

Mini Breakout Cable up to 24 Fibers

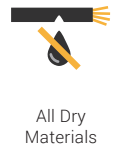
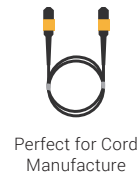
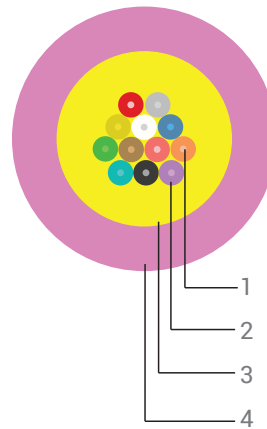
Design Type I-V(ZN)H Indoor

Properties

- Metal free indoor and outdoor 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

Cable Construction

| | |
|---------------------|------------------|
| 1 Fiber | SM or MM (250 μ) |
| 2 Tight Buffer Tube | 900μ LSZH |
| 3 Strength Member | Aramid |
| 4 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 |
|---------------------------------|---------------------|-------------|------------|------------|-------------------|
| Tight Diameter | - | All types | 0.9 | mm | IEC 60811-203 |
| Approx. Cable Diameter - Weight | - | 4 Fibers | 4.6 - 16 | mm - kg/km | IEC 60811-203 |
| | | 6 Fibers | 5.2 - 20 | | |
| | | 8 Fibers | 5.8 - 31 | | |
| | | 12 Fibers | 6.5 - 42 | | |
| | | 24 Fibers | 8.0 - 55 | | |
| Max. Tensile Strength | During Installation | All types | 800 | N | IEC 60794-1-2 E1 |
| | In Service | | 500 | | |
| Min. Bending Radius | During Installation | All types | 15xD | mm | IEC 60794-1-2 E11 |
| | In Service | | 10xD | | |
| Crush Resistance | ShortTerm | All types | 4000 | N/dm | IEC 60794-1-2 E3 |
| | LongTerm | | 1500 | | |
| Impact Resistance | Wp=2.21J | All types | 100 | Impact | IEC 60794-1-2 E4 |
| Repeated Bending | r=40mm, weight=1kg | 4 Fibers | 1000 | cycles | IEC 60794-1-2 E6 |
| | r=50mm, weight=1kg | 6-24 Fibers | 2000 | | |
| Temperature Range | During installation | All types | -10 to +50 | °C | IEC 60794-1-22 F1 |
| | In service | | -20 to +70 | | |
| | In storage | | -25 to +70 | | |

Combustion Properties

| Fiber Type | Test Conditions | Type | Value | Unit | Result | Method |
|-------------------|----------------------------|-----------|-------|------|--------|---------------|
| Fire Load | - | 4 FO | 0.4 | Mj/m | - | - |
| | | 6 FO | 0.7 | | | |
| | | 8 FO | 0.9 | | | |
| | | 12 FO | 1.1 | | | |
| | | 24 FO | 1.7 | | | |
| 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 - 12 - RI - 65 - T9H - M4 - H - VT

| Type | Fiber Count | Cable Type | Diameter | Buffer Type | Fiber Type | Sheath Mat. | Color |
|-----------|---|------------|--|--|--|-------------|--|
| Indoor: I | 4 Fiber: 04 6 Fiber: 06 8 Fiber: 08 12 Fiber: 12 24 Fiber: 24 | Riser: RI | 4.6 mm: 46 5.2 mm: 52 5.8 mm: 58 6.5 mm: 65 8.0 mm: 80 | 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 | Yellow: YE A2 Yellow: YE B3 Orange: OG M1 Orange: OG M2 Aqua: AQ M3 Violet: VT M4 |