



**Product:** [GRAJD96](#)

Universal OFC MLT: LSZH + ARAMID + LSZH with 12 Tubes of Ø1.9mm 96f MM OM3.

### Product Description

Universal (Indoor/Outdoor) dry core optical fiber Multi Loose Tube cable with Low Smoke Zero Halogen inner jacket, aramid yarns as strength member and Low Smoke Zero Halogen outer jacket. Existing out of 12 tubes with a diameter of 1.9mm with 96 fibers (12t x 8f) MM OM3.

### 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 Count | Subunit Color   |
|------------|-------------|---|
| OM3        | 96          | TIA coding (Gxxxxxx.T): Blue, Orange, Green, Brown, Gray, White, Red, Black, Yellow, Violet |

|                           |   |
|---------------------------|---|
| Fiber Color Coding:       | TIA coding (Gxxxxxx.T): Blue, Orange, Green, Brown, Gray, White, Red, Black |
| Central Strength Member:  | GRP   |
| Cable Core Water Tight:   | Yes   |
| Cable Core Waterblocking: | Waterblocking Aramid Yarns + Tape   |
| Bulk Cable Weight:        | 240 kg/km   |

#### SubUnit Specifications

|                              |            |
|------------------------------|------------|
| Number of Active Subunits:   | 10         |
| Number of Subunit Positions: | 12         |
| Fibers Per Subunit:          | 8          |
| Subunit Diameter:            | 1.9 mm     |
| Subunit Waterblocking:       | Gel Filled |

#### Jacket Specifications

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

#### Inner Jacket

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

#### Outer Jacket Specifications

##### Outer Jacket

| Material  | Nominal Diameter | Ripcord |
|---|------------------|---------|
| LSZH - Low Smoke Zero Halogen (Flame Retardant) | 15.1 mm          | Yes     |

|              |  |
|--------------|--|
| 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

|                              |           |
|------------------------------|-----------|
| Max. Attenuation at 1300 nm: | 0.9 dB/km |
| Max. Attenuation at 850 nm:  | 2.9 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  | 302 mm                        | IEC 60794-3-10                    |
| Cable Min. Bend Radius Operation (Long Term)          | IEC 60794-1-21-E11 | 226.5 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 +40 °C  |
| Storage Temperature Range:      | -30 °C to +70 °C |

## Standards

|  |                            |
|--|----------------------------|
| UL Rating/Flame Test:                                      | Non-UL Rated               |
| 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                        |
| 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: 0.49 Revision Date: 09-17-2024 |
|----------------------|---|

© 2025 Belden, Inc

All Rights Reserved.

Although Belden makes every reasonable effort to ensure their accuracy at the time of this publication, information and specifications described here in are subject to error or omission and to change without notice, and the listing of such information and specifications does not ensure product availability.

Belden provides the information and specifications herein on an "ASIS" basis, with no representations or warranties, whether express, statutory or implied. In no event will Belden be liable for any damages (including consequential, indirect, incidental, special, punitive, or exemplary damages) whatsoever, even if Belden has been advised of the possibility of such damages, whether in an action under contract, negligence or any other theory, arising out of or in connection with the use, or inability to use, the information or specifications described herein.

All sales of Belden products are subject to Belden's standard terms and conditions of sale.

Belden believes this product to be in compliance with all applicable environmental programs as listed in the data sheet. The information provided is correct to the best of Belden's knowledge, information and belief at the date of its publication. This information is designed only as a general guide for the safe handling, storage, and any other operation of the product itself or the one that it becomes a part of. The Product Disclosure is not to be considered a warranty or quality specification. Regulatory information is for guidance purposes only. Product users are responsible for determining the applicability of legislation and regulations based on their individual usage of the product.