



**Product:** [GCGH812](#)

Universal OFC MLT: GLASS YARNS + LSZH + PA + LSZH with 6 Tubes of Ø1.9mm 12f SM OS2 G.652.D & G.657.A1.

## Product Description

Universal (Indoor/Outdoor) dry core optical fiber Multi Loose Tube cable with glass yarns as strength member, Low Smoke Zero Halogen inner jacket, termite protection by polyamide layer and Low Smoke Zero Halogen outer jacket. Product feature: This cable has rodent protection by glass yarns and termite protection by polyamide layer. Existing out of 6 tubes with a diameter of 1.9mm with 12 fibers (1t x 12f) SM OS2 G.652.D & G.657.A1.

## Technical Specifications

### Product Overview

|                        |                                                                                                                                                                                                                                                                                                              |
|------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Construction Type:     | Multi 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/or tubes. |

### Construction

#### Fiber Cable Construction

| Fiber Type                    | Fiber Grade acc. ITU-T                                                                                  | Fiber Count | Subunit Color                |
|-------------------------------|---------------------------------------------------------------------------------------------------------|-------------|------------------------------|
| OS2                           | G.652D & G.657A1                                                                                        | 12          | TIA coding (Gxxxxxx.T): Blue |
| Fiber Color Code:             | TIA coding (Gxxxxxx.T): Blue, Orange, Green, Brown, Gray, White, Red, Black, Yellow, Violet, Pink, Aqua |             |                              |
| Central Strength Member Type: | GRP                                                                                                     |             |                              |
| Cable Core Water Tight:       | Yes                                                                                                     |             |                              |
| Cable Core Water Blocking:    | Waterblocking Glass Yarns + Tape                                                                        |             |                              |
| Bulk Cable Weight:            | 225 kg/km                                                                                               |             |                              |

### SubUnit Specifications

|                              |            |
|------------------------------|------------|
| Number of Active Subunits:   | 1          |
| Number of Subunit Positions: | 6          |
| Fibers Per Subunit:          | 12         |
| Subunit Diameter:            | 1.9 mm     |
| Subunit Waterblocking:       | Gel Filled |

### Jacket Specifications

|                    |               |
|--------------------|---------------|
| Number of Jackets: | Triple Jacket |
| Type of Armor:     | Non-Armored   |

### Outer Jacket Specifications

#### Outer Jacket

| Material                                        | Nominal Diameter                                                                                                                                         | Ripcord |
|-------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------|---------|
| LSZH - Low Smoke Zero Halogen (Flame Retardant) |                                                                                                                                                          | Yes     |
| Nylon                                           |                                                                                                                                                          |         |
| LSZH - Low Smoke Zero Halogen (Flame Retardant) | 14.0 mm                                                                                                                                                  |         |
| Outer Jacket1 Table Notes:                      | Standard color: Orange. Available colors: Orange, Yellow, Turquoise, Erika Violet, Red, Blue, Green, Brown, Violet, Pink, Grey, White, Black, Lime Green |         |

### Optical Characteristics

|                                 |            |
|---------------------------------|------------|
| Maximum Attenuation at 1310 nm: | 0.39 dB/km |
| Maximum Attenuation at 1550 nm: | 0.24 dB/km |
| Maximum Attenuation at 1625 nm: | 0.29 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  | 290 mm                        | IEC 60794-3-10                    |
| Cable Min. Bend Radius Operation (Long Term)          | IEC 60794-1-21-E11 | 217 mm                        | IEC 60794-3-10                    |
| Cable Max. Tensile Strength Installation (Short Term) | IEC 60794-1-21-E1  | 6000 N (1349 lbf)             | IEC 60794-3-10                    |
| Cable Max. Tensile Strength Operation (Long Term)     | IEC 60794-1-21-E1  | 2000 N (450 lbf)              | IEC 60794-3-10                    |
| Cable Max. Crush Resistance Installation (Short Term) | IEC 60794-1-21-E3  | 15 kN/m                       | IEC 60794-3-10                    |
| Cable Max. Crush Resistance Operation (Long Term)     | IEC 60794-1-21-E3  | 7.5 kN/m                      | IEC 60794-3-10                    |
| Cable Impact Resistance                               | IEC 60794-1-21-E4  | 10 J, 300 mm Radius, 3 Cycles | IEC 60794-3-10                    |
| Cable Torsion Resistance                              | IEC 60794-1-21-E7  | 180°, 2 m, 10 cycles          | 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 Test:                      | IEC 60332-3-24             |
| IEC 60754-1 - Halogen Amount:                              | Zero                       |
| IEC 60754-2 - Halogen Acid Gas Amount - Max. Conductivity: | 10 µS/mm                   |
| IEC 60754-2 - Halogen Acid Gas Amount - Min. pH:           | 4.3                        |
| IEC 61034-2 - Smoke Density Min. Transmittance:            | 60%                        |
| REACH:                                                     | Compliant                  |
| ISO/IEC Compliance:                                        | IEC 60794, ISO/IEC 11801-1 |
| EU Directive 2011/65/EU (RoHS 2):                          | Compliant                  |
| UV/ Sunlight Protection:                                   | Yes                        |

### History

|                      |                                                 |
|----------------------|-------------------------------------------------|
| Update and Revision: | Revision Number: 0.64 Revision Date: 09-17-2024 |
|----------------------|-------------------------------------------------|

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