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# MICRO CABLE SOLUTION

IDEAL SOLUTION FOR FTT<sub>x</sub> NETWORKS



## Micro design and excellent performance for network solutions

Taihan Fiberoptics Micro Cable solutions are designed to apply as high count fiber as possible to a limited duct space by applying a flexible micro tube with good stripping.

The cables designed with a stable structure can be applied to various environments such as aerial, duct, micro duct, and direct buried.

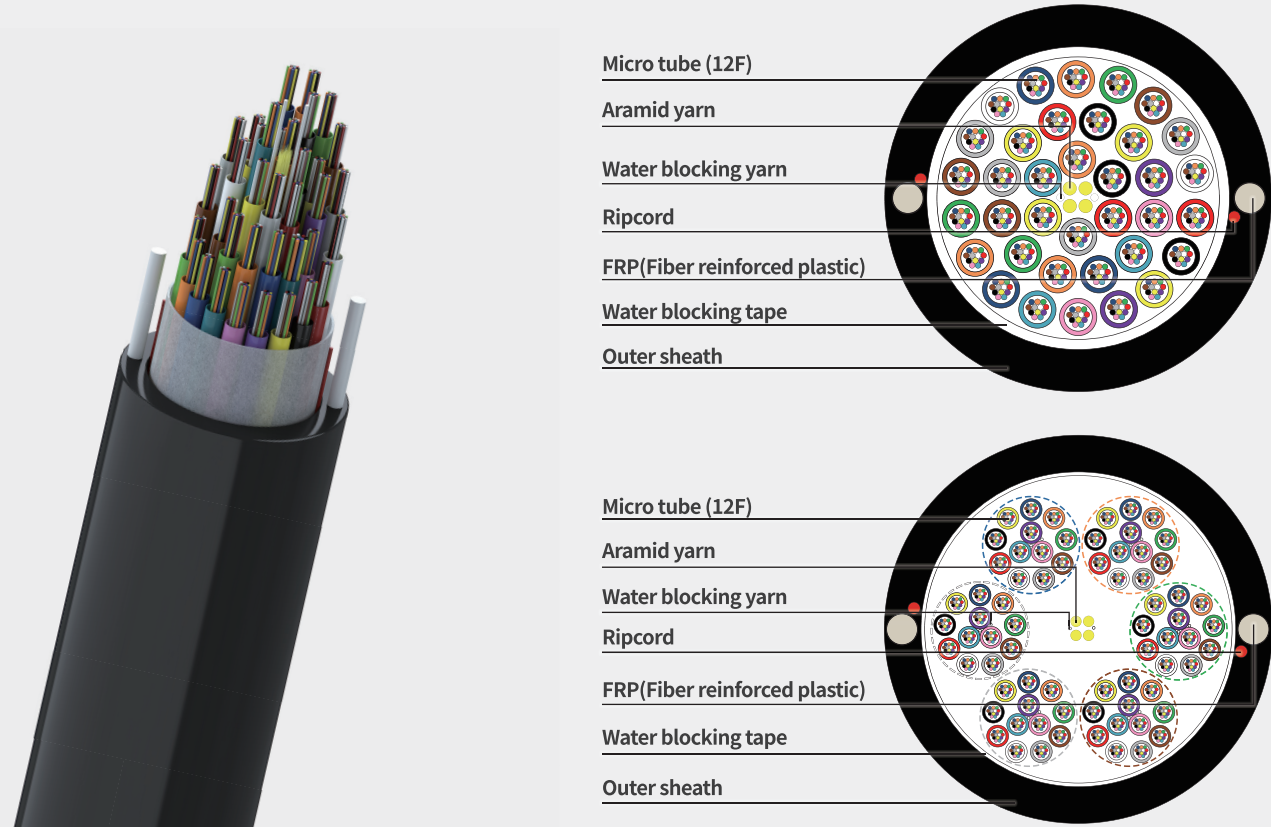
In particular, air blown cable applies a lightweight sheath design to enable reliable long-distance installation in Micro duct.

Taihan Fiberoptics offers customers a superior Micro cable solution by reducing total project costs, and minimizing time and disruption.





# MICRO CABLE



## Description

Micro Cable is a cable designed based on the micro-module and is designed in a compact size and provides high efficiency when used in a duct. Micro modules are designed to be easily stripped, reducing installation time and Non-metallic strength members on both sides provide excellent crush protection performance. Micro Cable contains 6F or 12F optical fiber per module and provides from 6F to 864F cable, so it can be applied to the backbone and distribution access area networks with aerial and duct.

## Applications

Backbone Networks

FTTx Networks

Duct

Feeder & Last Mile

Aerial

## Features

- Non-Metallic Design
- Easily Removable without Tools
- Outer Jacket with UV Protection
- Soft, Flexible, Easily stripping micro modules

## Standards & Certifications

[ITU-T G.650. 657] [IEC 60793] [TIA-598]  
[IEC 60794-5-10]  
[ISO 9001, 14001] [OHSAS 18001]

Specification															
Item		Value and description													
Total fiber number (F)		12	24	36	48	72	96	144	288	432	576		720	864	
Sub-unit grouping		-	-	-	-	-	-	-	-	-	-	0	0	0	
No. of tube (ea)		1	2	3	4	6	8	12	24	36	48		60	72	
No. of fiber per tube (F)		12													
No. of sub-unit (ea)		-									4		5	6	
No. of tube in each sub-unit (ea)		-									12		12	12	
Micro Tube	Material	LSZH													
	Diameter (Nom. mm)	1.6													
	Water blocking material	Water blocking yarn													
Longitudinal strength material		-								Aramid yarn					
Water blocking material		Water blocking yarn and tape													
Ripcord (ea)		2													
Axial strength member	Material	FRP													
	No. of strength member	2													
Outer sheath	Material	Black color HDPE													
Cable	Diameter (Nom. mm)	7.1	8.0	8.0	8.0	10.2	11.5	11.5	14.0	16.5	19.5		21.0	22.0	
	Weight (Nom. kg/km)	38	46	49	52	70	93	107	159	205	255		300	340	
Temperature range	Operation	-40°C to +70°C [-40F to +158°C ]													
	Storage	-40°C to +70°C [-40F to +158°C ]													
	Installation	-10°C to +60°C [14F to +140°C ]													
Bending radius	Operation	10 x Cable diameter													
	Installation	20 x Cable diameter													
Tensile strength (N)		2,200	2,200	2,200	2,200	2,200	2,700	2,700	3,200	2,800	3,000		4,000	4,400	

Fiber Type			
Single-Mode Fiber	Fiber Standards	Wavelengths (nm)	Maximum Cable on Reel Attenuation (dB/km)
ANYWAVE D	G.652.D	1310/1383/1550	0.40/0.40/0.30
ANYWAVE FLEX A1	G.657.A1	1310/1383/1550	0.40/0.40/0.30
ANYWAVE FLEX A2	G.657.A2	1310/1383/1550	0.40/0.40/0.30





Micro Duct

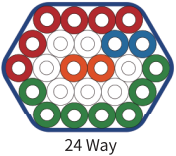
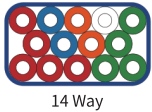
THICK WALLED DUCT

Description

THICK WALLED DUCT is designed for direct burial by having thicker inner tube. It has advantage for easy and fast termination with thin outer sheath. The thickness of each inner tube allows individual tubes to be used direct buried solution. This item is suitable for any construction sites such as open cut, Micro trenching, Mini trenching and HDD. This product is usually recommended to the site which requires fast and easy sheath cutting during fiber branch off from the FCP.



4/2.1mm	Nom.OD(mm)	Weight(kg/km)	Length/drum(m)	Number of drums in 40'
1way	5.6	21	1,000	320
7way	13.6x12.5	92	2,000	40
12way	17.6x16.0	144	2,000	32
24way	25.6x19.5	263	1,000	32
7/3.5mm	Nom. OD(mm)	Weight(kg/km)	Length/drum(m)	Number of drums in 40'
1way	9.0	52	2,000	104
2way	16.0x9.0	93	2,000	40
3way	16.0x15.1	128	2,000	32
4way	16.0x16.0	162	2,000	32
5way	23.0x15.1	195	2,000	24
6way	21.1x19.5	228	2,000	24
7way	23.0x21.1	258	2,000	21
12way	30.0x27.2	415	2,000	14
14way	37.0x21.1	485	2,000	14
19way	37.0x33.3	627	1,000	19
24way	44.0x33.3	777	1,000	14
24+1way	43.6x43.6	855	1,000	12
10/6mm	Nom. OD(mm)	Weight(kg/km)	Length/drum(m)	Number of drums in 40'
1way	12.0	81	1,000	104
2way	22.0x12.0	149	2,000	32
3way	22.0x20.7	206	2,000	22
4way	22.0x22.0	264	2,000	21
5way	32.0x20.7	320	2,000	18
6way	29.4x27.0	374	2,000	14
7way	32.0x29.3	426	2,000	12
12/8mm	Nom. OD(mm)	Weight(kg/km)	Length/drum(m)	Number of drums in 40'
1way	14.0	99	2,000	40
2way	26.0x14.0	182	2,000	24
3way	26.0x24.4	254	2,000	19
4way	26.0x26.0	325	2,000	18
5way	38.0x24.4	395	2,000	12
6way	34.8x32.0	463	2,000	12
7way	38.0x34.8	527	2,000	11





# DI-HS DUCT

## Description

Direct Install High Strength duct is designed for installation duct and subduct. This product will be installed in the existing infrastructure with relatively high crush resistance. Even though it is solid product, it is very easy to bend or fix the tube inside of cabinet by having thin inner tube. It is also strong against lightning and electrical surge.



5/3.5mm	Nom. OD(mm)	Weight(kg/km)	Length/drum(m)	Number of drums in 40'
1way	8.0	38	2,000	104
2way	13.0x8.0	62	2,000	88
4way	15.1	98	2,000	36
7way	18.0	139	2,000	32
12way	23.3	209	2,000	21
19way	27.3	293	2,000	18
24+1way	32.9	398	2,000	12

8/6mm	Nom. OD(mm)	Weight(kg/km)	Length/drum(m)	Number of drums in 40'
1way	11.0	62	2,000	88
2way	19.0x11.0	106	2,000	33
4way	22.3	175	2,000	22
7way	27.0	257	2,000	18
12way	35.8	418	2,000	11

10/8mm	Nom. OD(mm)	Weight(kg/km)	Length/drum(m)	Number of drums in 40'
1way	13.0	77	2,000	40
2way	23.0x13.0	132	2,000	30
4way	28.1	259	2,000	18
7way	34.2	383	2,000	12

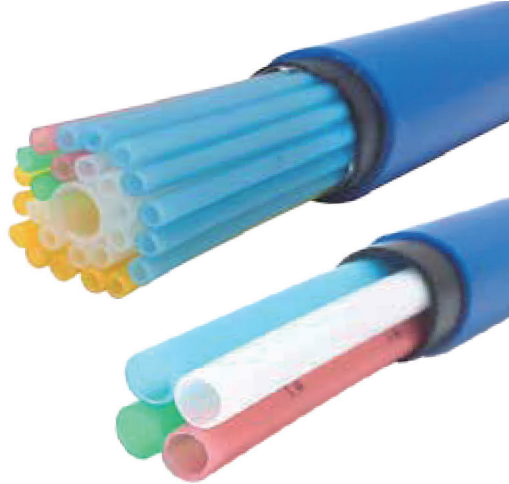
12/10mm	Nom. OD(mm)	Weight(kg/km)	Length/drum(m)	Number of drums in 40'
1way	15.0	91	2,000	36
2way	27.0x15.0	158	2,000	22
4way	33.0	310	2,000	12
7way	40.2	460	1,000	12



# DB-HS DUCT

## Description

Direct Bury High Strength duct is designed to endure harsh environment with high crush resistance. Even though it is solid product, it is very easy to bend or fix the tube inside of cabinet by having thin inner tube. The extra layer (total 2 layers of the outer sheath) is added to protect the thin wall of inner tube from external ground pressure. Moreover, it is very strong against lightning and electrical surge.

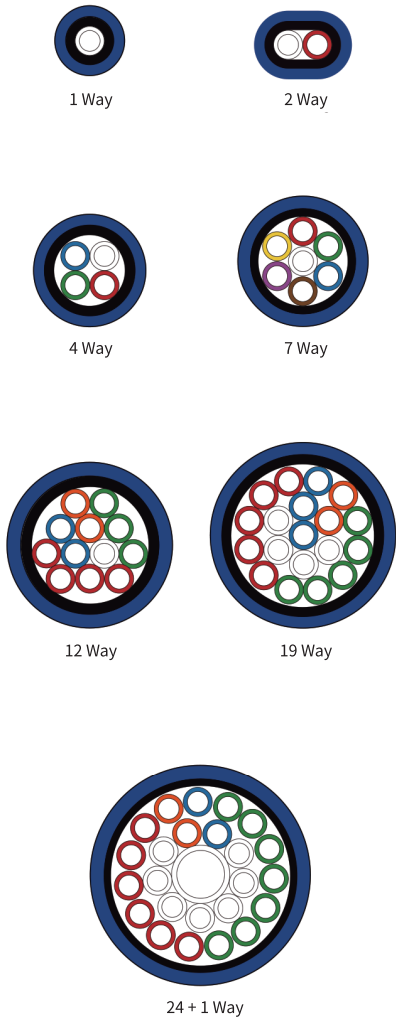


5/3.5mm	Nom. OD(mm)	Weight(kg/km)	Length/drum(m)	Number of drums in 40'
1way	12.0	98	2,000	44
2way	17.0x12.0	140	2,000	36
4way	19.1	200	2,000	29
7way	22.0	259	2,000	22
12way	27.9	385	2,000	18
19way	31.9	496	2,000	12
24+1way	37.5	639	1,000	14

8/6mm	Nom. OD(mm)	Weight(kg/km)	Length/drum(m)	Number of drums in 40'
1way	15.0	140	2,000	36
2way	23.0x15.0	214	2,000	24
4way	26.3	320	2,000	19
7way	31.0	431	2,000	13
12way	40.4	680	1,000	12

10/8mm	Nom. OD(mm)	Weight(kg/km)	Length/drum(m)	Number of drums in 40'
1way	17.0	166	2,000	32
2way	27.0x17.0	259	2,000	21
4way	31.5	410	2,000	12
7way	38.2	599	2,000	10

12/10mm	Nom. OD(mm)	Weight(kg/km)	Length/drum(m)	Number of drums in 40'
1way	19.0	193	2,000	29
2way	31.0x19.0	305	2,000	19
4way	36.4	486	2,000	11
7way	44.2	712	1,000	12



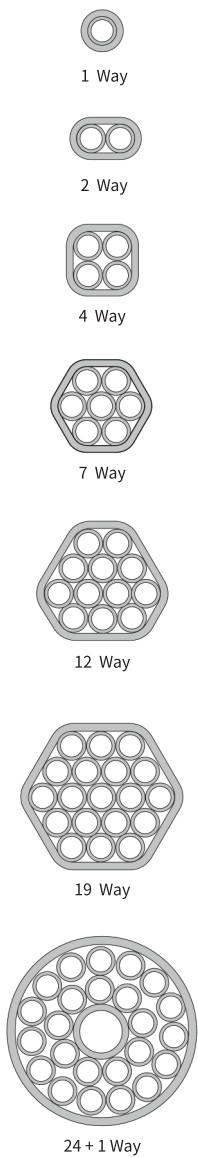


# INDOOR APPLICATION LSZH

## Description

Application requires the best quality of ducting pipe that can provide safety to the building. This method is the most appropriate for in-building infrastructure. Generally, the ducting pipe must comply with municipality and national authority standards and regulations on fire. The ducting pipe must be produced for retardant.

5/3.5mm	Nom. OD(mm)	Weight(kg/km)	Length/drum(m)	Number of drums in 40'
1way	7.0	42	2,000	180
2way	12.4x7.4	80	1,000	130
4way	12.4x12.4	125	2,000	40
7way	17.4x16.1	184	2,000	32
12way	22.4x20.4	278	2,000	22
19way	27.4x24.7	400	2,000	18
24+1way	32.0x32.0	533	1,000	21
10/8mm	Nom. OD(mm)	Weight(kg/km)	Length/drum(m)	Number of drums in 40'
1way	12.4	105	1,000	104
2way	22.4x12.4	183	2,000	32
4way	22.4x22.4	301	2,000	21
7way	32.4x29.7	460	2,000	12
12/10mm	Nom. OD(mm)	Weight(kg/km)	Length/drum(m)	Number of drums in 40'
1way	14.4	120	1,000	96
2way	26.4x14.4	211	2,000	24
4way	26.4x26.4	348	2,000	18
7way	38.4x35.2	533	1,000	14



# AERIAL APPLICATION

## Description

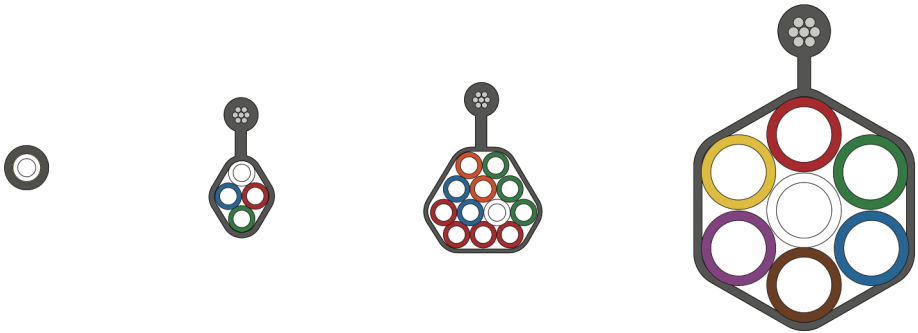
As Aerial installation product , it can deploy cost effective network within a short time. It is very useful product and solution in case of installing existing telecommunication pole or power pole, if there is urgent construction due date and project owner cannot get road construction permit under special condition.



# AERIAL FIGURE-8 DUCT

## Description

The figure-8 self-supporting aerial microduct is used for conditions where microduct cannot be installed to underground such as rocky mountain area, stream crossing or road crossing area and the area where the existing pole exist with cost saving. This microduct has high UV resistance with black polyethylene sheath for outdoor use and their strength member is galvanized wire strand with high tensile strength to withstand severe load.







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