

Distribution Cable up to 24 Fibers

Design Type U-(ZN)H(ZN)H Universal 4.8 mm

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

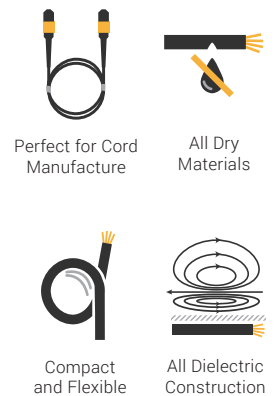
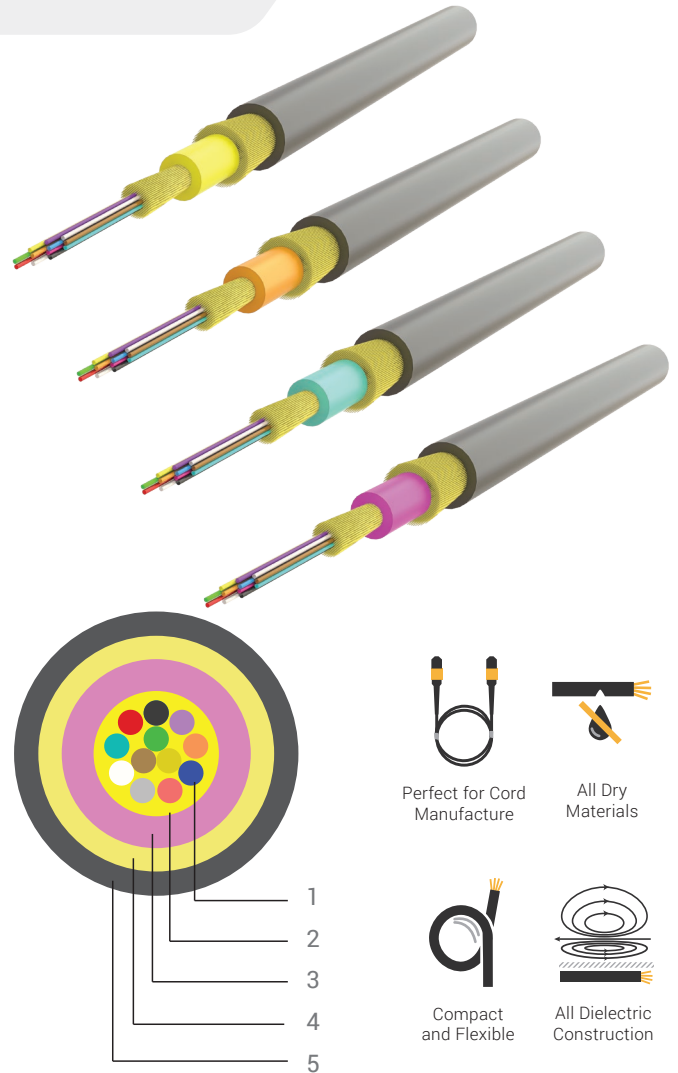
1 Fiber	SM or MM (250 μ)
2 Strength Member	Aramid yarn
3 Inner Jacket	LSZH
4 Strength Member	Swellable Aramid Yarn
5 Outer Jacket	LSZH - FR, UV Resistant

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

Combustion Properties

Property	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