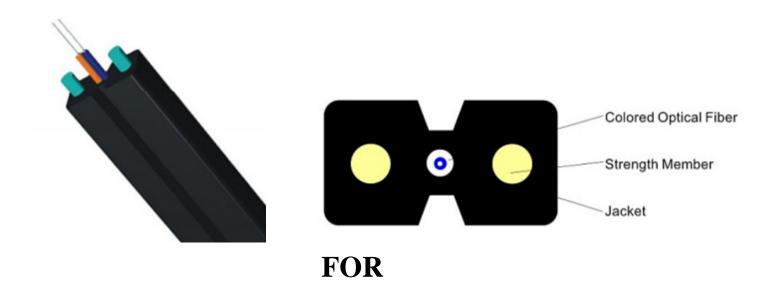




### **SPECIFICATION**



# Indoor FTTH Drop CABLE Single mode 1 2 4core LSZH





### 1. Scope of applications

The specifications are suitable for the general requirements of fiber optic telecommunicating and FTTH application.

### **Cable description**

Construction: coloured optical fibers, 2 parallel FRP(Fiber Reinforced Plastic) strength member, LSZH Jacket

### 2. Optical fiber

Table 1. Characteristics of the Single Mode Fiber (ref. ITU-T G657A)

| ITEMS  | UNITS     | SPECIFICATION                           |  |
|--|-----------|---|--|
| Attenuation                                      | dB/km     | ≤0.4 at 1310nm ≤0.3 at 1550nm           |  |
| Chromatic Dispersion                             | ps/nm.km  | ≤3.5 at 1285nm ~ 1330nm ≤18.0 at 1550nm |  |
| Zero Dispersion Wavelength                       | nm        | 1300 ~ 1324                             |  |
| Zero Dispersion Slope                            | ps/nm2.km | ≤0.095                                  |  |
| Cut-off Wavelength (λcc, 22m of a cabled fiber)  | nm        | ≤1260                                   |  |
| Mode Field Diameter                              | $\mu$ m   | 8.6±0.5                                 |  |
| Mode Field Concentricity                         | μm        | ≤0.8                                    |  |
| Cladding Diameter                                | μm        | 125±1.0                                 |  |
| Cladding Non-circularity                         | %         | ≤1.0                                    |  |
| Coating cladding concentricity error             | μm        | ≤12.5                                   |  |
| Coating Diameter                                 | $\mu$ m   | 245±10                                  |  |
| Bending loss (Bare fiber) Radius :7.5mm x 1 turn | dB        | ≤0.5 at 1550nm                          |  |
| Proof Test                                       | kpsi      | ≥100                                    |  |





### 3. Optical fiber cable

Construction of optical fiber cable, see

Table 2

| Items                                    | Description  |  |
|--|--|--|
| No. of fiber                             | 2  |  |
| Fiber model no.                          | Single mode: G.657A                                  |  |
| Fiber colour                             | Blue, orange   |  |
| Outer diameter of colour coating         | 250±15um   |  |
| Dielectric strength member               | FRP  |  |
| Jacket                                   | LSZH   |  |
| Colour of Jacket                         | White  |  |
| Size of optical fiber cable width height | $3.1 \pm 0.2 \text{ mm}$<br>$1.9 \pm 0.2 \text{ mm}$ |  |
| Approx. weight cable Kg/KM               | $9.0\pm1.0~\mathrm{kg/km}$                           |  |

#### Mechanical and environmental data:

| Temperature range                               | Storage/Shipping Temperature range | $^{\circ}$           | -10°C−− +60°C |  |
|---|------------------------------------|----------------------|---------------|--|
|   | Operating temperature range        |                      |               |  |
| Min.Bending Radius (mm)                         | Dynamic                            | mm                   | nm 20H        |  |
| Min.Bending Radius (mm)                         | Static                             | mm                   | 10H           |  |
| Max.Tension (N)                                 | Short-term                         | N                    | 80            |  |
| Max.Tension (N)                                 | Long-term                          | N 40                 |               |  |
| Max.Crushing Resistance (N/100mm <sup>2</sup> ) |                                    | N/100mm <sup>2</sup> | 800           |  |





#### 4. Packing and markings

Printings on optical fiber cable

White printings are printed at intervals of 1 metre with the following information. Clients can select their own wordings.

- 1. Metre marks
- 2. Type of cable and fiber count
- 3. Name of Manufacturer
- 4. Year of manufacture

Packing of optical fiber cable

Standard length is 1KM, other lengths subject to negotiation

Wooden reel

Contents of sticker on the wooden reel are as below:

- 1. Type of cable, fiber count
- 2. Length
- 3. Gross weight KGS
- 4. Reel no.
- 5. Year of manufacture
- 6. The following particulars marked on weather proof materials will appear on the outside of reel flanges
  - a Arrow indicating the direction of winding
  - b Cable needs to be wound tightly on the wooden reel to avoid damage during shipping and operation



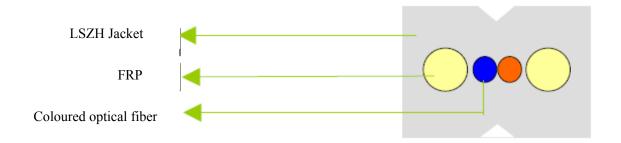


Diameter, weight, minimum bending radius of optical fiber cable

| No. of fibers | Approx. Cable outer diameter (±0.2 mm) | Approx. weight of | Minimum bending radius MM |            |
|---------------|--|-------------------|---------------------------|------------|
|               |  | cableKg/KM        | No load                   | Under load |
| 1             | 3.1MM*1.9MM                            | 9.0               | 10                        | 20         |
| 2             | 3.1MM*1.9MM                            | 9.0               | 10                        | 20         |
| 4             | 3.8MM*1.9MM                            | 10.0              | 10                        | 20         |

The actual weight and diameter of the cable can differ from the above values

#### Cross sectional drawings of cable



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