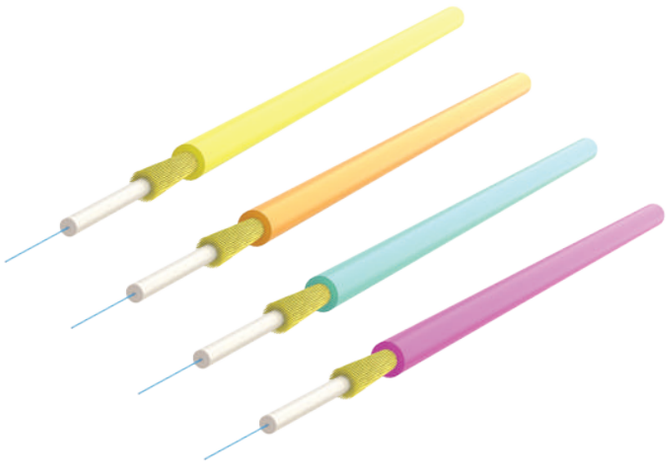
Simplex Fiber Cable

Design Type I-V(ZN)H Indoor

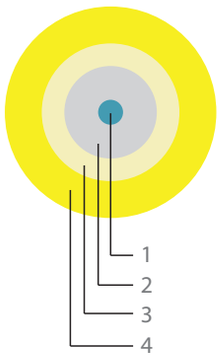


Properties

- Metal free indoor 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

Cable Construction

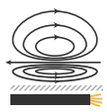
1	Fiber	SM or MM (250 µ)
2	Semi-Tight Buffer Tube	900µ LSZH
3	Strength Member	Aramid yarn
4	Outer Jacket	LSZH



Perfect for Cord Manufacture

All Dry Materials

Compact and Flexible



All Dielectric Construction

Sheath Marking

Print Color/Method	Black / 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		Yellow	Orange	Orange	Aqua	Violet
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	@1310 nm	≤ 0.40	-	-	-	-
(max. in cable)	@1550 nm	≤ 0.30	-	-	-	-
(dB/km)	@850 nm	-	≤ 3.4	≤ 3.0	≤ 3.0	≤ 3.0
	@1300 nm	-	≤ 1.0	≤ 1.0	≤ 1.0	≤ 1.0
Bandwitdh	@850 nm	-	200 Mhz*km	500 Mhz*km	1500 Mhz*km	3500 Mhz*km
(overfilled)	@1300 nm	-	500 Mhz*km	500 Mhz*km	500 Mhz*km	500 Mhz*km
Serial Ethernet	@850 nm	-	-	-	1000 meters	1040 meters
1 Gigabit	@1300 nm	-	-	-	600 meters	600 meters
Serial Ethernet	@850 nm	-	-	-	300 meters	550 meters
10 Gigabit	@1300 nm	-	-	-	300 meters	300 meters

Mechanical and Environmental Properties

Test	Test Conditions	Type	Value	Unit	Method
Semi Tight Diameter	-	All types	0.9	mm	IEC 60811-203
Approx. Cable Diameter/ Approx. Cable Weight	-	1.8mm	3.5	kg/km	IEC 60811-203
		2.0mm	4.1		
		2.7mm	7.4		
Max. Tensile Strength	During installation	1.8 / 2.0	200	N	IEC 60794-1-2 E1
	In service		100		
	During installation	2.7	400	N	IEC 60794-1-2 E1
	In service		200		
Min. Bending Radius	During installation	1.8 / 2.0	50	mm	IEC 60794-1-2 E11
	In service		25		
	During installation	2.7	50	mm	IEC 60794-1-2 E11
	In service		25		
Crush Resistance	Short term	1.8 / 2.0	3000	N/dm	IEC 60794-1-2 E3
	Long term		1000		
	Short term	2.7	4000	N/dm	IEC 60794-1-2 E3
	Long term		1000		
Impact Resistance	Wp=0.5J	1.8 / 2.0	3	impact	IEC 60794-1-2 E4
	Wp=1.0J	2.7	20		
Repeated Bending	r=25mm	All types	5000	cycles	IEC 60794-1-2 E6
Temperature Range	During installation	All types	-10 to +50	°C	IEC 60794-1-22 F1
	In service		-25 to +70		
	In storage		-40 to +70		

Combustion Properties

Fiber Type	Test Conditions	Type	Value	Unit	Result	Method
Fire Load	-	1.8	0.07	Mj/m	-	-
		2.0	0.08			
		2.7	0.15			
Fire Propagation	On a vertical single cable	All types	-	-	passed	IEC 60332-1-2
Smoke Density		All types	-	-	passed	IEC 61034-2
Halogen Acid Gas	Jacket material	All types	-	-	passed	IEC 60754-1
Degree of Acidity	Jacket material	All types	-	-	passed	IEC 60754-2

Cable Coding System

I - 01 - SX - 20 - S9H - A2 - H - YE

Type	Fiber Count	Cable Type	Diameter	Buffer Type	Fiber Type	Sheath Mat.	Color
Indoor: I	1 Fiber: 01	Simplex: SX	1.8 mm: 18 2.0 mm: 20 2.7 mm: 27	S-Tight 900µm: S9H Tight 900µm: T9H	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	Yellow: YE A2 Yellow: YE B3 Orange: OG M1 Orange: OG M2 Aqua: AQ M3 Violet: VT M4