

## Duplex Cable - FIG 0

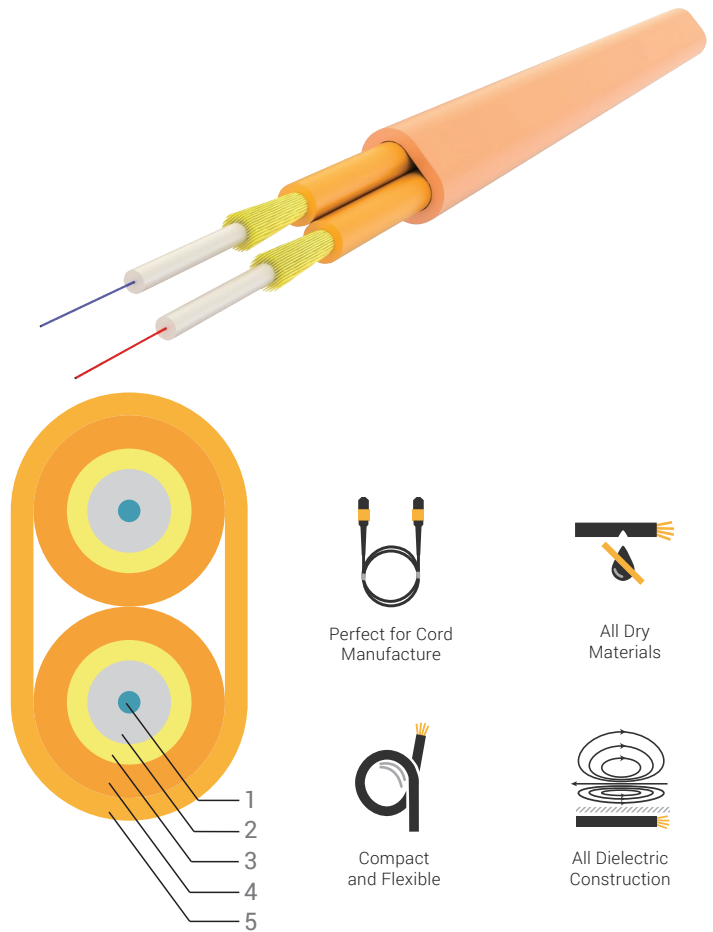
### Design Type I-V(ZN)H-FIG 0 Indoor Cable

#### 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 Inner Jacket	LSZH
5 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
Tube Diameter	-	3.1x5.2	0.9 Semi Tight	mm	IEC 60811-203
		3.5x6.2	0.9 Semi Tight		
Simplex Diameter	-	3.1x5.2	2.0	mm	IEC 60811-203
		3.5x6.2	2.7		
Approx. Cable Weight	-	3.1x5.2	18.0	kg/km	-
		3.5x6.2	24.0		
Max. Tensile Strength	During installation	3.1x5.2	400	N	IEC 60794-1-2 E1
	In service		2x100		
	During installation	3.5x6.2	800	N	IEC 60794-1-2 E1
	In service		2x200		
Min. Bending Radius	During installation	All Types	50	mm	IEC 60794-1-2 E11
	In service		25		
Crush Resistance	Short term	3.1x5.2	7000	N/dm	IEC 60794-1-2 E3
	Long term		5000		
	Short term	3.5x6.2	10000	N/dm	IEC 60794-1-2 E3
	Long term		5000		
Impact Resistance	Wp=1.0J	All Types	20	impact	IEC 60794-1-2 E4
Repeated Bending	r=25mm w=0.5 kg	All Types	10000	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		-25 to +70		

## Combustion Properties

Fiber Type	Test Conditions	Type	Value	Unit	Result	Method
Fire Load	-	3.1x5.2	0.33	Mj/m	-	-
		3.5x6.2	0.45			
Fire Propagation	On a vertical single cable	-	-	-	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

Type	Fiber Count	Cable Type	Diameter	Buffer Type	Fiber Type	Sheath Mat.	Sheath Mat.	Color
Indoor: I	2 Fibers: 02	Duplex Fig 0: DX	3.1x5.2 mm: 3152 3.5x6.2 mm: 3562	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	LSZH: H	Yellow: YE A2 Yellow: YE B3 Orange: OR M1 Orange: OR M2 Aqua: AQ M3 Violet: VI M4