

FTTR hybrid composite cable

DESCRIPTION

FTTR on-site Photoelectric Composite Cable is a hybrid cable of integrated optical fiber and electrical copper wire; applicable for indoor tube conduct wiring, on-site optical fiber connection and electrical transmission, aims for data transmission and remote equipment electricity supply.

FEATURES

- Optoelectronic integration, data transmission and remote electricity supply simultaneously
- On-site cable wiring, consecution and terminal connection
- XC/UPC connector pre-applied or field fabrication alternative
- Great bending properties and excellent flexibility, convenient for construction



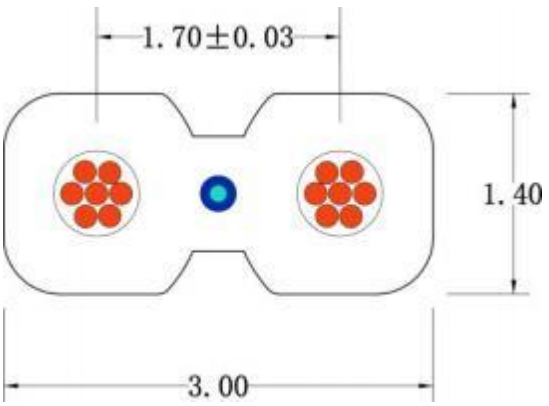
APPLICATIONS

- Indoor tube conduct wiring
- On-site optical fiber connection with terminal equipments
- Remote intensive electricity supply

SPECIFICATIONS

Environment	Indoor
Connector	XC/UPC double-ended pre-applied connector
Operatating Temperature	- 10 °C ~ +60 °C
Relative Humidity	0 % ~ 95 % (+40 °C)
Storage Temperature	- 15 °C ~ +60 °C
Rated Operational Voltage (DC)	48~56 V
Rated Operational Current (DC)	0.25 A
Maxium Transmitting Distance	Backbone FOC (length)=20m, Branch FOC= 80m (Max) Backbone FOC (length)=2m, Branch FOC= 150m (Max)
Flame Retardancy	UL94-V0

Cross-section of FTTR hybrid composite cable



Non contractual pictures

FTTR hybrid composite cable

FTTR Hybrid Composite Cable-Structure Description

Fiber	Fiber	G.657A2 1 core
Conductor	Material	Stranded Copper, 7X0.16 mm/26 AWGX2
	Conductor Spacing	1.70±0.03 mm (Key Dimension)
Outer Jacket	Material	White: LSZH/Invisible: PVC
	Overall Dimension	1.4 mm ×3.0 mm
Connector Length		5/10/15/20/25/30/35/40/45/50/55/ 60/65/70/75/80m Customized Acceptable

Connector Optical and Mechanical Performance Indicators

Connector Type	Double-ended XC/UPC Connector
Dimension (H×W×D)	6.5 mm × 6 mm × 27 mm
IL	≤ 0.50 dB
RL	≥ 50 dB
Tension	50 N
Reliability	50 times

FTTR hybrid composite cable-Electrical Performance Indicators

Insulation Resistance	≥ 500 mΩ , at room temperature DC 300 V, 1 min
Medium Crushing Resistance	1000 V, 1 min, Leakage current less than 0.5 mA
Conductivity Test	No short or open circuit at room temperature
Contact Resistance	$R_{test} \leq (R_{cable}) + 2 \times 50 \text{ m}\Omega$

FTTR Hybrid Composite Cable - Mechanical Performance Indicators

Tension(Long Term /Short Term)	100 N / 60 N
Flattening Test(Long Term /Short Term)	2200 N/100 mm, 1100 N/100 mm
Min. Bending Radius (static /dynamic)	18 mm / 36 mm
Wire Bending	No broken with loading 500 g at ±90° for 8 times; No short/open circuit at Voltage withstand and insulation resistance test.