

Multi Dry Loose Tube Cable up to 144 Fibers

Design Type IT-BQ(ZN)H Indoor



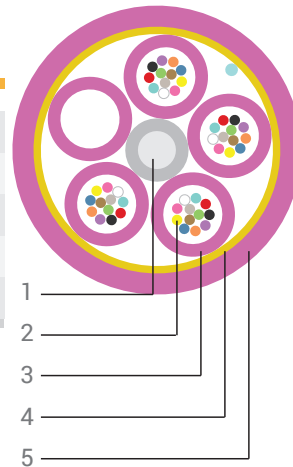
Properties

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

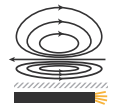
1 Central Strength Member	FRP
2 Fiber	SM or MM (250 μ)
3 Loose Tube	LSZH
4 Strength Member	Aramid yarn
5 Outer Jacket	LSZH - FR, UV Resistant



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 (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	-	4x12-6x12	2.0	mm	-
		6x24	3.0		
Approx. Cable Diameter - Weight	-	4x12	6.8 - 38.5	mm-kg/km	-
		6x12	7.3 - 45.0		
		6x24	8.9 - 67.0		
Max. Tensile Strength	During installation / In service	4x12	1000/500	N	IEC 60794-1-2 E1
		6x12	1200/800		
		6x24	1200/800		
Min. Bending Radius	During installation	All types	15xD	mm	IEC 60794-1-2 E11
	In service		10xD		
Crush Resistance	Short term	All types	5000	N/dm	IEC 60794-1-2 E3
	Long term		1000		
Impact Resistance	Wp=1.0 J	All types	50	impact	IEC 60794-1-2 E4
Temperature Range	During installation		-10 to +50	°C	IEC 60794-1-22 F12
	In service	-	-10 to +60		
	In storage		-20 to +70		

Combustion Properties

Property	Test Conditions	Type	Result	Method
Euroclass CPR Level	-	All types	B2ca, s1a, 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

I - 48 - MDL - 68 - DI - M4 - H - H - VT - B2ca

Type	Fiber Count	Cable Type	Diameter	Tube Type	Fiber Type	Sheath Mat.	Sheath Mat.	Color
Indoor. I	48 Fiber: 48 72 Fiber: 72 144 Fiber: 144	Multi Dry Loose Tube: MDL	6.8 mm: 68 7.3 mm: 73 8.9 mm: 89	Distribution: DI	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