance of telecom network, BPO & KPO services



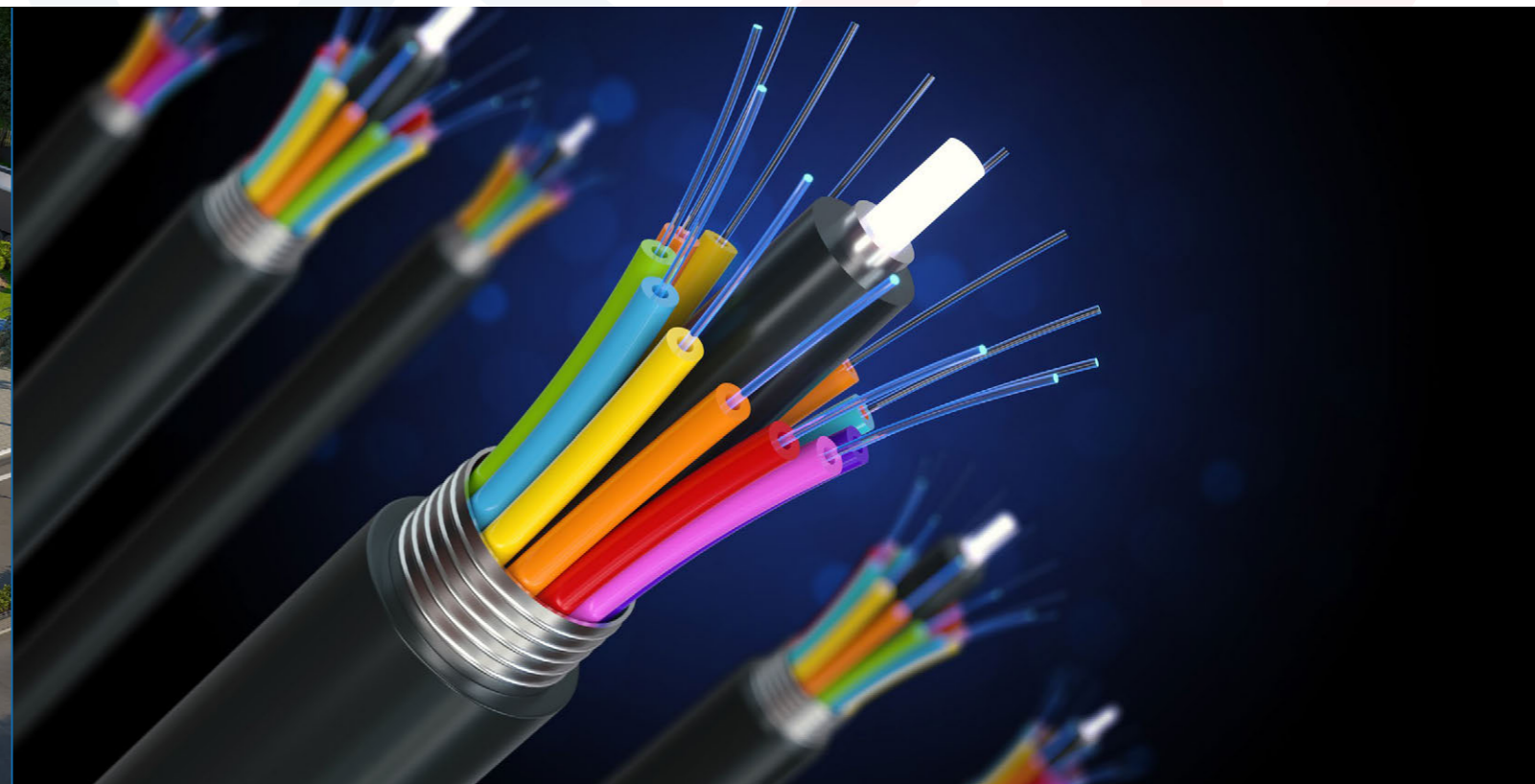
PRATAP DIGITAL COMMUNICATIONS PVT LTD.
Manufacturing of optical fiber cable



BECKHAUL DIGITAL TECHNOLOGIES PVT LTD.
Creating underground infrastructure



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Corsis Technologies is one of India's largest and **fastest-growing organization**, specializing in the manufacturing of **optical fiber cable** from **1F to 576F**, which are the backbone of any network employing communication. A brand of **Pratap Digital Communications Pvt. Ltd.** (A unit of Pratap Group), we are an ISO 9001:2015 & TL 9000:2016 certified company. Corsis Technologies is headquartered in the center of India in **Pithampur near Indore, Madhya Pradesh**.

Our company is well equipped with fully automatic machines for **manufacturing a wide range of optical fiber cable** including Aerial Cable, Under ground cable, FTTX cable, Indoor cable, CATV, Special Cables, and Undersea Cables. With a manufacturing capacity of more than **4.5 million fiber kilometers (fkm's)** of optic-fiber cable annually, Corsis Technologies has been able to gain a remarkable position in the market. Our advanced **R&D center** constantly works on innovation to create value for our customers. We offer **customized solutions** of cable designs to deliver the most **economical and reliable products** to our customers based on their application.

Our network of trusted suppliers ensures that we gain the best possible **lead times, deliveries, and economies of scale**, which in turn has made us reliable for long terms association with our partners and has become the key to our success.

MISSION

To deliver the highest quality of work with continuous innovation, market study, and systems in place and to ensure cost-effective and timely deliveries with the highest standard of compliance in the industry.

VISION

To be reckoned as stalwarts of manufacturing industry to produce communication network backbone products for building futuristic networks.

CORE VALUES

Corsis Technologies follows a strong code of conduct and aims to secure a position as a valuable manufacturer that leverages skills, achievements, and ability in a direction that provides a niche in customer experience. Because of our strong core values, we are able to achieve success in the industry.

- > **Digitization & Automation:** The incorporation of digitization & automation in the manufacturing of our products ensures increased productivity & efficiency resulting in delivering the best.
- > **High-quality products:** We strive to be our best and deliver the best. Each of our product is carefully manufactured.
- > **Customer satisfaction:** Our customers are our priority. We provide exceptional customer service through quality products, efficient services, and innovative solutions.
- > **Excellence and Innovation:** Innovation and excellence are an integral part of Corsis Technologies. We thrive to implement innovative ideas and solutions to achieve excellence.
- > **Teamwork & Integrity:** We work in a collaborative environment for successful cross-cultural collaboration, streamlined inter-departmental cooperation and efficient processes. Integrity drives us towards honesty and fulfilling our commitments, ultimately winning our customers trust and respect.

Optical fiber is the technology associated with **data transmission using light pulses travelling** along with a long fiber which is usually made of plastic or glass. Optical fibers are a unique medium of transmission. Optical fiber consists of a **core and a cladding layer**, selected for total internal reflection due to the difference in the refractive index between the two. They carry information in the form of data between two places using optical or light-based technology. Generally, optical fiber has a **diameter of 125 micrometers (µm)**, which is the diameter of the cladding, or outer reflecting layer. The core, or inner transmitting cylinder, may have a much smaller diameter (sometimes 10 µm). Optical fiber is rising in both **telecommunication and data communication** due to its unsurpassed advantages including:

- > High transmission capacity i.e., **optical fiber can carry enormous volumes of data at the speed of light over a very long distance.**
- > Optical fiber cables (OFC) are now preferred over old metal telecom cables as they are less impervious to electromagnetic interference (EMI), and smaller in size.
- > Additionally, optical fibers are more **long-lasting** as compared to metal wires, which are much fragile.

> Since fibers are made of a **dielectric material**, they are immune to **radiated and conducted interference**. It is nearly impossible to tap an optical fiber; therefore, **optical fiber transmission** is very secure.

> The **unceasing bandwidth needs**, on the other hand, are also yielding significant growth in optical fiber demands.

> Optical Fiber can be protected by **sheathing and armour** to make them resistant to **harsh environmental conditions**. Hence, it is widely adopted in commercial businesses, governments, the military, and many other industries for voice, video, and data transmission.

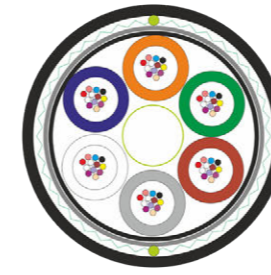
> Different types of cable are used for different applications, for example, **long distance telecommunication**, or providing a **high-speed data connection** between different parts of a building.

Corsis Technologies deals in manufacturing of wide range of optical fiber cables. We provide the best quality OFC and innovative cable design as per customers and application requirements.

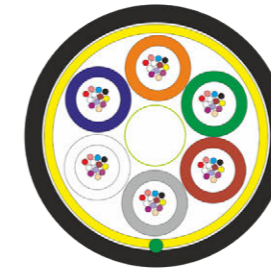
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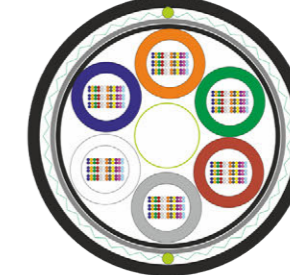
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MULTITUBE CABLE



ADSS CABLE



RIBBON CABLE



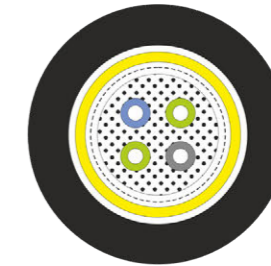
MICRO CABLE



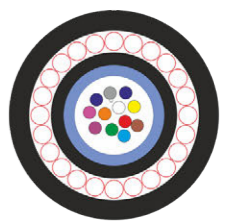
MULTI TUBE FIG-8 AERIAL CABLE



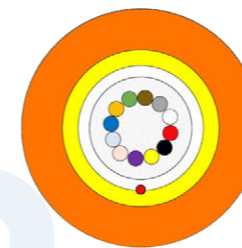
UNI TUBE FIG-8 AERIAL CABLE



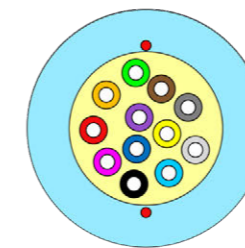
FIBER TIGHT JACKETING SPIRAL ARMOUR



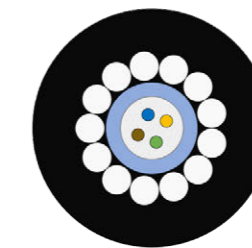
UNI TUBE WIRE ARMOUR



UNI TUBE MICRO DUCT CABLE



TIGHT BUFFER DISTRIBUTION CABLE



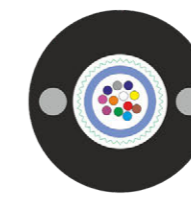
TACTICAL CABLE



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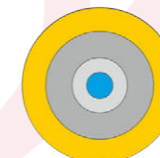
UNI TUBE CABLE



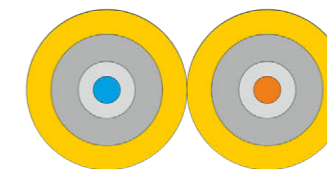
FLAT INDOOR CABLE



FLAT OUTDOOR CABLE



SIMPLEX CABLE



DUPLIX CABLE



FLAT AERIAL CABLE



Aerial Cables

UNITUBE DIELECTRIC ARMoured CABLE

PRODUCT DETAIL

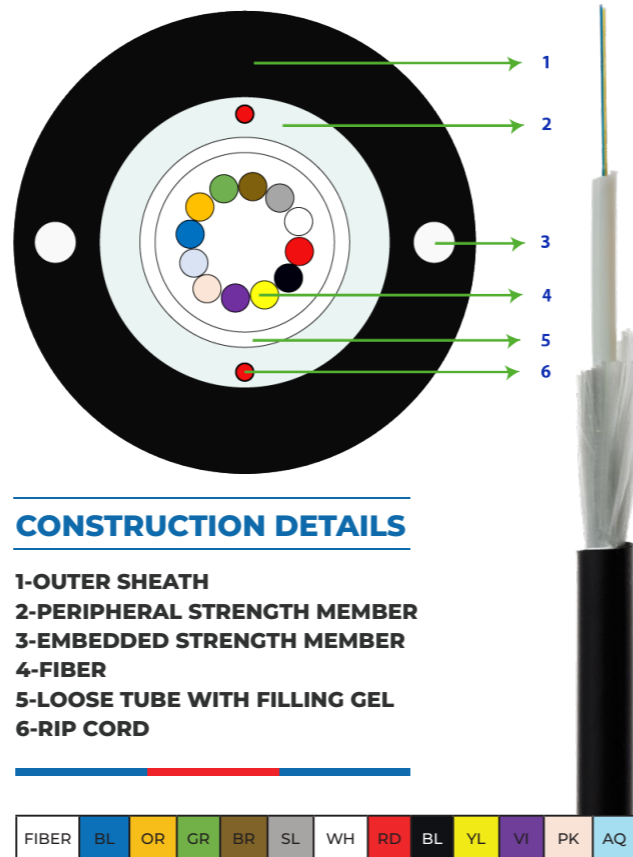
Unitube Single Sheath Dielectric Armoured Fiber Optic Cable is uni tube cable using optical fibers presented in loose tube and surrounded by glass roving yarn armoring. To protect the optical fibers from water penetration, the tube is filled with a thixotropic gel and is enclosed in a thermoplastic sheath that gives both mechanical and environmental protection to the cable.

PRODUCT APPLICATION

These cables can be used for outdoor applications in ducts or aerial drop for access and distribution for campus/ between and within buildings. These cables can be installed in ducts using pulling or blowing techniques and in aerial applications with traditional lashing methods.

STANDARDS

IEC 60794; IEC 60793; ITU-T ;Telecordia GR-20



CONSTRUCTION DETAILS

- 1-OUTER SHEATH
- 2-PERIPHERAL STRENGTH MEMBER
- 3-EMBEDDED STRENGTH MEMBER
- 4-FIBER
- 5-LOOSE TUBE WITH FILLING GEL
- 6-RIP CORD



TECHNICAL DATA					
FIBER COUNT	2F	4F	6F	8F	12F
CABLE DIAMETER (MM) +/- 5%	7.5	7.5	7.5	7.5	7.5
CABLE WEIGHT (KG/KM) +/- 10%	45	45	45	45	45

MECHANICAL PARAMETER					
MAX. TENSILE STRENGTH (N)	1000	1000	1000	1000	1000
CRUSH RESISTANCE (N/100 X 100 MM)	1000	1000	1000	1000	1000
BENDING RADIUS (DYNAMIC)	15D	15D	15D	15D	15D
BENDING RADIUS (STATIC)	10D	10D	10D	10D	10D
IMPACT RESISTANCE (N-m)	10	10	10	10	10
TORSION	±180°	±180°	±180°	±180°	±180°
WATER PENETRATION	1 meter Water Head, 3 meter Sample, 24 hrs, No Water Leakage				
ENVIRONMENTAL CONDITIONS	Operating Temperature: -20 °C to + 70 °C Storage Temperature: -30 °C to + 70 °C Installation Temperature: -10 °C to + 70 °C				

OPTICAL PARAMETER		
FIBER TYPE	G.652D	G.657A1
ATTENUATION (dB/km)	TYPICAL / MAXIMUM	TYPICAL / MAXIMUM
1310 nm	0.335/0.360	0.335/0.360
1550 nm	0.200/0.220	0.200/0.220
1625 nm	0.220/0.250	0.220/0.250

CUSTOMIZATION AVAILABLE ON REQUEST

MULTITUBE SINGLE SHEATH ADSS CABLE

PRODUCT DETAIL

Multi-tube Single Sheath ADSS Cables are light in weight which enable them to be installed aerially in short to medium span applications. This cable is a stranded loose tube cable with optical fiber placed inside robust buffer tubes stranded around a Fiber Reinforced Plastic (FRP) central strength member. In addition to optical fibers, the buffer tubes contain water blocking gel and the cable core is surrounded with water-swellable tape to prevent water penetration in the interstices of cable core. High strength aramid yarns are evenly distributed over the periphery core to provide the required tensile strength for aerial self-supporting applications. An overall thermoplastic sheath provides the cable with both mechanical and environmental protection.

PRODUCT APPLICATION

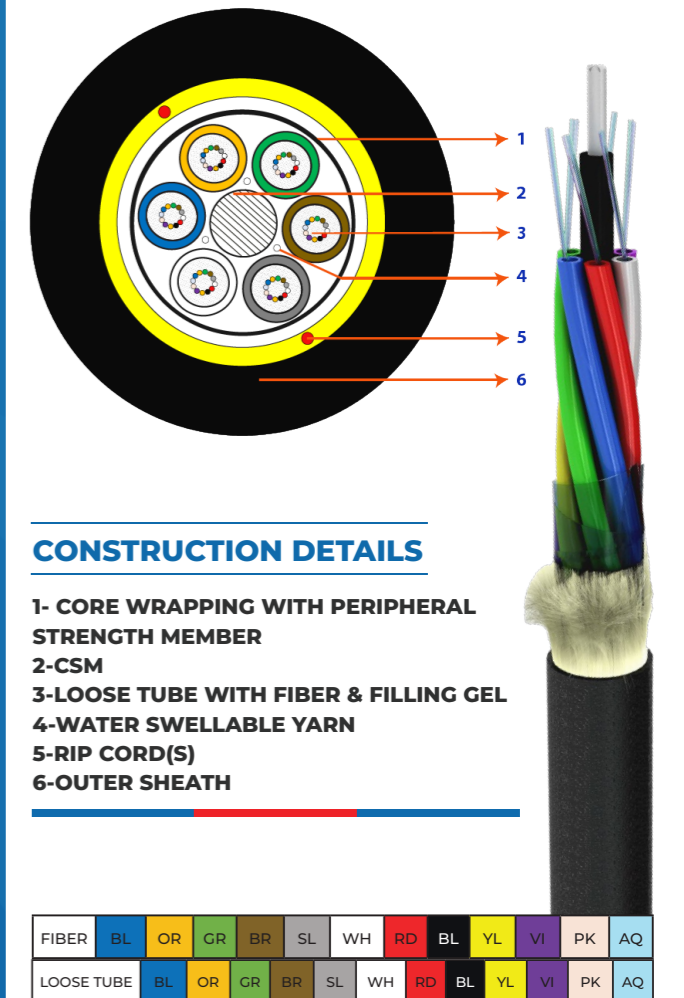
This ADSS Cable is designed for outside plant aerial self-supported applications in distribution as well as local and campus network loop architectures. These cables are used in aerial applications for short to medium span lengths including deployment along existing aerial right-of-way and electric transmission towers. This cable is suitable for aerial to-duct/ underground transitions.

STANDARDS

IEC 60794; IEC 60793; ITU-T ;Telecordia GR-20

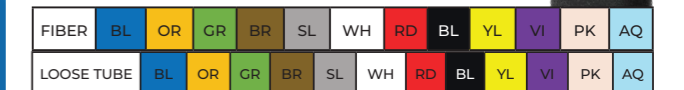
LOADING CONDITION

- 1- Wind Speed: 65Km/Hr
- 2-Ice Loading: 0mm
- 3-Span Length: 100 m
- 4-Installation Sag: 1.0 %



CONSTRUCTION DETAILS

- 1-CORE WRAPPING WITH PERIPHERAL STRENGTH MEMBER
- 2-CSM
- 3-LOOSE TUBE WITH FIBER & FILLING GEL
- 4-WATER SWELLABLE YARN
- 5-RIP CORD(S)
- 6-OUTER SHEATH



TECHNICAL DATA			OPTICAL PARAMETER			
FIBER COUNT	12F-72F	96F	144F	FIBER TYPE	G.652D	G.657A1
FIBER PER TUBE	12F	12F	12F	ATTENUATION (dB/km)	TYPICAL / MAXIMUM	TYPICAL / MAXIMUM
NO. OF TUBES	1-6	8	12	1310 nm	0.335/0.360	0.335/0.360
CABLE DIAMETER (MM) +/- 5%	11.3	13.3	16.7	1550 nm	0.200/0.220	0.200/0.220
CABLE WEIGHT (KG/KM) +/- 10%	97	147	205	1625 nm	0.220/0.250	0.220/0.250

MECHANICAL PARAMETER			
MAX. TENSILE STRENGTH (N)	4000	4000	4000
CRUSH RESISTANCE (N/100 X 100 MM)	2000	2000	2000
BENDING RADIUS (DYNAMIC)	20D	20D	20D
BENDING RADIUS (STATIC)	15D	15D	15D
IMPACT RESISTANCE (N-m)	25		
TORSION	±180°		
ENVIRONMENTAL CONDITIONS	Operating Temperature: -30 °C to + 70 °C Storage Temperature: -20 °C to + 60 °C Installation Temperature: -10 °C to + 70 °C		

CUSTOMIZATION AVAILABLE ON REQUEST

MULTITUBE DOUBLE SHEATH ADSS CABLE

PRODUCT DETAIL

Multi-tube Double Sheath ADSS Cables are light in weight which enable them to be installed aerially in short to medium span applications. This cable is a stranded loose tube cable with optical fiber placed inside robust buffer tubes stranded around a Fiber Reinforced Plastic (FRP) central strength member. In addition to optical fibers, the buffer tubes contain water blocking gel and the cable core is surrounded with water-swellable tape to prevent water penetration in the interstices of cable core. High strength aramid yarns are evenly distributed over the inner sheath to provide the required tensile strength for aerial self-supporting applications. Inner and outer thermoplastic sheath provides the cable both mechanical and environmental protection.

PRODUCT APPLICATION

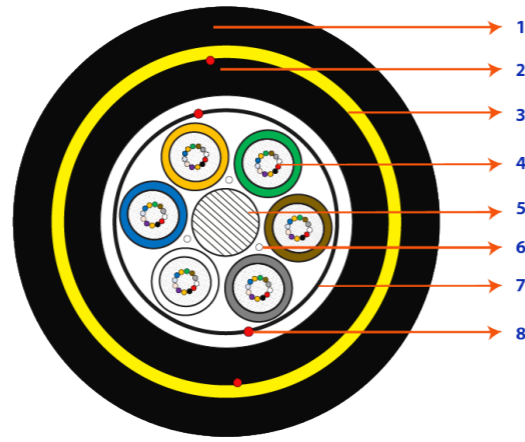
This ADSS Cable is designed for outside plant aerial self-supported applications in distribution as well as local and campus network loop architectures. These cables are used in aerial applications for short to medium span lengths including deployment along existing aerial right-of-way and electric transmission towers. This cable is suitable for aerial to-duct/underground transitions.

STANDARDS

IEC 60794; IEC 60793; ITU-T
;Telecordia GR-20

LOADING CONDITION

- 1- Wind Speed: 65Km/Hr
- 2-Ice Loading: 0mm
- 3-Span Length: 100 m
- 4-Installation Sag: 1.0 %



CONSTRUCTION DETAILS

- 1- OUTER SHEATH
- 2-INNER SHEATH
- 3-PERIPHERAL STRENGTH MEMBER
- 4-LOOSE TUBE WITH FIBER & FILLING GEL
- 5- CSM
- 6- WATER SWELLABLE YARN
- 7. CORE WRAPPING
- 8. RIP CORD

FIBER	BL	OR	GR	BR	SL	WH	RD	BL	YL	VI	PK	AQ
LOOSE TUBE	BL	OR	GR	BR	SL	WH	RD	BL	YL	VI	PK	AQ



TECHNICAL DATA			
FIBER COUNT	12F-72F	96F	144F
FIBER PER TUBE	12F	12F	12F
NO. OF TUBES	1-6	8	12
CABLE DIAMETER (MM) +/- 5%	14.5	15.3	19
CABLE WEIGHT (KG/KM) +/- 10%	145	195	290

OPTICAL PARAMETER		
FIBER TYPE	G.652D	G.657A1
ATTENUATION (dB/km)	TYPICAL / MAXIMUM	TYPICAL / MAXIMUM
1310 nm	0.335/0.360	0.335/0.360
1550 nm	0.200/0.220	0.200/0.220
1625 nm	0.220/0.250	0.220/0.250

MECHANICAL PARAMETER		
MAX. TENSILE STRENGTH (N)	5000	5000
CRUSH RESISTANCE (N/100 X 100 MM)	3000	3000
BENDING RADIUS (DYNAMIC)	20D	20D
BENDING RADIUS (STATIC)	15D	15D
IMPACT RESISTANCE (N-m)	25	
TORSION	±180°	
ENVIRONMENTAL CONDITIONS	Operating Temperature: -30 °C to + 70 °C Storage Temperature: -20 °C to + 60 °C Installation Temperature: -10 °C to + 70 °C	

MULTITUBE DRY DRY SINGLE SHEATH ADSS CABLE

PRODUCT DETAIL

Dry Dry Multi-tube Single Sheath ADSS Cables are lighter in weight which enable them to be installed aerially in short to medium span applications. This cable is a stranded loose tube cable with optical fiber placed inside robust buffer tubes stranded around a Fiber Reinforced Plastic (FRP) central strength member. In addition to optical fibers, the buffer tubes contain water blocking yarn and the cable core is surrounded with water-swellable tape to prevent water penetration in the interstices of cable core. High strength aramid yarns are evenly distributed over the core to provide the required tensile strength for aerial self-supporting applications. An overall thermoplastic sheath provides the cable both mechanical and environmental protection.

PRODUCT APPLICATION

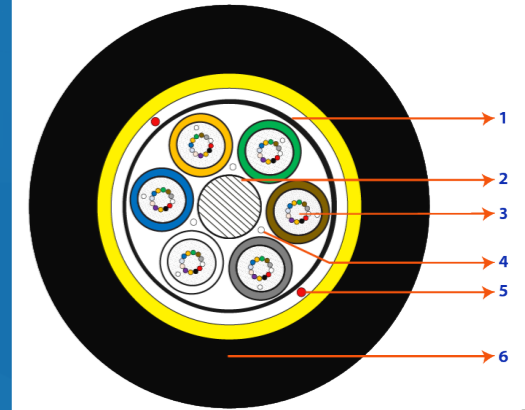
This ADSS Cable is designed for outside plant aerial self-supported applications in distribution as well as local and campus network loop architectures. These cables are used in aerial applications for short to medium span lengths including deployment along existing aerial right-of-way and electric transmission towers. This cable is suitable for aerial to-duct/underground transitions.

STANDARDS

IEC 60794; IEC 60793; ITU-T
;Telecordia GR-20

LOADING CONDITION

- 1- Wind Speed: 65Km/Hr
- 2-Ice Loading: 0mm
- 3-Span Length: 100 m
- 4-Installation Sag: 1.0 %



CONSTRUCTION DETAILS

- 1- CORE WRAPPING WITH PERIPHERAL STRENGTH MEMBER
- 2-CSM
- 3-LOOSE TUBE FIBER WITH WS YARN
- 4-WATER SWELLABLE YARN
- 5- RIP CORD(S)
- 6-OUTER SHEATH

FIBER	BL	OR	GR	BR	SL	WH	RD	BL	YL	VI	PK	AQ
LOOSE TUBE	BL	OR	GR	BR	SL	WH	RD	BL	YL	VI	PK	AQ



TECHNICAL DATA			
FIBER COUNT	12F-72F	96F	144F
FIBER PER TUBE	12F	12F	12F
NO. OF TUBES	1-6	8	12
CABLE DIAMETER (MM) +/- 5%	12.5	13.0	17.7
CABLE WEIGHT (KG/KM) +/- 10%	100	130	215

OPTICAL PARAMETER		
FIBER TYPE	G.652D	G.657A1
ATTENUATION (dB/km)	TYPICAL / MAXIMUM	TYPICAL / MAXIMUM
1310 nm	0.335/0.360	0.335/0.360
1550 nm	0.200/0.220	0.200/0.220
1625 nm	0.220/0.250	0.220/0.250

MECHANICAL PARAMETER		
MAX. TENSILE STRENGTH (N)	2700	2700
CRUSH RESISTANCE (N/100 X 100 MM)	2000	2000
BENDING RADIUS (DYNAMIC)	20D	20D
BENDING RADIUS (STATIC)	15D	15D
IMPACT RESISTANCE (N-m)	25	
TORSION	±180°	
ENVIRONMENTAL CONDITIONS	Operating Temperature: -30 °C to + 70 °C Storage Temperature: -40 °C to + 70 °C Installation Temperature: -20 °C to + 60 °C	

UNITUBE SINGLE SHEATH WIRE ARMoured FIGURE- 8 CABLE

PRODUCT DETAIL

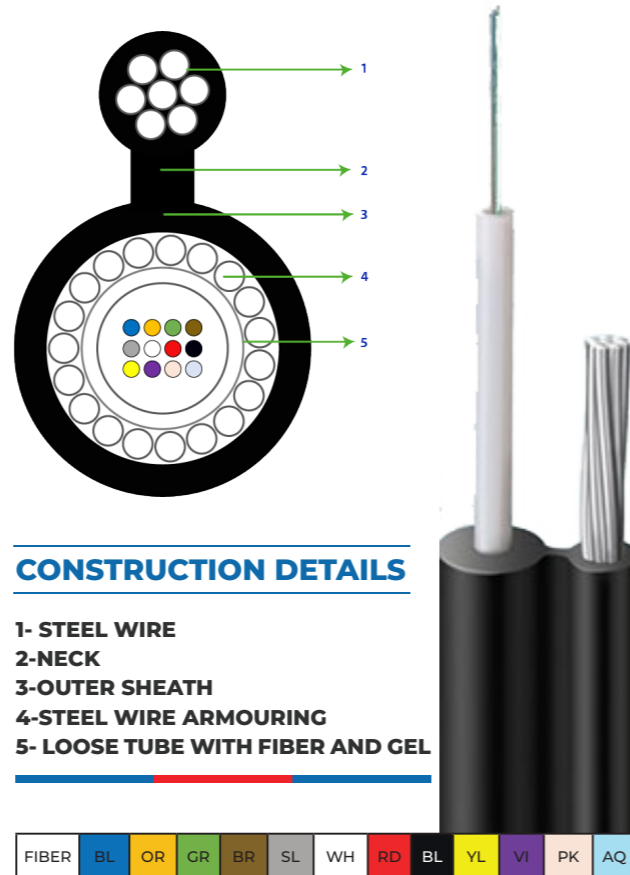
Unitube Fig.8 Aerial optical fiber cable is a uni tube cable which is used for aerial installation. This product has better grip for aerial installation. This product has integrated high strength stranded steel messenger wire as a support strand which provides high tensile strength to the cable and make them ideal to be used for aerial outdoor applications. Color fiber and gel placed inside unitube to protect water penetration and tube is surrounded by PE coated Steel wire to provide better crush resistance. Thermoplastic seamless sheath material is provide over cable core.

PRODUCT APPLICATION

Designed suitably for outside plant (OSP) aerial applications for short runs between buildings and also for short, medium span aerial installations provides easy and economical one-step installation and stable performance over a wide temperature range and is compatible with any local distribution telecommunication network.

STANDARDS

IEC 60794; IEC 60793; ITU-T ;Telecordia GR-20



CONSTRUCTION DETAILS

- 1- STEEL WIRE
- 2-NECK
- 3-OUTER SHEATH
- 4-STEEL WIRE ARMOURING
- 5- LOOSE TUBE WITH FIBER AND GEL

FIBER	BL	OR	GR	BR	SL	WH	RD	BL	YL	VI	PK	AQ
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TECHNICAL DATA	
FIBER COUNT	4F-12F
CABLE DIAMETER (MM) +/- 5%	6.8 X 13.6
CABLE WEIGHT (KG/KM) +/- 10%	130

MECHANICAL PARAMETER	
MAX. TENSILE STRENGTH (N)	1500
CRUSH RESISTANCE (N/100 X 100 MM)	1500
BENDING RADIUS (DYNAMIC)	20D
BENDING RADIUS (STATIC)	15D
IMPACT RESISTANCE (N-m)	25
TORSION	±180°
WATER PENETRATION	1 meter Water Head, 3 meter Sample, 24 hrs, No Water Leakage
ENVIRONMENTAL CONDITIONS	Operating Temperature: -20 °C to + 70 °C Storage Temperature: -30 °C to + 70 °C Installation Temperature: -10 °C to + 70 °C

OPTICAL PARAMETER		
FIBER TYPE	G.652D	G.657A1
ATTENUATION (dB/km)	TYPICAL / MAXIMUM	TYPICAL / MAXIMUM
1310 nm	0.335/0.360	0.335/0.360
1550 nm	0.200/0.220	0.200/0.220
1625 nm	0.220/0.250	0.220/0.250

MULTITUBE SINGLE SHEATH FIGURE- 8 CABLE

PRODUCT DETAIL

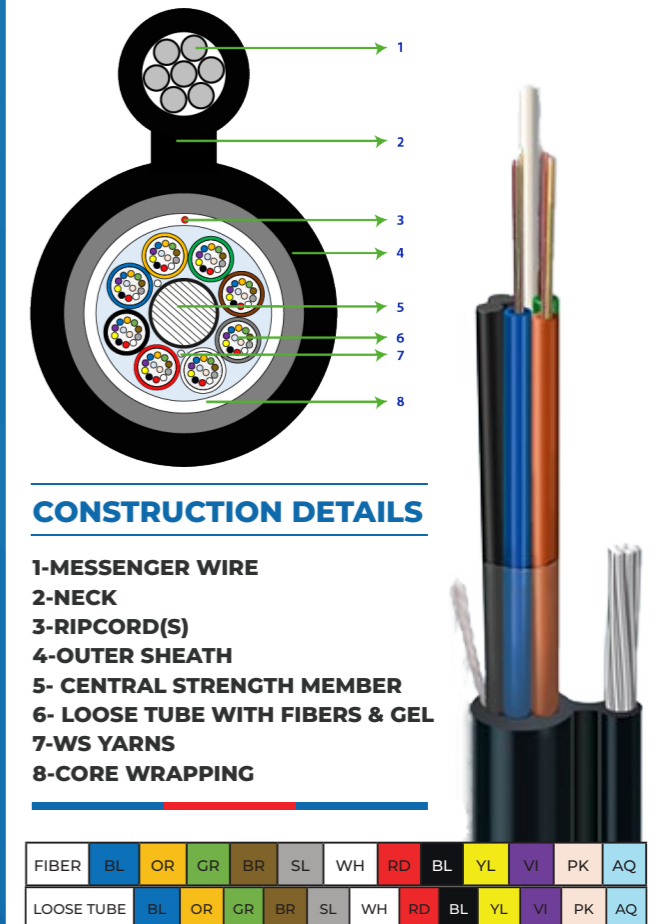
Single Sheath Figure-8 Cables have integrated high strength stranded galvanised steel messenger wire as a support strand which provides high tensile strength to the cable making it suitable for aerial self-supported installations. This cable is a stranded loose tube cable with optical fiber placed inside robust buffer tubes stranded around a Fiber Reinforced Plastic (FRP) central strength member. In addition to optical fibers, the buffer tubes contain water blocking gel, and the cable core is surrounded with water-swellable tape to prevent water penetration in the interstices of cable core. Thermoplastic sheath is applied over the cable core and integrated stranded steel messenger to form a "Figure-8" shape.

PRODUCT APPLICATION

This cable is designed for outside plant (OSP) aerial self-supported applications in distribution as well as local and campus network loop architectures. These cables are used in aerial applications for short to medium span lengths including deployment along existing aerial rights-of-way. Once detached from the steel messenger wire, cable is suitable for aerial-to-duct/ underground transitions. This design provides easy and economical one-step installation and stable performance over a wide temperature range & is compatible with any local distribution telecommunication network.

STANDARDS

IEC 60794; IEC 60793; ITU-T ;Telecordia GR-20



CONSTRUCTION DETAILS

- 1-MESSENGER WIRE
- 2-NECK
- 3-RIPCORD(S)
- 4-OUTER SHEATH
- 5- CENTRAL STRENGTH MEMBER
- 6- LOOSE TUBE WITH FIBERS & GEL
- 7-WS YARNS
- 8-CORE WRAPPING

FIBER	BL	OR	GR	BR	SL	WH	RD	BL	YL	VI	PK	AQ
LOOSE TUBE	BL	OR	GR	BR	SL	WH	RD	BL	YL	VI	PK	AQ

TECHNICAL DATA				OPTICAL PARAMETER	
FIBER COUNT	12F-72F	96F	144F	FIBER TYPE	G.652D & G.657A1
FIBER PER TUBE	12F	12F	12F	ATTENUATION (dB/km)	TYPICAL / MAXIMUM
NO. OF TUBES	1-6	8	12	1310 nm	0.335/0.360
CABLE DIAMETER (MM) +/- 5%	10.8 x 19.0	12.5 x 20.5	16.0 x 24.0	1550 nm	0.200/0.220
CABLE WEIGHT (KG/KM) +/- 10%	170	220	275	1625 nm	0.220/0.250

MECHANICAL PARAMETER			
MAX. TENSILE STRENGTH (N)	5000	5000	5000
CRUSH RESISTANCE (N/100 X 100 MM)	3000	3000	3000
BENDING RADIUS (DYNAMIC)	20D	20D	20D
BENDING RADIUS (STATIC)	15D	15D	15D
IMPACT RESISTANCE (N-m)	25		
TORSION	±180°		
ENVIRONMENTAL CONDITIONS	Operating Temperature: -30 °C to + 70 °C Storage Temperature: -40 °C to + 70 °C Installation Temperature: -20 °C to + 60 °C		

RIBBON MULTITUBE SINGLE SHEATH ADSS CABLE

PRODUCT DETAIL

Multitube Single Sheath ADSS Cable combines robust performance for aerial and duct installations with the productivity of high-count mass fusion splicing. The optical fibers are arranged into ribbon units by placing the fibers in a flat array of 12 colour-coded, fibers bonded together by a UV-curable matrix material. The Ribbon units placed inside robust buffer tubes are stranded around a Fiber Reinforced Plastic (FRP) central strength member. In addition to optical fibers, the buffer tubes contain water blocking gel, and the cable core is surrounded with water-swellable tape to prevent water penetration in the interstices of cable core. High strength aramid yarns are evenly distributed over the core to provide the required tensile strength for aerial self-supporting applications. An overall thermoplastic sheath provides the cable with both mechanical and environmental protection.

PRODUCT APPLICATION

Ribbon cable design meets the application which requires delivering the highest fiber density in the most compact cable package possible. This cable offers an outstanding solution for demanding high-growth, high-bandwidth communications applications like data centers, equipment connections within cabinets, outside plant applications. These cables are used in aerial applications for short to medium span lengths including deployment along existing aerial right of way and electric transmission towers. This cable is suitable for aerial-to-duct/underground transitions.

STANDARDS

IEC 60794; IEC 60793; ITU-T ;Telecordia GR-20

LOADING CONDITION

- 1- Wind Speed: 65Km/Hr
- 2-Ice Loading: 0mm
- 3-Span Length: 100 m
- 4-Installation Sag: 1.0 %



CONSTRUCTION DETAILS

- 1- CORE WRAPPING WITH PERIPHERAL STRENGTH MEMBER
- 2- FRP ROD AS CSM
- 3-LOOSE TUBE WITH RIBBON FIBER & THIXOTROPIC GEL
- 4-WATER BLOCKING YARN
- 5-RIP CORD(S)
- 6- OUTER SHEATH

FIBER	BL	OR	GR	BR	SL	WH	RD	BL	YL	VI	PK	AQ
LOOSE TUBE	BL	OR	GR	BR	SL	WH	RD	BL	YL	VI	PK	AQ

RIBBON MULTITUBE DOUBLE SHEATH ADSS CABLE

PRODUCT DETAIL

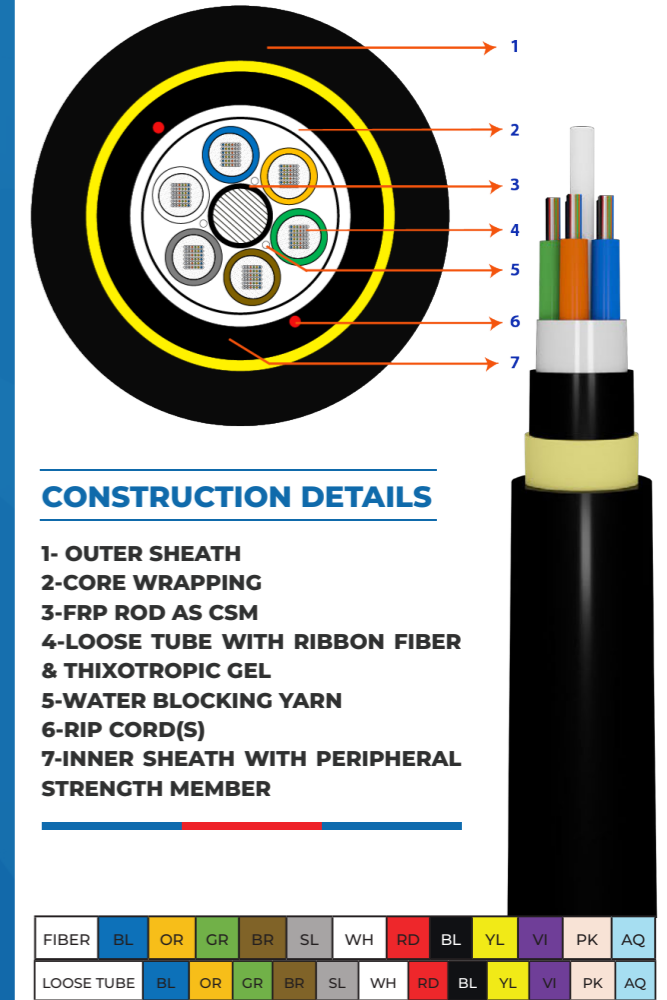
Multitube Double Sheath ADSS Cable combines robust performance for aerial/duct installations with the productivity of high-count mass fusion splicing. The optical fibers are arranged into ribbon units by placing the fibers in a flat array of 12 colour-coded fibers bonded together by a UV-curable matrix material. The ribbon units placed inside robust buffer tubes are stranded around a Fiber Reinforced Plastic (FRP) central strength member. In addition to optical fibers, the buffer tubes contain water blocking gel, of cable core. High strength aramid yarns are evenly distributed over the core to provide the required tensile strength for aerial self-supporting applications. An overall thermoplastic sheath provides the cable with both mechanical and environmental protection.

PRODUCT APPLICATION

Ribbon cable design meets the application which requires delivering the highest fiber density in the most compact cable package possible. This cable offers an outstanding solution for demanding high-growth, high-bandwidth communications applications like data centers, equipment connections within cabinets, outside plant applications. These cables are used in aerial applications for short to medium span-lengths including deployment along existing aerial right of way and electric transmission towers. This cable is suitable for aerial-to-duct /underground transitions.

STANDARDS

IEC 60794; IEC 60793; ITU-T ;Telecordia GR-20



CONSTRUCTION DETAILS

- 1- OUTER SHEATH
- 2-CORE WRAPPING
- 3-FRP ROD AS CSM
- 4-LOOSE TUBE WITH RIBBON FIBER & THIXOTROPIC GEL
- 5-WATER BLOCKING YARN
- 6-RIP CORD(S)
- 7-INNER SHEATH WITH PERIPHERAL STRENGTH MEMBER

FIBER	BL	OR	GR	BR	SL	WH	RD	BL	YL	VI	PK	AQ
LOOSE TUBE	BL	OR	GR	BR	SL	WH	RD	BL	YL	VI	PK	AQ

TECHNICAL DATA				
FIBER COUNT	72	96	144	288
FIBER PER RIBBON	12F	12F	12F	12F
NO.OF RIBBON	6	8	12	24
NO. OF FIBER PER TUBE	24	24	24	48
NO.OF RIBBON PER TUBE	2	2	2	4
CABLE DIAMETER (MM) +/- 5%	18.2	18.2	20.2	21.2
CABLE WEIGHT (KG/KM) +/- 10%	230	237	280	295

OPTICAL PARAMETER			
FIBER TYPE	G.652D		G.657A1
ATTENUATION (dB/km)	TYPICAL / MAXIMUM		TYPICAL / MAXIMUM
1310 nm	0.335/0.360		0.335/0.360
1550 nm	0.200/0.220		0.200/0.220
1625 nm	0.220/0.250		0.220/0.250

MECHANICAL PARAMETER				
MAX. TENSILE STRENGTH (N)	5500	5500	5500	5500
CRUSH RESISTANCE (N/100 X 100 MM)	2000	2000	2000	2000
BENDING RADIUS (DYNAMIC)	20D	20D	20D	20D
BENDING RADIUS (STATIC)	15D	15D	15D	15D
IMPACT RESISTANCE (N-m)	25	25	25	25
TORSION	±180°	±180°	±180°	±180°
WATER PENETRATION	1 meter Water Head, 3 meter Sample, 24 hrs, No Water Leakage			
	Operating Temperature: -30 °C to + 70 °C			
ENVIRONMENTAL CONDITIONS	Storage Temperature: -30 °C to + 70 °C			
	Installation Temperature: -20 °C to + 70 °C			

TECHNICAL DATA				
FIBER COUNT	72	96	144	288
FIBER PER RIBBON	12F	12F	12F	12F
NO.OF RIBBON	6	8	12	24
NO. OF FIBER PER TUBE	24	24	24	48
NO.OF RIBBON PER TUBE	2	2	2	4
CABLE DIAMETER (MM) +/- 5%	20.6	20.6	20.6	22.7
CABLE WEIGHT (KG/KM) +/- 10%	300	308	313	321

OPTICAL PARAMETER			
FIBER TYPE	G.652D		G.657A1
ATTENUATION (dB/km)	TYPICAL / MAXIMUM		TYPICAL / MAXIMUM
1310 nm	0.335/0.360		0.335/0.360
1550 nm	0.200/0.220		0.200/0.220
1625 nm	0.220/0.250		0.220/0.250

MECHANICAL PARAMETER				
MAX. TENSILE STRENGTH (N)	7000	7000	7000	7000
CRUSH RESISTANCE (N/100 X 100 MM)	2000	2000	2000	2000
BENDING RADIUS (DYNAMIC)	20D	20D	20D	20D
BENDING RADIUS (STATIC)	15D	15D	15D	15D
IMPACT RESISTANCE (N-m)	25	25	25	25
TORSION	±180°	±180°	±180°	±180°
WATER PENETRATION	1 meter Water Head, 3 meter Sample, 24 hrs, No Water Leakage			
	Operating Temperature: -30 °C to + 70 °C			
ENVIRONMENTAL CONDITIONS	Storage Temperature: -30 °C to + 70 °C			
	Installation Temperature: -20 °C to + 70 °C			

UNITUBE RIBBON DIELECTRIC ARMoured CABLE

PRODUCT DETAIL

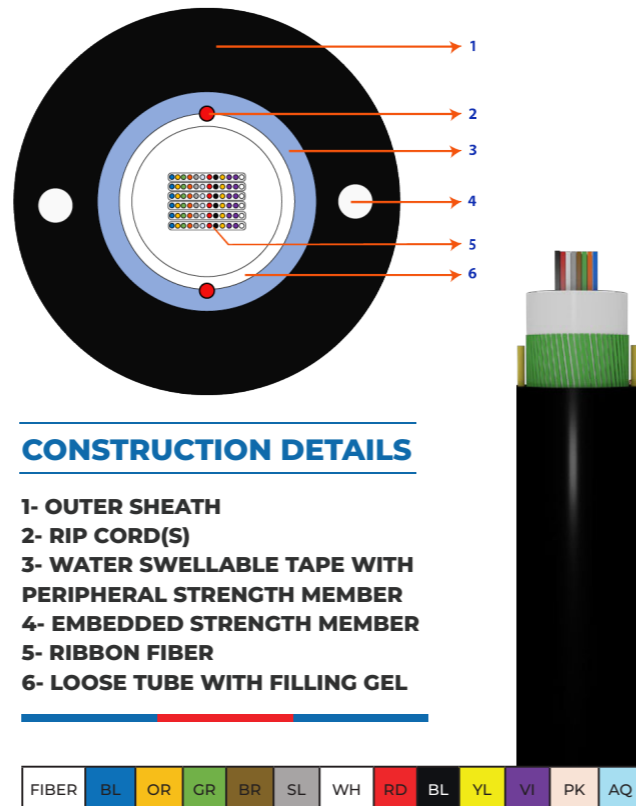
Unitube Single Sheath Cable combines robust performance for duct installations with the productivity of high-count easy splicing. The optical fibers are arranged into ribbon units by placing the fibers in array of 12 fiber bounded by UV curable matrix. In addition to optical fibers, the buffer tubes contain filling gel to prevent water ingress inside the tube. The loose-tube is surrounded with water-swellable tape to protect against moisture ingress, and anti-buckling strength members are provided in form of two diagonally opposite strength members embedded inside the thermoplastic outer sheath.

PRODUCT APPLICATION

Cable design meets the application which requires delivering the highest Fiber density in the most compact cable package possible. This cable offers an outstanding solution for demanding high-growth, high-bandwidth communications applications.

STANDARDS

IEC 60794; IEC 60793; ITU-T; Telecordia GR-20



CONSTRUCTION DETAILS

- 1- OUTER SHEATH
- 2- RIP CORD(S)
- 3- WATER SWELLABLE TAPE WITH PERIPHERAL STRENGTH MEMBER
- 4- EMBEDDED STRENGTH MEMBER
- 5- RIBBON FIBER
- 6- LOOSE TUBE WITH FILLING GEL



UNITUBE ADSS CABLE

PRODUCT DETAIL

Unitube ADSS Fiber Optic Cable is a unitube cable, which is intended for use in aerial installation. This cable consists of colour coded optical fibers placed in a central tube along with gel to protect from water penetration. Central Tube is surrounded with aramid yarns which provides tensile strength to the core. Thermoplastic sheath placed over the aramid yarn armoured layer that sheath gives both mechanical and environmental protection to the cable.

PRODUCT APPLICATION

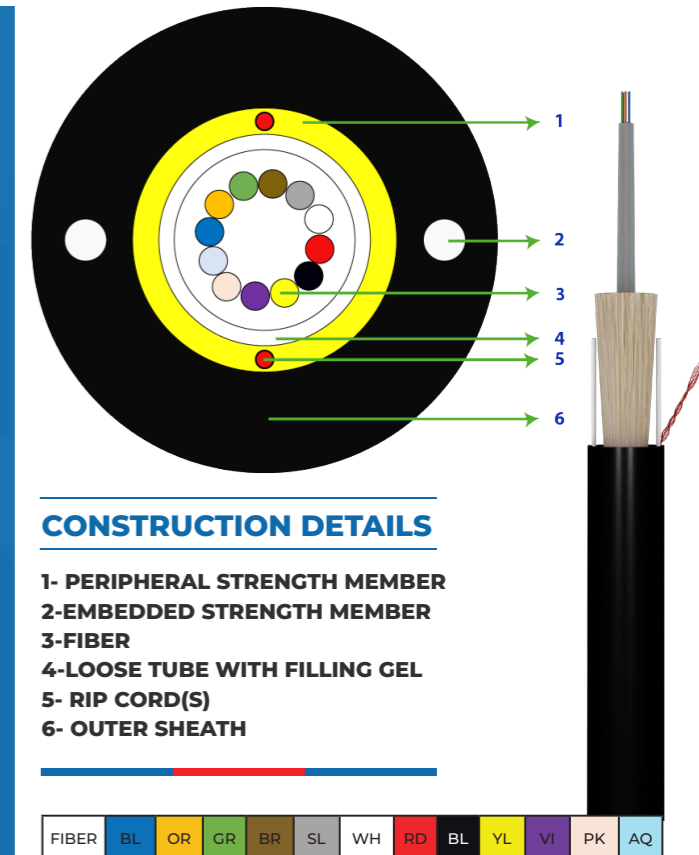
These cables can be used for outdoor applications in access network or as access cable from outdoor to indoor in customer premises network. It can also be used as access building cable in premises distribution system, especially used in outdoor aerial access cabling.

STANDARDS

IEC 60794; IEC 60793; ITU-T; Telecordia GR-20

LOADING CONDITION

- 1- Wind Speed: 100Km/Hr
- 2- Ice Loading: 0mm
- 3- Span Length: 50 m
- 4- Installation Sag: 2.0 %



CONSTRUCTION DETAILS

- 1- PERIPHERAL STRENGTH MEMBER
- 2- EMBEDDED STRENGTH MEMBER
- 3- FIBER
- 4- LOOSE TUBE WITH FILLING GEL
- 5- RIP CORD(S)
- 6- OUTER SHEATH



TECHNICAL DATA		
FIBER COUNT	48F	72F
FIBER PER RIBBON	12F/ RIBBON	12F/ RIBBON
NO.OF RIBBON	4	6
No. OF FIBER PER TUBE	48	72
CABLE DIAMETER (MM) +/- 5%	11.6	12.4
CABLE WEIGHT (KG/KM) +/- 10%	130	145

MECHANICAL PARAMETER		
MAX. TENSILE STRENGTH (N)	1500	1500
CRUSH RESISTANCE (N/100 X 100 MM)	2000	2000
BENDING RADIUS (DYNAMIC)	25D	25D
BENDING RADIUS (STATIC)	20D	20D
IMPACT RESISTANCE (N-m)	25	25
TORSION	±180°	±180°
WATER PENETRATION	1 meter Water Head, 3 meter Sample, 24 hrs, No Water Leakage	
ENVIRONMENTAL CONDITIONS	Operating Temperature: -30 °C to + 70 °C Storage Temperature: -40 °C to + 70 °C Installation Temperature: -20 °C to + 70 °C	

OPTICAL PARAMETER		
FIBER TYPE	G.652D	G.657A1
ATTENUATION (dB/km)	TYPICAL / MAXIMUM	TYPICAL / MAXIMUM
1310 nm	0.335/0.360	0.335/0.360
1550 nm	0.200/0.220	0.200/0.220
1625 nm	0.220/0.250	0.220/0.250

TECHNICAL DATA					
FIBER COUNT	2F	4F	6F	8F	12F
CABLE DIAMETER (MM) +/- 5%	6.5	6.5	6.5	6.5	6.5
CABLE WEIGHT (KG/KM) +/- 10%	38	38	38	38	38

MECHANICAL PARAMETER					
MAX. TENSILE STRENGTH (N)	1000	1000	1000	1000	1000
CRUSH RESISTANCE (N/100 X 100 MM)	1000	1000	1000	1000	1000
BENDING RADIUS (DYNAMIC)	15D	15D	15D	15D	15D
BENDING RADIUS (STATIC)	10D	10D	10D	10D	10D
IMPACT RESISTANCE (N-m)	10	10	10	10	10
TORSION	±180°	±180°	±180°	±180°	±180°
WATER PENETRATION	1 meter Water Head, 3 meter Sample, 24 hrs, No Water Leakage				
ENVIRONMENTAL CONDITIONS	Operating Temperature: -20 °C to + 70 °C Storage Temperature: -30 °C to + 70 °C Installation Temperature: -10 °C to + 70 °C				

OPTICAL PARAMETER		
FIBER TYPE	G.652D	G.657A1
ATTENUATION (dB/km)	TYPICAL / MAXIMUM	TYPICAL / MAXIMUM
1310 nm	0.335/0.360	0.335/0.360
1550 nm	0.200/0.220	0.200/0.220
1625 nm	0.220/0.250	0.220/0.250

UNITUBE AERIAL CABLE

UNITUBE FLAT DROP CABLE

PRODUCT DETAIL

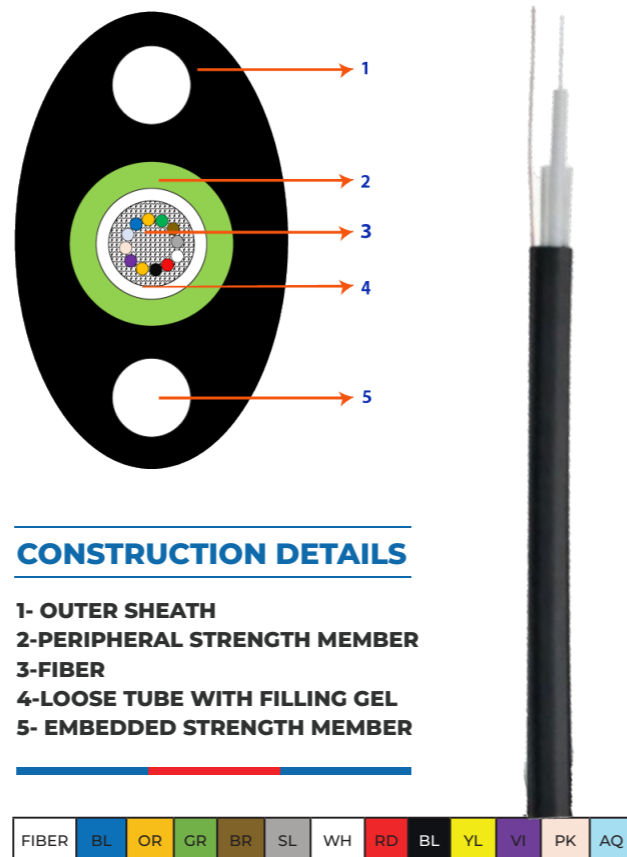
Unitube Single Sheath Flat Drop Optical Fiber Cable is a central tube cable using optical Fibers presented in loose tube filled with a thixotropic gel, and is enclosed in a thermoplastic outer sheath. The cables have two embedded strength members for anti buckling property. Peripheral strength member gives its extra protection and tensile strength. This cable is suitable for under ground and aerial installation.

PRODUCT APPLICATION

This cable is suitable for outside plant installation. This is self supporting cable and it can be used in aerial as well as in duct application.

STANDARDS

IEC 60794; IEC 60793; ITU-T ;Telecordia GR-20



CONSTRUCTION DETAILS

- 1- OUTER SHEATH
- 2-PERIPHERAL STRENGTH MEMBER
- 3-FIBER
- 4-LOOSE TUBE WITH FILLING GEL
- 5- EMBEDDED STRENGTH MEMBER



TECHNICAL DATA

FIBER COUNT	2F	4F	6F	8F	12F
CABLE DIAMETER (MM) +/- 5%	4.7 X 8.5	4.7 X 8.5	4.7 X 8.5	4.7 X 8.5	4.7 X 8.5
CABLE WEIGHT (KG/KM) +/- 10%	40	40	40	40	40

MECHANICAL PARAMETER

MAX. TENSILE STRENGTH (N)	800	800	800	800	800
CRUSH RESISTANCE (N/100 X 100 MM)	1000	1000	1000	1000	1000
BENDING RADIUS (DYNAMIC)	20D	20D	20D	20D	20D
BENDING RADIUS (STATIC)	10D	10D	10D	10D	10D
IMPACT RESISTANCE (N-m)	15	15	15	15	15
TORSION	±180°	±180°	±180°	±180°	±180°
WATER PENETRATION	1 meter Water Head, 3 meter Sample, 24 hrs, No Water Leakage				
ENVIRONMENTAL CONDITIONS	Operating Temperature: -20 °C to + 70 °C				
	Storage Temperature: -30 °C to + 70 °C				
	Installation Temperature: -10 °C to + 70 °C				

OPTICAL PARAMETER

FIBER TYPE	G.652D	G.657A1
ATTENUATION (dB/km)	TYPICAL / MAXIMUM	TYPICAL / MAXIMUM
1310 nm	0.335/0.360	0.335/0.360
1550 nm	0.200/0.220	0.200/0.220
1625 nm	0.220/0.250	0.220/0.250



Under Ground Cables

MULTITUBE DOUBLE SHEATH FLAT FRP ARMoured CABLE

PRODUCT DETAIL

Multitube Double Sheath Flat FRP Armoured Fiber Optic Cables are suitable for ducts as well as overhead (Aerial) application. This cable is a stranded loose tube cable with optical fibers placed inside robust buffer tubes stranded around a round Fiber Reinforced Plastic (FRP) central strength member. In addition to optical fibers, the buffer tubes are protected with water blocking gel and the cable core is surrounded with water-swellable tape and water-swellable yarns to prevent water ingress in the interstices of cable core. Flat FRP armouring provided over the inner sheath and an overall thermoplastic sheathing provides the cable with both mechanical as well as environmental protection.

PRODUCT APPLICATION

These cables are mostly used for outside plant application and for multipurpose installation (overhead, direct buried, in ducts). Mainly used in overhead applications for short to medium span-lengths including deployment along existing aerial rights-of-way and electric transmission lines. This cable is also suitable for aerial-to-duct/ underground/ direct buried transitions. Flat FRP armouring gives this design better crush resistance so we can also use this cable where better crush required.

STANDARDS

IEC 60794; IEC 60793; ITU-T Rec. G.652;Telecordia GR-20



CONSTRUCTION DETAILS

- 1- CENTRAL STRENGTH MEMBER
- 2- LOOSE TUBE WITH FIBERS & GEL
- 3- WS YARN
- 4- CORE WRAPPING
- 5- INNER SHEATH
- 6- FLAT FRP STRENGTH MEMBER
- 7- RIP CORD(S)
- 8- OUTER SHEATH

FIBER	BL	OR	GR	BR	SL	WH	RD	BL	YL	VI	PK	AQ
LOOSE TUBE	BL	OR	GR	BR	SL	WH	RD	BL	YL	VI	PK	AQ

MULTITUBE SINGLE SHEATH UNARMoured CABLE

PRODUCT DETAIL

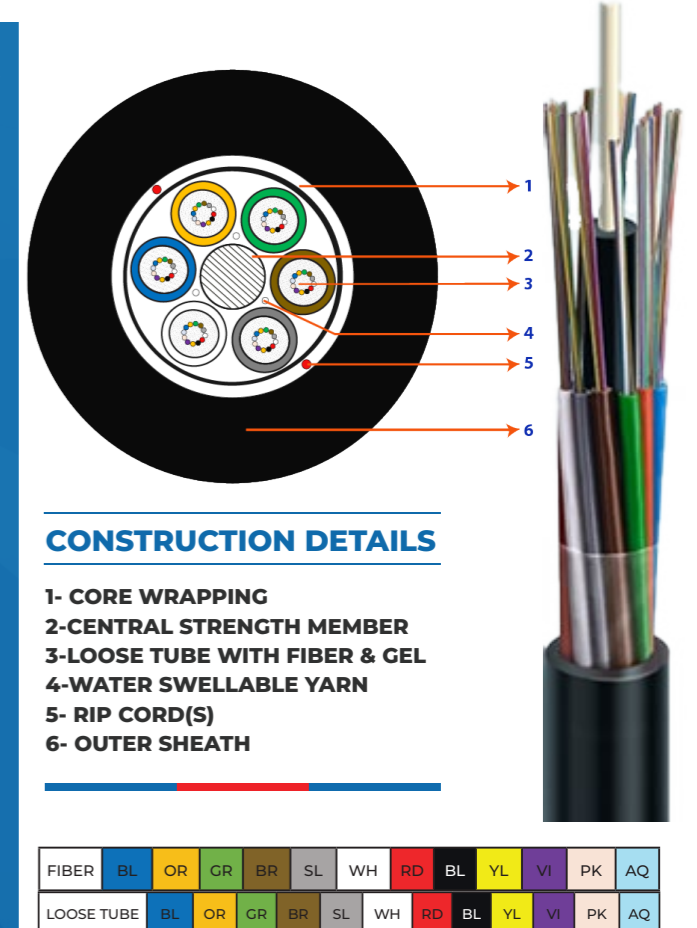
Multitube Single Sheath Fiber Optic Cables are suitable for duct applications. This cable is a stranded loose tube cable with optical fibers placed inside robust buffer tubes stranded around a Fiber Reinforced Plastic (FRP) central strength member. In addition to optical fibers, the buffer tubes contain water blocking gel and the cable core is surrounded with water-swellable tape to prevent water ingress in the interstices of cable core. The cable core is surrounded with thermoplastic sheath making the cable robust and also provide mechanical and environmental protection.

PRODUCT APPLICATION

These cables are typically used for outside plant applications including duct and lashed aerial installation in harsh environments. They can be installed in ducts with either pulling, trenching or blowing techniques and in aerial applications with traditional lashing methods.

STANDARDS

IEC 60794; IEC 60793; ITU-T ;Telecordia GR-20



CONSTRUCTION DETAILS

- 1- CORE WRAPPING
- 2-CENTRAL STRENGTH MEMBER
- 3-LOOSE TUBE WITH FIBER & GEL
- 4-WATER SWELLABLE YARN
- 5- RIP CORD(S)
- 6- OUTER SHEATH

FIBER	BL	OR	GR	BR	SL	WH	RD	BL	YL	VI	PK	AQ
LOOSE TUBE	BL	OR	GR	BR	SL	WH	RD	BL	YL	VI	PK	AQ

TECHNICAL DATA

FIBER COUNT	12F-72F	96F	144F
FIBER PER TUBE	12F	12F	12F
NO. OF TUBES	1-6	8	12
CABLE DIAMETER (MM) +/- 5%	12.5	15	18
CABLE WEIGHT (KG/KM) +/- 10%	145	180	220

MECHANICAL PARAMETER

MAX. TENSILE STRENGTH (N)	9000	9000	9000
CRUSH RESISTANCE (N/100 X 100 MM)	4000	4000	4000
BENDING RADIUS (DYNAMIC)	20D	20D	20D
BENDING RADIUS (STATIC)	15D	15D	15D
IMPACT RESISTANCE (N-m)	25		
TORSION	±180°		
ENVIRONMENTAL CONDITIONS	Operating Temperature: -30 °C to + 70 °C Storage Temperature: -40 °C to + 70 °C Installation Temperature: -20 °C to + 60 °C		

OPTICAL PARAMETER

FIBER TYPE	G.652D	G.657A1
ATTENUATION (dB/km)	TYPICAL / MAXIMUM	TYPICAL / MAXIMUM
1310 nm	0.335/0.360	0.335/0.360
1550 nm	0.200/0.220	0.200/0.220
1625 nm	0.220/0.250	0.220/0.250

TECHNICAL DATA

FIBER COUNT	12F-72F	96F	144F
FIBER PER TUBE	12F	12F	12F
NO. OF TUBES	1-6	8	12
CABLE DIAMETER (MM) +/- 5%	9.5	11.0	13.6
CABLE WEIGHT (KG/KM) +/- 10%	75	100	145

MECHANICAL PARAMETER

MAX. TENSILE STRENGTH (N)	1000	1000	1000
CRUSH RESISTANCE (N/100 X 100 MM)	2000	2000	2000
BENDING RADIUS (DYNAMIC)	20D	20D	20D
BENDING RADIUS (STATIC)	15D	15D	15D
IMPACT RESISTANCE (N-m)	25		
TORSION	±180°		
ENVIRONMENTAL CONDITIONS	Operating Temperature: -30 °C to + 70 °C Storage Temperature: -40 °C to + 70 °C Installation Temperature: -20 °C to + 60 °C		

OPTICAL PARAMETER

FIBER TYPE	G.652D	G.657A1
ATTENUATION (dB/km)	TYPICAL / MAXIMUM	TYPICAL / MAXIMUM
1310 nm	0.335/0.360	0.335/0.360
1550 nm	0.200/0.220	0.200/0.220
1625 nm	0.220/0.250	0.220/0.250

MULTITUBE SINGLE SHEATH DIELECTRIC ARMoured CABLE

PRODUCT DETAIL

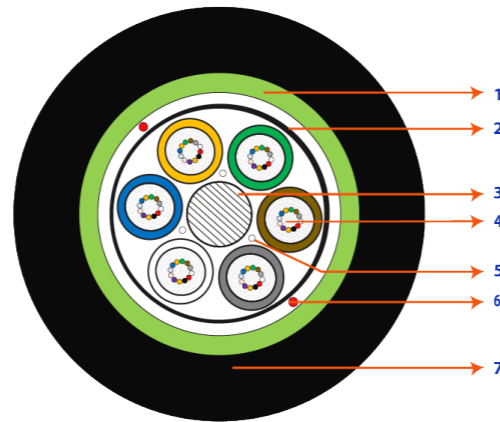
Multitube Sheath Dielectric Armoured Fiber Optic Cables are suitable for duct applications. This cable is a stranded loose tube cable with optical fibers placed inside robust buffer tubes stranded around a Fiber Reinforced Plastic (FRP) central strength member. In addition to optical fibers, the buffer tubes contain water blocking gel and the cable core is surrounded with water swellable yarn & water blocking tape to prevent water penetration in the interstices of cable core. Glass roving yarns are distributed over the stranded core and an overall thermoplastic sheath provides the cable with both mechanical and environmental protection.

PRODUCT APPLICATION

These cables are typically used for outside plant applications, including duct, direct buried and lashed aerial in harsh environments. They can be directly buried using blowing or trenching techniques. These cables can also be installed in ducts with either pulling or blowing techniques and installed with traditional aerial lashing methods.

STANDARDS

IEC 60794; IEC 60793; ITU-T ;Telecordia GR-20



CONSTRUCTION DETAILS

- 1- PERIPHERAL STRENGTH MEMBER
- 2-CORE WRAPPING
- 3-CENTRAL STRENGTH MEMBER
- 4-LOOSE TUBE WITH FIBERS & GEL
- 5-WATER SWELLABLE YARN
- 6-RIP CORD(S)
- 7-OUTER SHEATH

FIBER	BL	OR	GR	BR	SL	WH	RD	BL	YL	VI	PK	AQ
LOOSE TUBE	BL	OR	GR	BR	SL	WH	RD	BL	YL	VI	PK	AQ



MULTITUBE DOUBLE SHEATH DIELECTRIC ARMoured CABLE

PRODUCT DETAIL

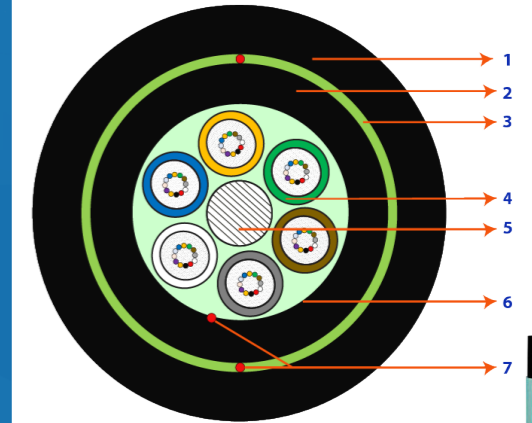
Multitube Double Sheath Dielectric Armoured Fiber Optic Cables are suitable for direct burial as well as for duct applications. This cable is a stranded loose tube cable with optical fibers placed inside robust buffer tubes stranded around a Fiber Reinforced Plastic (FRP) central strength member. In addition to optical fibers, the buffer tubes contain water blocking gel and the cable core is surrounded with flooding gel & polyester tape to prevent water penetration in the interstices of cable core. Glass roving yarns are distributed over the inner sheath and an overall thermoplastic sheath provides the cable with both mechanical and environmental protection.

PRODUCT APPLICATION

These cables are typically used for outside plant applications, including duct, direct buried and lashed aerial in harsh environments. They can be directly buried using plowing or trenching techniques. These cables can also be installed in ducts with either pulling or blowing techniques and installed with traditional aerial lashing methods.

STANDARDS

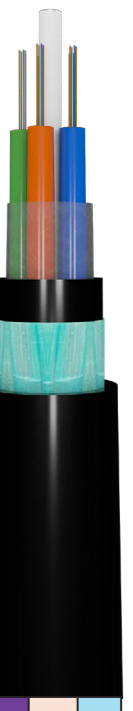
IEC 60794; IEC 60793; ITU-T ;Telecordia GR-20



CONSTRUCTION DETAILS

- 1- OUTER SHEATH
- 2- INNER SHEATH
- 3- PERIPHERAL STRENGTH MEMBER
- 4- LOOSE TUBE WITH FIBER & GEL
- 5- CENTRAL STRENGTH MEMBER
- 6- POLYESTER TAPE
- 7- RIP CORD

FIBER	BL	OR	GR	BR	SL	WH	RD	BL	YL	VI	PK	AQ
LOOSE TUBE	BL	OR	GR	BR	SL	WH	RD	BL	YL	VI	PK	AQ



TECHNICAL DATA						
FIBER COUNT	12F	24F	48F	72F	96F	144F
FIBER PER TUBE	4F	6F	8F	12F	12F	12F
NO. OF TUBES	3	6	6	6	8	12
CABLE DIAMETER (MM) +/- 5%	10	10	10	10	11.5	14.5
CABLE WEIGHT (KG/KM) +/- 10%	95	95	95	98	115	160

MECHANICAL PARAMETER			
MAX. TENSILE STRENGTH (N)	2700	2700	2700
CRUSH RESISTANCE (N/100 X 100 MM)	3000	3000	3000
BENDING RADIUS (DYNAMIC)	20D	20D	20D
BENDING RADIUS (STATIC)	15D	15D	15D
IMPACT RESISTANCE (N-m)	25		
TORSION	±180°		
ENVIRONMENTAL CONDITIONS	Operating Temperature: -30 °C to + 70 °C Storage Temperature: -40 °C to + 70 °C Installation Temperature: -20 °C to + 60 °C		

OPTICAL PARAMETER		
FIBER TYPE	G.652D	G.657A1
ATTENUATION (dB/km)	TYPICAL / MAXIMUM	TYPICAL / MAXIMUM
1310 nm	0.335/0.360	0.335/0.360
1550 nm	0.200/0.220	0.200/0.220
1625 nm	0.220/0.250	0.220/0.250

TECHNICAL DATA						
FIBER COUNT	12F	24F	48F	72F	96F	144F
FIBER PER TUBE	4F	6F	8F	12F	12F	12F
NO. OF TUBES	3	6	6	6	8	12
CABLE DIAMETER (MM) +/- 5%	13.2	13.2	13.2	13.6	14.5	17.0
CABLE WEIGHT (KG/KM) +/- 10%	140	140	140	145	200	270

MECHANICAL PARAMETER			
MAX. TENSILE STRENGTH (N)	2700	2700	2700
CRUSH RESISTANCE (N/100 X 100 MM)	3000	3000	3000
BENDING RADIUS (DYNAMIC)	20D	20D	20D
BENDING RADIUS (STATIC)	15D	15D	15D
IMPACT RESISTANCE (N-m)	25		
TORSION	±180°		
ENVIRONMENTAL CONDITIONS	Operating Temperature: -30 °C to + 70 °C Storage Temperature: -40 °C to + 70 °C Installation Temperature: -20 °C to + 60 °C		

OPTICAL PARAMETER		
FIBER TYPE	G.652D	G.657A1
ATTENUATION (dB/km)	TYPICAL / MAXIMUM	TYPICAL / MAXIMUM
1310 nm	0.335/0.360	0.335/0.360
1550 nm	0.200/0.220	0.200/0.220
1625 nm	0.220/0.250	0.220/0.250

MULTITUBE SINGLE SHEATH ARMoured CABLE

PRODUCT DETAIL

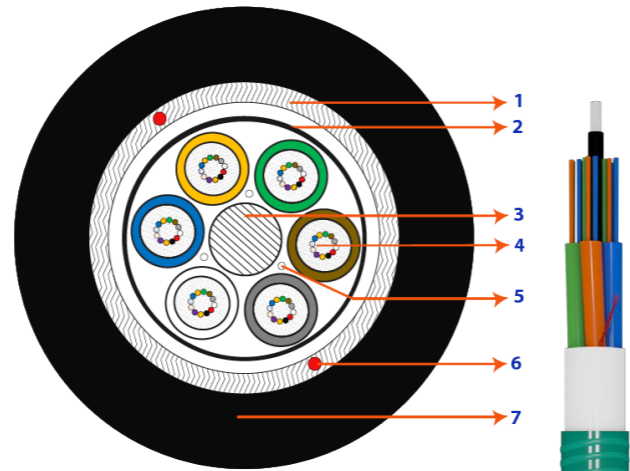
Multitube Single Sheath Steel Tape Armoured Cables are suitable for direct burial as well as for duct applications. This cable is a stranded loose tube cable with optical fibers placed inside robust buffer tubes, stranded around a Fiber Reinforced Plastic (FRP) central strength member. In addition to optical fibers, the buffer tubes contain water blocking gel, and the cable core is surrounded with water-swellable tape to prevent water penetration in the interstices of cable core. Corrugated steel tape armour surrounds the cable core with thermoplastic sheath bonded over the armoured layer making the cable robust and installation friendly.

PRODUCT APPLICATION

These cables are typically used for outside plant (OSP) applications, including duct, direct buried and lashed aerial in harsh environments. They can be direct buried using plowing or trenching techniques. These cables can also be installed in ducts with either pulling or blowing techniques and in aerial applications with traditional lashing methods.

STANDARDS

IEC 60794; IEC 60793; ITU-T ;Telecordia GR-20



CONSTRUCTION DETAILS

- 1-CORRUGATED STEEL TAPE
- 2-CORE WRAPPING
- 3-CENTRAL STRENGTH MEMBER
- 4-LOOSE TUBE WITH FIBER & GEL
- 5-WATER SWELLABLE YARN
- 6-RIP CORD
- 7-OUTER SHEATH

FIBER	BL	OR	GR	BR	SL	WH	RD	BL	YL	VI	PK	AQ
LOOSE TUBE	BL	OR	GR	BR	SL	WH	RD	BL	YL	VI	PK	AQ

MULTITUBE DOUBLE SHEATH ARMoured CABLE

PRODUCT DETAIL

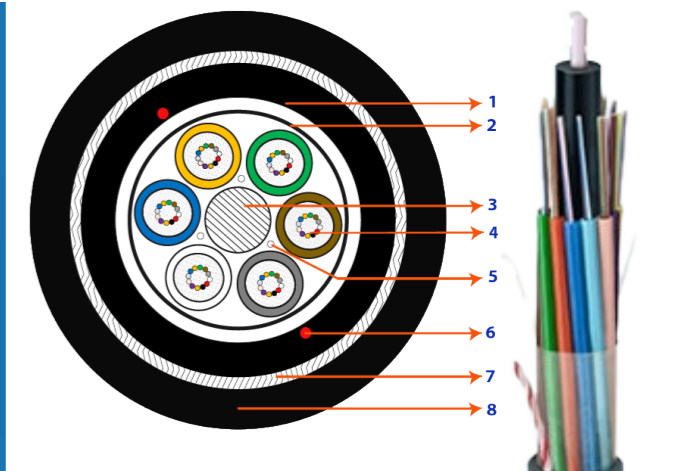
Multitube Double Sheath Steel Tape Armoured Cables are suitable for direct burial as well as for duct applications. This cable is a stranded loose tube cable with optical fiber placed inside robust buffer tubes stranded around a Fiber Reinforced Plastic (FRP) central strength member. In addition to optical fibers, the buffer tubes contain water blocking gel, and the cable core is surrounded with water swellable tape to prevent water penetration in the interstices of cable core. Corrugated Steel Tape armouring surrounds the inner sheath with thermoplastic sheath bonded to the armoured layer giving the cable mechanical and environmental protection.

PRODUCT APPLICATION

These cables are typically used for outside plant (OSP) applications, installed mainly as direct buried. They can be buried directly using plowing or trenching techniques. These cables can also be installed in ducts with either pulling or blowing techniques and in aerial applications with traditional lashing methods.

STANDARDS

IEC 60794; IEC 60793; ITU-T ;Telecordia GR-20



CONSTRUCTION DETAILS

- 1- INNER SHEATH
- 2-CORE WRAPPING
- 3-CENTRAL STRENGTH MEMBER
- 4-LOOSE TUBE WITH FIBERS & GEL
- 5-WATER SWELLABLE YARN
- 6- RIP CORD
- 7-CORRUGATED STEEL TAPE
- 8-OUTER SHEATH

FIBER	BL	OR	GR	BR	SL	WH	RD	BL	YL	VI	PK	AQ
LOOSE TUBE	BL	OR	GR	BR	SL	WH	RD	BL	YL	VI	PK	AQ

TECHNICAL DATA			
FIBER COUNT	12F-72F	96F	144F
FIBER PER TUBE	12F	12F	12F
NO. OF TUBES	1-6	8	12
CABLE DIAMETER (MM) +/- 5%	11.5	12.2	14.7
CABLE WEIGHT (KG/KM) +/- 10%	130	145	205

MECHANICAL PARAMETER			
MAX. TENSILE STRENGTH (N)	1600	1600	1600
CRUSH RESISTANCE (N/100 X 100 MM)	2000	2000	2000
BENDING RADIUS (DYNAMIC)	20D	20D	20D
BENDING RADIUS (STATIC)	15D	15D	15D
IMPACT RESISTANCE (N-m)	25		
TORSION	±180°		
ENVIRONMENTAL CONDITIONS	Operating Temperature: -30 °C to + 70 °C Storage Temperature: -40 °C to + 70 °C Installation Temperature: -20 °C to + 60 °C		

OPTICAL PARAMETER		
FIBER TYPE	G.652D	G.657A1
ATTENUATION (dB/km)	TYPICAL / MAXIMUM	TYPICAL / MAXIMUM
1310 nm	0.335/0.360	0.335/0.360
1550 nm	0.200/0.220	0.200/0.220
1625 nm	0.220/0.250	0.220/0.250

TECHNICAL DATA			
FIBER COUNT	12F-72F	96F	144F
FIBER PER TUBE	12F	12F	12F
NO. OF TUBES	1-6	8	12
CABLE DIAMETER (MM) +/- 5%	13	14.5	17
CABLE WEIGHT (KG/KM) +/- 10%	150	190	260

MECHANICAL PARAMETER			
MAX. TENSILE STRENGTH (N)	2700	2700	2700
CRUSH RESISTANCE (N/100 X 100 MM)	3000	3000	3000
BENDING RADIUS (DYNAMIC)	20D	20D	20D
BENDING RADIUS (STATIC)	15D	15D	15D
IMPACT RESISTANCE (N-m)	50		
TORSION	±180°		
ENVIRONMENTAL CONDITIONS	Operating Temperature: -30 °C to + 70 °C Storage Temperature: -40 °C to + 70 °C Installation Temperature: -20 °C to + 60 °C		

OPTICAL PARAMETER		
FIBER TYPE	G.652D	G.657A1
ATTENUATION (dB/km)	TYPICAL / MAXIMUM	TYPICAL / MAXIMUM
1310 nm	0.335/0.360	0.335/0.360
1550 nm	0.200/0.220	0.200/0.220
1625 nm	0.220/0.250	0.220/0.250

MULTITUBE SINGLE SHEATH DRY DRY DUCT CABLE

PRODUCT DETAIL

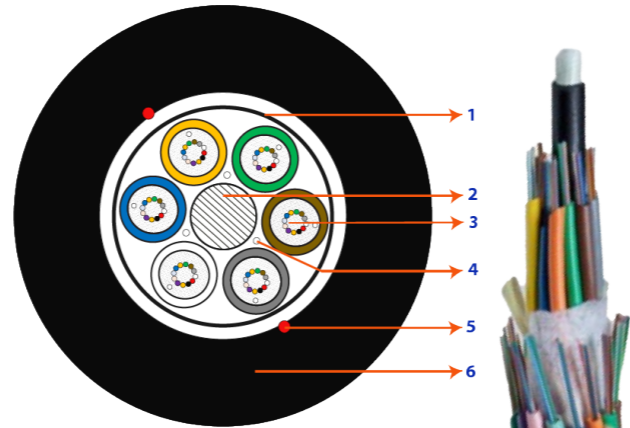
Multitube Single sheath Dry Dry Fiber Optic Cables are suitable for duct applications. This cable is a stranded loose tube cable with optical fibers placed inside robust buffer tubes stranded around a Fiber Reinforced Plastic (FRP) central strength member. In addition to optical fibers, the buffer tubes contain water blocking yarn and the cable core is surrounded with water-swellable tape to prevent water penetration in the interstices of cable core. The cable core is surrounded with thermoplastic sheath making the cable robust and installation friendly.

PRODUCT APPLICATION

These cables are typically used for outside plant applications including duct and lashed aerial in harsh environments. They can be installed in ducts with either pulling, trenching or blowing techniques and in aerial applications with traditional lashing methods.

STANDARDS

IEC 60794; IEC 60793; ITU-T ;Telecordia GR-20



CONSTRUCTION DETAILS

- 1- CORE WRAPPING
- 2-CENTRAL STRENGTH MEMBER
- 3-LOOSE TUBE WITH FIBER & WS YARN
- 4-WATER SWELLABLE YARN
- 5- RIP CORD(S)
- 6- OUTER SHEATH

FIBER	BL	OR	GR	BR	SL	WH	RD	BL	YL	VI	PK	AQ
LOOSE TUBE	BL	OR	GR	BR	SL	WH	RD	BL	YL	VI	PK	AQ

MULTITUBE SINGLE SHEATH DRY DRY STEEL TAPE ARMoured CABLE

PRODUCT DETAIL

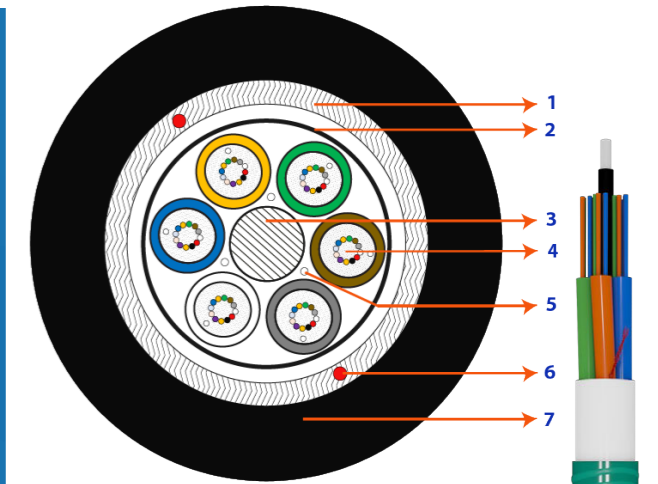
Multitube Single Sheath Steel Tape Armoured Dry Dry Cables are suitable for direct burial as well as for duct applications. This cable is a stranded loose tube cable with optical fibers placed inside robust buffer tubes, stranded around a Fiber Reinforced Plastic (FRP) central strength member. In addition to optical fibers, the buffer tubes contain water blocking yarn, and the cable core is surrounded with water-swellable tape to prevent water penetration in the interstices of cable core. Corrugated steel tape armouring over stranded core that can give this cable robust construction and rodent protection.

PRODUCT APPLICATION

These cables are typically used for outside plant (OSP) applications, including duct, direct buried and lashed aerial in harsh environments. They can be direct buried using plowing or trenching techniques. These cables can also be installed in ducts with either pulling or blowing techniques and in aerial applications with traditional lashing methods.

STANDARDS

IEC 60794; IEC 60793; ITU-T; Telecordia GR-20



CONSTRUCTION DETAILS

- 1- CORRUGATED STEEL TAPE
- 2-CORE WRAPPING
- 3- CENTRAL STRENGTH MEMBER
- 4-LOOSE TUBE WITH FIBERS & WS YARN
- 5-WATER SWELLABLE YARN
- 6- RIP CORD(S)
- 7-OUTER SHEATH

FIBER	BL	OR	GR	BR	SL	WH	RD	BL	YL	VI	PK	AQ
LOOSE TUBE	BL	OR	GR	BR	SL	WH	RD	BL	YL	VI	PK	AQ

TECHNICAL DATA

FIBER COUNT	12F-72F	96F	144F
FIBER PER TUBE	12F	12F	12F
NO. OF TUBES	1-6	8	12
CABLE DIAMETER (MM) +/- 5%	10.8	12.5	16.0
CABLE WEIGHT (KG/KM) +/- 10%	80	110	175

MECHANICAL PARAMETER

MAX. TENSILE STRENGTH (N)	1000	1000	1000
CRUSH RESISTANCE (N/100 X 100 MM)	2000	2000	2000
BENDING RADIUS (DYNAMIC)	20D	20D	20D
BENDING RADIUS (STATIC)	15D	15D	15D
IMPACT RESISTANCE (N-m)	25		
TORSION	±180°		
ENVIRONMENTAL CONDITIONS	Operating Temperature: -30 °C to + 70 °C Storage Temperature: -40 °C to + 70 °C Installation Temperature: -20 °C to + 60 °C		

OPTICAL PARAMETER

FIBER TYPE	G.652D	G.657A1
ATTENUATION (dB/km)	TYPICAL / MAXIMUM	TYPICAL / MAXIMUM
1310 nm	0.335/0.360	0.335/0.360
1550 nm	0.200/0.220	0.200/0.220
1625 nm	0.220/0.250	0.220/0.250

TECHNICAL DATA

FIBER COUNT	12F-72F	96F	144F
FIBER PER TUBE	12F	12F	12F
NO. OF TUBES	1-6	8	12
CABLE DIAMETER (MM) +/- 5%	12.5	14.2	17.5
CABLE WEIGHT (KG/KM) +/- 10%	140	175	255

MECHANICAL PARAMETER

MAX. TENSILE STRENGTH (N)	2000	2000	2000
CRUSH RESISTANCE (N/100 X 100 MM)	2000	2000	2000
BENDING RADIUS (DYNAMIC)	20D	20D	20D
BENDING RADIUS (STATIC)	15D	15D	15D
IMPACT RESISTANCE (N-m)	25		
TORSION	±180°		
ENVIRONMENTAL CONDITIONS	Operating Temperature: -30 °C to + 70 °C Storage Temperature: -40 °C to + 70 °C Installation Temperature: -20 °C to + 60 °C		

OPTICAL PARAMETER

FIBER TYPE	G.652D	G.657A1
ATTENUATION (dB/km)	TYPICAL / MAXIMUM	TYPICAL / MAXIMUM
1310 nm	0.335/0.360	0.335/0.360
1550 nm	0.200/0.220	0.200/0.220
1625 nm	0.220/0.250	0.220/0.250

MULTITUBE DOUBLE SHEATH WIRE ARMoured CABLE

PRODUCT DETAIL

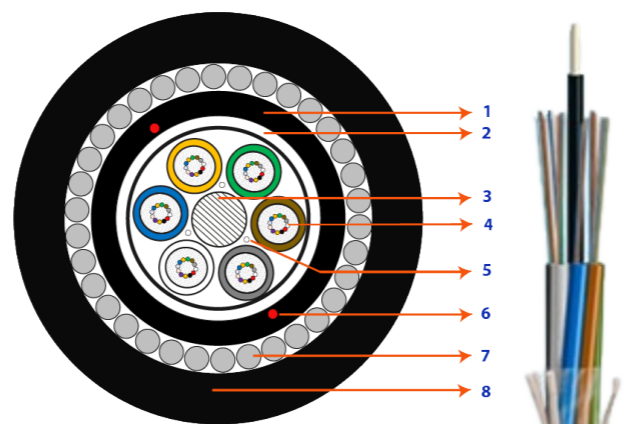
Multitube Double Sheath Steel Wire Armoured Cables are especially suited for harsh/ rough installation environment. This cable is a stranded loose tube cable with optical fibers placed inside robust buffer tubes stranded around a Fiber Reinforced Plastic (FRP) central strength member. In addition to optical fibers, the buffer tubes contain water blocking gel, and the cable core is surrounded with water-swellable tape to prevent water penetration in the interstices of cable core. Steel wire armour surrounds the inner sheath with thermoplastic sheath placed over the armour layer making the cable robust and installation friendly.

PRODUCT APPLICATION

These cables are typically used in heavy construction zones including heavy traffic area, wind farm developments, pipelines, oil and gas fields, heavy industrial sites and a variety of additional harsh environments. This cable is suitable for direct buried and other hazardous applications and are typically used in harsh environments.

STANDARDS

IEC 60794; IEC 60793; ITU-T ;Telecordia GR-20



CONSTRUCTION DETAILS

- 1- INNER SHEATH
- 2- CORE WRAPPING
- 3-CENTRAL STRENGTH MEMBER
- 4-LOOSE TUBE WITH FIBERS & THIXOTROPIC FILLING GEL
- 5-WATER SWELLABLE YARN
- 6-RIP CORD
- 7-STEEL WIRE ARMOURING
- 8-OUTER SHEATH

FIBER	BL	OR	GR	BR	SL	WH	RD	BL	YL	VI	PK	AQ
LOOSE TUBE	BL	OR	GR	BR	SL	WH	RD	BL	YL	VI	PK	AQ

TECHNICAL DATA			
FIBER COUNT	12F-72F	96F	144F
FIBER PER TUBE	12F	12F	12F
NO. OF TUBES	1-6	8	12
CABLE DIAMETER (MM) +/- 5%	15.7	17.2	19.7
CABLE WEIGHT (KG/KM) +/- 10%	430	510	635

MECHANICAL PARAMETER			
MAX. TENSILE STRENGTH (N)	10000	10000	10000
CRUSH RESISTANCE (N/100 X 100 MM)	5000	5000	5000
BENDING RADIUS (DYNAMIC)	20D	20D	20D
BENDING RADIUS (STATIC)	15D	15D	15D
IMPACT RESISTANCE (N-m)	50		
TORSION	±180°		
ENVIRONMENTAL CONDITIONS	Operating Temperature: -30 °C to + 70 °C Storage Temperature: -40 °C to + 70 °C Installation Temperature: -20 °C to + 60 °C		

OPTICAL PARAMETER		
FIBER TYPE	G.652D	G.657A1
ATTENUATION (dB/km)	TYPICAL / MAXIMUM	TYPICAL / MAXIMUM
1310 nm	0.335/0.360	0.335/0.360
1550 nm	0.200/0.220	0.200/0.220
1625 nm	0.220/0.250	0.220/0.250

MULTITUBE RIBBON SINGLE SHEATH UNARMoured CABLE

PRODUCT DETAIL

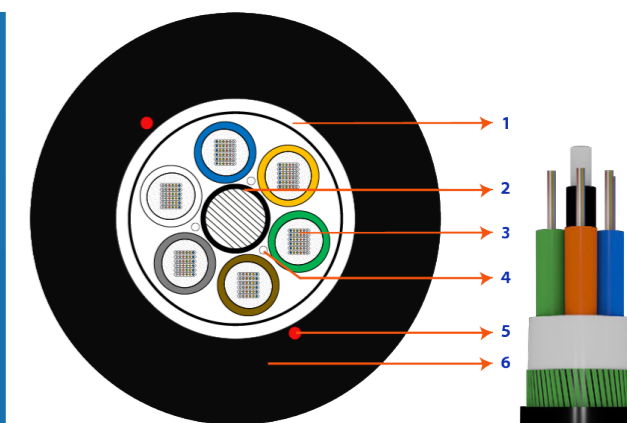
The optical fibers are arranged into ribbon units by placing the fibers in a flat array of 12 colours-coded fibers bonded together by a UV-curable matrix material. Ribbon fiber is placed inside loose tube and layed over robust FRP to provide mechanical strength and mid spanning. This cable is fully protected with water blocking tape and yarn to prevent water ingress in side cable. Two rip cord given at 180° below outer sheath to provide better riping. Cable core is fully protected with anti termite and seamless thermoplastic covering.

PRODUCT APPLICATION

Cable design meets the application which requires delivering the highest fiber density in the most compact cable package possible. This cable offers an outstanding solution for demanding high-growth, high-bandwidth communications applications. Cable used for duct application.

STANDARDS

IEC 60794; IEC 60793; ITU-T ;Telecordia GR-20



CONSTRUCTION DETAILS

- 1- CORE WRAPPING WITH PERIPHERAL STRENGTH MEMBER
- 2-FRP ROD AS CSM
- 3-LOOSE TUBE WITH RIBBON FIBER & THIXOTROPIC GEL
- 4-WATER BLOCKING YARN
- 5-RIP CORD(S)
- 6-OUTER SHEATH

FIBER	BL	OR	GR	BR	SL	WH	RD	BL	YL	VI	PK	AQ
LOOSE TUBE	BL	OR	GR	BR	SL	WH	RD	BL	YL	VI	PK	AQ

TECHNICAL DATA					
FIBER COUNT	72	96	144	288	432
FIBER PER RIBBON	12F/RIBBON	12F/RIBBON	12F/RIBBON	12F/RIBBON	12F/RIBBON
NO.OF RIBBON	6	8	12	24	36
No. OF FIBER PER TUBE	24	24	24	48	72
NO.OF RIBBON PER TUBE	2	2	2	4	6
CABLE DIAMETER (MM) +/- 5%	18	18	20	21	22
CABLE WEIGHT (KG/KM) +/- 10%	230	237	280	295	335

MECHANICAL PARAMETER					
MAX. TENSILE STRENGTH (N)	2700	2700	2700	2700	2700
CRUSH RESISTANCE (N/100 X 100 MM)	2000	2000	2000	2000	2000
BENDING RADIUS (DYNAMIC)	20D	20D	20D	20D	20D
BENDING RADIUS (STATIC)	15D	15D	15D	15D	15D
IMPACT RESISTANCE (N-m)	25	25	25	25	25
TORSION	±180°	±180°	±180°	±180°	±180°
WATER PENETRATION	1 meter Water Head, 3 meter Sample, 24 hrs, No Water Leakage				
ENVIRONMENTAL CONDITIONS	Operating Temperature: -30 °C to + 70 °C Storage Temperature: -30 °C to + 70 °C Installation Temperature: -20 °C to + 70 °C				

OPTICAL PARAMETER		
FIBER TYPE	G.652D	G.657A1
ATTENUATION (dB/km)	TYPICAL / MAXIMUM	TYPICAL / MAXIMUM
1310 nm	0.335/0.360	0.335/0.360
1550 nm	0.200/0.220	0.200/0.220
1625 nm	0.220/0.250	0.220/0.250

MULTITUBE RIBBON DOUBLE SHEATH DIELECTRIC ARMoured CABLE

PRODUCT DETAIL

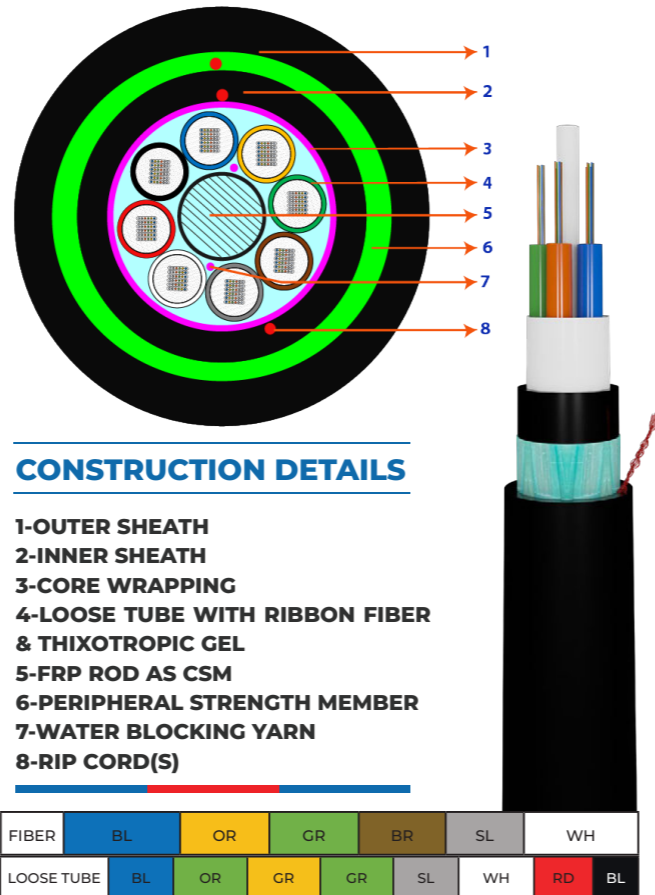
The optical fibers are arranged into ribbon units by placing the fibers in a flat array of 06 colours-coded fibers bonded together by a UV-curable matrix material. Ribbon fiber is placed inside loose tube encapsulation and layed over robust FRP to provide mechanical strength and mid spanning. This cable is fully protected with water blocking tape and yarn. Two rip cord given at 180° below outer sheath to provide better ripping. Cable core is fully protected with anti termite and seamless thermoplastic covering.

PRODUCT APPLICATION

Cable design meets the application which requires delivering the highest fiber density in the most compact cable package possible. This cable offers an outstanding solution for demanding high-growth, high-bandwidth communications applications. Cable used for duct application.

STANDARDS

IEC 60794; IEC 60793; ITU-T ;Telecordia GR-20



TECHNICAL DATA			
FIBER COUNT	48F	96F	288F
FIBER PER RIBBON	6F/RIBBON	6F/RIBBON	6F/RIBBON
NO.OF RIBBON	8	16	48
No. OF FIBER PER TUBE	12	24	36
NO.OF RIBBON PER TUBE	2	4	6
CABLE DIAMETER (MM) +/- 5%	16	17.8	23
CABLE WEIGHT (KG/KM) +/- 10%	185	230	385

MECHANICAL PARAMETER			
MAX. TENSILE STRENGTH (N)	3000	3000	3000
CRUSH RESISTANCE (N/100 X 100 MM)	2000	2000	2000
BENDING RADIUS (DYNAMIC)	20D	20D	20D
BENDING RADIUS (STATIC)	10D	10D	10D
IMPACT RESISTANCE (N-m)	50	50	50
TORSION	±180°	±180°	±180°
WATER PENETRATION	1 meter Water Head, 3 meter Sample, 24 hrs, No Water Leakage		
ENVIRONMENTAL CONDITIONS	Operating Temperature: -30 °C to + 70 °C Storage Temperature: -30 °C to + 70 °C Installation Temperature: -20 °C to + 70 °C		

OPTICAL PARAMETER		
FIBER TYPE	G.652D	G.657A1
ATTENUATION (dB/km)	TYPICAL / MAXIMUM	TYPICAL / MAXIMUM
1310 nm	0.335/0.360	0.335/0.360
1550 nm	0.200/0.220	0.200/0.220
1625 nm	0.220/0.250	0.220/0.250

RIBBON MULTITUBE SINGLE SHEATH ARMoured CABLE

PRODUCT DETAIL

The optical fibers are arranged into ribbon units by placing the fibers in a flat array of 12 colours-coded fibers bonded together by a UV-curable matrix material. Ribbon fiber is placed inside loose tube and layed over robust FRP to provide mechanical strength and mid spanning. This cable is fully protected with water blocking tape and yarn to prevent water ingress in side cable two rip cord given at 180° below outer sheath to provide better ripping. Cable core is fully protected with corrugated steel tape along anti termite seamless thermoplastic covering.

PRODUCT APPLICATION

Cable design meets the application which requires delivering the highest fiber density in the most compact cable package possible. This cable offers an outstanding solution for demanding high-growth, high-bandwidth communications applications. Cable used for duct as well as direct buried application.

STANDARDS

IEC 60794; IEC 60793; ITU-T ;Telecordia GR-20



TECHNICAL DATA					
FIBER COUNT	72	96	144	288	432
FIBER PER RIBBON	12F/RIBBON	12F/RIBBON	12F/RIBBON	12F/RIBBON	12F/RIBBON
NO.OF RIBBON	6	8	12	24	36
No. OF FIBER PER TUBE	24	24	24	48	72
NO.OF RIBBON PER TUBE	2	2	2	4	6
CABLE DIAMETER (MM) +/- 5%	18	18	20	21	22
CABLE WEIGHT (KG/KM) +/- 10%	230	237	280	295	335

MECHANICAL PARAMETER					
MAX. TENSILE STRENGTH (N)	2700	2700	2700	2700	2700
CRUSH RESISTANCE (N/100 X 100 MM)	2000	2000	2000	2000	2000
BENDING RADIUS (DYNAMIC)	20D	20D	20D	20D	20D
BENDING RADIUS (STATIC)	15D	15D	15D	15D	15D
IMPACT RESISTANCE (N-m)	25	25	25	25	25
TORSION	±180°	±180°	±180°	±180°	±180°
WATER PENETRATION	1 meter Water Head, 3 meter Sample, 24 hrs, No Water Leakage				
ENVIRONMENTAL CONDITIONS	Operating Temperature: -30 °C to + 70 °C Storage Temperature: -30 °C to + 70 °C Installation Temperature: -20 °C to + 70 °C				

OPTICAL PARAMETER		
FIBER TYPE	G.652D	G.657A1
ATTENUATION (dB/km)	TYPICAL / MAXIMUM	TYPICAL / MAXIMUM
1310 nm	0.335/0.360	0.335/0.360
1550 nm	0.200/0.220	0.200/0.220
1625 nm	0.220/0.250	0.220/0.250

UNITUBE RIBBON SINGLE SHEATH ARMoured OPTICAL FIBER CABLE

PRODUCT DETAIL

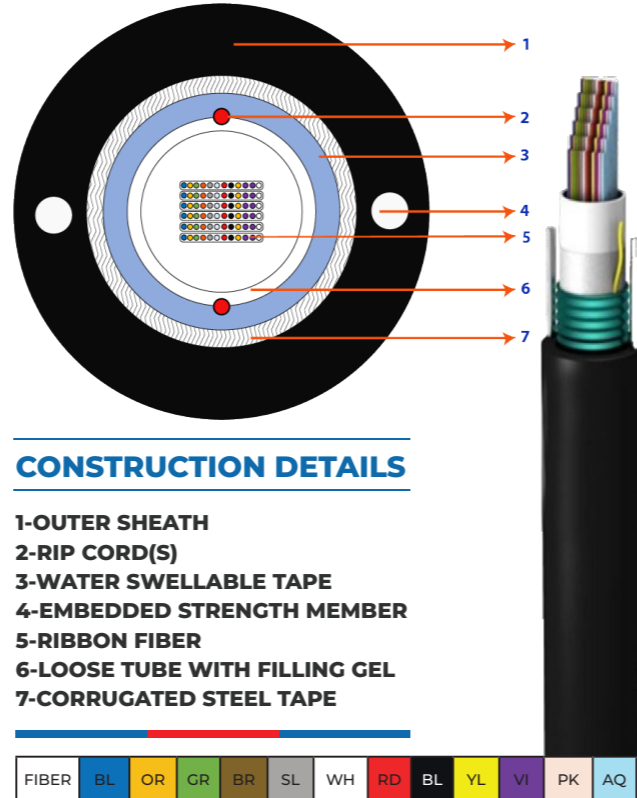
Unitube Single Sheath Cable combines robust performance for duct installations with the productivity of high-count easy splicing. The optical fibers are arranged into ribbon units by placing the fibers in array of 12 fiber bounded by UV curable matrix. In addition to optical fibers, the buffer tubes contain filling gel to prevent water ingress inside the tube. The loose-tube is surrounded with water-swellable tape to protect against moisture ingress, steel tape armouring over water blocking tape provides better rodent protection & robust construction. Two anti-buckling strength members are provided in form of two diagonally opposite strength members embedded inside the thermoplastic outer sheath.

PRODUCT APPLICATION

Cable design meets the application which requires delivering the highest fiber density in the most compact cable package possible. This cable offers an outstanding solution for demanding high-growth, high-bandwidth communications applications.

STANDARDS

IEC 60794; IEC 60793; ITU-T ;Telecordia GR-20



UNITUBE DOUBLE SHEATH WIRE ARMoured CABLE

PRODUCT DETAIL

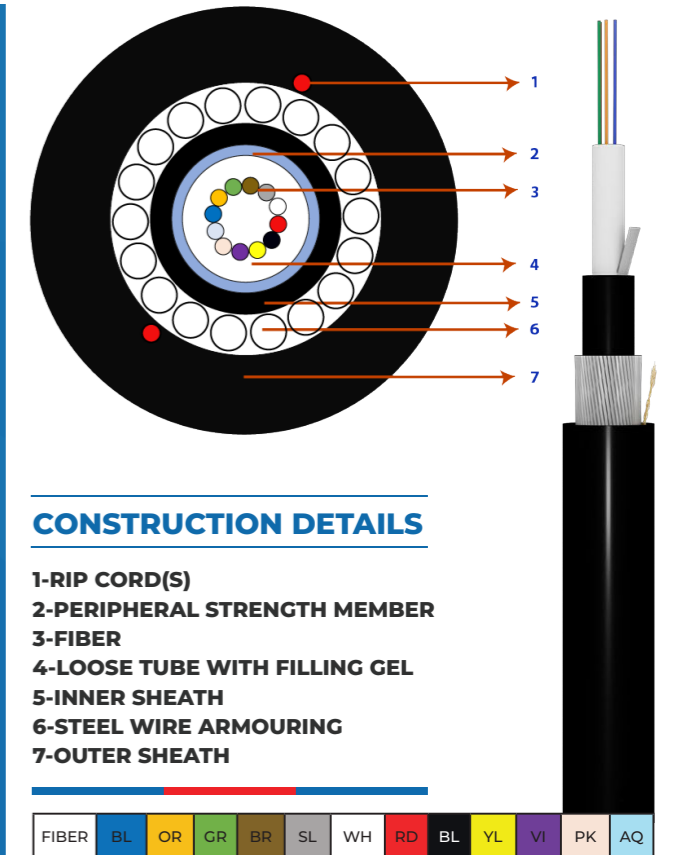
Unitube Double Sheath Wire Armoured Cables, suitable for harsh environments and high crush resistance. This is a uni tube cable using optical fibers presented in tube filled with a thixotropic gel to protect from water penetration core is sheathed with inner Sheath and steel wire armour surrounds the inner sheath with outer sheath placed over the armour layer making the cable robust and installation friendly.

PRODUCT APPLICATION

These cables can be used for outdoor applications in heavy industrial sites & heavy traffic area. This cable is suitable for direct buried applications. Cable has high tensile strength and better rodent protection due to steel wire armouring.

STANDARDS

IEC 60794; IEC 60793; ITU-T ;Telecordia GR-20



TECHNICAL DATA		
FIBER COUNT	48F	72F
FIBER PER RIBBON	12F/ RIBBON	12F/ RIBBON
NO.OF RIBBON	4	6
No. OF FIBER PER TUBE	48	72
CABLE DIAMETER (MM) +/- 5%	13.5	13.8
CABLE WEIGHT (KG/KM) +/- 10%	145	150

MECHANICAL PARAMETER		
MAX. TENSILE STRENGTH (N)	2000	2000
CRUSH RESISTANCE (N/100 X 100 MM)	2000	2000
BENDING RADIUS (DYNAMIC)	25D	25D
BENDING RADIUS (STATIC)	20D	20D
IMPACT RESISTANCE (N-m)	25	25
TORSION	±180°	±180°
WATER PENETRATION	1 meter Water Head, 3 meter Sample, 24 hrs, No Water Leakage	
ENVIRONMENTAL CONDITIONS	Operating Temperature: -30 °C to + 70 °C Storage Temperature: -40 °C to + 70 °C Installation Temperature: -20 °C to + 70 °C	

OPTICAL PARAMETER		
FIBER TYPE	G.652D	G.657A1
ATTENUATION (dB/km)	TYPICAL / MAXIMUM	TYPICAL / MAXIMUM
1310 nm	0.335/0.360	0.335/0.360
1550 nm	0.200/0.220	0.200/0.220
1625 nm	0.220/0.250	0.220/0.250

TECHNICAL DATA					
FIBER COUNT	2F	4F	6F	8F	12F
CABLE DIAMETER (MM) +/- 5%	10.0	10.0	10.0	10.0	11.5
CABLE WEIGHT (KG/KM) +/- 10%	200	200	200	200	244

MECHANICAL PARAMETER					
MAX. TENSILE STRENGTH (N)	3500	3500	3500	3500	3500
CRUSH RESISTANCE (N/100 X 100 MM)	4000	4000	4000	4000	4000
BENDING RADIUS (DYNAMIC)	25D	25D	25D	25D	25D
BENDING RADIUS (STATIC)	20D	20D	20D	20D	20D
IMPACT RESISTANCE (N-m)	50	50	50	50	50
TORSION	±180°	±180°	±180°	±180°	±180°
WATER PENETRATION	1 meter Water Head, 3 meter Sample, 24 hrs, No Water Leakage				
ENVIRONMENTAL CONDITIONS	Operating Temperature: -20 °C to + 70 °C Storage Temperature: -30 °C to + 70 °C Installation Temperature: -10 °C to + 70 °C				

OPTICAL PARAMETER		
FIBER TYPE	G.652D	G.657A1
ATTENUATION (dB/km)	TYPICAL / MAXIMUM	TYPICAL / MAXIMUM
1310 nm	0.335/0.360	0.335/0.360
1550 nm	0.200/0.220	0.200/0.220
1625 nm	0.220/0.250	0.220/0.250

UNITUBE SINGLE SHEATH ARMoured OPTICAL FIBER CABLE

PRODUCT DETAIL

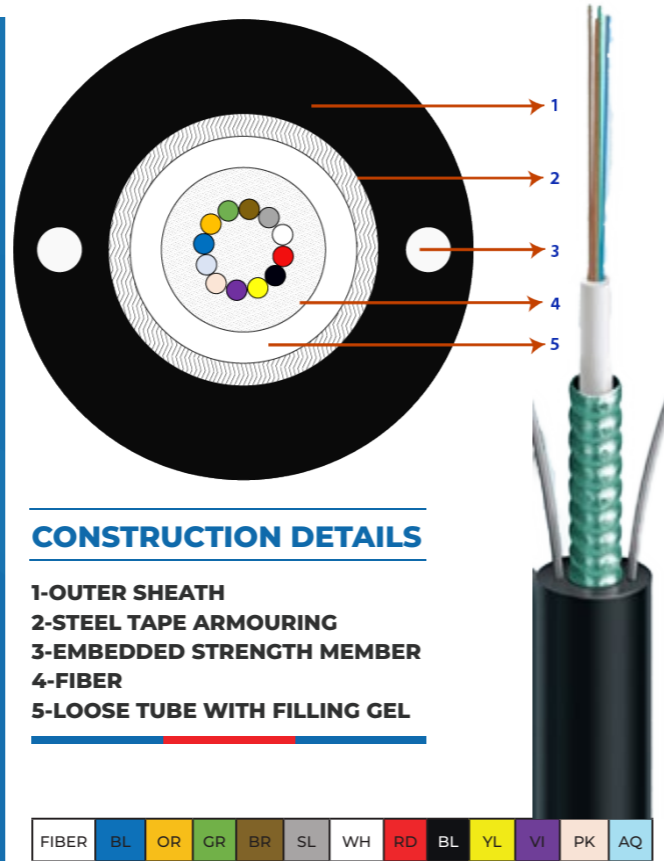
Unitube Single Sheath Steel Tape Armoured Cables is a central tube cable using optical fibers presented in loose tube and surrounded by steel tape armouring. To protect the optical fibers from water penetration, the tube is filled with a thixotropic gel, and is enclosed in a thermoplastic sheath. The cables have embedded strength members for anti-buckling property. The cable can also be offered with steel wire as embedded strength member to provide higher tensile strength.

PRODUCT APPLICATION

These cables can be used for outdoor applications in ducts or aerial drop for access and distribution for campus/ between buildings. These cables can be installed in ducts with either pulling or blowing techniques and in aerial applications with traditional lashing methods.

STANDARDS

IEC 60794; IEC 60793; ITU-T ;Telecordia GR-20



CONSTRUCTION DETAILS

- 1-OUTER SHEATH
- 2-STEEL TAPE ARMOURING
- 3-EMBEDDED STRENGTH MEMBER
- 4-FIBER
- 5-LOOSE TUBE WITH FILLING GEL

FIBER	BL	OR	GR	BR	SL	WH	RD	BL	YL	VI	PK	AQ
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TECHNICAL DATA

FIBER COUNT	2F	4F	6F	8F	12F
CABLE DIAMETER (MM) +/- 5%	7.5	7.5	7.5	7.5	7.5
CABLE WEIGHT (KG/KM) +/- 10%	56	56	56	56	56

MECHANICAL PARAMETER

MAX. TENSILE STRENGTH (N)	500	500	500	500	500
CRUSH RESISTANCE (N/100 X 100 MM)	500	500	500	500	500
BENDING RADIUS (DYNAMIC)	20D	20D	20D	20D	20D
BENDING RADIUS (STATIC)	10D	10D	10D	10D	10D
IMPACT RESISTANCE (N-m)	10	10	10	10	10
TORSION	±180°	±180°	±180°	±180°	±180°
WATER PENETRATION	1 meter Water Head, 3 meter Sample, 24 hrs, No Water Leakage				
ENVIRONMENTAL CONDITIONS	Operating Temperature: -20 °C to + 70 °C				
	Storage Temperature: -30 °C to + 70 °C				
	Installation Temperature: -10 °C to + 70 °C				

OPTICAL PARAMETER

FIBER TYPE	G.652D	G.657A1
ATTENUATION (dB/km)	TYPICAL / MAXIMUM	TYPICAL / MAXIMUM
1310 nm	0.335/0.360	0.335/0.360
1550 nm	0.200/0.220	0.200/0.220
1625 nm	0.220/0.250	0.220/0.250

TIGHT BUFFER SPIRAL ARMOURED CABLE

PRODUCT DETAIL

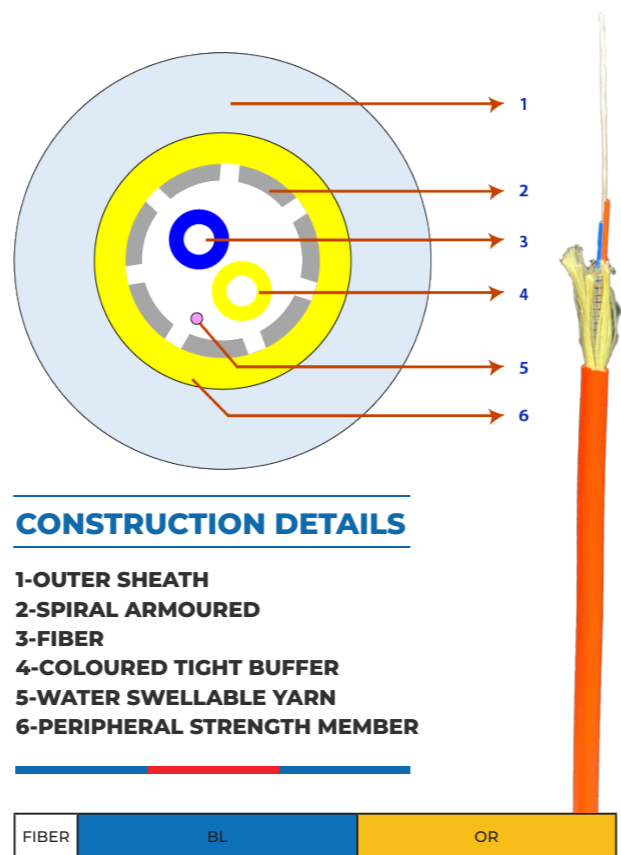
Tight Buffer Spiral Armoured Cable is last mile connectivity solution, this cable is manufactured by two bend sensitive fiber (ITU-T G.657A1 or G.657A2 or G.657B3) protected by spiral armouring to provide additional strength peripheral strength member (Aramid Yarn) also given over spiral armouring core is fully terminations covered with LSZH sheath. This cable has very good flexibility. We can connectorized this cable too for direct.

PRODUCT APPLICATION

These cables can be used for indoor applications, this cable has very good mechanical strength and super flexibility. As this cable is spiral armoured with steel wire it is rodent proof cable. Suitable for CPRI Protocol.

STANDARDS

IEC 60794; IEC 60793; ITU-T; Telecordia GR-20



CONSTRUCTION DETAILS

- 1-OUTER SHEATH
- 2-SPIRAL ARMOURED
- 3-FIBER
- 4-COLOURED TIGHT BUFFER
- 5-WATER SWELLABLE YARN
- 6-PERIPHERAL STRENGTH MEMBER



TIGHT BUFFER DOUBLE SHEATH ARMOURED CABLE

PRODUCT DETAIL

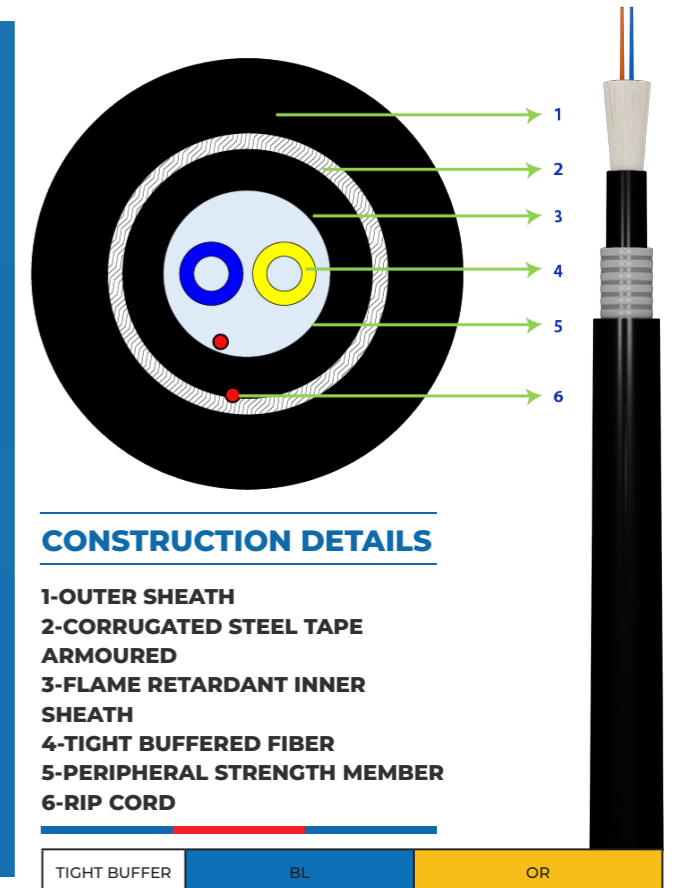
Tight Buffer Armoured Cable contains two tight buffer units protected in a corrugated steel tape armoured and overall sheath of polyethylene, two no. of tight buffer protected by Glass Roving Yarn and flame retardant inner sheath provided over core. Corrugated steel tape provided over flame retardant inner sheath to provided better mechanical strength.

PRODUCT APPLICATION

This cable is suitable for FTTA application as this cable have very good mechanical property. This cable can withstand with adverse weather condition suitable for FTTH application also. Tight buffer can be connectorized for direct termination. This cable can also be used as a riser cable. Suitable for CPRI protocol

STANDARDS

IEC 60794; IEC 60793; ITU-T; Telecordia GR-20, IEC60332-1-2



CONSTRUCTION DETAILS

- 1-OUTER SHEATH
- 2-CORRUGATED STEEL TAPE ARMOURED
- 3-FLAME RETARDANT INNER SHEATH
- 4-TIGHT BUFFERED FIBER
- 5-PERIPHERAL STRENGTH MEMBER
- 6-RIP CORD



TECHNICAL DATA	
FIBER COUNT	2F
CABLE DIAMETER (MM) +/- 5%	4.8
CABLE WEIGHT (KG/KM) +/- 10%	35

MECHANICAL PARAMETER	
MAX. TENSILE STRENGTH (N)	400
CRUSH RESISTANCE (N/100 X 100 MM)	1000
BENDING RADIUS (DYNAMIC)	10D
BENDING RADIUS (STATIC)	15D
IMPACT RESISTANCE (N-m)	4
TORSION	±180°
WATER PENETRATION	1 meter Water Head, 3 meter Sample, 24 hrs, No Water Leakage
ENVIRONMENTAL CONDITIONS	Operating Temperature: -20 °C to + 70 °C Storage Temperature: -30 °C to + 70 °C Installation Temperature: -10 °C to + 70 °C

OPTICAL PARAMETER		
FIBER TYPE	G.657A1	G.657A2
ATTENUATION (dB/km)	TYPICAL / MAXIMUM	TYPICAL / MAXIMUM
1310 nm	0.38/0.4	0.335/0.380
1550 nm	0.200/0.3	0.200/0.25

TECHNICAL DATA	
FIBER COUNT	2F
CABLE DIAMETER (MM) +/- 5%	8.5
CABLE WEIGHT (KG/KM) +/- 10%	64

MECHANICAL PARAMETER	
MAX. TENSILE STRENGTH (N)	500
CRUSH RESISTANCE (N/100 X 100 MM)	1500
BENDING RADIUS (DYNAMIC)	25D
BENDING RADIUS (STATIC)	20D
IMPACT RESISTANCE (N-m)	25
TORSION	±180°
WATER PENETRATION	1 meter Water Head, 3 meter Sample, 24 hrs, No Water Leakage
ENVIRONMENTAL CONDITIONS	Operating Temperature: -20 °C to + 70 °C Storage Temperature: -30 °C to + 70 °C Installation Temperature: -10 °C to + 70 °C

OPTICAL PARAMETER		
FIBER TYPE	G.652D	G.657A1
ATTENUATION (dB/km)	TYPICAL / MAXIMUM	TYPICAL / MAXIMUM
1310 nm	0.335/0.360	0.335/0.360
1550 nm	0.200/0.220	0.200/0.220
1625 nm	0.220/0.250	0.220/0.250

FLAT INDOOR FTTH CABLE

PRODUCT DETAIL

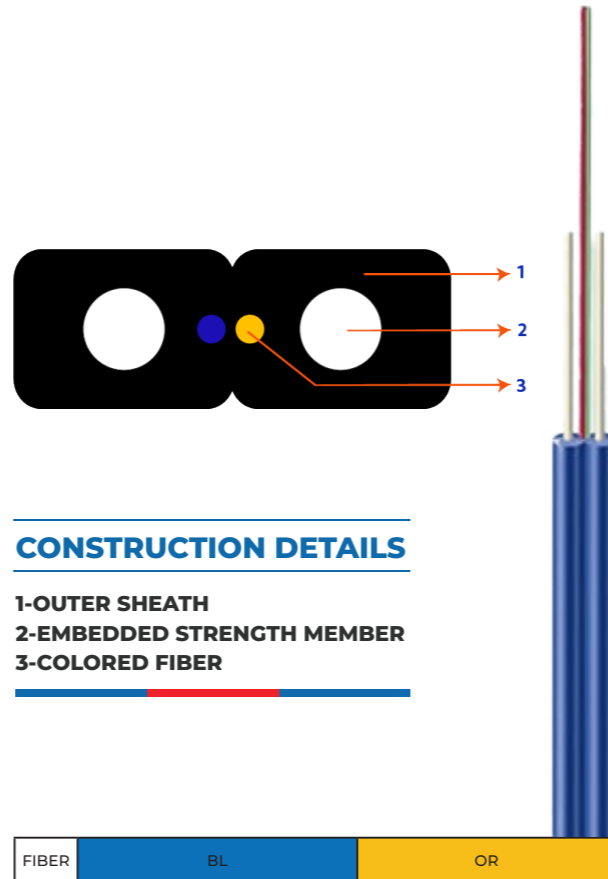
Indoor Flat Cable is a FTTH solution, this cable is manufactured by one or two bend sensitive fiber (ITU-T G657A1 or G.657A2) protected by two strength members for aerial FTTH drop applications and a final LSZH sheath. This cable is very light weight and easy strip. We can connectorized this cable too for direct terminations.

PRODUCT APPLICATION

These cables can be used for indoor/outdoor aerial applications and FTTH/ FTTH applications between the apartment's central communication room and the apartment/ office point.

STANDARDS

IEC 60794; IEC 60793; ITU-T ;Telecordia GR-20



CONSTRUCTION DETAILS

- 1-OUTER SHEATH
- 2-EMBEDDED STRENGTH MEMBER
- 3-COLORED FIBER

FIBER BL OR

FLAT OUTDOOR FTTH FIGURE-8 CABLE

PRODUCT DETAIL

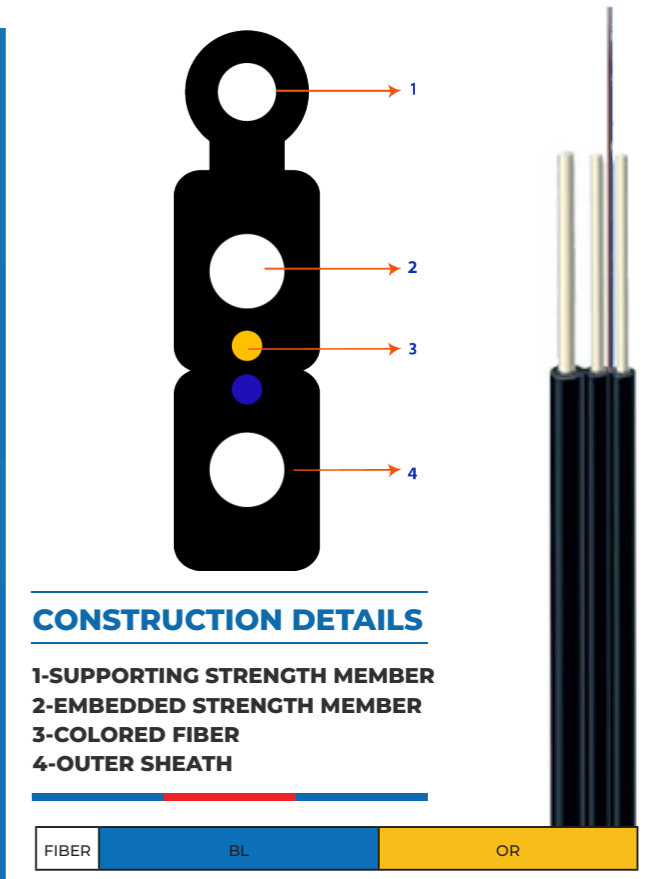
Outdoor Fig. 8 Flat Cable is a FTTH solution, this cable is manufactured by one or two bend sensitive fiber (ITU-T G657A1 or G.657A2) protected by two strength members and one messenger wire on the top for aerial FTTH drop applications and a final LSZH sheath. This cable is very light weight and easy strip. We can connectorized this cable too for direct terminations.

PRODUCT APPLICATION

These cables can be used for indoor/outdoor aerial applications and FTTH/ FTTH applications between the apartment's central communication room and the apartment/ office point.

STANDARDS

IEC 60794; IEC 60793; ITU-T ;Telecordia GR-20



CONSTRUCTION DETAILS

- 1-SUPPORTING STRENGTH MEMBER
- 2-EMBEDDED STRENGTH MEMBER
- 3-COLORED FIBER
- 4-OUTER SHEATH

FIBER BL OR

TECHNICAL DATA	
FIBER COUNT	2F
CABLE DIAMETER (MM) +/- 5%	3.0 x 2.0
CABLE WEIGHT (KG/KM) +/- 10%	10

MECHANICAL PARAMETER	
MAX. TENSILE STRENGTH (N)	150
CRUSH RESISTANCE (N/100 X 100 MM)	500
BENDING RADIUS (DYNAMIC)	10D
BENDING RADIUS (STATIC)	15D
IMPACT RESISTANCE (N-m)	4
TORSION	±180°
WATER PENETRATION	1 meter Water Head, 3 meter Sample, 24 hrs, No Water Leakage
ENVIRONMENTAL CONDITIONS	Operating Temperature: -20 °C to + 70 °C Storage Temperature: -30 °C to + 70 °C Installation Temperature: -10 °C to + 70 °C

OPTICAL PARAMETER		
FIBER TYPE	G.657A1	G.657A2
ATTENUATION (dB/km)	TYPICAL/MAXIMUM	TYPICAL/MAXIMUM
1310 nm	0.38/0.4	0.335/0.380
1550 nm	0.25/0.3	0.200/0.250

TECHNICAL DATA	
FIBER COUNT	2F
CABLE DIAMETER (MM) +/- 5%	5.4 x 2.0
CABLE WEIGHT (KG/KM) +/- 10%	20

MECHANICAL PARAMETER	
MAX. TENSILE STRENGTH (N)	400
CRUSH RESISTANCE (N/100 X 100 MM)	500
BENDING RADIUS (DYNAMIC)	10D
BENDING RADIUS (STATIC)	15D
IMPACT RESISTANCE (N-m)	4
TORSION	±180°
WATER PENETRATION	1 meter Water Head, 3 meter Sample, 24 hrs, No Water Leakage
ENVIRONMENTAL CONDITIONS	Operating Temperature: -20 °C to + 70 °C Storage Temperature: -30 °C to + 70 °C Installation Temperature: -10 °C to + 70 °C

OPTICAL PARAMETER		
FIBER TYPE	G.657A1	G.657A2
ATTENUATION (dB/km)	TYPICAL/MAXIMUM	TYPICAL/MAXIMUM
1310 nm	0.38/0.4	0.335/0.380
1550 nm	0.25/0.3	0.200/0.250

SIMPLEX / DUPLEX CABLE

PRODUCT DETAIL

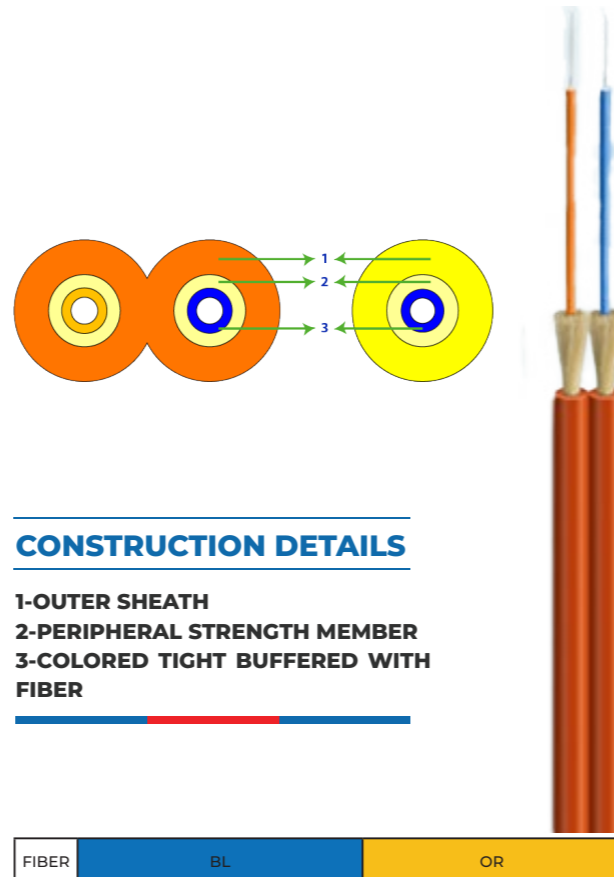
Tight Buffer Simplex / Duplex Cables are an integral part of the end-to-end fiber optic solution, designed to support enhanced data needs along with future advancing network requirements. Simplex Fiber Optic Cable consists of a single fiber, tight buffered (coated with a 900 micron buffer over coating) with Kevlar (Aramid Yarn) strength members and suitable for indoor use where in duplex fiber optic cables consist of two fibers joined by the two sheaths fiber is either single mode or multimode.

PRODUCT APPLICATION

Simplex Cables are used mostly for patch cord. Duplex Cables are used in applications where data needs to be transferred bi-directionally.

STANDARDS

IEC 60794; IEC 60793; ITU-T ;Telecordia GR-20



CONSTRUCTION DETAILS

- 1-OUTER SHEATH
- 2-PERIPHERAL STRENGTH MEMBER
- 3-COLORED TIGHT BUFFERED WITH FIBER

FIBER	BL	OR
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TIGHT BUFFER DISTRIBUTION CABLE

PRODUCT DETAIL

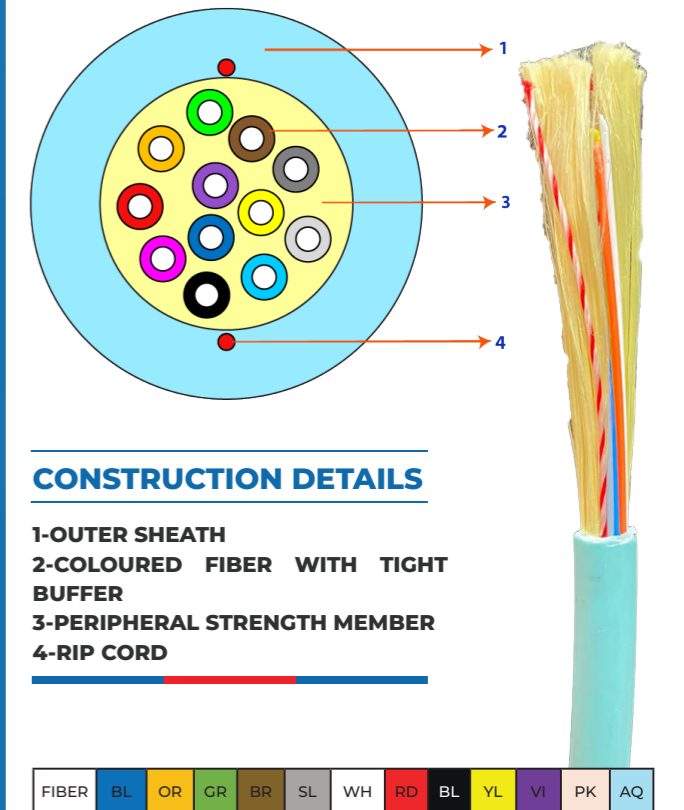
Distribution Cables are an integral part of the end-to-end fiber optic solution, designed to support enhanced data needs along with future advancing network requirements. These cables are suitable for riser applications in multi-story buildings. This cable consists of tight-buffered fibers (coated with a 900 micron buffer over coating) with aramid yarn strength members and sheathed with Low Smoke Zero Halogens material to make it suitable for indoor use.

PRODUCT APPLICATION

This cable is suitable for riser application with is buildings.

STANDARDS

IEC 60794; IEC 60793; ITU-T ;Telecordia GR-20



CONSTRUCTION DETAILS

- 1-OUTER SHEATH
- 2-COLOURED FIBER WITH TIGHT BUFFER
- 3-PERIPHERAL STRENGTH MEMBER
- 4-RIP CORD

FIBER	BL	OR	GR	BR	SL	WH	RD	BL	YL	VI	PK	AQ
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TECHNICAL DATA

FIBER COUNT	SIMPLEX	SIMPLEX	DUPLEX	DUPLEX
CABLE DIAMETER (MM) +/- 5%	3	2	3 x 6.2	2 x 4.2
CABLE WEIGHT (KG/KM) +/- 10%	9	4	18	8

MECHANICAL PARAMETER

MAX. TENSILE STRENGTH (N)	150	100	200	150
CRUSH RESISTANCE (N/100 X 100 MM)	300	200	300	200
BENDING RADIUS (DYNAMIC)	20D			
ENVIRONMENTAL CONDITIONS	Operating Temperature: -20 °C to + 70 °C			
	Storage Temperature: -30 °C to + 70 °C			
	Installation Temperature: -10 °C to + 70 °C			

OPTICAL PARAMETER

FIBER TYPE	G.657A1	G.657A2
ATTENUATION (dB/km)	TYPICAL/MAXIMUM	TYPICAL/MAXIMUM
1310 nm	0.38/0.4	0.335/0.380
1550 nm	0.25/0.3	0.200/0.250

TECHNICAL DATA

FIBER COUNT	6F	8F	12F
CABLE DIAMETER (MM) +/- 5%	6	7	7.5
CABLE WEIGHT (KG/KM) +/- 10%	36	47	52

MECHANICAL PARAMETER

MAX. TENSILE STRENGTH (N)	500	500	500
CRUSH RESISTANCE (N/100 X 100 MM)	500	500	500
BENDING RADIUS (DYNAMIC)	20D	20D	20D
ENVIRONMENTAL CONDITIONS	Operating Temperature: -20 °C to + 70 °C		
	Storage Temperature: -30 °C to + 70 °C		
	Installation Temperature: -10 °C to + 70 °C		

OPTICAL PARAMETER

FIBER TYPE	G.657A1	G.657A2
ATTENUATION (dB/km)	TYPICAL/MAXIMUM	TYPICAL/MAXIMUM
1310 nm	0.38/0.4	0.335/0.380
1550 nm	0.25/0.3	0.200/0.250

BREAKOUT CABLE

PRODUCT DETAIL

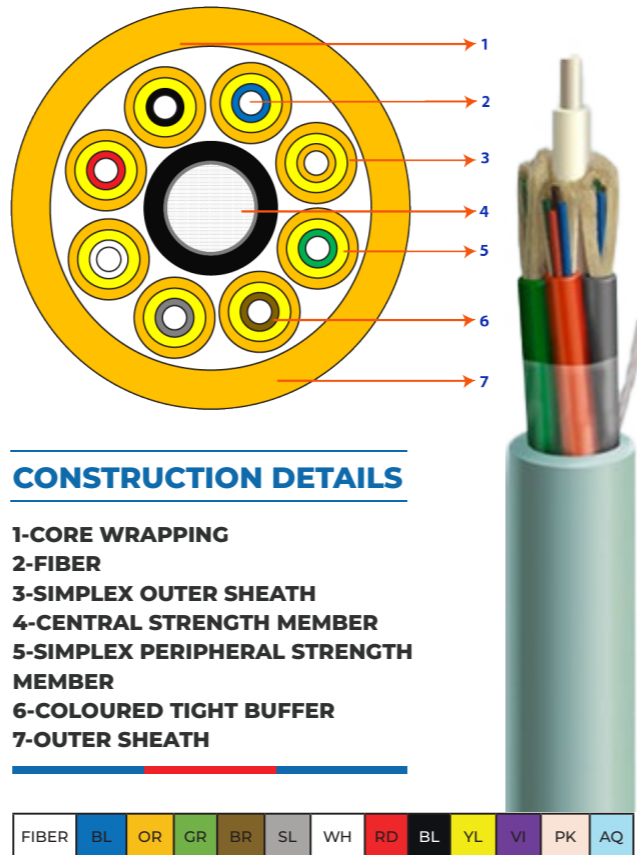
Breakout Cables are an integral part of the end-to-end fiber optic solution, designed to support enhanced data needs along with future advancing network requirements. These cables are suitable for mid spanning. This cable consists of simplex with aramid yarn and FRP strength members and sheathed with Low Smoke Zero Halogens material to make it suitable for indoor use.

PRODUCT APPLICATION

This cable is suitable for mid spanning of cables. Individual simplex can be used. This cable is also suitable for FTTH connection.

STANDARDS

IEC 60794; IEC 60793; ITU-T ;Telecordia GR-20



CONSTRUCTION DETAILS

- 1-CORE WRAPPING
- 2-FIBER
- 3-SIMPLEX OUTER SHEATH
- 4-CENTRAL STRENGTH MEMBER
- 5-SIMPLEX PERIPHERAL STRENGTH MEMBER
- 6-COLOURED TIGHT BUFFER
- 7-OUTER SHEATH

TECHNICAL DATA			
FIBER COUNT	6F	8F	12F
CABLE DIAMETER (MM) +/- 5%	10.5	12.2	15
CABLE WEIGHT (KG/KM) +/- 10%	96	126	186

MECHANICAL PARAMETER			
MAX. TENSILE STRENGTH (N)	500	500	500
CRUSH RESISTANCE (N/100 X 100 MM)	500	500	500
BENDING RADIUS (DYNAMIC)	20D	20D	20D
ENVIRONMENTAL CONDITIONS	Operating Temperature: -5 °C to + 55 °C		
	Storage Temperature: -5 °C to + 60 °C		
	Installation Temperature: -5 °C to + 55 °C		

OPTICAL PARAMETER		
FIBER TYPE	G.657A1	G.657A2
ATTENUATION (dB/km)	TYPICAL/MAXIMUM	TYPICAL/MAXIMUM
1310 nm	0.38/0.4	0.335/0.380
1550 nm	0.25/0.3	0.200/0.250

Special Cables

TACTICAL CABLE

PRODUCT DETAIL

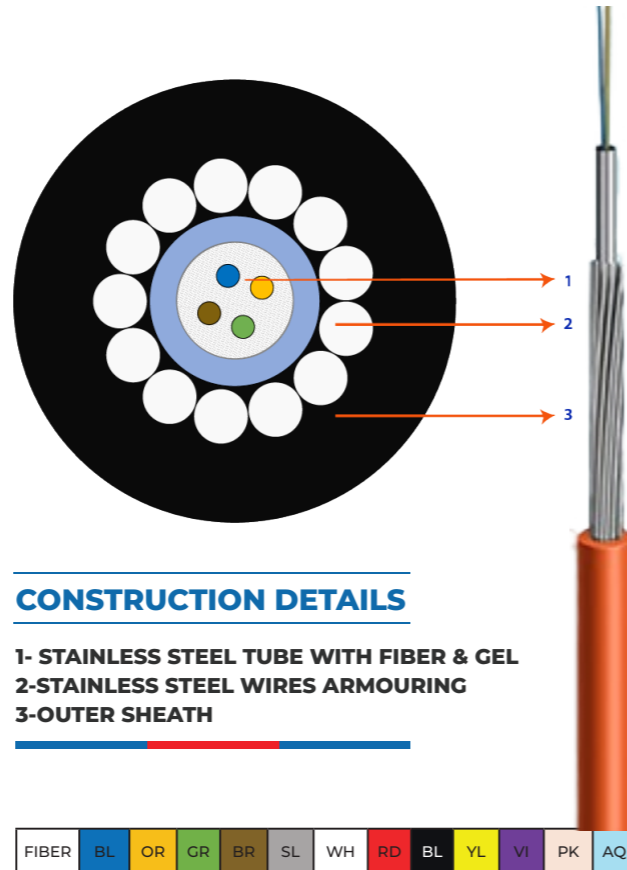
Tactical Cables are intended for military communications, remote control links and operation in severe environments and wide temperature range. The construction is of central stainless steel loose tube with fibers reinforced with stainless steel wires and sheathed with nylon black. This cable is compatible with most military grade as well as with standard commercial type connectors.

PRODUCT APPLICATION

These cables are specifically designed for extreme environmental conditions temperature, humidity, ice, fungus, and fluid immersion. They can be used for battlefield, tactical, defense and military or civil applications. They can be rapidly deployed in harsh environment.

STANDARDS

IEC 60794; IEC 60793; ITU-T ;Telecordia GR-20



CONSTRUCTION DETAILS

- 1- STAINLESS STEEL TUBE WITH FIBER & GEL
- 2-STAINLESS STEEL WIRES ARMOURING
- 3- OUTER SHEATH



UNITUBE ARP ARMoured CABLE

PRODUCT DETAIL

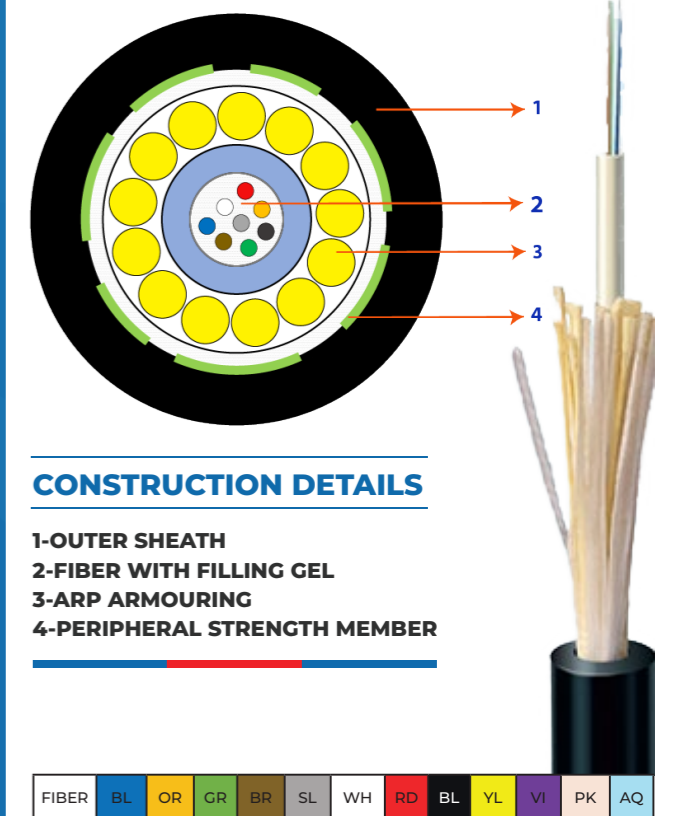
Unitube ARP Armoured Cables are central tube cable using optical fiber presented in loose tube and surrounded by ARP (Aramid Reinforced Plastic). To protect the optical fibers from water penetration, the tube is filled with thixotropic gel and loose tube is protected by ARP rods and covered with peripheral strength member and this complete assembly is fully enclosed in a thermoplastic seamless sheath, sheath provides the cable both mechanical and environmental protection.

PRODUCT APPLICATION

These cables can be used for outdoor applications in access network or as access cable from outdoor to indoor in customer premises network. It can be used as access building cable in premises distribution system, especially used in outdoor aerial access cabling.

STANDARDS

IEC 60794; IEC 60793; ITU-T Rec. G.652;Telecordia GR-20



CONSTRUCTION DETAILS

- 1- OUTER SHEATH
- 2-FIBER WITH FILLING GEL
- 3-ARP ARMOURING
- 4-PERIPHERAL STRENGTH MEMBER



TECHNICAL DATA		
FIBER COUNT	4F	8F
CABLE DIAMETER (MM) +/- 5%	4.0	4.5
CABLE WEIGHT (KG/KM) +/- 10%	29	42

MECHANICAL PARAMETER	
MAX. TENSILE STRENGTH (N)	1000
CRUSH RESISTANCE (N/100 X 100 MM)	5000
BENDING RADIUS (DYNAMIC)	20D
BENDING RADIUS (STATIC)	15D
TORSION	±180°
WATER PENETRATION	1 meter Water Head, 3 meter Sample, 24 hrs, No Water Leakage
ENVIRONMENTAL CONDITIONS	Operating Temperature: -20° C to + 70° C
	Storage Temperature: -30° C to + 70° C
	Installation Temperature: -10° C to + 70° C

OPTICAL PARAMETER		
FIBER TYPE	G.652D	G.657A1
ATTENUATION (dB/km)	TYPICAL / MAXIMUM	TYPICAL / MAXIMUM
1310 nm	0.335/0.360	0.335/0.360
1550 nm	0.200/0.220	0.200/0.220
1625 nm	0.220/0.250	0.220/0.250

TECHNICAL DATA	
FIBER COUNT	2F-12F
CABLE DIAMETER (MM) +/- 5%	8
CABLE WEIGHT (KG/KM) +/- 10%	55

MECHANICAL PARAMETER	
MAX. TENSILE STRENGTH (N)	700
CRUSH RESISTANCE (N/100 X 100 MM)	1500
BENDING RADIUS (DYNAMIC)	20D
BENDING RADIUS (STATIC)	15D
TORSION	±180°
WATER PENETRATION	1 meter Water Head, 3 meter Sample, 24 hrs, No Water Leakage
ENVIRONMENTAL CONDITIONS	Operating Temperature: -20° C to + 70° C
	Storage Temperature: -30° C to + 70° C
	Installation Temperature: -10° C to + 70° C

OPTICAL PARAMETER		
FIBER TYPE	G.652D	G.657A1
ATTENUATION (dB/km)	TYPICAL / MAXIMUM	TYPICAL / MAXIMUM
1310 nm	0.335/0.360	0.335/0.360
1550 nm	0.200/0.220	0.200/0.220
1625 nm	0.220/0.250	0.220/0.250

CENTRAL TUBE INTRUSION PROOF DIELECTRIC ARMoured CABLE

PRODUCT DETAIL

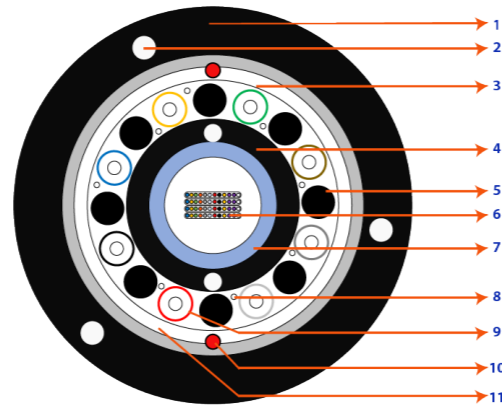
Central Tube Intrusion Proof Fiber Optic Cable is design for data secrecy purpose and this cable is fool proof intruder protected for data hacking. The optical fibers are arranged into ribbon units by placing the fibers of 12 color-coded fibers bonded together by a UV-curable matrix material. A dual stranding layer of loose tubes containing single sensory fiber around the thermoplastic sheath of central tube containing ribbon fibers has been provided as intrusion proofing for the network. Cable core is surrounded with water-swellable tape, peripheral strength members and anti-buckling strength members are provided in diagonally opposite in inner sheath of cable and at 120 degree each other in outer sheath of cable to provide better strength.

PRODUCT APPLICATION

This cable can detect data hacking/intrusion at various points by securing data transmission through ribbon fiber in inner core and surveillance by sensory layer below the outer sheath. This cable combines robust performance for duct and better tensile in aerial installations with the productivity of high count mass fusion splicing. The ribbon design delivers the highest Fiber density in the most compact cable package possible and offers an outstanding solution for demanding high-growth, high-bandwidth communications applications.

STANDARDS

IEC 60794; IEC 60793; ITU-T ;Telecordia GR-20



CONSTRUCTION DETAILS

- 1- OUTER SHEATH
- 2- EMBEDDED STRENGTH MEMBER
- 3- WATER SWELLABLE TAPE
- 4- INNER SHEATH
- 5- SENSORY LAYER
- 6- RIBBON FIBER WITH LOOSE TUBE AND GEL
- 7- WATER SWELLABLE TAPE
- 8- WATER SWELLABLE YARN
- 9- LOOSE TUBE WITH SENSORY FIBER
- 10- RIP CORD
- 11- PERIPHERAL STRENGTH MEMBER



TECHNICAL DATA		OPTICAL PARAMETER		
FIBER COUNT	48F(R) + 8F	FIBER TYPE	G.652D	G.655
FIBER PER RIBBON	12F/ RIBBON	ATTENUATION (dB/km)	TYPICAL / MAXIMUM	TYPICAL / MAXIMUM
NO.OF RIBBON	4	1310 nm	0.335/0.360	--
No. OF FIBER PER TUBE	48	1550 nm	0.200/0.220	0.22/0.240
CABLE DIAMETER (MM) +/- 5%	19.0	1625 nm	0.220/0.250	0.24/0.260
CABLE WEIGHT (KG/KM) +/- 10%	270			

MECHANICAL PARAMETER	
MAX. TENSILE STRENGTH (N)	3000
CRUSH RESISTANCE (N/100 X 100 MM)	4000
BENDING RADIUS (DYNAMIC)	20D
BENDING RADIUS (STATIC)	15D
IMPACT RESISTANCE (N-m)	25
TORSION	±180°
WATER PENETRATION	1 meter Water Head, 3 meter Sample, 24 hrs, No Water Leakage
ENVIRONMENTAL CONDITIONS	Operating Temperature: -30 °C to + 70 °C Storage Temperature: -40 °C to + 70 °C Installation Temperature: -20 °C to + 70 °C

CUSTOMIZATION AVAILABLE ON REQUEST

MULTI TUBE DOUBLE SHEATH FRP ARMoured

PRODUCT DETAIL

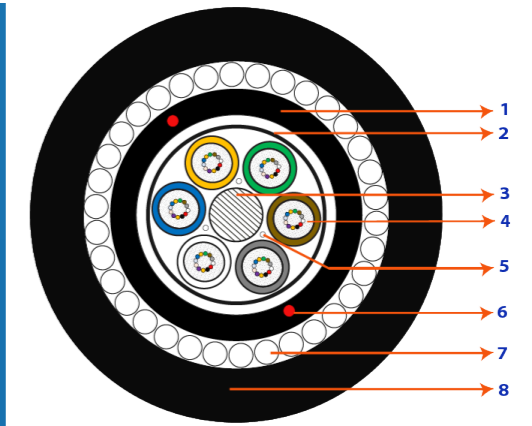
Multitube Double Sheath FRP Armoured Cables are especially suited for direct buried application. This cable is a stranded loose tube cable with optical fibers placed inside robust buffer tubes stranded around a Fiber Reinforced Plastic (FRP) central strength member. In addition to optical fibers, the buffer tubes contain water blocking gel, and the cable core is surrounded with water-swellable tape to prevent water penetration in the interstices of cable core. FRP rod armour surrounds the inner sheath with thermoplastic sheath placed over the armour layer making the cable robust and installation friendly. Its complete dielectric design make this cable suitable for installation along with power transmission line.

PRODUCT APPLICATION

These cables are typically used in heavy construction zones including heavy traffic area, wind farm developments, pipelines, oil and gas fields, heavy industrial sites and a variety of additional harsh environments. This cable is suitable for direct buried and other hazardous applications and are typically used in harsh environments.

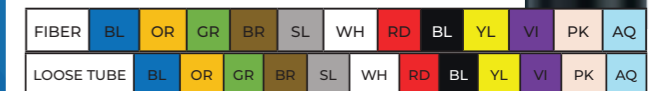
STANDARDS

IEC 60794; IEC 60793; ITU-T; Telecordia GR-20



CONSTRUCTION DETAILS

- 1- INNER SHEATH
- 2- CORE WRAPPING
- 3- CENTRAL STRENGTH MEMBER
- 4- LOOSE TUBE WITH FIBERS & WATER BLOCKING GEL
- 5- WATER SWELLABLE YARN
- 6- RIP CORD
- 7- FRP ROD ARMOURING
- 8- OUTER SHEATH



TECHNICAL DATA			
FIBER COUNT	12F-72F	96F	144F
FIBER PER TUBE	12F	12F	12F
NO. OF TUBES	1-6	8	12
CABLE DIAMETER (MM) +/- 5%	15.7	17.2	19.7
CABLE WEIGHT (KG/KM) +/- 10%	430	510	635

MECHANICAL PARAMETER			
MAX. TENSILE STRENGTH (N)	5000	5000	5000
CRUSH RESISTANCE (N/100 X 100 MM)	5000	5000	5000
BENDING RADIUS (DYNAMIC)	20D	20D	20D
BENDING RADIUS (STATIC)	15D	15D	15D
IMPACT RESISTANCE (N-m)	50		
TORSION	±180°		
ENVIRONMENTAL CONDITIONS	Operating Temperature: -30 °C to + 70 °C Storage Temperature: -40 °C to + 70 °C Installation Temperature: -20 °C to + 60 °C		

OPTICAL PARAMETER		
FIBER TYPE	G.652D	G.657A1
ATTENUATION (dB/km)	TYPICAL / MAXIMUM	TYPICAL / MAXIMUM
1310 nm	0.335/0.360	0.335/0.360
1550 nm	0.200/0.220	0.200/0.220
1625 nm	0.220/0.250	0.220/0.250

CUSTOMIZATION AVAILABLE ON REQUEST

UNITUBE UNARMoured CABLE

PRODUCT DETAIL

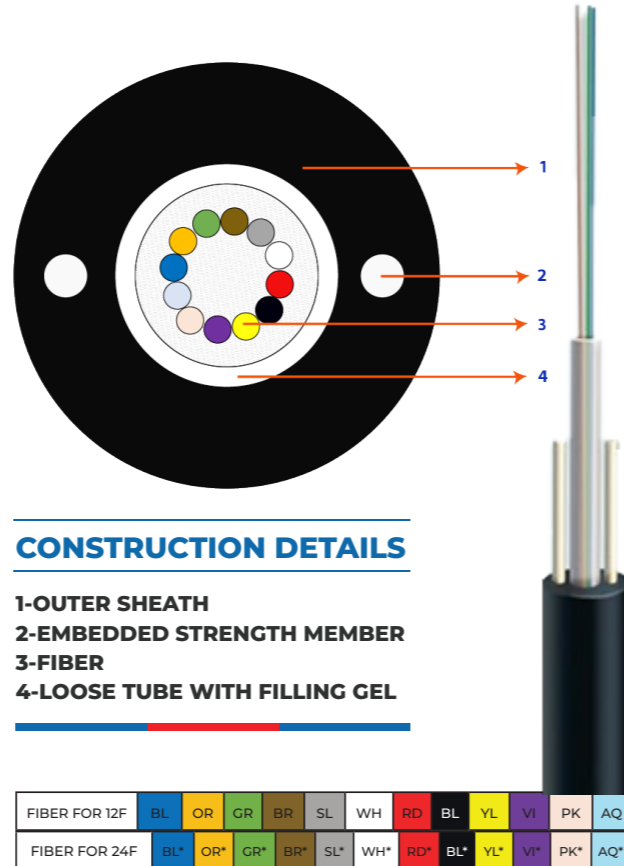
Unitube Single Sheath unarmoured embedded strength member cables are multipurpose cables designed for CATV application. This cable is a uni tube cable with two no. of embedded strength member for providing anti buckling property. This uni loose tube and embedded FRP is covered with thermoplastic sheath material.

PRODUCT APPLICATION

These cables can be used for outdoor applications in ducts or aerial drop for access and distribution for campus/ between buildings. These cables can be installed in ducts with either pulling or blowing techniques and in aerial applications with traditional lashing methods.

STANDARDS

IEC 60794; IEC 60793; ITU-T; Telecordia GR-20



CONSTRUCTION DETAILS

- 1-OUTER SHEATH
- 2-EMBEDDED STRENGTH MEMBER
- 3-FIBER
- 4-LOOSE TUBE WITH FILLING GEL

TECHNICAL DATA						
FIBER COUNT	2F	4F	6F	8F	12F	24F
CABLE DIAMETER (MM) +/- 5%	6.0	6.0	6.0	6.0	6.0	7.0
CABLE WEIGHT (KG/KM) +/- 10%	30	30	30	30	30	38

MECHANICAL PARAMETER						
MAX. TENSILE STRENGTH (N)	350	350	350	350	350	350
CRUSH RESISTANCE (N/100 X 100 MM)	500	500	500	500	500	500
BENDING RADIUS (DYNAMIC)	20D	20D	20D	20D	20D	20D
BENDING RADIUS (STATIC)	10D	10D	10D	10D	10D	10D
IMPACT RESISTANCE (N-m)	10	10	10	10	10	10
TORSION	±180°	±180°	±180°	±180°	±180°	±180°
WATER PENETRATION	1 meter Water Head, 3 meter Sample, 24 hrs, No Water Leakage					
ENVIRONMENTAL CONDITIONS	Operating Temperature: -20 °C to + 70 °C					
	Storage Temperature: -30 °C to + 70 °C					
	Installation Temperature: -10 °C to + 70 °C					

OPTICAL PARAMETER		
FIBER TYPE	G.652D	G.657A1
ATTENUATION (dB/km)	TYPICAL / MAXIMUM	TYPICAL / MAXIMUM
1310 nm	0.335/0.360	0.335/0.360
1550 nm	0.200/0.220	0.200/0.220
1625 nm	0.220/0.250	0.220/0.250

Micro Cables

MULTI TUBE MICRO DUCT CABLE

PRODUCT DETAIL

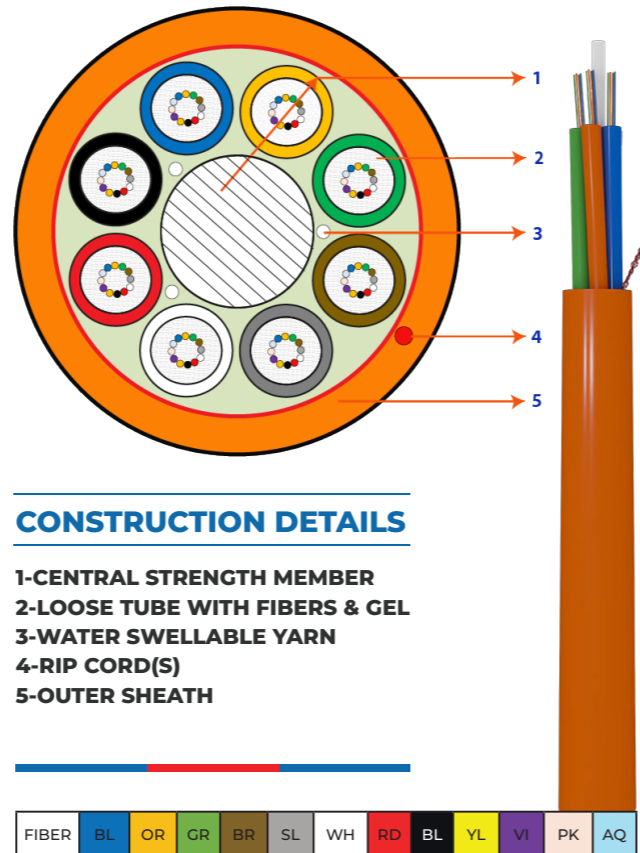
Multitube Single Sheath Micro Duct Fiber Optic Cables are suitable for micro duct applications. This cable is a stranded loose tube cable with optical fibers placed inside robust buffer tubes stranded around a Fiber Reinforced Plastic (FRP) central strength member. In addition to optical fibers, the micro buffer tubes contain water blocking gel and the cable core is filled with water-swellable yarn to prevent water ingress in the interstices of cable core. The cable core is surrounded with thermoplastic sheath making the cable robust and installation friendly.

PRODUCT APPLICATION

These cables are typically used for air blown drop cabling for FTTX networks. Microcables can utilise existing and new duct systems more effectively by accommodating more fibers in given sub-duct network. As compared to conventional cable, Micro Cable diameter is less and thereby reducing installation cost. Its flexible, light weight, easy to handle & installation.

STANDARDS

IEC 60794; IEC 60793; ITU-T; Telecordia GR-20



CONSTRUCTION DETAILS

- 1-CENTRAL STRENGTH MEMBER
- 2-LOOSE TUBE WITH FIBERS & GEL
- 3-WATER SWELLABLE YARN
- 4-RIP CORD(S)
- 5-OUTER SHEATH



UNITUBE MICRO DUCT OPTICAL FIBER CABLE

PRODUCT DETAIL

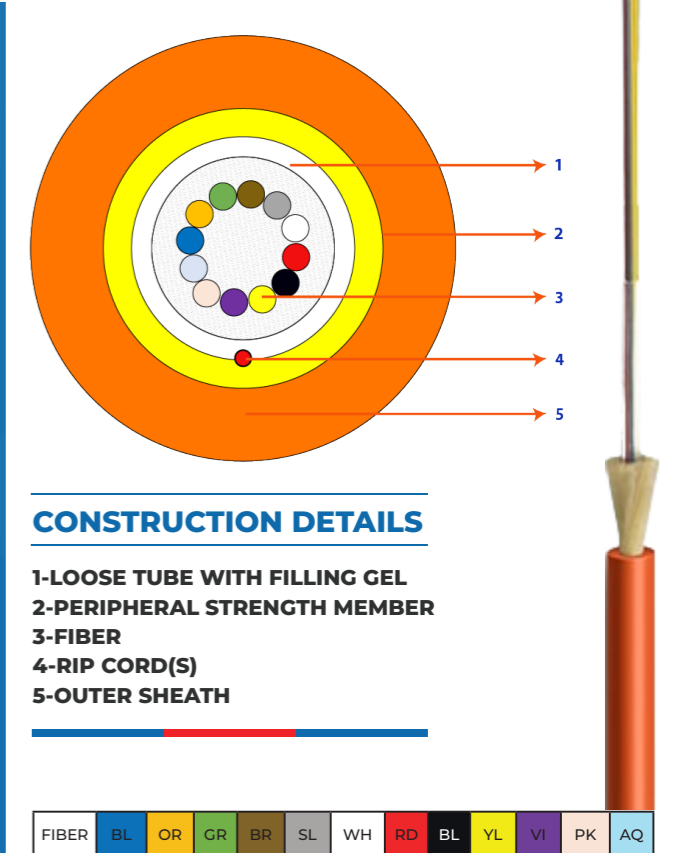
Unitube Micro Duct optical fiber cable with central loose tube filled with filling gel to prevent water penetration inside cable. Central loose tube is fully covered peripheral strength member and this complete assembly is covered with PA-12 outer sheath to provide better mechanical, environmental as well as termite protection.

PRODUCT APPLICATION

This design is suitable to micro duct application. Completely dielectric cable/ non-metallic cable immune to electromagnetic interferences. Suitable for air blowing method. Cable is protected with termite.

STANDARDS

IEC 60794; IEC 60793; ITU-T; Telecordia GR-20



CONSTRUCTION DETAILS

- 1-LOOSE TUBE WITH FILLING GEL
- 2-PERIPHERAL STRENGTH MEMBER
- 3-FIBER
- 4-RIP CORD(S)
- 5-OUTER SHEATH



TECHNICAL DATA			
FIBER COUNT	12F-72F	96F	144F
FIBER PER TUBE	12F	12F	12F
NO. OF TUBES	1-6	8	12
CABLE DIAMETER (MM) +/- 5%	5.8	6.8	9.2
CABLE WEIGHT (KG/KM) +/- 10%	28	45	78

MECHANICAL PARAMETER			
DUCT SIZE (ID/OD) MM	8/12	10/14	12/16
CRUSH RESISTANCE (N/100 X 100 MM)	500	500	500
BENDING RADIUS (DYNAMIC)	20D	20D	20D
BENDING RADIUS (STATIC)	15D	15D	15D
IMPACT RESISTANCE (N-m)	25		
TORSION	±180°		
ENVIRONMENTAL CONDITIONS	Operating Temperature: -30 °C to + 70 °C		
	Storage Temperature: -40 °C to + 70 °C		
	Installation Temperature: -20 °C to + 60 °C		

OPTICAL PARAMETER		
FIBER TYPE	G.652D	G.657A1
ATTENUATION (dB/km)	TYPICAL / MAXIMUM	TYPICAL / MAXIMUM
1310 nm	0.335/0.360	0.335/0.360
1550 nm	0.200/0.220	0.200/0.220
1625 nm	0.220/0.250	0.220/0.250

TECHNICAL DATA					
FIBER COUNT	2F	4F	6F	8F	12F
CABLE DIAMETER (MM) +/- 5%	3.8	3.8	3.8	3.8	3.8
CABLE WEIGHT (KG/KM) +/- 10%	12	12	12	12	12

MECHANICAL PARAMETER					
MAX. TENSILE STRENGTH (N)	75	75	75	75	75
CRUSH RESISTANCE (N/100 X 100 MM)	500	500	500	500	500
BENDING RADIUS (DYNAMIC)	20D	20D	20D	20D	20D
BENDING RADIUS (STATIC)	10D	10D	10D	10D	10D
IMPACT RESISTANCE (N-m)	5	5	5	5	5
TORSION	±180°	±180°	±180°	±180°	±180°
WATER PENETRATION	1 meter Water Head, 3 meter Sample, 24 hrs, No Water Leakage				
ENVIRONMENTAL CONDITIONS	Operating Temperature: -20 °C to + 70 °C				
	Storage Temperature: -30 °C to + 70 °C				
	Installation Temperature: -10 °C to + 70 °C				

OPTICAL PARAMETER		
FIBER TYPE	G.652D	G.657A1
ATTENUATION (dB/km)	TYPICAL / MAXIMUM	TYPICAL / MAXIMUM
1310 nm	0.335/0.360	0.335/0.360
1550 nm	0.200/0.220	0.200/0.220
1625 nm	0.220/0.250	0.220/0.250

CENTRAL-TUBE AIRBLOWN MICRO CABLE

PRODUCT DETAIL

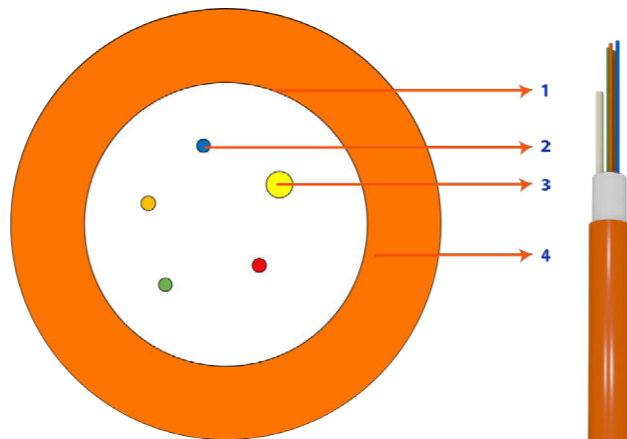
Unitube/ Central Tube Airblown Micro Optical Fiber Cable with central looetube filled with filling gel to prevent water penetration inside cable. FRP/ARP as strength member inside central loose tube and this complete assembly is covered with PA-12 outer sheath to provide better mechanical, environmental as well as termite protection.

PRODUCT APPLICATION

This Design is suitable to micro duct air blowing application. Completely dielectric cable/ non metallic cable immune to electromagnetic interferences. Cable is protected with termite.

STANDARDS

IEC 60794; IEC 60793; ITU-T ;Telecordia GR-20



CONSTRUCTION DETAILS

- 1-LOOSE TUBE WITH FILLING GEL
- 2-FIBER
- 3-STRENGTH MEMBER
- 4-OUTER SHEATH



TECHNICAL DATA		
FIBER COUNT	2F	4F
CABLE DIAMETER (MM) +/- 0.2	2.8	2.8
CABLE WEIGHT (KG/KM) +/- 10%	7	7

MECHANICAL PARAMETER		
MAX. TENSILE STRENGTH (N)	20	20
CRUSH RESISTANCE (N/100 X 100 MM)	100	100
BENDING RADIUS (DYNAMIC)	20D	20D
BENDING RADIUS (STATIC)	10D	10D
ENVIRONMENTAL CONDITIONS	Operating Temperature: -20 °C to + 70 °C Storage Temperature: -30 °C to + 70 °C Installation Temperature: -10 °C to + 70 °C	

OPTICAL PARAMETER		
FIBER TYPE	G.652D	G.657A1
ATTENUATION (dB/km)	TYPICAL / MAXIMUM	TYPICAL / MAXIMUM
1310 nm	0.335/0.360	0.335/0.360
1550 nm	0.200/0.220	0.200/0.220
1625 nm	0.220/0.250	0.220/0.250

ISO & TSEC CERTIFICATIONS

ISO 9001:2015
Quality Management System

ISO 14001:2015
Environmental Management System

ISO 45001:2018
Occupational Health & Safety Management System

ISO 10002:2004
Quality Management Customer Satisfaction System

ISO 27001:2013
Information Security Management System

TL 9000:2016
Quality Management System for Telecom Industry



- BSNL TSEC**
- ✓ FTTH Cables
 - ✓ Aerial cables
 - ✓ ADSS cables
 - ✓ Armoured duct cables
 - ✓ Unarmoured duct cables
 - ✓ Ribbon cables



- RDSO**
- ✓ Armoured 24F & 48F OFCs



PLANT & MACHINERY

Our **state-of-the-art manufacturing plant** consists of the **latest & ultramodern machinery** for manufacturing Optical Fiber Cable (OFC) ranging from 1F to 576F and other Special Cables. We have a **capacity to manufacture more than 4.5 million Fiber Cable (FKMs) per annum**. Corsis Technologies follows a **stringent quality control system** with **advanced testing facilities** to meet national and international standards.



MANUFACTURING



CAPACITY



ADVANCE TECHNOLOGY



MORDERN MACHINERY



QUALITY ASSURANCE



MORDERN TESTING



NATIONAL STANDARDS



INTERNATIONAL STANDARDS

CENTER OF EXCELLENCE

Our Centre of Excellence continuously works on **innovation** to create value for our customers by **offering customized solutions** of cable designs based on the applications. We work closely with our customers to understand their **requirements and explore the best possible solutions** to deliver our customers **exceptional quality products**. Our R&D center is focused on reducing the construction cost of cable, based on **suitability, reliability, workability, operability, maintainability, capacity, and functionality** of the product.

To improve the testing workflow, we use automation and advanced sensing technology for equipment inspection.

Test and measurement of cable parameters are conducted at various stages of production to ensure **long-term system reliability**. The capability of each length of **optical fiber** is tested to meet the required **geometry, spectral, dispersion, attenuation, mechanical, and environmental** characteristics with testing of raw materials before it goes to FG. To determine the capability of the cable to withstand the rigors of installation, we conduct various **reliability tests** including bending, flexing, torsion, impact resistance, and crush tests.

This is done using specially designed equipment that simulates field conditions according to international standards. Special emphasis is placed on tensile strength, environmental performance, and bending radius.



INNOVATION



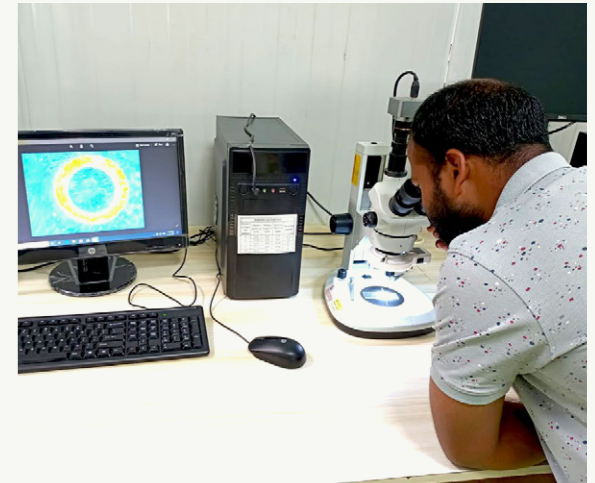
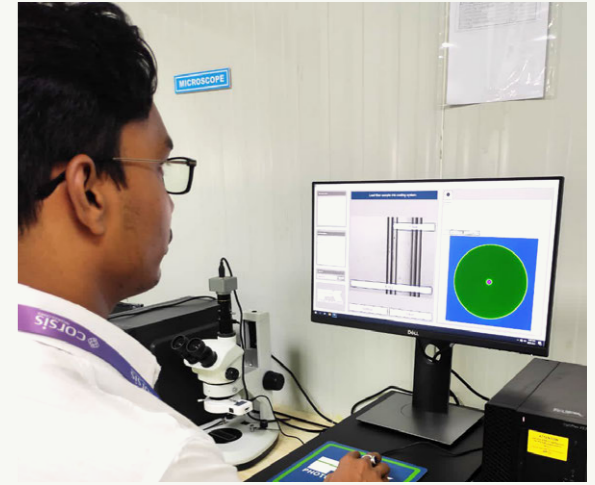
EXCEPTIONAL QUALITY



CUSTOMIZATION



INSPECTION & TESTING



CSR & GREEN EARTH INITIATIVES

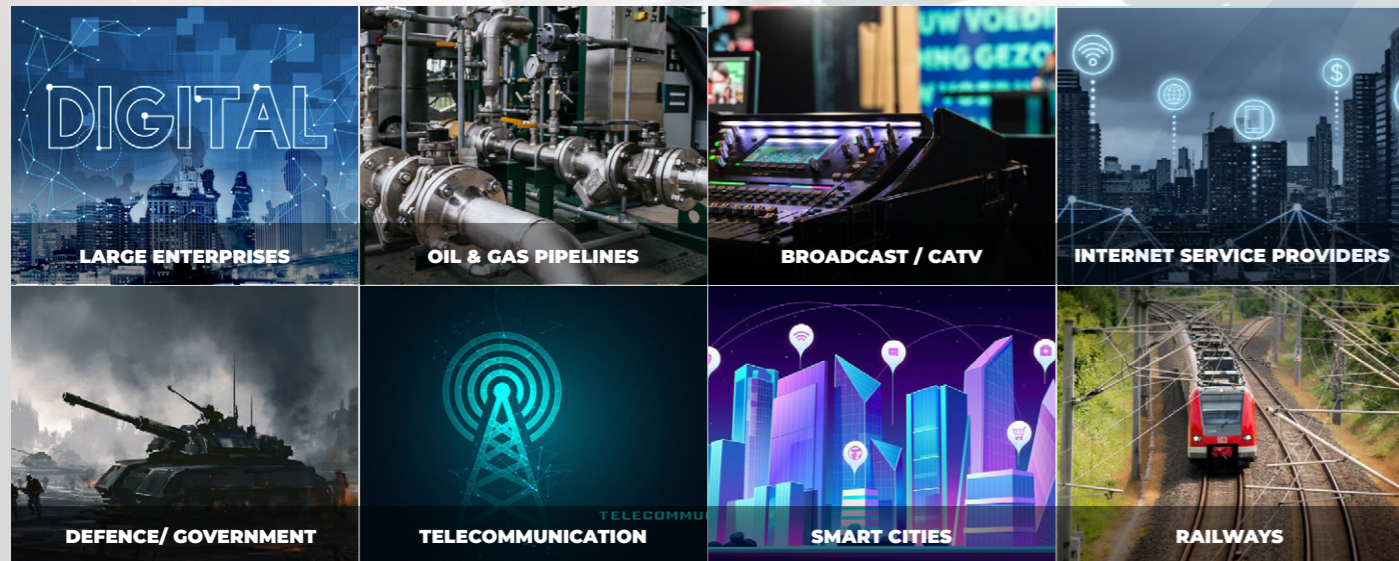
As a socially responsible organization, Corsis Technologies executes its operations by **complying with social responsibilities**. We ensure **limited environmental ramifications**. Undertaking various initiatives towards a sustainable environment, Corsis Technologies is **committed towards making the society a better place to live**. The Board's CSR committee is chaired by **CMD-Pratap Group Mr. Devendra Singh Shekhawat**, aiming to help & contribute for a better tomorrow. **Our company has established the following priorities for Team Pratap CSR Initiative:**

- Green earth initiatives and setting up of solar power plant to save energy
- Committed for 10k plantation annually and doing it consecutively from last few years
- Promoting preventive health care
 - Making safe drinking water available in schools at rural areas
- Organizing Blood donation camps every year
 - Initiative for nutritious food for children



OUR ASSOCIATIONS

Our high-quality products have garnered us **sturdy business relationships** in the industry. Corsis Technologies has **strong associations** and is closely working with **Large enterprises and data centres, Oil & Gas pipelines, Broadcast/ CATV, Smart Cities, Internet Service Providers, Defence/ Government, Telecommunication, and Railways.**



Connecting the World



CONTACT US

PRATAP DIGITAL COMMUNICATIONS PVT. LTD.

ADDRESS

Corporate Office: 10th Floor, Tower-A, Spaze IT Park, Sector-49, Sohna Road, Gurugram, Haryana – 122002, India

Manufacturing Unit: 40, Smart Industrial Park, MPIDC, Near NATRAX, Sector-3, Pithampur, Dist.: Dhar - 454774, Madhya Pradesh, India

 **MOBILE**
+91-7898981300, 01

 **EMAIL**
enquiry@corsis.in; sales@corsis.in

 **WEBSITE**
www.corsis.in

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