



Product: <u>GRAHC24</u>

Universal OFC MLT: LSZH + ARAMID + LSZH with 6 Tubes of Ø1.9mm 24f MM OM5.

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 6 tubes with a diameter of 1.9mm with 24 fibers (2t x 12f) MM OM5.

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 | |
|--------------|---------------|--------------|-----------------------------------|--|
| OM5 | 24 | TIA coding (| Gxxxxxx.T): Blue, Orange | |
| Fiber Color | Coding: | | TIA coding (Gxxxxx.T): B | |
| Central Stre | ength Member: | | GRP | |
| Cable Core | Water Tight: | | Yes | |
| Cable Core | Waterblocking | | Waterblocking Aramid Yarns + Tape | |
| Bulk Cable | Weight: | | 155 kg/km | |

SubUnit Specifications

| Number of Active Subunits: | 2 |
|------------------------------|------------|
| Number of Subunit Positions: | 6 |
| Fibers Per Subunit: | 12 |
| 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

| Material | | Nominal Diameter | Ripcord |
|--|--------------|------------------|---------|
| LSZH - Low Smoke Zero Halogen (Flam | e Retardant) | 12.1 mm | Yes |
| Table Notes: Standard color: Orange. Available colors: C | | | |

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 | 242 mm | IEC 60794-3-10 |
| Cable Min. Bend Radius Operation (Long Term) | IEC 60794-1-21-E11 | 242 mm | IEC 60794-3-10 |
| Cable Max. Tensile Strength Installation (Short Term) | IEC 60794-1-21-E1 | 3900 N (877 lbf) | IEC 60794-3-10 |
| Cable Max. Tensile Strength Operation (Long Term) | IEC 60794-1-21-E1 | 1300 N (292 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 |
|---|----------------------------|
| 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: 0.35 Revision Date: 09-17-2024

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