

## Duplex Fig8 Fiber Cable 1x2

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

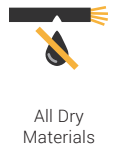
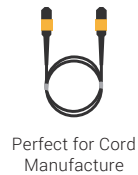
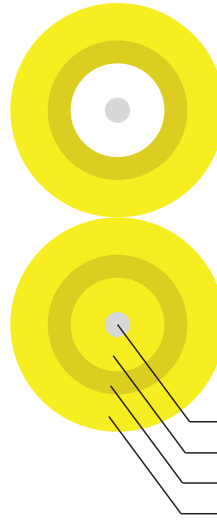
1 Fiber	SM or MM (250 μ)
2 Semi-Tight Buffer Tube	900μ LSZH
3 Strength Member	Aramid yarn
4 Outer Jacket	LSZH

### 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 (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
Approx. Cable Diameter		1.8x3.7mm	6.6		
Approx. Cable Weight	-	2.0x4.1mm	9.0	kg/km	IEC 60811-203
		3.0x6.1mm	17.5		
Max. Tensile Strength	During installation	1.8 & 2.0 mm	400	N	IEC 60794-1-2 E1
	In service		200		
	During installation	3.0 mm	800		
	In service		400		
Min. Bending Radius	During installation	All Types	50	mm	IEC 60794-1-2 E11
	In service		25		
Crush Resistance	Short term	All Types	4000	N/dm	IEC 60794-1-2 E3
	Long term		1000		
Impact Resistance	Wp=0.74J	All Types	40	impact	IEC 60794-1-2 E4
	Wp=1J		20		
Repeated Bending	r=25mm w=0.5 kg	All Types	5000	cycles	IEC 60794-1-2 E6
Temperature Range	During installation		-10 to +50		
	In service	All types	-25 to +70	°C	IEC 60794-1-22 F1
	In storage		-40 to +70		

## Combustion Properties

Property	Test Conditions	Type	Value	Unit	Result	Method
Fire Load		1.8x3.7	0.13	Mj/m	-	-
		2.0x4.1	0.22			
		3.0x6.1	0.34			
Fire Propagation	On a vertical single cable	-	-	-	passed	IEC 60332-1-2
Smoke Density	Jacket material	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

Type	Fiber Count	Cable Type	Diameter	Buffer Type	Fiber Type	Sheath Mat.	Color
Indoor: I	2 Fibers: 02	Duplex: ZX	1.8x3.7 mm: 1837 2.0x4.1 mm: 2041 3.0x6.1 mm: 3061	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