

## Fire Resistant Fiber Optic Cables with CPR

**Part Number:** **FRT-090-24/BK - F902401G6B**

**Applications:** Offshore Installations, Campus Backbone, Campus Distribution cabling, General purpose indoor/outdoor LAN, Outdoor Plant Duct Installation

**General Construction:** The cable contains 24 SM G652D color coded optical fibers, each with a 250µm outer diameter. The optical fibers are contained in a loose tube filled with a thixotropic gel. The tube is wrapped with a mica tape for heat protection, reinforced and protected by waterblocking fiber-glass strength yarns and jacketed.

**Outer Jacket Material:** FR-LSZH

**Outer Diameter:** 7.5 mm nom.

**Weight:** 70 kg/km



## Design & Materials

|                            |                   |
|----------------------------|-------------------|
| <b>Buffer Material:</b>    | PBT               |
| <b>Tube Diameter:</b>      | 3.1 mm nom.       |
| <b>Strength Elements:</b>  | E-Glass Yarns     |
| <b>Number of fibers:</b>   | 24                |
| <b>Waterblocking:</b>      | Dry Waterblocking |
| <b>Rip-Cord:</b>           | Yes               |
| <b>Outer Jacket Color:</b> | Black             |
| <b>Marking:</b>            | Per request       |

## Standards

|                              |  |
|------------------------------|--|
| <b>Applicable Standards:</b> | IEC 60794-1-21/22, IEC 60794   |
| <b>Flammability Rating:</b>  | IEC 60331, IEC 60331-25, IEC 60331 FE 90, IEC 60332-3 , IEC 60754-1, IEC 60754-2, IEC 61034-1/2, EN 50575:2014 DcaS2d2a3 (CPR) |
| <b>Installation:</b>         | Guidelines as per IEC TR 62691   |

## Performance

|   |             |
|---|-------------|
| <b>Max. Installation Tensile Load :</b>   | 1800 N max. |
| <b>Max. fiber strain at MIT:</b>          | 0.6 %       |
| <b>Max. Residual Tension (MRS) :</b>      | 540 N max.  |
| <b>Max. Fiber Strain at MRS.:</b>         | 0.2 %       |
| <b>Impact Resistance:</b>                 | 10 N*m      |
| <b>Impact Resistance:</b>                 | 3 cycles    |
| <b>Max. Crush Resistance:</b>             | 400 N/cm    |
| <b>Min. Bend Radius for Installation:</b> | 20xD mm     |
| <b>Min. Bend Radius for Operation:</b>    | 10xD mm     |
| <b>Repeated Bending:</b>                  | 100 cycles  |
| <b>Torsion (L=125 x d):</b>               | 10 cycles   |
| <b>Drip Test:</b>                         | 80 °C       |
| <b>Max. Operating Temperature:</b>        | +70 °C      |
| <b>Min. Operating Temperature:</b>        | -30 °C      |
| <b>Max. Installation Temperature:</b>     | +45 °C      |
| <b>Min. Installation Temperature:</b>     | -20 °C      |
| <b>Max. Storage Temperature:</b>          | +70 °C      |
| <b>Min. Storage Temperature:</b>          | -40 °C      |
| <b>UV Resistance:</b>                     | Yes         |
| <b>Waterblocking:</b>                     | Yes         |