

## Tight Tube 0.9 mm

### Design Type I-VH Indoor Cable

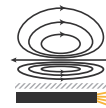
#### Properties

- Metal free indoor cable
- Jelly free, dry design
- 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        |



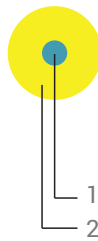
All Dielectric Construction



Compact and Flexible



All Dry Materials



#### 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<br>(max. in cable)<br>(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<br>(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<br>1 Gigabit              | @850 nm  | -        | -          | -          | 1000 meters | 1040 meters |
|                                           | @1300 nm | -        | -          | -          | 600 meters  | 600 meters  |
| Serial Ethernet<br>10 Gigabit             | @850 nm  | -        | -          | -          | 300 meters  | 550 meters  |
|                                           | @1300 nm | -        | -          | -          | 300 meters  | 300 meters  |

## Mechanical and Environmental Properties

| Test                  | Test Conditions           | Value      | Unit   | Method             |
|-----------------------|---------------------------|------------|--------|--------------------|
| Tube Diameter         | -                         | 0.9        | mm     | IIEC 60811-203     |
| Approx. Weight        | -                         | 0.8        | kg/km  | -                  |
| Max. Tensile Strength | During installation       | 20         | N      | IEC 60794-1-2 E1   |
|                       | In service                | 10         |        |                    |
| Min. Bending Radius   | During installation       | 25         | mm     | IEC 60794-1-2 E11  |
|                       | In service                | 25         |        |                    |
| Crush Resistance      | Short term                | 1000       | N/dm   | IEC 60794-1-2 E3   |
|                       | Long term                 | 500        |        |                    |
| Impact Resistance     | Wp=0.74J                  | 3          | impact | IEC 60794-1-2 E4   |
| Kink Resistance       | r=5mm                     |            | passed | IEC 60794-1-2 E10  |
| Torsion               | 360°, length=1000mm, F=5N | 3          | cycles | IEC 60794-1-2 E7   |
| Temperature Range     | During installation       | -10 to +50 | °C     | IEC 60794-1-22 F12 |
|                       | In service                | -25 to +75 |        |                    |
|                       | In storage                | -40 to +75 |        |                    |

## Cable Coding System

I - 01 - TB - 9 - H - A2 - YE

| Type      | Fiber Count | Cable Type | Diameter  | Sheath  | Fiber Type                                                                                                         | Color                                                                                            |
|-----------|-------------|------------|-----------|---------|--------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------|
| Indoor: I | 1 Fiber: 01 | Tight: TB  | 0.9 mm: 9 | LSZH: H | SM G.657 A2: A2<br>SM G.657 B3: B3<br>MM G.651 OM1: M1<br>MM G.651 OM2: M2<br>MM G.651 OM3: M3<br>MM G.651 OM4: M4 | Yellow: YE A2<br>Yellow: YE B3<br>Orange: OR M1<br>Orange: OR M2<br>Aqua: AQ M3<br>Violet: VI M4 |