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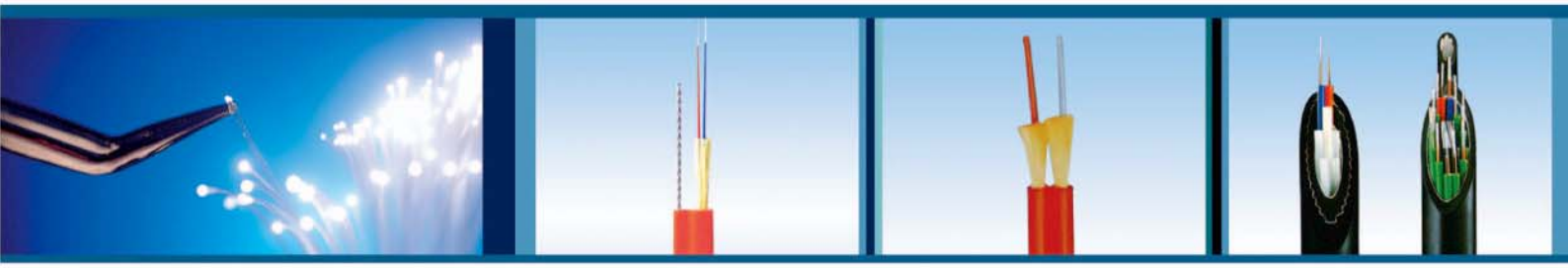
A Guide of ITECO Cable



FTTH Optical Drop Cable
Tight Buffered Fiber Optic Cable
Loose Tube Fiber Optic Cable
Data Cable(LAN Cable)
Telecommunication Cable

ITECO LTD.
International Telecom Equipment & Cable Co., Ltd.

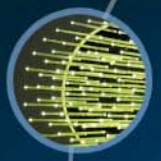
ITECO will be with you anywhere

FTTH Optical Drop Cable

Optical Drop Cable

Tight Buffered Fiber Optic Cable

Simplex Cable
Duplex Round Cable
Duplex Zip Cable
Duplex Flat Twin Cable
Distribution Cable



Loose Tube Fiber Optic Cable

Loose Tube Cable for Duct
Loose Tube Cable for Aerial
Loose Tube Cable for Direct Buried
All Dielectric Self-supporting Cable(ADSS)

Data Cable(LAN Cable)

UTP Category 6
UTP Category 5
UTP Category 5e
FTP Category 5

Telecommunication Cable

Copper Telecommunication Cable
Self-supporting Outdoor Telephone Drop Wire
PVC Insulated Indoor Telephone Wire(TIV)
PVC Insulated Outdoor Telephone Wire(TOV)
PVC Insulated Jumper Wire(TJV)
PVC Insulated Nylon Jacket Jumper Wire(TJVN)
Infantry Field Wire(WD-1/TT)

Introduction

I am pleased to have this opportunity to thank you for support on behalf of International Telecom Equipment & Cable Co., Ltd. (ITECO LTD or "ITECO").

Since its foundation in 1999, it has supplied a full variety of communication cable products, and greatly contributed to enhancing communication networks, an important infrastructure for the nation's economic growth.

Recently, demand for high speed and broadband information telecommunication is rapid increased. Fiber To The Home (FTTH) system, in which all communication networks are connected by optical fibers, is the most suitable solution to satisfy such demand. Now, we have developed a new optical drop cable for FTTH system. This cable perfectly fit with your last 1 mile.

Those main products are being manufactured under the Quality Assurance System of ISO 9001 and Environmental Management System of ISO14001.

ITECO is and will be fulfilling its social responsibility under the strict management philosophy of upgrading quality, developing economical price range, always keeping on-time delivery and ultimately meeting customer's needs and requirements.

It'll be ITECO's management goal to help all of us lead a richer and better life in a fast-improving world community, particularly in the areas of information and telecommunications.

ITECO will continue to pursue the goal by playing its pro-active, strong part in contributing to the creation of information at home and abroad. With this mind, ITECO will try its level best to develop itself into a winner in such race to the brighter future of human beings.

President Kyung-Ro Lee

Certificated

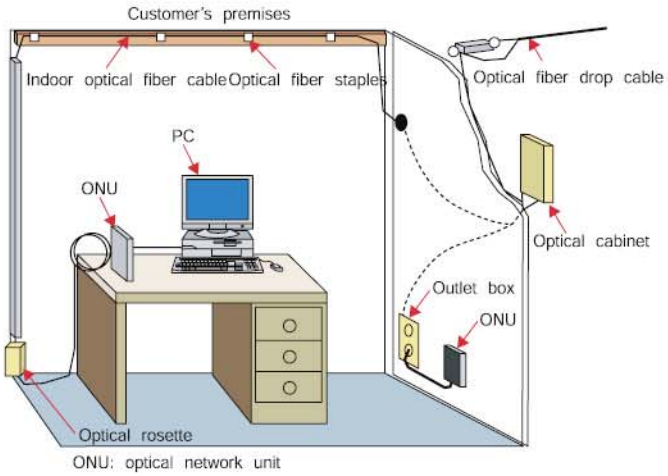
ISO 9001
ISO 14001

FTTH Optical Drop Cable

Optical Drop Cable

Overview

Recently, demand for high speed and broadband information telecommunication is rapid increased. Fiber To The Home (FTTH) system, in which all communication networks are connected by optical fibers, is the most suitable solution to satisfy such demand. Now, we have developed a new optical drop cable for FTTH system. This cable perfectly fit with your last 1 mile.

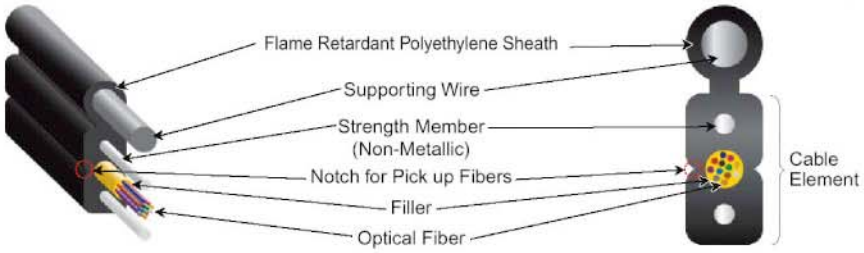


Example of optical wiring on a customer's premises.

Features

Small Diameter & Light Weight
Economical Cost
Easy to pull out the optical fibers from the cable.
Directly installed into houses
Aerial Installation
Suitable for Condominium/ Office Installation

Constructions

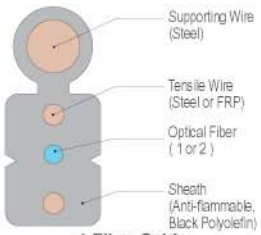


Specifications

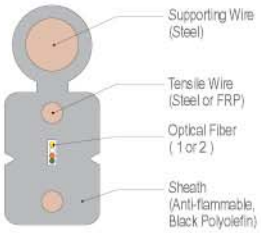
Fiber Count	1,2	4,8,12
Strength Member	FRP	
Sheath	Flame Retardant Black Polyethylene	
Cable Dimension (WxH, approx)	2x5mm	3 x 6mm
Weight(approx)	20kg/km	30kg/km
Maximum Tensile Strength	600N(35N for Cable element)	
Minimum Bending Radius	120mm(40mm for Cable element)	
Maximum Span Length*	30m	

Optical Drop Cable(1, 2, 4, 8 Fiber)

Construction/Dimension



1 Fiber Cable



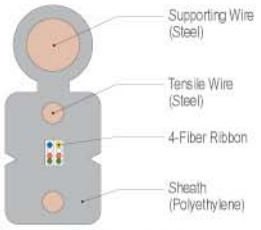
4 Fiber Cable

Type	Fiber Count	Size of Tensile Wire N/D(mm)	Dimension(mm)
Metallic	1 or 2(SM)	2/0.4(Steel)	2 x 5
Non-metallic		2/0.4(FRP)	
Metallic	4 or 8(SM-Ribbon)	2/0.4(Steel)	2 x 6
Non-metallic		2/0.4(FRP)	

Size of Supporting Wire N/D(mm)	Weight(kg/km)	Maximum Tensile Force of Cable(N)	Maximum Tensile Force of Supporting Wire(N)
1/1.2	25	140	660
	20	35	
	25	140	
	20	35	

Long-Span Optical Drop Cable(8 fiber)

Construction/Dimension



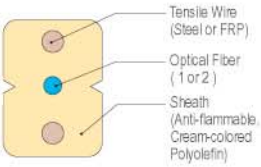
8 Fiber Cable

Type	Fiber Count	Size of Tensile Wire N/D(mm)	Dimension(mm)
Metallic	8(SM)	2/0.4	3.3 x 7.5

Size of Supporting Wire N/D(mm)	Weight(kg/km)	Maximum Tensile Force of Cable(N)	Maximum Tensile Force of Supporting Wire(N)
1/2.3	60	140	2560

Optical Indoor Cable(1, 2 Fiber)

Construction/Dimension



1 Fiber Cable

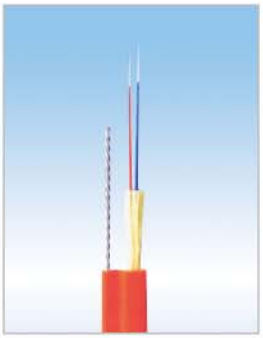
Type	Fiber Count	Size of Tensile Wire N/D(mm)	Dimension(mm)
Metallic	1 or 2(SM)	2/0.4(Steel)	2 x 3
Non-metallic		2/0.4(FRP)	

Weight(kg/km)	Tensile Force(N)	Minimum Bend Radius(mm)
15	140	30
10	35	40

FTTH Optical Drop Cable

Optical Drop Cable

Overview



One coated fiber shall has a buffer layer of reinforcing aramid yarn followed by an extruded outer jacket. The tight buffer designs add thermoplastic to the coating directly on the fiber with diameter up to 900㎛. Tight coating designs use longitudinal aramid yarn as the strength member. The colored outer jacket shall be extruded over the aramid yarn. Other designs are also available on request to meet specified requirements and conditions.

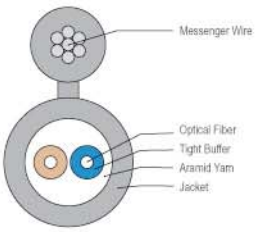
Features

Available in single mode and multi-mode fibers
Highly flexible and light weight for easy handling
Flame-retardant PVC, Nylon and LSZH buffer
Flame-retardant PVC, FR-PE and LSZH other jacket
Aramid yarn strength member reinforcement
Double jacket
Easy stripping for quick splicing

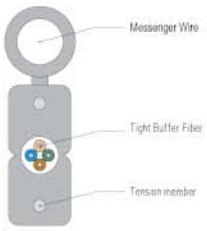
Application

FTTH
Cyber APT
Office Building
PC Room
CATV

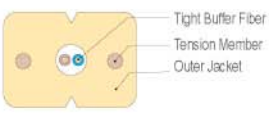
Construction/Dimension



Fiber count	Buffer Diameter(㎛)	Jacket Diameter(㎛)	Cable Weight(㎏)
1	900	3.5 x 6.5	22
2			23



Fiber count	Buffer Diameter(㎛)	Jacket Diameter(㎛)	Tension Member Diameter(㎛)	Messenger r wire Diameter(㎛)
4	650/900	3.8 x 10.2	1.0	1.2



Fiber count	Buffer Diameter(㎛)	Jacket Diameter(㎛)	Tension Member Diameter(㎛)
1	650/900	3.0 x 6.0	1.0
2		4.0 x 8.0	

Tight Buffered Fiber Optic Cable

Simplex Cable

Overview

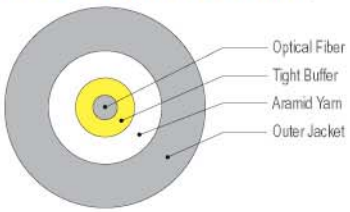
One coated fiber shall have a buffer layer of reinforcing aramid yarn followed by an extruded outer jacket with the diameter from 2.0 mm to 3.0 mm.
The tight buffer designs add thermoplastic to the coating directly on the fiber with diameter up to 900 ㎛. Tight coating designs use longitudinal aramid yarn as the strength member. The colored outer jacket shall be extruded over the aramid yarn. Other designs are also available on request to meet specified requirements and conditions

Application

Simplex is a flexible, flame-retardant, non-metallic cable recommended for use in telecommunication station between the optical line system and the fiber frame distribution. It is also suitable for data networks.

Fiber to The Desk
Pigtail and Patch Cords
Dropped Ceiling, Try and Conduit Application

Cable Cross-Section



Cable Technical Data

Buffer Diameter	Jacket Diameter	Cable Weight	Tensile Load (N)		Minimum Bending Radius(㎜)		Temperature (℃)	
(㎛)	(㎜)	(kg/㎞)	Installing	Operating	Installing	Operating	Installing	Operating
900	2.00	3.6	180	90	50	30	-15 ~ +50	-20 ~ +70
900	2.40	5.3	220	100	50	30	-15 ~ +50	-20 ~ +70
900	2.80	6.9	220	100	50	30	-15 ~ +50	-20 ~ +70
900	3.00	8.6	320	160	50	30	-15 ~ +50	-20 ~ +70

Tight Buffered Fiber Optic Cable

Duplex Zip Cable

Overview

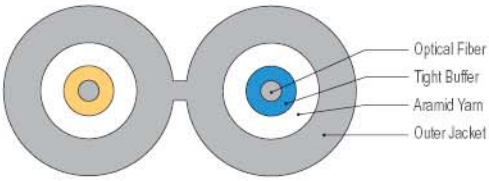
Each two coated and buffered fibers. Each fiber surrounded with layer of reinforcing aramid yarn followed by an extruded outer jacket of Zip configuration (Shape"8") with the diameter from 2.0 mm to 3.0mm. The tight buffer designs add thermoplastic to the coating directly on the fiber with diameter up to 900㎛. Tight coating designs use longitudinal aramid yarn as the strength member. The colored outer jacket shall be extruded over the aramid yarn. Other designs are also available on request to meet specified requirements and conditions.

Application

Duplex zip is a flexible, flame-retardant, non-metallic cable recommended for use in telecommunication station between the optical line system and the fiber frame distribution.
It is also suitable for data networks.

ESCON, FDDI
Fiber Channel
Multi-fiber Jumper Assembly

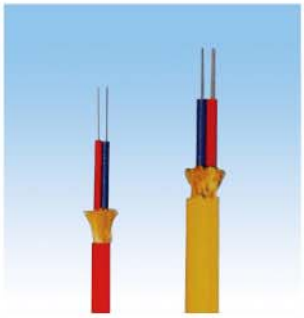
Cable Cross-Section



Cable Technical Data

Buffer Diameter	Jacket Diameter	Cable Weight	Tensile Load (N)		Minimum Bending Radius(㎜)		Temperature (℃)	
(㎛)	(㎜)	(kg/㎞)	Installing	Operating	Installing	Operating	Installing	0perating
900	2.0×4.1	7.2	360	160	50	30	-15 ~ +50	-20 ~ +70
900	2.4×4.9	10.6	440	200	50	30	-15 ~ +50	-20 ~ +70
900	2.8×5.6	12.8	440	200	50	30	-15 ~ +50	-20 ~ +70
900	3.0×5.9	16.2	640	320	50	30	-15 ~ +50	-20 ~ +70

Duplex Round Cable



Overview

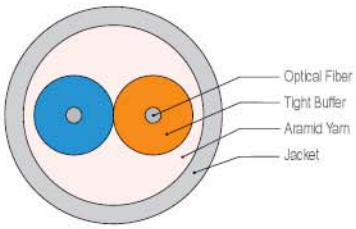
Each two coated and buffered fibers. Fibers surrounded with one layer of reinforcing aramid yarn followed by an extruded outer jacket of a round shape configuration ("O") with the diameter of 3.0 mm or 4.8mm. The tight buffer designs add thermoplastic to the coating directly on the fiber with diameter up to 900㎛. Tight coating designs use longitudinal aramid yarn as the strength member.
The colored outer jacket shall be extruded over the aramid yarn. other designs are also available on request to meet specified requirements and conditions.

Application

Duplex round is a flexible, flame-retardant, non-metallic cable recommended for use in telecommunication station between the optical line system and the fiber frame distribution. It is also suitable for data networks.

ESCON, FDDI
Fiber Channel
Multi-fiber Jumper Assembly

Cable Cross-Section



Cable Technical Data

Buffer Diameter	Jacket Diameter	Cable Weight	Tensile Load (N)		Minimum Bending Radius(㎜)		Temperature (℃)	
(㎛)	(㎜)	(kg/㎞)	Installing	Operating	Installing	Operating	Installing	Operating
900	3.00	7.6	440	200	50	30	-15 ~ + 50	-20 ~ + 70
900	4.80	21.0	600	300	96	48	-15 ~ + 50	-20 ~ + 70

Tight Buffered Fiber Optic Cable

Duplex Flat Twin Cable

Overview

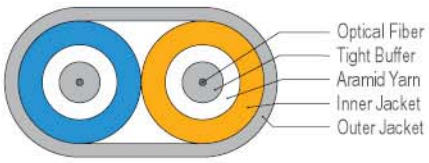
The two simplex(Twins) cables shall have an extruded outer jacket. The tight buffer designs add thermoplastic to the coating directly on the fiber with diameter up to 900㎛. Tight coating designs use longitudinal aramid yarn as the strength member. The colored inner Jacket shall be extruded over the aramid yarn. The colored outer jacket shall be extruded over the two simplexs.
Other designs are also available on request to meet specified requirements and conditions.

Application

Duplex zip is a flexible, flame-retardant, non-metallic cable recommended for use in telecommunication station between the optical line system and the fiber frame distribution.
It is also suitable for data networks.

ESCON, FDDI
Fiber Channel
Multi-fiber Jumper Assembly

Cable Cross-Section



Cable Technical Data

Buffer Diameter	Simplex Diameter	Jacket Diameter	Cable Weight	Tensile Load (N)		Minimum Bending Radius		Temperature (℃)	
(㎛)	(㎜)	(㎜)	(㎏/㎞)	Installing	Operating	Installing	Operating	Installing	Operating
900	2.00	4.0×6.0	27.0	440	200	50	30	-15 ~+50	-20 ~+70
900	2.4	4.4×6.8	34.0	440	200	50	30	-15 ~+50	-20 ~+70
900	2.8	4.8×7.6	38.5	440	200	50	30	-15 ~+50	-20 ~+70
900	3.0	5.0×8.0	45.5	640	300	50	30	-15 ~+50	-20 ~+70

Distribution Cable

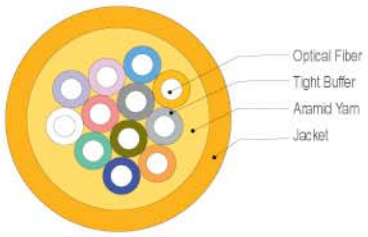
Overview

Distribution cable contains fibers buffered to 0.9 mm in a tight, the individual fibers are stranded and protected by aramid yarn and a outer jacket. The distribution cable is compact and flexible construction especially suitable for indoor installation, LAN and inter-telephone office.

Application

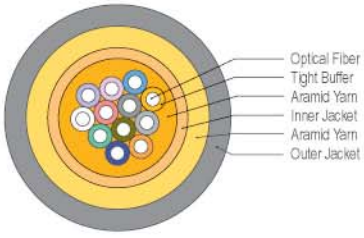
Intrabuilding Backbone
FDDI,LAN distribution

Single Sheath Distribution Cable



Fiber Count	Jacket Diameter (㎜)	Weight (㎏/㎞)	MAX.Tensile Load (㎏f)
2	4.3	15	40
4	4.7	20	60
6	5.5	30	100
8	6.0	37	100
10	6.5	40	100
12	6.5	40	100

Double Sheath Distribution Cable



Fiber Count	Jacket Diameter	Weight (㎏/㎞)
4, 6	7.2	48
8, 10	8.0	59
12	8.4	60

Loose Tube Fiber Optic Cable

Loose Tube Fiber Optic Cable for Duct

Overview

Loose tube cable provides excellent optical transmission and physical performance.
Loose tube cable is a design that has high tensile strength and flexibility in a compact cable size for use in conduit. ITECO ensures product reliability through rigorous qualification testing. Both initial and periodic qualification testing are performed to assure the cable's performance and durability in severe environment.

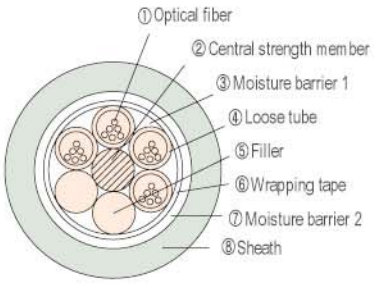
Features

Standard fiber count : 2~288 fibers
Excellent optical performance
Superior mechanical and environmental performance
High tensile strength design and anti termite (optional)
Jelly filled or dry type

Application

Local area network system
Long haul communication system
Subscriber network system

Cable Cross-Section



① Optical fiber	: Single mode fiber, multi mode fiber, dispersion shifted fiber, non-zero dispersion shifted fiber or ANYWAVE® single mode fiber
② Central strength member	: Galvanized steel wire(s) or fiber reinforced plastic (FRP)
③ Moisture barrier 1	: A water blocking jelly filling compound or water blocking yarn
④ Loose tube	: Thermoplastic material (polyethylene terephthalate)
⑤ Filler	: Polyethylene resin
⑥ Wrapping tape	: Non-hygroscopic plastic tape or water blocking tape (optional)
⑦ Moisture barrier 2	: Copolymer laminated aluminum tape
⑧ Sheath	: Black polyethylene

Cable Specification

No. of fibers per tube	No. of fibers	Metallic CSM	
		Outer Dia.(㎜)	Cable Wt.(㎏f/㎞)
6-fiber	2~ 36	11.6	130
12-fiber	48~ 72	13.1	180
	74~ 96	14.9	230
	98~120	16.7	300
	122~144	18.5	375
	288	23.0	400

Mechanical & Environment Specifications

Characteristics	Units	Specifications
Allowable tensile strength	㎏f	250 ~ 760
Crush resistance	㎏f/㎝	20
Minimum bending diameter Dynamic Static	㎜	 20 times of cable diameter 10 times of cable diameter
Maximum operating load	㎏f	200
Operating temperature range	℃	-40 ~ +70
Delivery length	㎞	1 ~ 6

Loose Tube Fiber Optic Cable for Direct Buried

Overview

Loose tube cable provides excellent optical transmission and physical performance.
Loose tube cable is a design that has high tensile strength and flexibility in a compact cable size for use in direct buried. ITECO ensures product reliability through rigorous qualification testing. Both initial and periodic qualification testing are performed to assure the cable's performance and durability in severe environment.

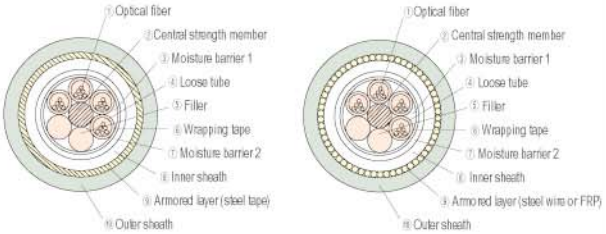
Features

Standard fiber count : 2~288 fibers
Excellent optical performance
Superior mechanical and environmental performance
High tensile strength design and anti termite (optional)
Jelly filled or dry type

Application

Local area network system
Long haul communication system
Subscriber network system

Cable Cross-Section



① Optical fiber	: Single mode fiber, multi mode fiber, dispersion shifted fiber, non-zero dispersion shifted fiber or ANYWAVE® single mode fiber
② Central strength member	: Galvanized steel wire(s) or fiber reinforced plastic (FRP)
③ Moisture barrier 1	: A water blocking jelly filling compound or water blocking yarn
④ Loose tube	: Thermoplastic material (polyethylene terephthalate)
⑤ Filler	: Polyethylene resin
⑥ Wrapping tape	: Non-hygroscopic plastic tape or water blocking tape (optional)
⑦ Moisture barrier 2	: Copolymer laminated aluminum tape
⑧ Inner Sheath	: Black polyethylene
⑨ Armored layer	: A corrugated steel tape, stranded steel wires or FRP
⑩ Outer sheath	: Black polyethylene

Cable Specification

No. of fibers per tube	No. of fibers	Steel tape armored		Steel wire armored	
		Outer Dia.(mm)	Cable Wt.(kgf/km)	Outer Dia.(mm)	Cable Wt.(kgf/km)
6-fiber	2~ 36	16.6	290	17.8	520
12-fiber	48~ 72	18.1	350	19.7	640
	74~ 96	19.9	430	21.9	810
	98~120	21.7	510	24.1	1000
	122~144	23.5	580	36.3	1200
	288	25.5	600	28.3	1300

Mechanical & Environment Specifications

Characteristics	Units	Specifications	
		Steel tape armored	Steel tape armored
Allowable tensile strength	kgf	250 ~ 760	2265~3600
Crush resistance	kgf/cm	40	40
Minimum bending diameter			
Dynamic(×Cable dia.)	mm	20 times	20 times
Static(×Cable dia.)		10 times	10 times
Operating temperature range	°C	-40 ~ +70	-40 ~ +70
Delivery length	km	1 ~ 4	1 ~ 4

Loose Tube Fiber Optic Cable

Loose Tube Fiber Optic Cable for Aerial

Overview

Loose tube cable provides excellent optical transmission and physical performance.
Loose tube cable is a design that has high tensile strength and flexibility in a compact cable size for use in aerial applications. ITECO ensures product reliability through rigorous qualification testing. Both initial and periodic qualification testing are performed to assure the cable's performance and durability in severe environment.

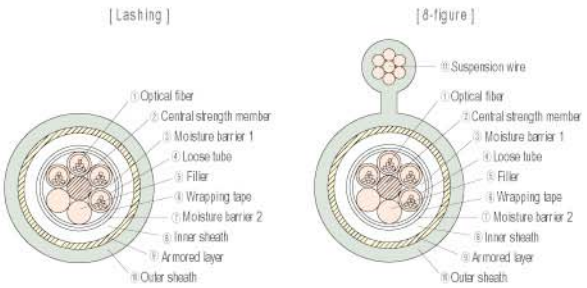
Features

Standard fiber count : 2~144 fibers
Protection from lightning and electrical interference
8-figure & lashed type design
Jelly filled or dry type

Application

Local area network system
Long haul communication system
Subscriber network system

Cable Cross-Section



① Optical fiber	:	Single mode fiber, multi mode fiber, dispersion shifted fiber, non-zero dispersion shifted fiber or ANYWAVE® single mode fiber
② Central strength member	:	Galvanized steel wire(s) or fiber reinforced plastic (FRP)
③ Moisture barrier 1	:	A water blocking jelly filling compound or water blocking yarn
④ Loose tube	:	Thermoplastic material (polyethylene terephthalate)
⑤ Filler	:	Polyethylene resin
⑥ Wrapping tape	:	Non-hygroscopic plastic tape or water blocking tape (optional)
⑦ Moisture barrier 2	:	Copolymer laminated aluminum tape
⑧ Inner sheath	:	Black polyethylene
⑨ Armored layer	:	Steel tape
⑩ Outer sheath	:	Black polyethylene
⑪ Suspension wire	:	Galvanized steel wires or fiber reinforced plastic (FRP)

Identification of Optical Fiber

No. of fiber	1	2	3	4	5	6	7	8	9	10	11	12
Color	Blue	Orange	Green	Brown	Slate	White	Red	Black	Yellow	Violet	Pink	Aqua

Cable Specification

No. of fibers per tube	No. of fibers	8 - figure		Lashing	
		Outer Dia.(mm)	Cable Wt.(kg/km)	Outer Dia.(mm)	Cable Wt.(kg/km)
6-fiber	2~ 36	16.6/27.6	500	16.6	290
12-fiber	48~ 72	18.1/29.1	560	18.1	350
	74~ 96	19.9/30.9	640	19.9	430
	98~120	21.7/32.7	730	21.7	510
	122~144	23.5/35.5	820	23.5	580

Mechanical & Environment Specifications

Characteristics	Units	Specifications	
		8-figure	Lashing
Allowable tensile strength	kgf	500 ~ 1500	250~750
Crush resistance	kgf/cm	40	40
Minimum bending diameter			
Dynamic(×Cable dia.)	mm	20 times	20 times
Static(×Cable dia.)		10 times	10 times
Operating temperature range	°C	-40 ~ +70	-40 ~ +70
Delivery length	km	1 ~ 4	1 ~ 4

All Dielectric Self-Supporting Cable (ADSS)

Overview

ADSS cable provides great flexibility and high strength in aerial application.
Especially for the medium and high voltage power line. ADSS cable provides a high capacity and reliable telecommunication network solution without electromagnetic influence along the power line.
Ensures product reliability through rigorous qualification testing. Both initial and periodic qualification testing are performed to assure the cables performance and durability in severe environment.

Features

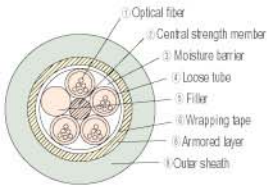
Standard fiber count : 2~144 fibers
Low weight and small diameter
All dielectric self supporting construction
Jelly filled or dry type

Application

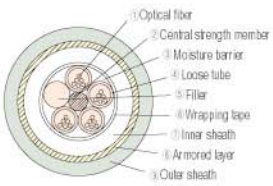
Local area network system
Long haul communication system
Subscriber network system
Vicinities power line plant

Cable Cross-Section

[Single sheath type]



[Double sheath type]



① Optical fiber	: Single mode fiber, multi mode fiber, dispersion shifted fiber, non-zero dispersion shifted fiber or ANYWAVE® single mode fiber
② Central strength member	: fiber reinforced plastic (FRP)
③ Moisture barrier 1	: A water blocking jelly filling compound or water blocking yarn
④ Loose tube	: Thermoplastic material (polyethylene terephthalate)
⑤ Filler	: Polyethylene resin
⑥ Wrapping tape	: Non-hygroscopic plastic tape or water blocking tape
⑦ Inner sheath	: Black polyethylene
⑧ Armored layer	: Aramid yarn
⑨ Outer sheath	: Black polyethylene or anti tracking polyethylene

Cable Specification

No. of fibers per tube	No. of fibers	ADSS			
		Single sheath		Double sheath	
		Outer Dia.(㎜)	Cable Wt.(kg/㎞)	Outer Dia.(㎜)	Cable Wt.(kg/㎞)
6-fiber	2~ 30	11.2	100	13.5	140
	36	11.6	110	14.0	155
12-fiber	42~ 60	12.5	125	15.1	175
	72	13.2	140	15.6	190
	144	18.4	310	20.7	335

Mechanical & Environment Specifications

Characteristics	Units	Specifications	
		Single sheath	Double sheath
Allowable tensile strength	kgf	270	600
Crush resistance	kgf/cm	20	30
Minimum bending diameter			
Dynamic(×Cable dia.)	㎜	Cable diameter× 10times	
Static(×Cable dia.)		Cable diameter× 20times	
Operating temperature range	℃	-40 ~ +70	-40 ~ +70
Delivery length	㎞	1 ~ 6	1 ~ 6

Data Cable(LAN Cable)

UTP Category 6 4Pair

Description

Item	Pair	Conductor	Outer Diameter (Nom.mm)	Weight (Approx.kg/300m)	Standard Length (m)	Packing
UTP CAT.6 CMX,CM,CMR,LSZH	4	Solid Bare Copper (24AWG)	6.2	12	300	Box Reel in Box

Specification

ANSI / EIA / TIA - 568B. 2 - 1
ISO / IEC 11801
UR 444

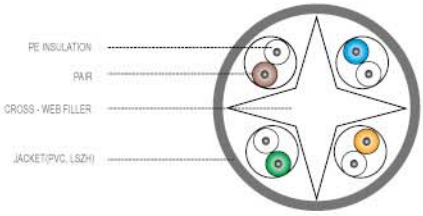
Frame Test

UL 1581 (CMX)
UL 1685 (CM)
UL 1666 (CMR)
IEC 60754, 332-1 (LSZH)

Application

High Speed Horizontal Cabling (250MHz)
155 / 622 Mbps ATM
Gigabit Ethernet
10 / 100 / 1000 Base -T
100 Mbps Fast Ethernet

Cable Cross-Section



Electrical Properties

Conductor Resistance 9.38Ω / 100m ↓
Resistance unbalance 5.0% ↓
Mutual Capacitance 5.6nF / 100m ↓
Capacitance Unbalance 330pF / 100m ↓
Characteristics Impedance 100 ± 15Ω

Frequency (MHz)	RL (Min.dB)	IL (Max.dB/100)	NEXT (Min.dB)	PSNEXT (Min.dB)	ELFEXT (Man.dB/100)	PSELFEXT (Man.dB/100)	DELAY (Max.ns/100)	SKEW (Max.ns/100)
0.772	-	1.8	76.0	74.0	70.0	67.0	-	-
1	20.0	2.0	74.3	72.3	67.8	64.8	570	45
4	23.0	3.8	65.3	63.3	55.8	52.8	-	-
8	24.5	5.3	60.8	58.8	49.7	46.7	-	
10	25.0	6.0	59.3	57.3	47.8	44.8	545	45
16	25.0	7.6	56.2	54.2	43.7	40.7	-	-
20	25.0	8.5	54.8	52.8	41.8	38.8	-	-
25	24.3	9.5	53.3	51.3	39.8	36.8	-	-
31.25	23.6	10.7	51.9	49.9	37.9	34.9	-	-
62.5	21.5	15.4	47.4	45.4	31.9	28.9	-	-
100	20.1	19.8	44.3	42.3	27.8	24.8	-	-
200	18.0	29.0	39.8	37.8	21.8	18.8	-	-
250	17.3	32.8	38.3	36.3	19.8	16.8	536	45

UTP Category 5e 4Pair

Description

Item	Pair	Conductor	Outer Diameter (Nom.mm)	Weight (Approx.kg/300m)	Standard Length (m)	Packing
UTP CAT.5E CMX,CM,CMR,LSZH	4	Solid Bare Copper (24AWG)	5.0	9	300	Box

Specification

ANSI / EIA / TIA - 568B. 2
ISO / IEC 11801
UR 444

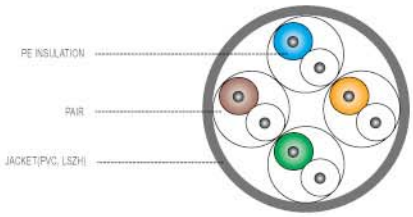
Frame Test

UL 1581 (CMX)
UL 1685 (CM)
UL 1666 (CMR)
IEC 60754, 332-1 (LSZH)

Application

High Speed Horizontal Cabling (100MHz)
155 Mbps ATM
Gigabit Ethernet
10 / 100 Base -T
100 Mbps Fast Ethernet

Cable Cross-Section



Electrical Properties

Conductor Resistance 9.38Ω / 100m ↓
Resistance unbalance 5.0% ↓
Mutual Capacitance 5.6nF / 100m ↓
Capacitance Unbalance 330pF / 100m ↓
Characteristics Impedance 100 ± 15Ω

Frequency (MHz)	RL (Min.dB)	IL (Max.dB/100)	NEXT (Min.dB)	PSNEXT (Min.dB)	ELFEXT (Man.dB/100)	PSELFEXT (Man.dB/100)	DELAY (Max.ns/100)	SKEW (Max.ns/100)
0.772	-	1.8	67.0	64.0	66.0	63.0	-	-
1	20.0	2.0	65.3	62.3	63.8	60.8	570	45
4	23.0	4.1	56.3	53.3	51.7	48.7	-	-
8	24.5	5.8	51.8	48.8	45.7	42.7	-	
10	25.0	6.5	50.3	47.3	43.8	40.8	545	45
16	25.0	8.2	47.3	44.3	39.7	36.7	-	-
20	25.0	9.3	45.8	42.8	37.7	34.7	-	-
25	24.3	10.4	44.3	41.3	35.8	32.8	-	-
31.25	23.6	11.7	42.9	39.9	33.9	30.9	-	-
62.5	21.5	17.0	38.4	35.4	27.8	24.8	-	-
100	20.1	22.0	35.3	32.3	23.8	20.8	538	45

Data Cable(LAN Cable)

UTP Category 5 2Pair, 4Pair

Description

Item	Pair	Conductor	Outer Diameter (Nom.mm)	Weight (Approx.kg/300m)	Standard Length (m)	Packing
UTP CAT.5 CMX,CM,CMR,LSZH	2 4	Solid Bare Copper (24AWG)	4.5 5.0	5 9	300	Box

Specification

ANSI / EIA / TIA - 568B. 2
ISO / IEC 11801
UR 444

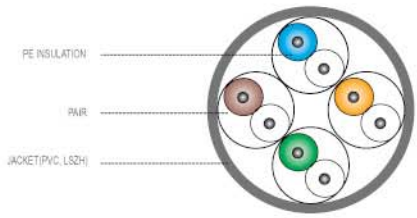
Frame Test

UL 1581 (CMX)
UL 1685 (CM)
UL 1666 (CMR)
IEC 60754, 332-1 (LSZH)

Application

High Speed Horizontal Cabling (100MHz)
155 Mbps ATM
10 / 100 Base -T
100 Mbps Fast Ethernet

Cable Cross-Section



Electrical Properties

Conductor Resistance 9.38 Ω / 100m ↓
Resistance unbalance 5.0% ↓
Mutual Capacitance 5.6nF / 100m ↓
Capacitance Unbalance 330pF / 100m ↓

Frequency (MHz)	Characteristic Impedance(ZO) (ohms)	SRL (Min.dB)	IL (Max.dB/100)	NEXT (Min.dB)	DELAY (Min.dB)	SKEW (Max.ns/100)
0.772	-	-	1.8	64.0	-	-
1	100±15	23.0	2.0	62.0	570	45
4	100±15	23.0	4.1	53.0	-	-
8	100±15	23.0	5.8	48.0	-	-
10	100±15	23.0	6.5	47.0	545	45
16	100±15	23.0	8.2	44.0	-	-
20	100±15	23.0	9.3	42.0	-	-
25	100±15	22.0	10.4	41.0	-	-
31.25	100±15	21.0	11.7	39.0	-	-
62.5	100±15	18.0	17.0	35.0	-	-
100	100±15	16.0	22.0	32.0	538	45

FTP Category 5 4Pair

Description

Item	Pair	Conductor	Outer Diameter (Nom.mm)	Weight (Approx.kg/300m)	Standard Length (m)	Packing
FTP CAT.5 CMX,CM,CMR,LSZH	4	Solid Bare Copper (24AWG)	6.4	13	300	Reel

Specification

ANSI / EIA / TIA - 568B. 2
ISO / IEC 11801
UR 444

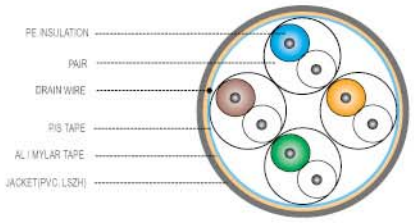
Frame Test

UL 1581 (CMX)
UL 1685 (CM)
UL 1666 (CMR)
IEC 60754, 332-1 (LSZH)

Application

High Speed Horizontal Cabling (100MHz)
EMI Proof
155 Mbps ATM
10 / 100 Base -T
100 Mbps Fast Ethernet

Cable Cross-Section



Electrical Properties

Conductor Resistance 9.38Ω / 100m ↓
Resistance unbalance 5.0% ↓
Mutual Capacitance 5.6nF / 100m ↓
Capacitance Unbalance 330pF / 100m ↓
Characteristics Impedance 100±15Ω

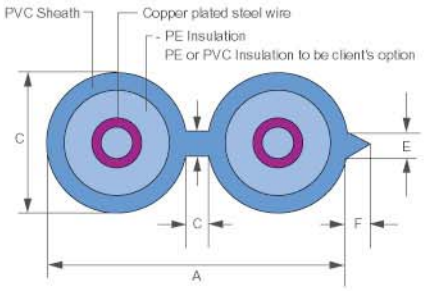
Frequency (MHz)	RL (Min.dB)	IL (Max.dB/100)	NEXT (Min.dB)	PSNEXT (Min.dB)	ELFEXT (Man.dB/100)	PSELFEXT (Man.dB/100)	DELAY (Max.ns/100)	SKEW (Max.ns/100)
0.772	-	1.8	67.0	64.0	66.0	63.0	-	-
1	20.0	2.0	65.3	62.3	63.8	60.8	570	45
4	23.0	4.1	56.3	53.3	51.7	48.7	-	-
8	24.5	5.8	51.8	48.8	45.7	42.7	-	
10	25.0	6.5	50.3	47.3	43.8	40.8	545	45
16	25.0	8.2	47.3	44.3	39.7	36.7	-	-
20	25.0	9.3	45.8	42.8	37.7	34.7	-	-
25	24.3	10.4	44.3	41.3	35.8	32.8	-	-
31.25	23.6	11.7	42.9	39.9	33.9	30.9	-	-
62.5	21.5	17.0	38.4	35.4	27.8	24.8	-	-
100	20.1	22.0	35.3	32.3	23.8	20.8	538	45

Telecommunication Cable

Self-supporting Outdoor Telephone Drop Wire

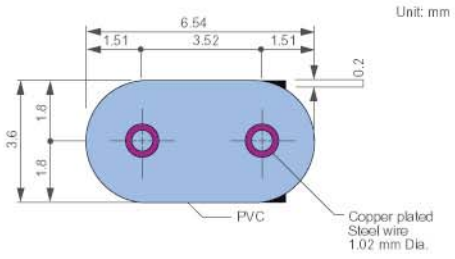
8 Figured Type

Conductor Dia. (mm)	A Approx (mm)	B Approx (mm)	C Approx (mm)	D Approx (mm)	E Approx (mm)	F Approx (mm)
1.0	6.8/6.4	3.2/3.0	0.4	0.4	0.5	0.5
0.8	6.4	3.0	0.4	0.4	0.5	0.5

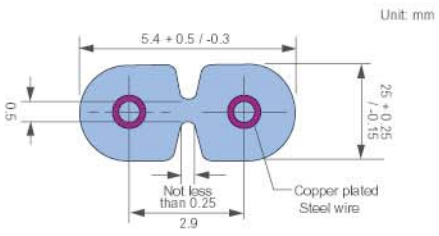


Conductor Dia. (mm)	Conductor Conductivity (%)	Tensile strength of conductor (kg/mm²)	Conductor resistance (ohm/km)	Insulation resistance (mega ohm/km)	Test Voltage (AC)	Twist (times)
1.0	40	98	54.23	5000	2000	20
1.0	30	106	72.33	5000	2000	20

Dumbell(Flat Type)



Double 'D' Type



CONDUCTOR VARIATIONS	INSULATION VARIATIONS
Conductivity: 30% or 40% Diameter: 0.71mm~1.20mm Tensile strength: HS Grade or EHS Grade (ASTM B 227)	PVC: black or grey PVC in BS 6746C. PE: HDPE in ASTM D1248 LDPE in ASTM D1248

PVC Insulated Indoor Telephone Wire (TIV)

Description

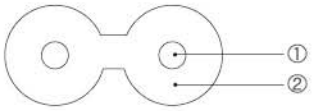
No.of Wire	Diameter of Conductor (mm)	Insulation Thickness (mm)	Approx. Overall Diameter(mm)	Conductor Resistance (Ω/ km,20℃)	Insulation Resistance (MΩ/ km,20℃)	Standard Length (m)	Packing Method
2	0.5	0.6	2.0×4.2	34.3	60	200	Coil
3	0.8	0.6	2.0×6.4	34.3	60	200	Coil
2	1.0	0.8	2.6×5.4	21.95	60	200	Coil
3	1.0	0.8	2.6×8.2	21.95	60	200	Coil

Application

This wire is used for inside wiring of telephone set, its extension and protection terminal

Construction

Conductor : Annealed copper wire
Insulation : Polyvinyl chloride(PVC)



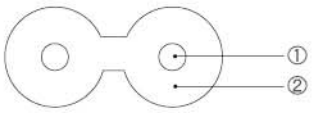
PVC Insulated Outdoor Telephone Wire (TOV)

Application

This wire is used for drop in from a terminal box to the inside of building

Construction

Conductor : Hard drawn copper wire
Insulation : Polyvinyl chloride(PVC)



Description

Conductor Diameter (mm)	Insulation Thickness (mm)	Overall Diameter (mm)	Conductor Resistance (Ω/ km,20℃)	Insulation Resistance (MΩ/ km,20℃)	Standard Length (m)	Packing Method
1.0	1.0	3.0×6.4	24.3	60	300	Coil
1.2	1.0	3.2×6.9	16.7	60	300	Coil

Telecommunication Cable

PVC Insulated Jumper Wire (TJV)

Description

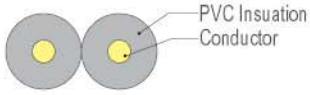
The Kind of Wire	Number of Wire	Colour of Cores	Conductor Diameter (mm)	PVC Insulation Thickness (mm)	Standard over all Diameter (mm)	Standard Core Pitch (mm)	Max Conductor Resistance at20℃ (Ω/km)	Min Insulation Resistance (MΩ -km)	Standard Length (m)
Single	1	Wh,Gr,Br,Y1	0.5	0.2	0.9	-	96.0	20	200
Single	1	Wh,Gr,Br,Y1	0.6	0.4	1.4	-	65.0	20	200
2Strands	2	Wh,Bk	0.5	0.2	0.9	70	96.0	20	200
2Strands	2	WH,Vk	0.6	0.4	1.4	70	65.0	20	200
2Strands	2	WH,Rd	0.6	0.4	1.4	70	65.0	20	200
3Strands	3	Bk,Wh,Rd	0.6	0.4	1.4	80	65.0	20	200
4Strands	4	Wh,Gr,Br,Y1	0.6	0.4	1.4	90	65.0	20	200
5Strands	5	Wh,Gr,BkY1,GY	0.6	0.4	1.4	110	65.0	20	200
Single	1	Gy	1.0	0.5	2.0	-	23.4	20	200

Application

This wire is used for inside wiring in the circuit of electronic apparatus telecommunication equipment.

Construction

Conductor : Tinned Annealed Copper Wire
Insulation : PVC



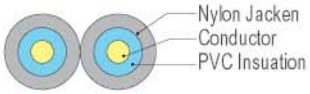
PVC Insulated Nylon Jacket Jumper Wire (TJVN)

Application

This wire is used for inside wiring in the circuit of electronic apparatus telecommunication equipment.

Construction

Conductor : Tinned Annealed Copper Wire
Insulation : PVC
Jacket : Nylon



The Kind of Wire	Number of Wire	Colour of Cores	Conductor Diameter (mm)	PVC Insulation Thickness (mm)	Nylon Jacket Thickness	Standard overall Diameter (mm)	Standard Core Pitch at20℃ (mm)	Max Conductor Resistance (Ω/km)	Min Insulation Resistance (MΩ -km)	Standard Length (m)
2	2	Gr,Wh	0.5	0.2	0.05	1.0	70	96.0	20	300

Infantry Field Wire (Type WD-1 / TT or W-190 as per MIL-C-13294C)

Application

This is mainly employed as military guard telephone wires and other electrical application and has the following features

: High mechanical strength aids installation and easy withdrawal.
: Excellent in weather proofness
: Variety usage

Construction

Conductor : Composed of 4 strands of 0.28 mm tinned copper wire and 3 strands of 0.28 mm galvanized steel wire
Insulation : Black Polyethylene extrusion
Sheath : Natural colored nylon extrusion
Finished field wire : Two finished single conductors shall be twisted closely together

Electrical Requirements

Conductor resistance : Not exceeding 151 Ω/km at 20℃.
Dielectric strength : To be capable of withstanding A.C 1,000 volts for at least 1 minute.
Insulation resistance : Not less than 1000 MΩ/km

Conductor		PE Insulation	Nylon Sheath		2 Strands		Max. Conductor Resistance (at 20℃)	Test Voltage (Ω/km)	Min. Insulation Resistance at 15.6℃ (MΩ -km)
Construction No.of Wire/Dia (No/mm)	Overall Diameter (mm)	Thickness (Approx) (mm)	Thickness (Approx) (mm)	Max.Overall Diameter (mm)	Max. Pitch (mm)	Overall Diameter (mm)			
7/0.28	0.84	0.45	0.2	2.24	152.4	42	150.92	1,000	2,000

http://www.iteco.co.kr

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