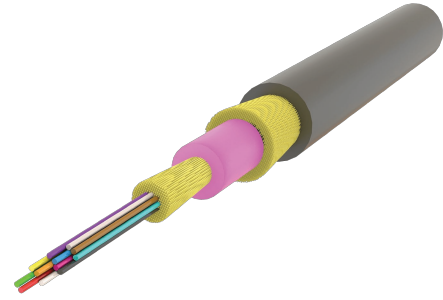


FTTX MF Distribution Cable

Design Type U-(ZN)H Universal Cable

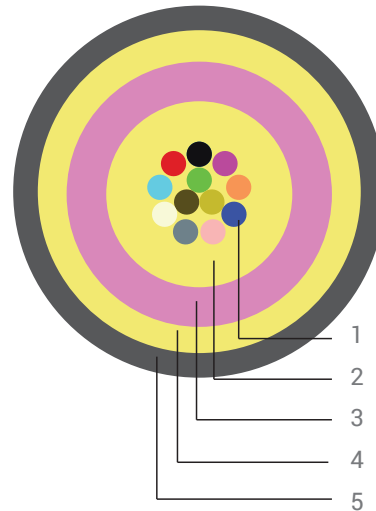
Properties

Metal free universal cable
Completely dry design
For direct connector assembly
High flexibility and light weight
Halogen free and non-corrosive fire gases
Low fire load for high safety requirements
Jacket material in accordance with UL 94V-0
LSZH - FR, UV Resistant Outer Jacket



Cable Construction

1 Fiber	SM or MM (250 μ)
2 Strength Member	Aramid yarn
3 Inner Jacket	LSZH
4 Strength Member	Swellable Aramid Yarn
5 Outer Jacket	LSZH - FR, UV Resistant



Sheath Marking

Print Color/Method	White / Ink-Jet	(length marking 1 m intervals)
Cable Printing	Manufacturer name, fiber count, fiber type, product code, cable type, date, meter marking	

Optical Characteristics and Physical Properties

Fiber Type		SM	OM1	OM2	OM3	OM4
Jacket Color		Black	Black	Black	Black	Black
Core Diameter (μm)		9.0 ±0.5	62.5 ±2.5	50 ±2.5	50 ±2.5	50 ±2.5
Cladding Diameter (μm)		125 ±5.0	125 ±5.0	125 ±5.0	125 ±5.0	125 ±5.0
Primary Coating Diameter (μm)		245 ±10	245 ±10	245 ±10	245 ±10	245 ±10
Attenuation (max. in cable) (dB/km)	@1310 nm	≤ 0.40	-	-	-	-
	@1550 nm	≤ 0.30	-	-	-	-
	@850 nm	-	≤ 3.4	≤ 3.0	≤ 3.0	≤ 3.0
	@1300 nm	-	≤ 1.0	≤ 1.0	≤ 1.0	≤ 1.0
Bandwidth (overfilled)	@850 nm	-	200 Mhz*km	500 Mhz*km	1500 Mhz*km	3500 Mhz*km
	@1300 nm	-	500 Mhz*km	500 Mhz*km	500 Mhz*km	500 Mhz*km
Serial Ethernet 1 Gigabit	@850 nm	-	-	-	1000 meters	1040 meters
	@1300 nm	-	-	-	600 meters	600 meters
Serial Ethernet 10 Gigabit	@850 nm	-	-	-	300 meters	550 meters
	@1300 nm	-	-	-	300 meters	300 meters

Mechanical and Environmental Properties

Test	Test Conditions	Type	Value	Unit	Method
Jacket Diameter	-	All types	4.8	mm	-
Approx. Weight	-	All types	23	kg/km	-
Max. Tensile Strength	During installation	All types	800	N	IEC 60794-1-2 E1
	In service		500		
Min. Bending Radius	During installation	All types	100	mm	IEC 60794-1-2 E11
	In service		70		
Crush Resistance	Short term	All types	5000	N/dm	IEC 60794-1-2 E3
	Long term		500		
Impact Resistance	Wp=2.21 J	All types	50	impact	IEC 60794-1-2 E4
Temperature Range	During installation	All types	-10 to +50		IEC 60794-1-22 F12
	In service		-20 to +70 °C		
	In storage		-20 to +70		

Combustion Properties

Fiber Type	Test Conditions	Value	Unit	Result	Method
Fire Load	-	1.10	Mj/m	-	-
Fire Propagation	On a vertical single cable	-	-	passed	IEC 60332-1-2
Smoke Density	-	-	-	passed	IEC 61034-2
Halogen Acid Gas	Jacket material	-	-	passed	IEC 60754-1
Degree of Acidity	Jacket material	-	-	passed	IEC 60754-2

Cable Coding System

U - 12 - MF - 48 - A2 - H - H - BK

Type	Fiber Count	Cable Type	Diameter	Fiber Type	Sheath	Sheath	Color
Universal: U	8 Fibers: 08 12 Fibers: 12 24 Fibers: 24	Multi-fiber: MF	4.8 mm: 48	SM G.657 A2: A2 SM G.657 B3: B3 MM G.651 OM1: M1 MM G.651 OM2: M2 MM G.651 OM3: M3 MM G.651 OM4: M4	LSZH: H	LSZH: H	Black: BK A2 Black: BK B3 Black: BK M1 Black: BK M2 Black: BK M3 Black: BK M4