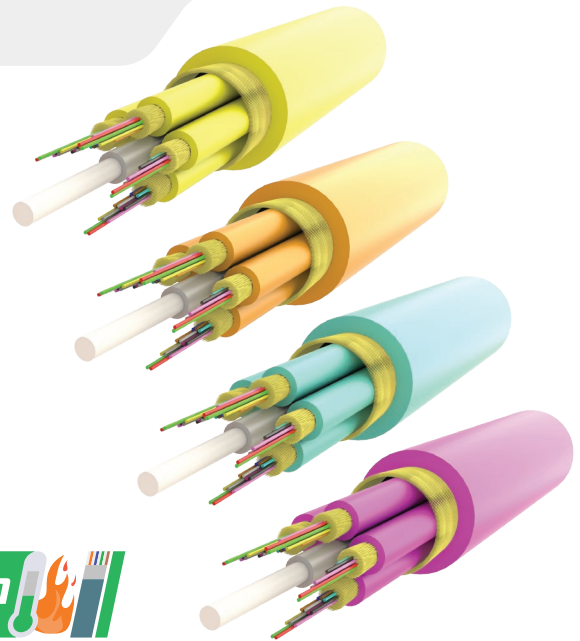


Multi-Fiber Breakout Cable up to 288 Fibers

Design Type **UT-(ZN)H(ZN)H Universal**



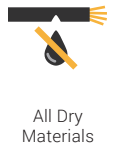
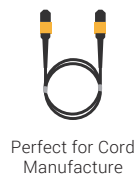
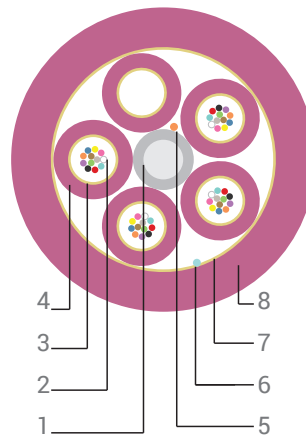
Properties

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 Central Strength Member	FRP
2 Fiber	SM or MM (250 μ)
3 Strength Member	Swellable Aramid Yarn
4 Inner Jacket	LSZH UV Resistant
5 Water Blocking Element	Water Swellable Yarn
6 Ripcord	Polyester
7 Strength Member	Swellable Aramid Yarn
8 Outer Jacket	LSZH - FR, UV Resistant



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	-	All types	3.0	mm	-
Approx. Cable Diameter - Weight		4x12	11.5 - 124.0	mm-kg/km	-
		6x12	12.4 - 147.0		
		12x12	18.0 - 315.0		
		12x24	18.6 - 350.0		
Max. Tensile Strength	During installation	4x12	1800/1300	N	IEC 60794-1-2 E1
	/ In service	6x12 / 12x12	2400/1500		
		12x24	4000/3000		
Min. Bending Radius	During installation	4x12	115/170	mm	IEC 60794-1-2 E11
	/ In service	6x12	125/185		
		12x12	180/270		
		12x24	185/280		
Crush Resistance	Short term	All types	3000	N/dm	IEC 60794-1-2 E3
	Long term		1500		
Impact Resistance	Wp=2.21 J	All types	20	impact	IEC 60794-1-2 E4
Temperature Range	During installation		-10 to +50	°C	IEC 60794-1-22 F12
	In service	-	-30 to +70		
	In storage		-40 to +70		

Combustion Properties

Property	Test Conditions	Type	Result	Method
Euroclass CPR Level	-	All types	B2ca, s1 a, d0, a1	-
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

U - 48 - MFB - 115 - MF - M4 - H - H - VT - B2ca

Type	Fiber Count	Cable Type	Diameter	Tube Type	Fiber Type	Sheath Mat.	Sheath Mat.	Color
Universal: U	48 Fiber: 48 72 Fiber: 72 144 Fiber: 144 288 Fiber: 288	Multi-Fiber Breakout: MFB	11.5 mm: 115 12.4 mm: 124 18.0 mm: 180 18.6 mm: 186	Multi-Fiber: MF	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: OG M1 Orange: OG M2 Aqua: AQ M3 Violet: VT M4