

# Product: NKXU12MA024BKAA

Universal OFC MLT: Gel Filled Tubes (6F/T), Gel Filled Core, PE Inner Jacket (black) + CST + LSZH Outer Jacket (black) 24f SM G.652.D. IEC 60332-1 rated.

# **Product Description**

Universal (Indoor/Outdoor) Gel filled tubes (6F/T), Gel filled core, optical fiber Multi Loose Tube cable with Polyethylene inner jacket (black), Corrugated Steel Tape armor and Low Smoke Zero Halogen outer jacket (black), 24 fibers SM G.652.D. IEC 60332-1 rated.

# **Technical Specifications**

# **Product Overview**

| Product Category:      | Fiber Multi-Loose Tube Cable  |
|------------------------|---|
| Suitable Applications: | For outdoor/indoor use in structured (data) wiring systems such as industrial backbone, campus backbone, building backbone cabling. For outdoor/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. |

# **Fiber Specifications**

| Fiber Type:          | OS2, G.652.D                     |
|----------------------|----------------------------------|
| Fiber Core Diameter: | 9 µm                             |
| Fiber Diameter:      | 125 µm                           |
| Buffer Material:     | PBT – Polybutylene Terephthalate |
| Fiber Count:         | 24                               |
| Fiber Color Coding:  | TIA-598-D                        |

# **Cable Construction**

| Number of Active Subunits: | 4  |
|----------------------------|--|
| Number of Fillers:         | 4  |
| Fibers Per Subunit:        | 6  |
| Subunit Waterblocking:     | Gel Filled   |
| Subunit Diameter:          | 2.1 mm   |
| Subunit Color:             | Blue, Orange, Green, Brown, Filler, Filler, Filler, Filler |
| Central Strength Member:   | GRP  |
| Cable Core Waterblocking:  | Gel Filled   |

# **Inner Jacket Specifications**

| Material: | PE - Polyethylene |
|-----------|-------------------|
| Color:    | Black             |

#### **Armor Specifications**

Armor Type and Material: CST - Corrugated Steel Tape

### **Outer Jacket Specifications**

| Jacket Material: | LSZH - Low Smoke Zero Halogen (Flame Retardant) |
|------------------|---|
| Nom. Diameter:   | 15.8 mm (0.622 in)                              |
| Color:           | Black   |

#### **Optical Characteristics**

| Wavelength       | 1310 nm    | 1550 nm    |
|------------------|------------|------------|
| Max. Attenuation | 0.36 dB/km | 0.22 dB/km |

#### Mode Field Diameter 9.2 µm 10.4 µm

#### **Mechanical Characteristics**

| Min. Bend Radius During<br>Installation:   | 25 x Cable OD    |
|--|------------------|
| Min. Bend Radius During<br>Operation:      | 12.5 x Cable OD  |
| Max. Tensile Strength During Installation: | 3000 N (670 lbf) |
| Max. Tensile Strength During<br>Operation: | 1000 N (220 lbf) |
| Crush Resistance:                          | 3000N/100mm      |

#### Mechanical Tests

| Description   | Tested Standard    |
|---|--------------------|
| Cable Min. Bend Radius Installation (Short Term)      | IEC 60794-1-21-E11 |
| Cable Min. Bend Radius Operation (Long Term)          | IEC 60794-1-21-E11 |
| Cable Max. Tensile Strength Installation (Short Term) | IEC 60794-1-21-E1  |
| Cable Max. Tensile Strength Operation (Long Term)     | IEC 60794-1-21-E1  |
| Cable Max. Crush Resistance Installation (Short Term) | IEC 60794-1-21-E3  |
| Cable Max. Crush Resistance Operation (Long Term)     | IEC 60794-1-21-E3  |
| Bulk Cable Weight: 330 kg/km (220 lbs/100             | Oft)               |

#### **Temperature Range**

| Operating Temperature<br>Range: | -40 °C to +70 °C |
|---------------------------------|------------------|
| Storage Temperature Range:      | -40 °C to +70 °C |

### **Standards and Compliance**

| Environmental Suitability:        | Indoor/Outdoor, Indoor, Outdoor, Aerial, Burial |
|-----------------------------------|---|
| Flammability / Reaction to Fire:  | IEC 60332-1-2                                   |
| ISO/IEC Compliance:               | IEC 60793-1-1IEC 60794-1-1                      |
| European Directive<br>Compliance: | EU Directive 2011/65/EU (RoHS 2)                |

#### **History**

Update and Revision: Revision Number: 0.36 Revision Date: 01-16-2024

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