



# Product: <u>GQDNF04</u> ☑

Universal OFC CLT (jelly filled): GLASS YARNS + LSZH + CST + LSZH (HIGH TEMP) with 1 Tube of Ø3.3mm 4f SM OS2 G.657.A2.

# **Product Description**

Universal (Indoor/Outdoor) high installation temperature optical fiber Central Loose Tube (jelly filled tube) cable with glass yarns as strength member, Low Smoke Zero Halogen inner jacket, Corrugated Steel Tape (Full Rodent Protected) armor and Low Smoke Zero Halogen outer jacket. Product feature: This cable has improved rodent protection by Corrugated Steel Tape (Full Rodent Protected). Existing out of 1 Tube with a diameter of 3.3mm with 4 fibers SM OS2 G.657.A2.

# **Technical Specifications**

### **Product Overview**

| Construction Type:     | Central Loose Tube  |
|------------------------|---|
| Environmental Space:   | Indoor/Outdoor  |
| Suitable Applications: | For outdoor and indoor use in structured (data) wiring systems such as industrial backbone, campus backbone, building backbone (riser) and/or horizontal cabling. For outdoor and indoor use in networks for industrial, telecom, cable TV and/or broadcast. Easy to install in ducts, tunnels and trenches and/or tubes. Suitable for Direct Burial. |

## Construction

#### Fiber Cable Construction

| Fiber Type   | Fiber Grade acc. ITU-T | Fiber Count | Fiber Count Subunit Color      |  |
|--|------------------------|-------------|--------------------------------|--|
| OS2  | G.657A2                | 4           | TIA coding (Gxxxxx.T): Natural |  |
| Fiber Color Coding: TIA coding (Gxxxxxx.T): Blue, Orange, Green, Brown |                        |             |                                |  |
| Cable Core Water Tight: Yes  |                        |             |                                |  |
| Cable Core Waterblocking: Waterblocking Glass Yarns                    |                        |             |                                |  |
| Bulk Cable Weight: 187 kg/km   |                        |             |                                |  |

#### SubUnit Specifications

| Number of Active Subunits:   | 1          |
|------------------------------|------------|
| Number of Subunit Positions: | 1          |
| Fibers Per Subunit:          | 4          |
| Subunit Diameter:            | 3.3 mm     |
| Subunit Waterblocking:       | Gel Filled |

# **Jacket Specifications**

| Number of Jackets: | Double Jacket         |
|--------------------|-----------------------|
| Type of Armor:     | Corrugated Steel Tape |

# Inner Jacket

| Material: | LSZH - Low Smoke Zero Halogen (Flame Retardant) |
|-----------|---|

# **Outer Jacket Specifications**

## Outer Jacket

|   | Material N   |  | Nominal Diameter | Ripcord |
|---|--|--|------------------|---------|
| Ī | LSZH - Low Smoke Zero Halogen (Flame Retardant                 |  | 11 mm            | Yes     |
| - | Table Notes: Standard color: Black. Available colors: Black, G |  |                  |         |

#### **Optical Characteristics**

| Max. Attenuation at 1310 nm: | 0.40 dB/km |
|------------------------------|------------|
| Max. Attenuation at 1550 nm: | 0.30 dB/km |
| Max. Attenuation at 1625 nm: | 0.30 dB/km |

#### **Mechanical Characteristics**

| Mechanical Tests                                      |                    |                   |                                   |  |  |
|---|--------------------|-------------------|-----------------------------------|--|--|
| Description   | Tested Standard    | Requirement/Value | According to Family Specification |  |  |
| Cable Min. Bend Radius Installation (Short Term)      | IEC 60794-1-21-E6  | 220 mm            | IEC 60794-3-10                    |  |  |
| Cable Min. Bend Radius Operation (Long Term)          | IEC 60794-1-21-E11 | 220 mm            | IEC 60794-3-10                    |  |  |
| Cable Max. Tensile Strength Installation (Short Term) | IEC 60794-1-21-E1  | 2400 N (540 lbf)  | IEC 60794-3-10                    |  |  |
| Cable Max. Tensile Strength Operation (Long Term)     | IEC 60794-1-21-E1  | 800 N (180 lbf)   | IEC 60794-3-10                    |  |  |
| Cable Max. Crush Resistance Installation (Short Term) | IEC 60794-1-21-E3  | 22 kN/m           | IEC 60794-3-10                    |  |  |
| Cable Max. Crush Resistance Operation (Long Term)     | IEC 60794-1-21-E3  | 11 kN/m           | IEC 60794-3-10                    |  |  |

### **Temperature Range**

| Operating Temperature Range:    | -30 °C to +70 °C |
|---------------------------------|------------------|
| Installation Temperature Range: | -5 °C to +50 °C  |
| Storage Temperature Range:      | -30 °C to +70 °C |

#### **Standards**

| UL Rating/Flame Test:   Non-UL Rated     IEC Flammability:   IEC 60332-1-2     Reaction to Fire - Bundle Flame<br>Test:   IEC 60332-3-25     IEC 60754-1 - Halogen Amount:   Zero     IEC 60754-2 - Halogen Acid Gas<br>Amount - Max. Conductivity:   10 μS/mm     IEC 60754-2 - Halogen Acid Gas<br>Amount - Min. pH:   4.3     IEC 61034-2 - Smoke Density Min.   60% |                                   |                            |
|---|-----------------------------------|----------------------------|
| Reaction to Fire - Bundle Flame<br>Test:IEC 60332-3-25IEC 60754-1 - Halogen Amount:ZeroIEC 60754-2 - Halogen Acid Gas<br>Amount - Max. Conductivity:10 μS/mmIEC 60754-2 - Halogen Acid Gas<br>Amount - Min. pH:4.3IEC 61034-2 - Smoke Density Min.<br>Transmittance:60%   | UL Rating/Flame Test:             | Non-UL Rated               |
| Test: IEC 60332-3-23   IEC 60754-1 - Halogen Amount: Zero   IEC 60754-2 - Halogen Acid Gas<br>Amount - Max. Conductivity: 10 μS/mm   IEC 60754-2 - Halogen Acid Gas<br>Amount - Min. pH: 4.3   IEC 61034-2 - Smoke Density Min.<br>Transmittance: 60%   | IEC Flammability:                 | IEC 60332-1-2              |
| IEC 60754-2 - Halogen Acid Gas   10 μS/mm     IEC 60754-2 - Halogen Acid Gas   4.3     IEC 61034-2 - Smoke Density Min.   60%   |                                   | IEC 60332-3-25             |
| Amount - Max. Conductivity: IO p Similar   IEC 60754-2 - Halogen Acid Gas<br>Amount - Min. pH: 4.3   IEC 61034-2 - Smoke Density Min.<br>Transmittance: 60%   | IEC 60754-1 - Halogen Amount:     | Zero                       |
| Amount - Min. pH: 4.3   IEC 61034-2 - Smoke Density Min.<br>Transmittance: 60%  |                                   | 10 µS/mm                   |
| Transmittance:  |                                   | 4.3                        |
| PEACH: Compliant  |                                   | 60%                        |
| CENCIT. Compliant   | REACH:                            | Compliant                  |
| ISO/IEC Compliance: IEC 60794, ISO/IEC 11801-1  | ISO/IEC Compliance:               | IEC 60794, ISO/IEC 11801-1 |
| EU Directive 2011/65/EU (RoHS 2): Compliant   | EU Directive 2011/65/EU (RoHS 2): | Compliant                  |
| UV/ Sunlight Protection: Yes  | UV/ Sunlight Protection:          | Yes                        |

#### **History**

Update and Revision: Revision Number: 0.8 Revision Date: 09-17-2024

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