

## BIRLA ERICSSON OPTICAL LIMITED

### TECHNICAL DETAILS OF UPTO 12 FIBRE FLAT DROP CABLE (LOOSE TUBE DESIGN)

#### **INTRODUCTION**

Outdoor drop cable having FRP rod as strength member & single mode fibre in full compliance with ITU-T G 652 D. The offered cable is fully compliant to the relevant IEC specification.

#### **(1) CABLE DESIGN**

- \* Singlemode fibre in full compliance with ITU-T Rec G652 D
- \* Loose buffer tubes fully filled
- \* FRP rod used as Strength Member
- \* UV Stabilized Black HDPE

#### **(2) APPLICATION:**

- \* Drop Cable suitable for outdoor Aerial Application

#### **(3) SPECIAL FEATURES:**

- \* Easy access to the fibres
- \* Completely Dielectric

#### **(4) MECHANICAL CHARACTERISTICS:**

- Temperature Range (IEC 60794-1-2-F1)
- |                         |               |
|-------------------------|---------------|
| Laying and Installation | -30° to +70°C |
| Operation               | -30° to +70°C |
| Transport and Storage   | -30° to +70°C |
- Cable Bending Radius (IEC 60794-1-2-E11)
- |                                 |        |
|---------------------------------|--------|
| During Installation (Full Load) | 300 mm |
| Installed (No Load)             | 200 mm |
- Tensile Force (IEC 60794-1-2-E1) 1000 N
- Crush Resistance (IEC 60794-1-2-E3) 1000 N (100 X 100 mm) for 60 sec
- Impact (IEC 60794-1-E4) 0.3 Kg, 0.5mtr height,  
3 no's at different location
- Torsion (IEC 60794-1-2-E7) 50 N ± 180°/m, 10 cycles

#### **(5) OPTICAL CHARACTERISTICS:**

Fibre used in the cable manufacturing fully comply to ITU-T-Rec G652 D as per attached data sheet.

- |                        |              |
|------------------------|--------------|
| Attenuation at 1310 nm | ≤ 0.38 dB/Km |
| Attenuation at 1550 nm | ≤ 0.25 dB/Km |

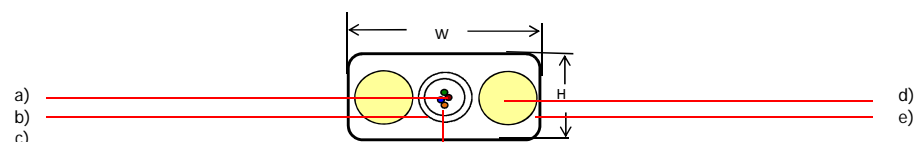
#### **(6) COLOUR CODING:**

- |                                 |                             |
|---------------------------------|-----------------------------|
| Colour of Fibres in loose tube: | Blue, Orange, Green & Brown |
| Colour of loose tube:           | Natural                     |

#### **(7) CABLE CONSTRUCTIONAL DETAILS:**

- |                          |                          |
|--------------------------|--------------------------|
| a) Primary Coated Fibre  | Single Mode - G 652 D    |
| b) Loose Tube            | PBTP                     |
| c) Tube Filling Compound | Thixotropic Jelly        |
| d) Strength Member       | FRP Rod                  |
| e) Sheath                | UV Stabilized Black HDPE |

**Typical Cross-section for 4 F OFC**



#### **(8) DELIVERY INFORMATION:**

- |                                  |                      |
|----------------------------------|----------------------|
| Nominal Cable Weight (Kg/Km)     | 28                   |
| Nominal Width (W) of Cable (mm)  | 7.1                  |
| Nominal Height (H) of Cable (mm) | 3.3                  |
| Standard Length Per Drum (Mtr)   | 500/1000/2000 ± 10 % |

#### **(9) CABLE SHEATH MARKING:**

Cable sheath shall be marked with Ink Jet Printing method in contrast colour. **Marking details can be customized.**

#### **(10) CABLE DRUM PACKING:**

Every length will be delivered on non-returnable spools. Generally the box of the cable spools will be marked with following: **These details can also be customised.**

- \* Country of origin.
- \* Manufacturer's name
- \* Number of fibers.
- \* Nominal cable length in meters
- \* Net and gross weight.
- \* Drum number
- \* Customer's name and destination

Both ends of the cable shall be sealed to prevent the ingress of moisture during transportation and storage, physical damage.

DOCUMENT No	RMC/BEOL/0258
ISSUE NO. & DATE	01 DTD : 02-12-12
REVISION No. & DATE	00