

INNOBIZ



ISO 9001



ISO 14001



ISO 45001

www.es-tech.com
vol.3

ESTECH
INTERNATIONAL

E S - T E C H I N T E R N A T I O N A L

HIGH QUALITY TOTAL
COMMUNICATION SOLUTION



ES CABLE

FIBER OPTIC CABLE

ES Cable provides high quality products and service that meet our customers needs based on our rich experience and technology.

| Distribution Cable / Breakout Cable / Simplex and Duplex / Drop Cable
| Multi Loose Tube Cable / ADSS Cable / Ribbon Cable

ESTECH
INTERNATIONAL

Company History

The below is the footprint of ES-TECH international



Coloring



S/C Line



S/Z Stranding Line



Jacketing Line



Specifications testing



Finished Cables

2023

Obtained ISO 45001 Certification
Obtained ISO 14001 Certification
Supply Fiber optic cable to Korea National Railway

2022

Established New Factory & Moved Head Quarter in Hongseung

2021

Authorized Fiber optic cable supplier to Kepco

2020

Obtained Parts and Materials Technician Certificate

2019

Apply for a Patent for SUN 3 UPS
Appointed as the first Vendor of KT

2018

Nominated as Promising Small-Medium Enterprises for Export by 'Ministry of SMEs and Startups'
Selected as an authorized SKT ribbon cable supplier.

2017

Certification of "World-class product" from Ministry of Industry and Trade on Uninterruptible Power Supply for communication.
Nominated as a Military Service Designated Company (Industry) by Military Manpower Administrations.

2016

Certification of Youth-friendly 'Small Hidden Champion'
Certification of Gyeong-gi Province Job Recognition Excellent Company.
Completion of new head office construction in Suwon Industrial Complex.
Nominated as a Gyeong-gi Province Women Employment Excellent Company.

2015

Expand further for fiber optic cable / Launched ESCABLE brand
Verification of greenhouse gas inventory. (carbon management system ISO14064)

2014

Selected the best company to work for by SMBA
(Small and Medium Business Administration)

2013

Selected promising small & medium business by Gyeonggi-Do Provincial Government
Submitted a new design for practical use to KIPO (Korean Intellectual Property Office)
Submitted design patent of 'Hole kit' for communication cable distributor to KIPO (Korean Intellectual Property Office)

2012

Selected best small & medium business to work for
Selected as 'a venture business' by small & medium business administration.
Awarded design award by Gyonggi province governor.

2010

Developed STS
Developed ground mount enclosure
Achieved the patent of 'dual power distribution equipment'.
Achieved the patent for rack type server system power distribution equipment

2008

Developed CATV line UPS of SUN & MOON series.
Developed small sized power supply for apartment building.
Obtained 'annex research institute certification' by KOITA
Obtained 'Innobiz certification' by small & medium business administration.

2007

Obtained 'small & medium size business certification' by administration
Obtained ISO 9001:2000 certifications

2005

Converted to corporation (ES-TECH international Inc.)
Developed APT (Auto Power Distributor)

2004

Developed CATV line UPS

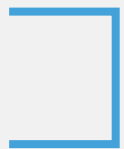
2002

ES TECH NOLOGY was founded



Company Introduction

Growing together with creative company culture.



ES-TECH international specializes in providing "communication & infrastructure" solution and provides most essential products which used in communication network service such as broadband solution, power solution, network solution, cable solution etc.

To keep pace with rapid changing market, ES-TECH international is expanding structured cable system/intelligence building system and network solution field by continuously developing new products through aggressive investment for R&D. Also developing new items by cooperating with Global Corporation, at the same time developing our own brand to expand overseas market. ES-TECH international will do our best to provide best solutions & products to our customers.

F I B E R O P T I C C A B L E

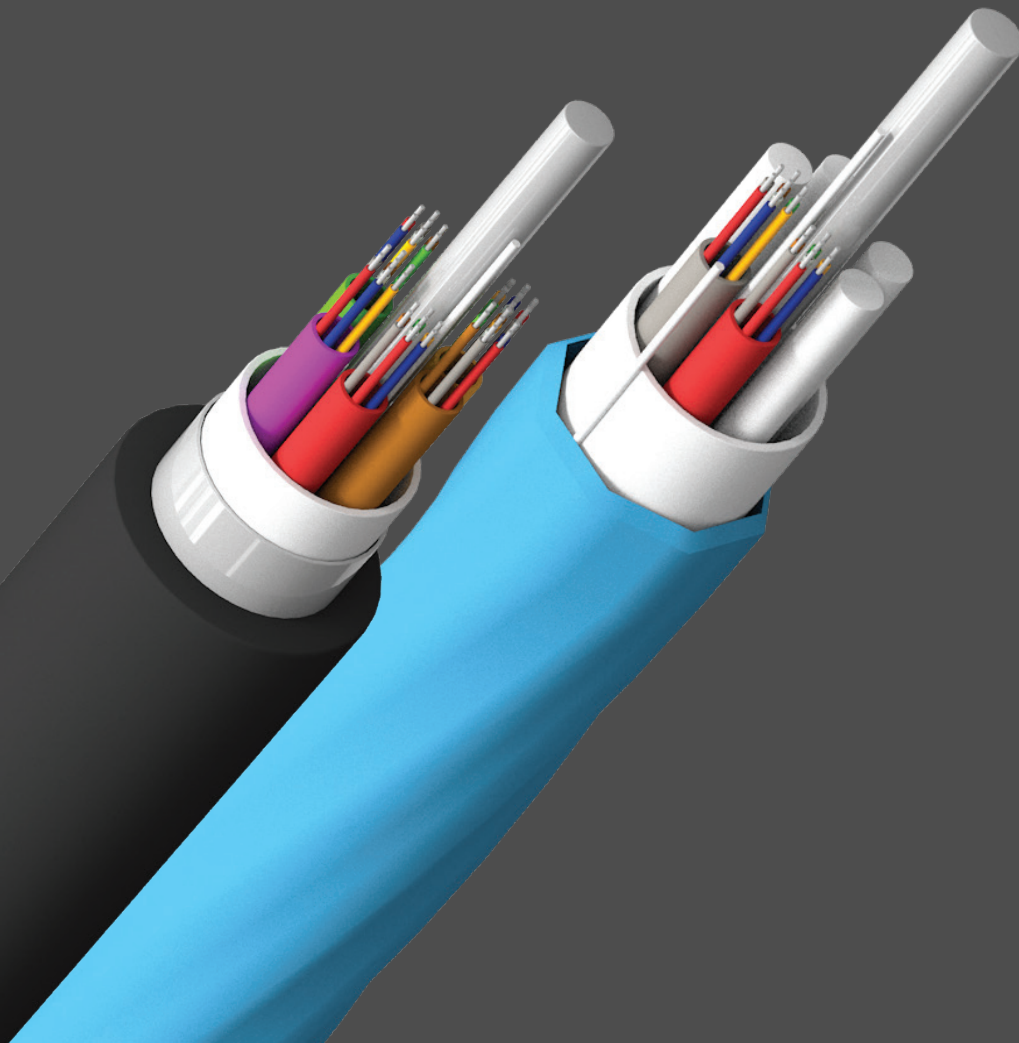
Fiber Optic Cable

ES-TECH International's ESCABLE is an optical cable solution that we design, produce and distribute ourselves. Not only do we have the technology and experience accumulated over many years to meet the various needs and situations of our customers, but we are also recognized for our high quality by our customers around the world.



ESCABLE

E S - T E C H I N T E R N A T I O N A L





ES CABLE Fiber Optic Cable

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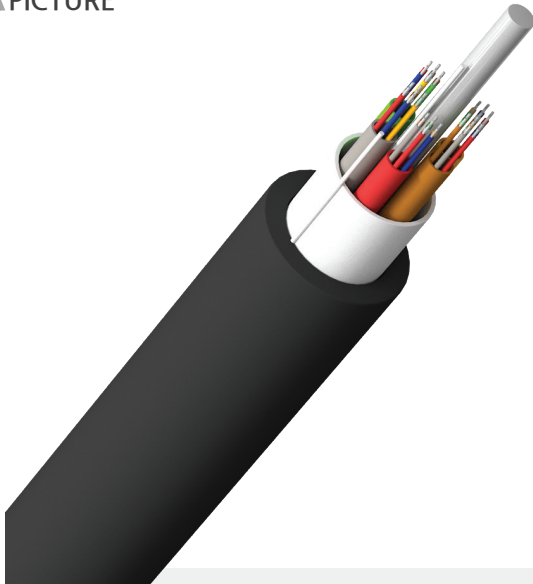
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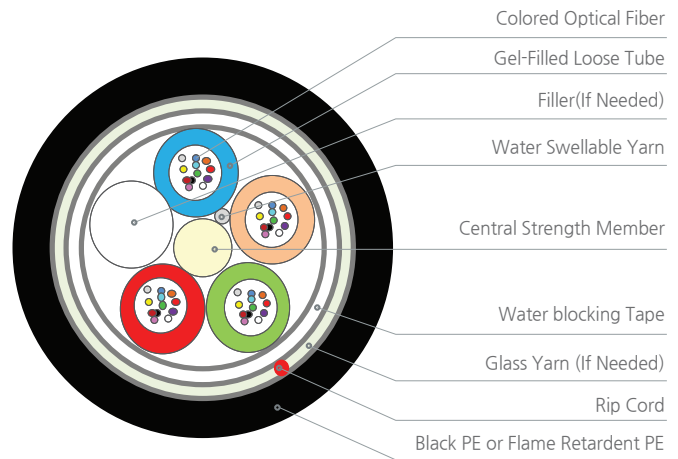
Toneable Drop Cable

LOOSE TUBE SINGLE JACKET MICRO OPTICAL CABLE

PICTURE



CABLE CROSS-SECTION



APPLICATION

- DUCT (Small and Microduct)
- LONG HAUL COMMUNICATION NETWORK
- SUBSCRIBER NETWORK
- LAN

FEATURES AND BENEFITS

- OUTSTANDING OPTICAL FIBER PROTECTION BY PROVEN LOOSE TUBE DESIGN
- AVAILABLE WITH FULL RANGE OF FIBER TYPES AND FIBER COUNT(UP TO 60C)
- AVAILABLE FOR METALLIC OR NON-METALLIC CENTRAL STRENGTH MEMBER
- EASY TO HANDLE BY DRY CABLE CORE
- GENERAL PE JACKET OR FLAME RETARDENT JACKET
- COLORED STRIPE PE JACKETS(IF REQUIRED) AVAILABLE
- OUTSTANDING MECHANICAL & ENVIRONMENTAL PROPERTIES

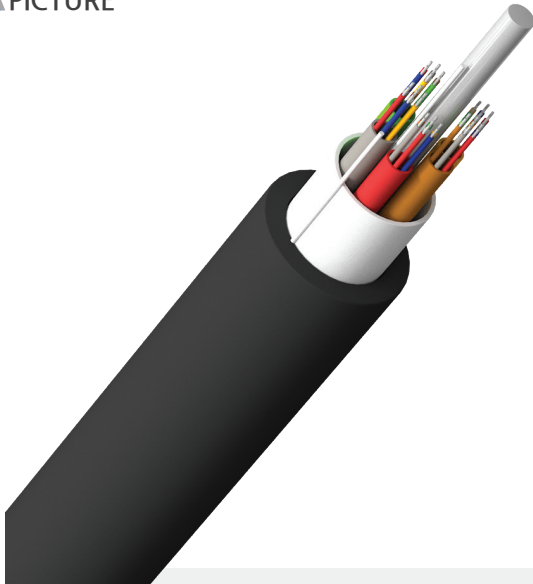
SPECIFICATION

Fiber Counts		up to 60
Fiber Counts/Tube		1~12
Outer Diameter(mm)		7.8
Weight(kg/km)		43
Max.Pulling Tension(kg)		65
Min. Bend Radius(mm)	Installation	20 times of Cable outer diameter
	Operation	10 times of Cable outer diameter
Temperature	Installation	-30℃ ~ +60℃
	Operation	-40℃ ~ +70℃

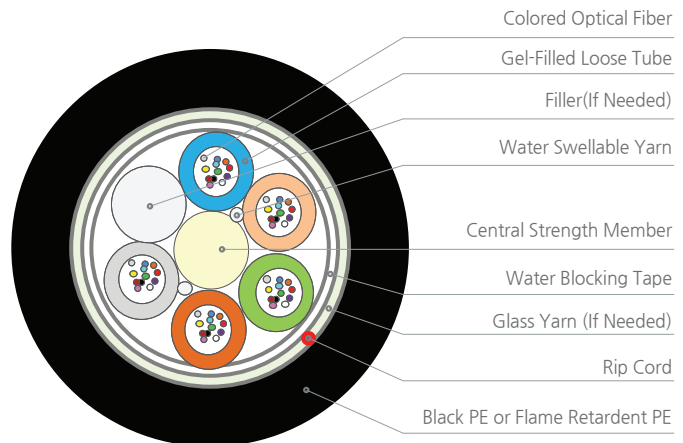
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LOOSE TUBE SINGLE JACKET OPTICAL CABLE

PICTURE



CABLE CROSS-SECTION



APPLICATION

- DUCT OR LASHED AERIAL
- LONG HAUL COMMUNICATION NETWORK
- SUBSCRIBER NETWORK
- LAN

FEATURES AND BENEFITS

- OUTSTANDING OPTICAL FIBER PROTECTION BY PROVEN LOOSE TUBE DESIGN
- AVAILABLE WITH FULL RANGE OF FIBER TYPES AND FIBER COUNT(UP TO 288 C)
- AVAILABLE FOR METALLIC OR NON-METALLIC CENTRAL STRENGTH MEMBER
- EASY TO HANDLE BY DRY CABLE CORE
- GENERAL PE JACKET OR FLAME RETARDENT JACKET
- COLORED STRIPE PE JACKETS(IF REQUIRED) AVAILABLE
- OUTSTANDING MECHANICAL & ENVIRONMENTAL PROPERTIES

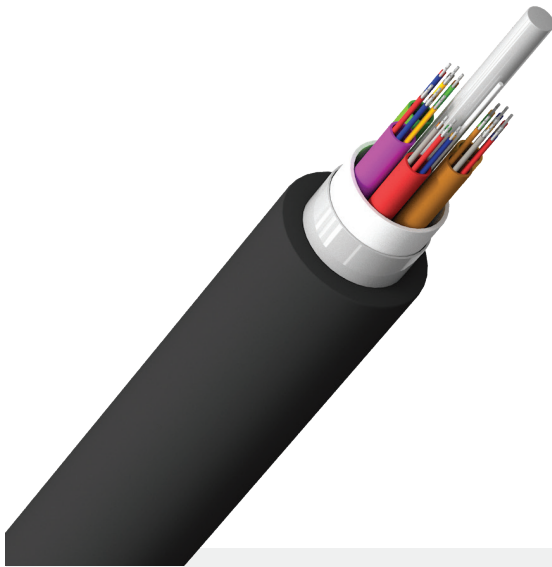
SPECIFICATION

Fiber Counts		up to 72	96	120	144	288
Fiber Counts/Tube		12	12	12	12	12
Outer Diameter(mm)		9.0	10.9	12.2	13.5	16.3
Weight(kg/km)		65	95	120	145	210
Max.Pulling Tension(kg)		90	140	180	220	280
Min. Bend Radius(mm)	Installation	20 times of Cable outer diameter				
	Operation	10 times of Cable outer diameter				
Temperature	Installation	-30℃ ~ +60℃				
	Operation	-40℃ ~ +70℃				

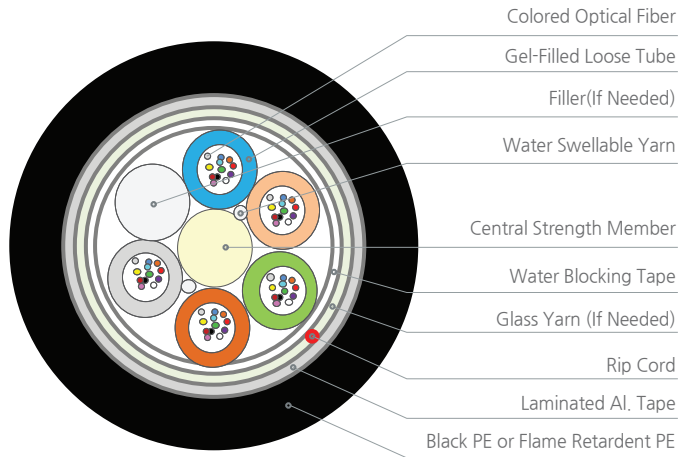
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LOOSE TUBE LAP SINGLE JACKET OPTICAL CABLE

PICTURE



CABLE CROSS-SECTION



APPLICATION

- DUCT OR LASHED AERIAL
- LONG HAUL COMMUNICATION NETWORK
- SUBSCRIBER NETWORK
- UNDERGROUND DUCT FOR FLAME RETARDENT DEMAND

FEATURES AND BENEFITS

- OUTSTANDING OPTICAL FIBER PROTECTION BY PROVEN LOOSE TUBE DESIGN
- AVAILABLE WITH FULL RANGE OF FIBER TYPES AND FIBER COUNT(UP TO 288C)
- AVAILABLE FOR METALLIC OR NON-METALLIC CENTRAL STRENGTH MEMBER
- EASY TO HANDLE BY DRY CABLE CORE
- EXCELLENT MOISTURE BARRIOR PROPERTIES USING LAP TAPE
- GENERAL PE JACKET OR FLAME RETARDANT JACKET
- COLORED STRIPE PE JACKETS(IF REQUIRED) AVAILABLE
- OUTSTANDING MECHANICAL & ENVIRONMENTAL PROPERTIES

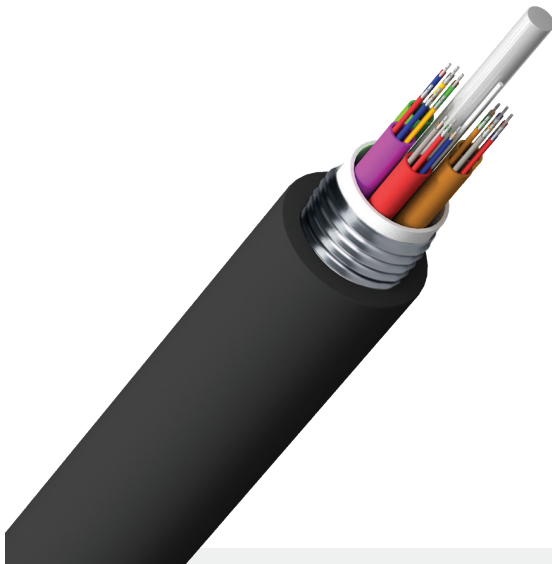
SPECIFICATION

Fiber Counts		up to 72	96	120	144	288
Fiber Counts/Tube		12	12	12	12	12
Outer Diameter(mm)		10.4	11.7	13.0	14.3	17.2
Weight(kg/km)		95	115	140	170	240
Max.Pulling Tension(kg)		140	160	170	210	290
Min. Bend Radius(mm)	Installation	20 times of Cable outer diameter				
	Operation	10 times of Cable outer diameter				
Temperature	Installation	-30℃ ~ +60℃				
	Operation	-40℃ ~ +70℃				

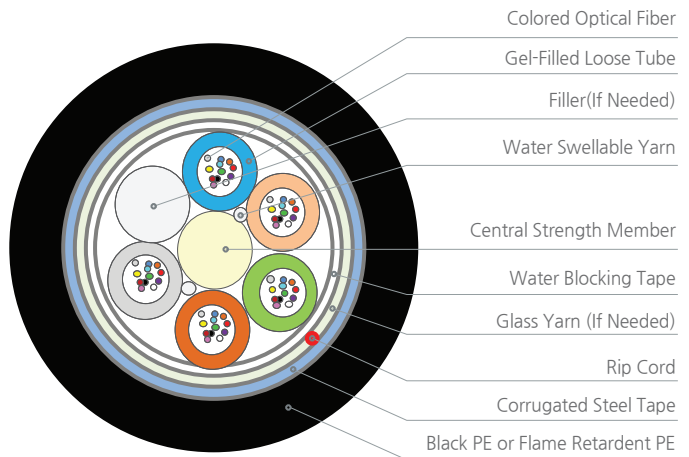
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LOOSE TUBE STEEL ARMOR SINGLE JACKET OPTICAL CABLE

PICTURE



CABLE CROSS-SECTION



APPLICATION

- BURIED, DUCT AND LASHED AERIAL
- LONG HAUL COMMUNICATION NETWORK
- SUBSCRIBER NETWORK

FEATURES AND BENEFITS

- OUTSTANDING OPTICAL FIBER PROTECTION BY PROVEN LOOSE TUBE DESIGN
- AVAILABLE WITH FULL RANGE OF FIBER TYPES AND FIBER COUNT(UP TO 288C)
- AVAILABLE FOR METALLIC OR NON-METALLIC CENTRAL STRENGTH MEMBER
- EASY TO HANDLE BY DRY CABLE CORE
- EXCELLENT CRUSH RESISTANCE AND PROTECTION FROM RODENT ATTACKS
- GENERAL PE JACKET OR FLAME RETARDANT JACKET
- COLORED STRIPE PE JACKETS(IF REQUIRED) AVAILABLE
- OUTSTANDING MECHANICAL & ENVIRONMENTAL PROPERTIES

SPECIFICATION

Fiber Counts		up to 72	96	120	144	288
Fiber Counts/Tube		12	12	12	12	12
Outer Diameter(mm)		11.6	12.9	14.2	15.5	18.3
Weight(kg/km)		125	150	180	215	290
Max.Pulling Tension(kg)		170	175	200	250	290
Min. Bend Radius(mm)	Installation	20 times of Cable outer diameter				
	Operation	10 times of Cable outer diameter				
Temperature	Installation	-30℃ ~ +60℃				
	Operation	-40℃ ~ +70℃				

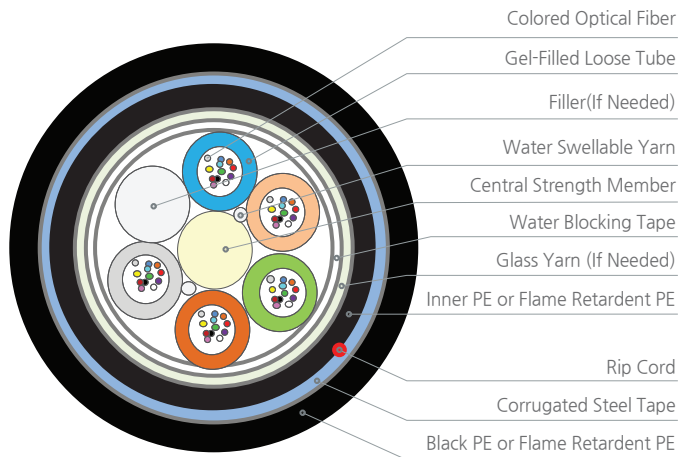
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LOOSE TUBE STEEL ARMOR DOUBLE JACKET OPTICAL CABLE

PICTURE



CABLE CROSS-SECTION



APPLICATION

- BURIED IN HARSH ENVIRONMENTS
- DUCT AND LASHED AERIAL
- LONG HAUL COMMUNICATION NETWORK
- SUBSCRIBER NETWORK

FEATURES AND BENEFITS

- OUTSTANDING OPTICAL FIBER PROTECTION BY PROVEN LOOSE TUBE DESIGN
- AVAILABLE WITH FULL RANGE OF FIBER TYPES AND FIBER COUNT(UP TO 288C)
- AVAILABLE FOR METALLIC OR NON-METALLIC CENTRAL STRENGTH MEMBER
- EASY TO HANDLE BY DRY CABLE CORE
- ENHANCED COMPRESSIVE STRENGTH AND RODENT RESISTANCE
- GENERAL PE JACKET OR FLAME RETARDENT JACKET
- COLORED STRIPE PE JACKETS(IF REQUIRED) AVAILABLE
- OUTSTANDING MECHANICAL & ENVIRONMENTAL PROPERTIES

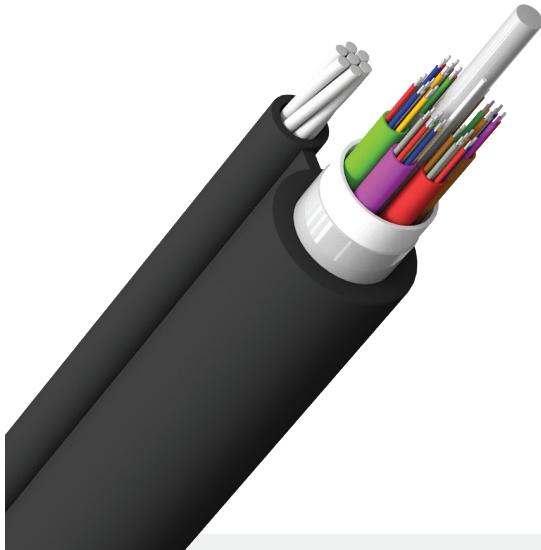
SPECIFICATION

Fiber Counts		up to 72	96	120	144	288
Fiber Counts/Tube		12	12	12	12	12
Outer Diameter(mm)		13.7	14.9	16.2	17.7	20.3
Weight(kg/km)		170	200	230	270	360
Max.Pulling Tension(kg)		200	210	250	300	390
Min. Bend Radius(mm)	Installation	20 times of Cable outer diameter				
	Operation	10 times of Cable outer diameter				
Temperature	Installation	-30℃ ~ +60℃				
	Operation	-40℃ ~ +70℃				

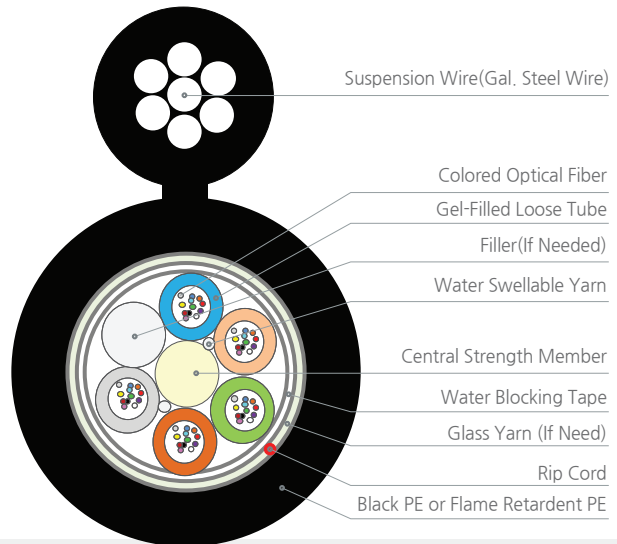
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LOOSE TUBE FIGURE-8 SINGLE JACKET OPTICAL CABLE

PICTURE



CABLE CROSS-SECTION



APPLICATION

- AERIAL
- LONG HAUL COMMUNICATION NETWORK
- SUBSCRIBER NETWORK

FEATURES AND BENEFITS

- OUTSTANDING OPTICAL FIBER PROTECTION BY PROVEN LOOSE TUBE DESIGN
- AVAILABLE WITH FULL RANGE OF FIBER TYPES AND FIBER COUNT(UP TO 288C)
- SUITABLE FOR SELF SUPPORTING INSTALLATION BY COMBINED SUSPENSION WIRE
- EASY TO HANDLE BY DRY CABLE CORE
- GENERAL PE JACKET OR FLAME RETARDENT JACKET
- COLORED STRIPE PE JACKETS(IF REQUIRED) AVAILABLE
- OUTSTANDING MECHANICAL & ENVIRONMENTAL PROPERTIES

SPECIFICATION

Fiber Counts		up to 72	96	120	144	288
Fiber Counts/Tube		12	12	12	12	12
Suspension Wire Diameter(mm)		3.6(1.2mm X 7C)		4.8(1.6mm X 7C)		
Cable Outer Diameter(mm)		9.6X18.2	10.8X20.6	12.1X21.9	13.4X23.2	16.0X26.0
Cable Weight(kg)		165	240	265	290	350
Max. Pulling Tension(kg)		550	1150			
Min. Bend Radius(mm)	Installation	20 times of Cable outer diameter				
	Operation	10 times of Cable outer diameter				
Temperature	Installation	-30℃ ~ +60℃				
	Operation	-40℃ ~ +70℃				

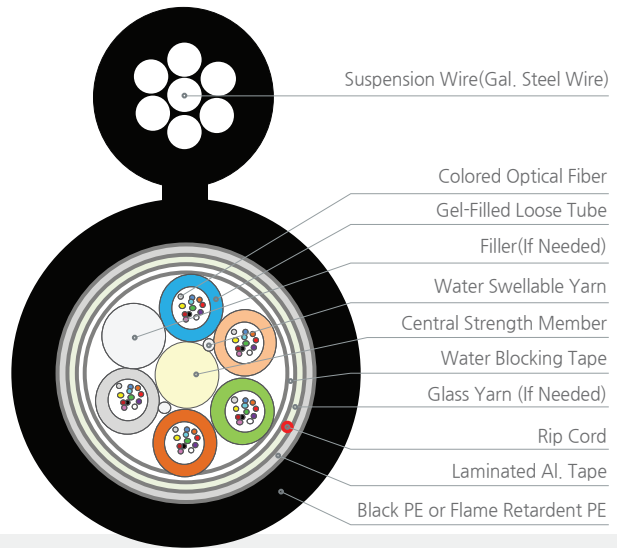
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LOOSE TUBE FIGURE-8 LAP SINGLE JACKET OPTICAL CABLE

PICTURE



CABLE CROSS-SECTION



APPLICATION

- AERIAL
- LONG HAUL COMMUNICATION NETWORK
- SUBSCRIBER NETWORK

FEATURES AND BENEFITS

- OUTSTANDING OPTICAL FIBER PROTECTION BY PROVEN LOOSE TUBE DESIGN
- AVAILABLE WITH FULL RANGE OF FIBER TYPES AND FIBER COUNT(UP TO 288C)
- SUITABLE FOR SELF SUPPORTING INSTALLATION BY COMBINED SUSPENSION WIRE
- EASY TO HANDLE BY DRY CABLE CORE
- EXCELLENT MOISTURE BARRIOR PROPERTIES USING LAP TAPE
- GENERAL PE JACKET OR FLAME RETARDANT JACKET
- COLORED STRIPE PE JACKETS(IF REQUIRED) AVAILABLE
- OUTSTANDING MECHANICAL & ENVIRONMENTAL PROPERTIES

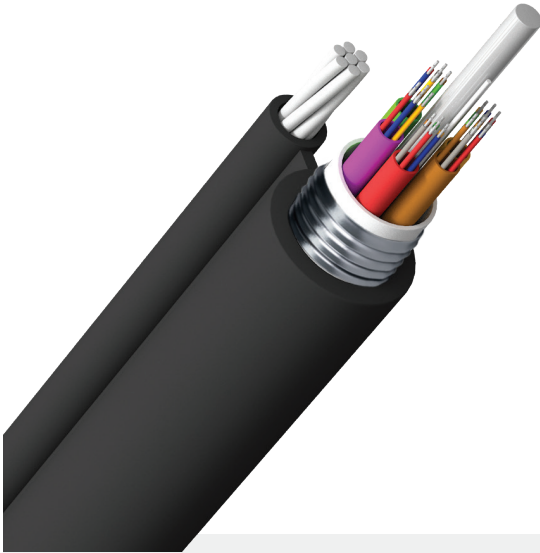
SPECIFICATION

Fiber Counts		up to 72	96	120	144	288
Fiber Counts/Tube		12	12	12	12	12
Suspension Wire Diameter(mm)		3.6(1.2mm X 7C)		4.8(1.6mm X 7C)		
Cable Outer Diameter(mm)		10.5X19.1	11.7X21.5	13.0X22.8	14.5X24.5	17.1X27.3
Cable Weight(kg)		185	265	290	325	390
Max. Pulling Tension(kg)		550	1150			
Min. Bend Radius(mm)	Installation	20 times of Cable outer diameter				
	Operation	10 times of Cable outer diameter				
Temperature	Installation	-30°C ~ +60°C				
	Operation	-40°C ~ +70°C				

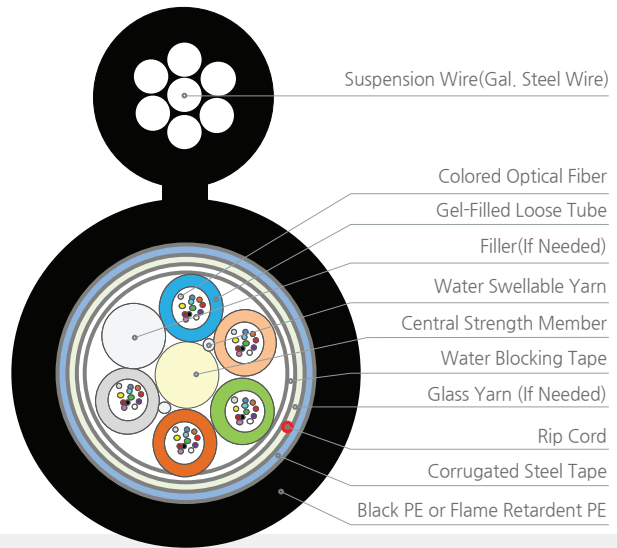
* The data on this table may be changed without any prior notice

LOOSE TUBE FIGURE-8 STEEL ARMOR SINGLE JACKET OPTICAL CABLE

PICTURE



CABLE CROSS-SECTION



APPLICATION

- AERIAL
- LONG HAUL COMMUNICATION NETWORK
- SUBSCRIBER NETWORK

FEATURES AND BENEFITS

- OUTSTANDING OPTICAL FIBER PROTECTION BY PROVEN LOOSE TUBE DESIGN
- AVAILABLE WITH FULL RANGE OF FIBER TYPES AND FIBER COUNT (UP TO 288C)
- SUITABLE FOR SELF SUPPORTING INSTALLATION BY COMBINED SUSPENSION WIRE
- EASY TO HANDLE BY DRY CABLE CORE
- EXCELLENT CRUSH RESISTANCE AND PROTECTION FROM RODENT ATTACKS
- GENERAL PE JACKET OR FLAME RETARDANT JACKET
- COLORED STRIPE PE JACKETS (IF REQUIRED) AVAILABLE
- OUTSTANDING MECHANICAL & ENVIRONMENTAL PROPERTIES

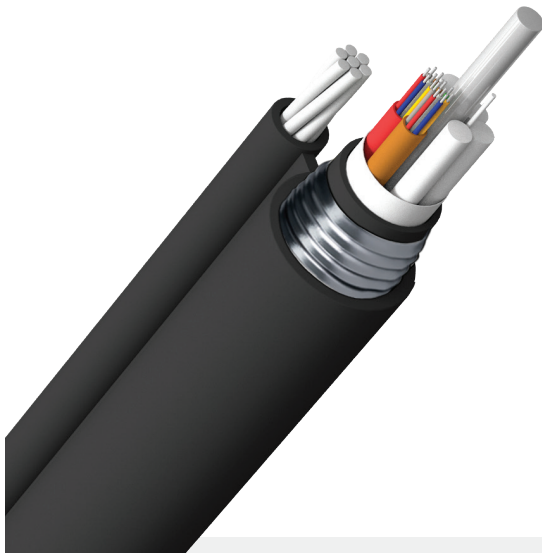
SPECIFICATION

Fiber Counts		up to 72	96	120	144	288
Fiber Counts/Tube		12	12	12	12	12
Suspension Wire Diameter(mm)		3.6(1.2mm X 7C)		4.8(1.6mm X 7C)		
Cable Outer Diameter(mm)		11.6X20.2	12.8X22.6	14.1X23.9	15.6X25.6	18.2X28.4
Cable Weight(kg)		215	295	325	365	440
Max. Pulling Tension(kg)		550	1150			
Min. Bend Radius(mm)	Installation	20 times of Cable outer diameter				
	Operation	10 times of Cable outer diameter				
Temperature	Installation	-30°C ~ +60°C				
	Operation	-40°C ~ +70°C				

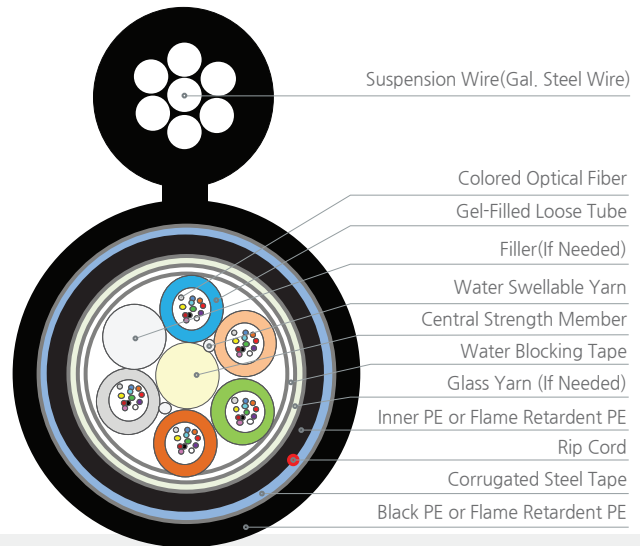
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LOOSE TUBE FIGURE-8 STEEL ARMOR DOUBLE JACKET OPTICAL CABLE

PICTURE



CABLE CROSS-SECTION



APPLICATION

- AERIAL
- LONG HAUL COMMUNICATION NETWORK
- SUBSCRIBER NETWORK

FEATURES AND BENEFITS

- OUTSTANDING OPTICAL FIBER PROTECTION BY PROVEN LOOSE TUBE DESIGN
- AVAILABLE WITH FULL RANGE OF FIBER TYPES AND FIBER COUNT(UP TO 288C)
- SUITABLE FOR SELF SUPPORTING INSTALLATION BY COMBINED SUSPENSION WIRE
- EASY TO HANDLE BY DRY CABLE CORE
- ENHANCED COMPRESSIVE STRENGTH AND RODENT RESISTANCE
- GENERAL PE JACKET OR FLAME RETARDENT JACKET
- COLORED STRIPE PE JACKETS(IF REQUIRED) AVAILABLE
- OUTSTANDING MECHANICAL & ENVIRONMENTAL PROPERTIES

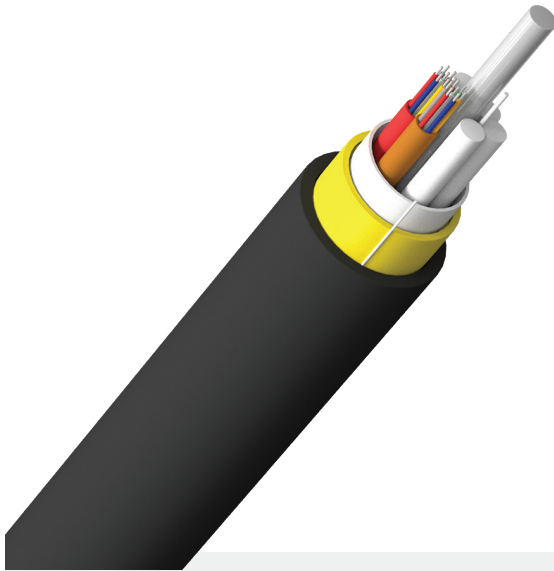
SPECIFICATION

Fiber Counts		up to 72	96	120	144	288
Fiber Counts/Tube		12	12	12	12	12
Suspension Wire Diameter(mm)		4.8(1.6mm X 7C)		5.4(1.8mm X 7C)		
Cable Outer Diameter(mm)		13.6X23.4	14.8X25.2	16.1X26.5	17.6X28.0	20.2X30.6
Cable Weight(kg)		315	375	410	450	530
Max. Pulling Tension(kg)		1150	1450			
Min. Bend Radius(mm)	Installation	20 times of Cable outer diameter				
	Operation	10 times of Cable outer diameter				
Temperature	Installation	-30℃ ~ +60℃				
	Operation	-40℃ ~ +70℃				

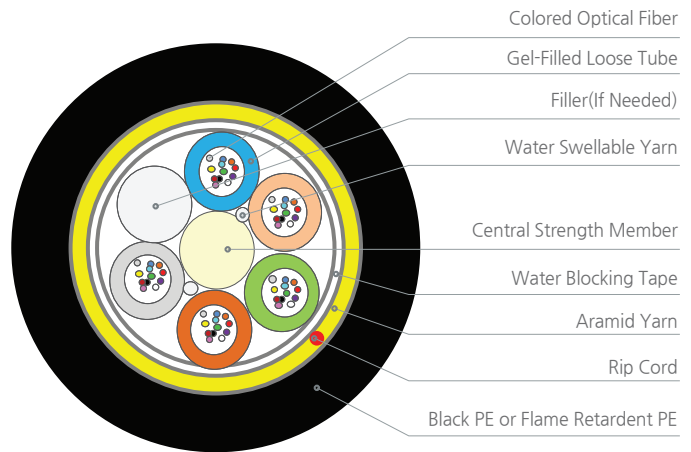
* The data on this table may be changed without any prior notice

LOOSE TUBE ADSS SINGLE JACKET OPTICAL CABLE

PICTURE



CABLE CROSS-SECTION



APPLICATION

- AERIAL
- BACKBONE/DISTRIBUTION NETWORK
- FTTH DEPLOYMENTS

FEATURES AND BENEFITS

- OUTSTANDING OPTICAL FIBER PROTECTION BY PROVEN LOOSE TUBE DESIGN
- AVAILABLE WITH FULL RANGE OF FIBER TYPES AND FIBER COUNT (UP TO 288C)
- SUITABLE FOR SELF SUPPORTING INSTALLATION
- ENABLE FASTER DEPLOYMENT AND REDUCED INSTALLATION COST
- GENERAL PE JACKET OR FLAME RETARDANT JACKET
- COLORED STRIPE PE JACKETS (IF REQUIRED) AVAILABLE
- OUTSTANDING MECHANICAL & ENVIRONMENTAL PROPERTIES

SPECIFICATION

Fiber Counts		up to 72	96	120	144	288
Fiber Counts/Tube		12	12	12	12	12
Outer Diameter(mm)		9.7	11.2	12.5	13.8	16.2
Weight(kg/km)		75	100	130	155	200
Max. Pulling Tension(kg)		250	320	380	450	520
Min. Bend Radius(mm)	Installation	20 times of Cable outer diameter				
	Operation	10 times of Cable outer diameter				
Temperature	Installation	-30°C ~ +60°C				
	Operation	-40°C ~ +70°C				

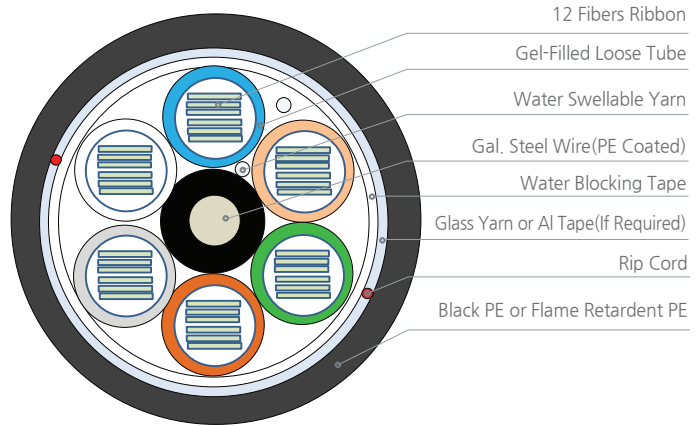
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RIBBON TUBE SINGLE JACKET OPTICAL CABLE

PICTURE



CABLE CROSS-SECTION



APPLICATION

- UNDERGROUND DUCT
- SUBSCRIBER NETWORK
- DATA CENTER, FTTX, ACCESS NETWORK

FEATURES AND BENEFITS

- HIGH DENSITY FIBER COUNTS-UP TO 720 CORES
- REDUCING SPLICING TIME BY MASS FUSION SPLICING
- LIGHT WEIGHT/ COMPACT DESIGN
- AVAILABLE WITH VARIETY OF JACKET(LAP TAPE, STEEL TAPE, DOUBLE JACKET)
- AVAILABLE FOR GENERAL PE JACKET OR FLAME RETARDANT JACKET
- COLORED STRIPE PE JACKETS(IF REQUIRED) AVAILABLE
- OUTSTANDING MECHANICAL & ENVIRONMENTAL PROPERTIES

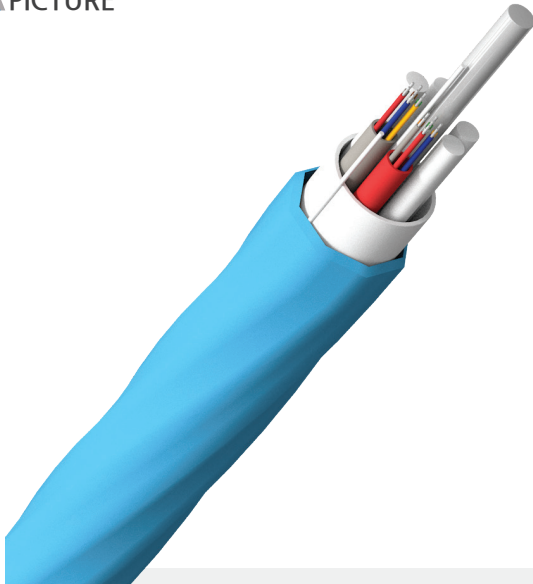
SPECIFICATION

Fiber Counts		144	288	360	432	576	720
Structure of Ribbon Tube		72 cores(12C Ribbon * 6 stacks)					
NO. of Ribbon Tube/Filler		2/3	4/1	5/0	6/0	8/0	10/0
Outer Diameter(mm)		20.7			22.8	27	31.2
Weight(kg/km)		290			350	540	700
Max.Pulling Tension(kg)		380			380	550	750
Min. Bend Radius(mm)	Installation	20 times of Cable outer diameter					
	Operation	10 times of Cable outer diameter					
Temperature	Installation	-30°C ~ +60°C					
	Operation	-40°C ~ +70°C					

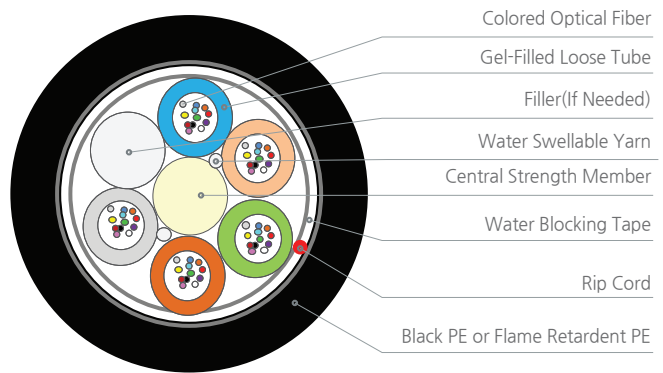
* The data on this table may be changed without any prior notice

LOOSE TUBE AIR BLOWN OPTICAL CABLE(ABC)

PICTURE



CABLE CROSS-SECTION



APPLICATION

- DUCT(MICRO DUCT)
- SUBSCRIBER NETWORK(DISTRIBUTION/DROP)
- FTTX NETWORK

FEATURES AND BENEFITS

- OUTSTANDING OPTICAL FIBER PROTECTION BY PROVEN LOOSE TUBE DESIGN
- AVAILABLE WITH FULL RANGE OF FIBER TYPES AND FIBER COUNT(UP TO 288C)
- LIGHT WEIGHT AND COMPACT DESIGN BY MICRO TUBE AND NON METALLIC.
- EASY TO HANDLE BY DRY CABLE CORE
- PE JACKET OR FLAME RETARDENT JACKET AVAILABLE
- OUTSTANDING BENDING PROPERTIES

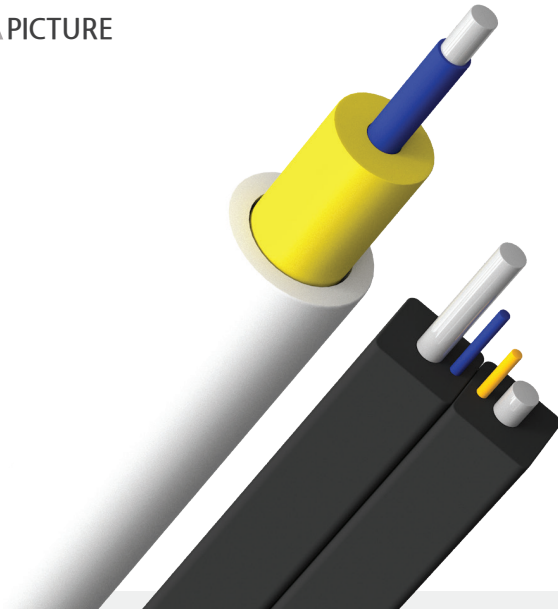
SPECIFICATION

Fiber Counts		2~72	96	120	144	288
Fiber Counts/Tube		2~12				
Outer Diameter(mm)		5.8	6.8	8.0	8.8	9.6
Weight(kg/km)		22	33	46	50	72
Max.Pulling Tension(kg)		80	130	130	130	130
Min. Bend Radius(mm)	Installation	20 times of Cable outer diameter				
	Operation	10 times of Cable outer diameter				
Temperature	Installation	-30℃ ~ +60℃				
	Operation	-40℃ ~ +70℃				

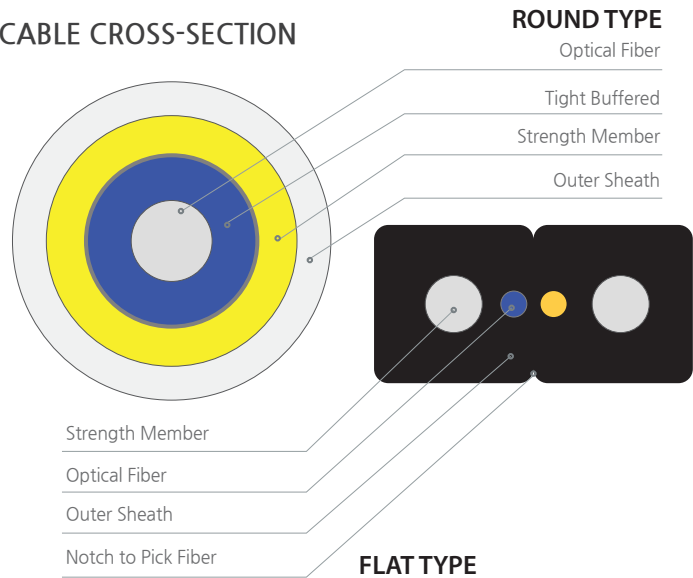
* The data on this table may be changed without any prior notice

Optical Drop Cable (Round/Flat type)

PICTURE



CABLE CROSS-SECTION



APPLICATION

- Fiber to the home (FTTH)
- Cyber APT
- Office Building
- PC room
- CATV

FEATURES AND BENEFITS

- Standard fiber count: 1, 2, 4 core
- High flexibility and light weight for easy handling
- Easy stripping for quick splicing

SPECIFICATION

Type	Fiber Counts	Buffer Diameter (μm)	Outer Diameter (mm)	Weight (km/kg)
Round	1 or 2	900	3.0	8.6
Flat	1~4	-	2.0 x 3.0 2.0 x 1.6	12

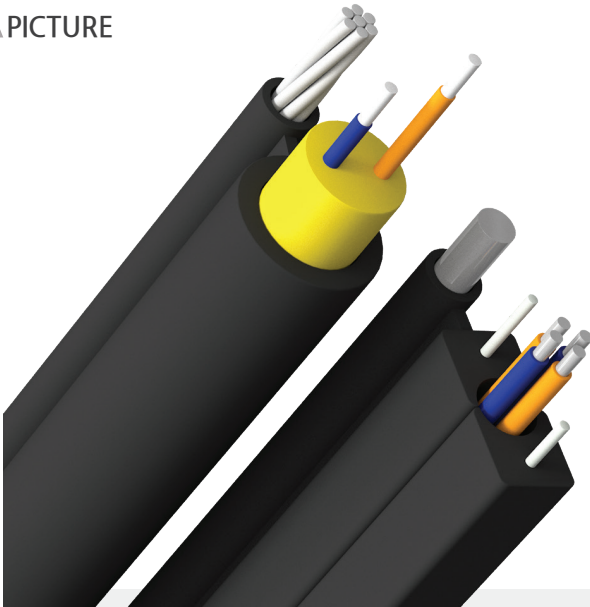
MECHANICAL & ENVIRONMENTAL CHARACTERISTICS

Characteristics		Specifications
Max. Tensile Load		Round 500N~1,000N Flat 300N
Crush Resistance		100N/cm
Min. Bend Radius(mm)	Installation	20 times of Cable outer diameter
	Operation	10 times of Cable outer diameter
Temperature	Installation	-30℃ ~ +60℃
	Operation	-30℃ ~ +70℃

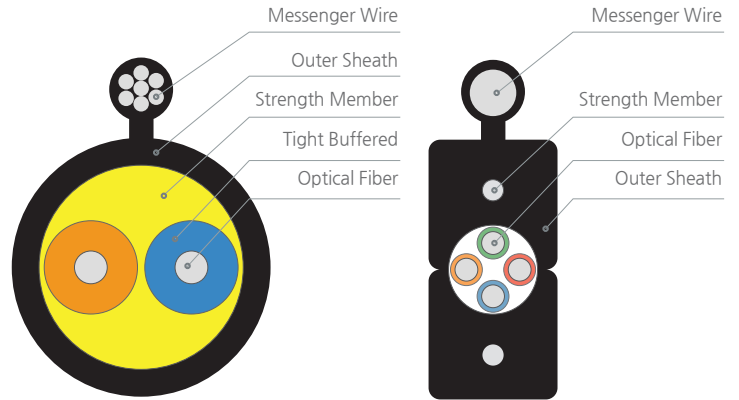
* The data on this table may be changed without any prior notice

Optical Drop Cable (F-8 Round/Flat type)

PICTURE



CABLE CROSS-SECTION



APPLICATION

- Fiber to the home (FTTH)
- Cyber APT
- Office Building
- PC room
- CATV

FEATURES AND BENEFITS

- Standard fiber count: 2~4 core
- Economical construction for aerial cabling application
- Outstanding mechanical & environmental characteristics

SPECIFICATION

Type	Fiber Counts	Buffer Diameter (μm)	Outer Diameter (mm)	Weight (km/kg)
F-8	1 or 2	900	3.8 x 6.5	21
Flat	1 or 2	-	2.0 x 5.2	23

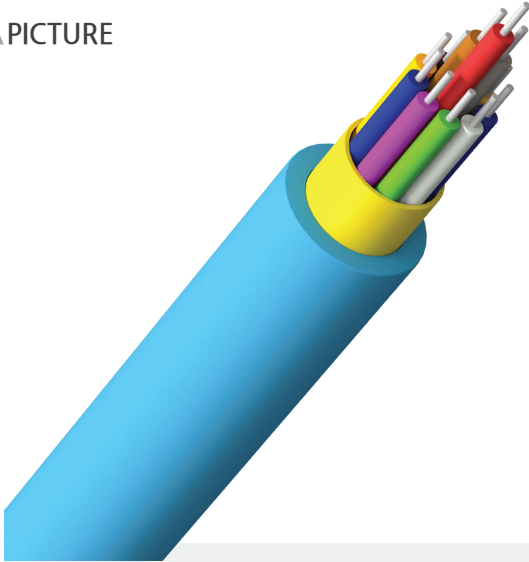
MECHANICAL & ENVIRONMENTAL CHARACTERISTICS

Characteristics		Specifications
Max. Tensile Load		Round 1,400N Flat 1,000N
Crush Resistance		1200N/cm
Min. Bend Radius(mm)	Installation	20 times of Cable outer diameter
	Operation	10 times of Cable outer diameter
Temperature	Installation	-30℃ ~ +60℃
	Operation	-30℃ ~ +70℃

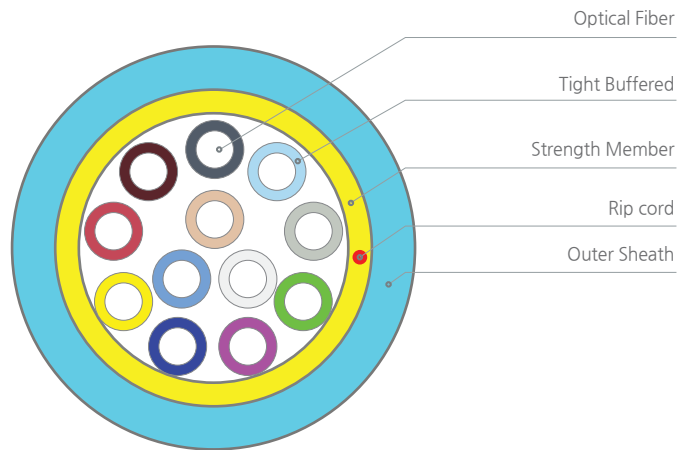
* The data on this table may be changed without any prior notice

Distribution Cable (Tight Buffered Cable)

PICTURE



CABLE CROSS-SECTION



APPLICATION

- FTTX
- Indoor or outdoor application
- Backbone & computer room cabling

FEATURES AND BENEFITS

- Standard fiber count: 2~48 core
- Small size & light weight for limited conduit space
- Rugged & high performance
- LSZH, OFNR, OFNP rated

SPECIFICATION

Construction	Fiber Counts	Outer Diameter (mm)	Weight (km/kg)
Round Type	2	4.5	20
	4	5.3	25
	6	5.7	30
	8	6.0	35
	12	6.7	40
	16	8.5	70
	18	8.9	75
	24	9.8	90
6 Fiber Subunits	24	13.9	160
12 Fiber Subunits	48	18.3	275

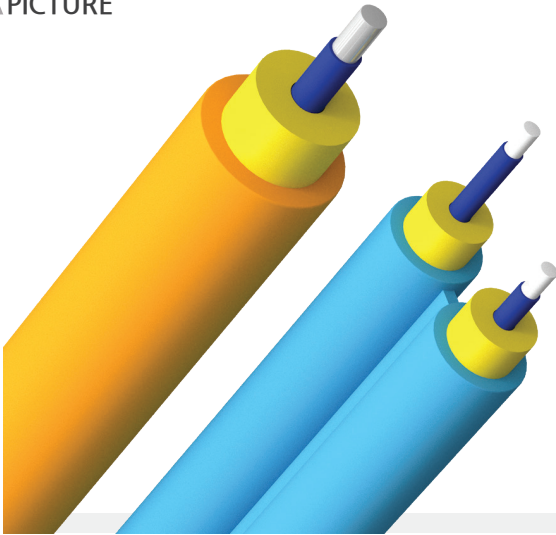
MECHANICAL & ENVIRONMENTAL CHARACTERISTICS

Characteristics		Specifications
Max. Tensile Load		600N~1,200N
Crush Resistance		50~100N/cm
Min. Bend Radius(mm)	Installation	20 times of Cable outer diameter
	Operation	10 times of Cable outer diameter
Temperature	Installation	-10℃ ~ +70℃
	Operation	-20℃ ~ +70℃

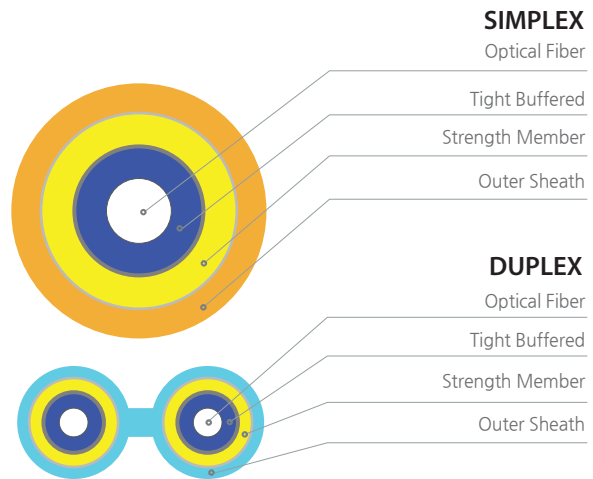
* The data on this table may be changed without any prior notice

Simplex and Duplex Cord

PICTURE



CABLE CROSS-SECTION



APPLICATION

- Short Run Office & Computer Room Cabling
- Patch cords, Pigtailed and Jumpers
- Equipment Interconnects

FEATURES AND BENEFITS

- Compact & high flexibility
- Aramid yarns strength member reinforcement
- Easy stripping for quick splicing
- LSZH, OFNR, OFNP rated

SPECIFICATION

Construction	Buffer Diameter (μm)	Outer Diameter (mm)	Weight (km/kg)
Simplex	600	1.6	3.0
		1.8	4.0
	900	2.0	4.0
		2.4	6.5
		2.9	9.5
Duplex	900	2.0	18.0
		2.8	28.0

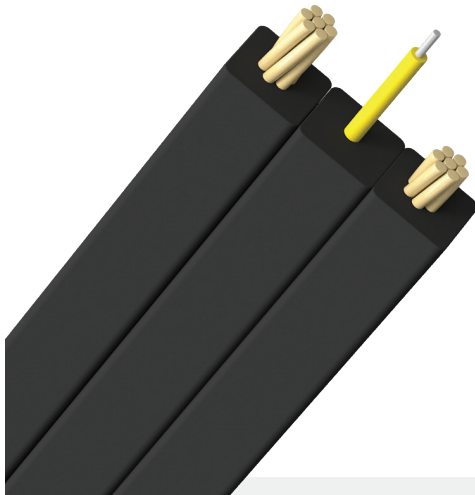
MECHANICAL & ENVIRONMENTAL CHARACTERISTICS

Characteristics		Specifications
Max. Tensile Load		200N~500N
Crush Resistance		3.5N/cm
Min. Bend Radius(mm)	Installation	20 times of Cable outer diameter
	Operation	10 times of Cable outer diameter
Temperature	Installation	-10℃ ~ +70℃
	Operation	-20℃ ~ +70℃

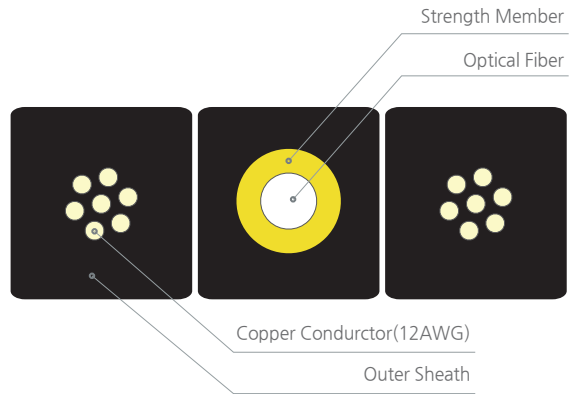
* The data on this table may be changed without any prior notice

Hybrid Cable (Powered Fiber Optic Cable)

PICTURE



CABLE CROSS-SECTION



APPLICATION

- Remote powering of network access devices
- Low voltage DC devices

FEATURES AND BENEFITS

- Higher power and longer distances
- Speed installation
- Easy stripping and spilt
- Polarization indentation
- No special tools or mounting hardware required

SPECIFICATION

Fiber Counts	Strength member diameter (mm)	Outer Diameter (mm)	Weight (km/kg)
1 or 2	2.5	12 X 4.5	139

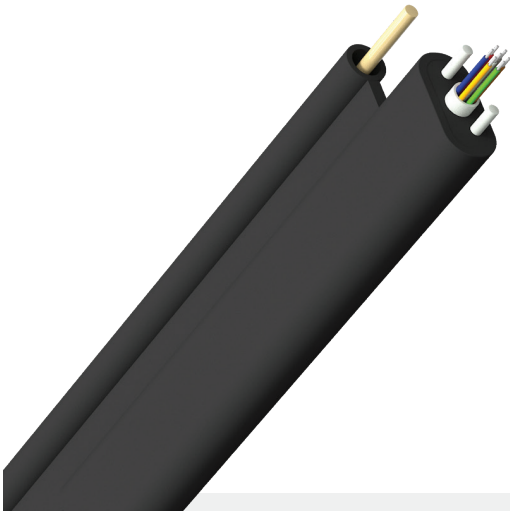
MECHANICAL & ENVIRONMENTAL CHARACTERISTICS

Characteristics		Specifications
Tensile Load	Short Term	440N
	Long Term	132N
Bending Radius (Loaded)		165mm
Temperature Range	Installation	-30°C ~ +60°C
	Operation	-40°C ~ +70°C

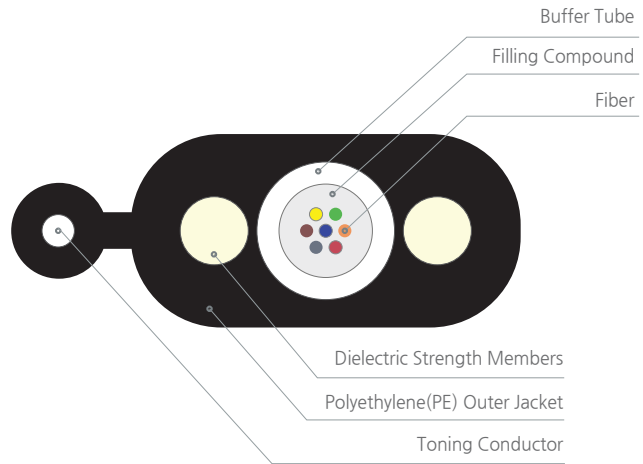
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Toneable Drop Cable

PICTURE



CABLE CROSS-SECTION



APPLICATION

- Drop cables
- Broadband network
- Local loop
- FTTX
- Aerial or direct bury

FEATURES AND BENEFITS

- Universal design
- Maximum bandwidth
- Excellent crush resistance
- Reduces cable prep and installation time
- Easy location after installation

SPECIFICATION

Fiber Counts	Conductor Size (AWG)	Width (mm)	Height (mm)	Weight (km/kg)
up to 24	24	9.8	4.5	42

MECHANICAL & ENVIRONMENTAL CHARACTERISTICS

Characteristics		Specifications
Tensile Load		1350N
		400N
Crush Resistance		500N/mm
Axis Bending Radius	Loaded	136mm
	Unloaded	68mm
Temperature Range	Installation	-10°C ~ + 60°C
	Operation	-40°C ~ + 70°C

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