

Multi Dry Loose Tube Cable up to 144 Fibers

Design Type I-BQ(BN)H Indoor



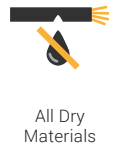
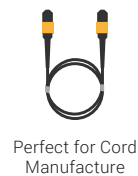
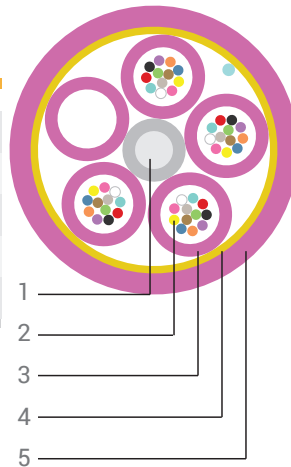
Properties

- 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 |



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	@850 nm	-	-	-	1000 meters	1040 meters
	@1300 nm	-	-	-	600 meters	600 meters
Serial Ethernet	@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		
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

Fiber Type	Test Conditions	Type	Value	Unit	Result	Method
Fire Load	-	4x12 FO	1.72	Mj/m	-	-
		6x12 FO	3.40			
		6x24 FO	4.10			
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 - DI - 68 - MDL - M4 - H - BK							
Type	Fiber Count	Cable Type	Diameter	Tube Type	Fiber Type	Sheath Mat.	Color
Indoor: I	48 Fiber: 48 72 Fiber: 72 144 Fiber: 144	Distribution: DI	6.8 mm: 68 7.3 mm: 73 8.9 mm: 89	Multi Dry Loose Tube: MDL	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