

# FREEDM™ B2 Tight Buffer Indoor/Outdoor Cable 12F G50 MMF ClearCurve® OM4 0.9mm TB3, B2ca-s1,d1,a1



CORNING

**Part Number:**  
**012T8X-32198E2C**

Corning MPC (multipurpose cable) tight -buffered cables are flame -retardant, indoor/outdoor cables designed for interbuilding and intrabuilding backbones in duct and riser applications. The tight -buffered construction facilitates easier termination for low -fibre -count applications in the local area network (LAN) and eliminates need for fan -out kits. These cables are designed for installation in conduits, ducts and in -house.

## Features and Benefits

### **Waterblocking technology**

OSP (outdoor) applications

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### **All-dielectric cable construction**

Requires no grounding or bonding

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### **UV- and microbe-resistant**

Can be installed in ducts or conduits

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### **Dry cable core by means of water swellable elements**

Allows efficient and craft-friendly cable preparation in outdoor or indoor/outdoor applications

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### **Small diameter and bend radius**

Easy installation in space-constrained areas

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### **TB3 tight-buffered construction**

TB3 tight-buffered construction

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### **Flame retardant**

LSZH™/FRNC

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### **Silicon-free outer jacket**

The cable jacket and the outer jacket of subunits (not valid for 900 µm tight buffers) are free of harmful components to paint structures

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## Specifications

### Mechanical Specifications

|                               |             |
|-------------------------------|-------------|
| Crush resistance              | 500 N/10 cm |
| Min. bend radius installation | 80 mm       |
| Min. bend radius operation    | 67.5 mm     |
| Nominal outer diameter        | 6.5 mm      |

### Cable Design

|                                                      |                                                                                                                                                  |
|------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------|
| Cable marking                                        | Metre - Handset - CE 17 EN 50575 B2ca-s1,d1,a1 - Sine - CORNING - Fiber Optic Cable - Year - FREEDM(TM) U-VQ(ZN)H 12 OM4CC TB3 0.9 LSZH(TM)/FRNC |
| Fibre count                                          | 12                                                                                                                                               |
| Number of ripcords                                   | 1                                                                                                                                                |
| Buffer tube diameter                                 | 900 mm                                                                                                                                           |
| Outer jacket colour                                  | Black                                                                                                                                            |
| Buffering diameter                                   | 900 µm                                                                                                                                           |
| Outer jacket material                                | Flame-retardant, non-corrosive/low-smoke, silicon-free, zero-halogen (FRNC/LSZH) material                                                        |
| Outer jacket nominal thickness                       | 0.8 mm                                                                                                                                           |
| Tensile strength elements and/or armouring - Layer 1 | Aramid yarn                                                                                                                                      |
| Tight buffer colour, layer 1                         | Blue, orange, green                                                                                                                              |
| Tight buffer colour, layer 2                         | Brown, grey, white, red, black, yellow, violet, pink, turquoise                                                                                  |
| Tight buffer type                                    | TB3 (easy strip up to 10 cm)                                                                                                                     |
| Flame rating                                         | LSZH™/FRNC                                                                                                                                       |

### General Specifications

|              |                |
|--------------|----------------|
| Environment  | Indoor/Outdoor |
| Cable type   | Tight-buffered |
| Product type | Dielectric     |

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## General Specifications

|                                                       |                                                                 |
|-------------------------------------------------------|-----------------------------------------------------------------|
| Fibre category                                        | 50 µm MM (OM4)                                                  |
| Application                                           | Direct Buried, Duct, Vertical Riser, General Purpose Horizontal |
| Flame rating                                          | LSZH™/FRNC                                                      |
| Coding according to EN 60794-1-1 (DIN VDE 0888-100-1) | U-VQ(ZN)H                                                       |

## Dimensions

|                |        |
|----------------|--------|
| Outer diameter | 4.5 mm |
|----------------|--------|

## Ordering Information

|                         |                 |
|-------------------------|-----------------|
| Product Number          | 012T8X-32198E2C |
| Length                  | 2000 m          |
| Maximum delivery length | 2000 m          |
| Weight                  | 22 kg           |
| Weight                  | 22 kg/km        |

## Environmental Conditions

|                                 |                 |
|---------------------------------|-----------------|
| Temperature range, installation | -5 °C to 50 °C  |
| Temperature range, operation    | -20 °C to 60 °C |
| Temperature range, storage      | -25 °C to 70 °C |

## Standards

|                  |                                                           |
|------------------|-----------------------------------------------------------|
| RoHS             | Free of hazardous substances according to RoHS 2011/65/EU |
| Reaction to fire | B2ca, s1, d1, a1                                          |

## Optical Characteristics

|            |   |
|------------|---|
| Fibre code | T |
|------------|---|

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| Optical Characteristics                 |                                |
|-----------------------------------------|--------------------------------|
| Fibre name                              | G50/125 ULTRA-BEND 7.5         |
| Fibre Type                              | Multimode                      |
| Fibre core diameter                     | 50 µm                          |
| Minimum effective modal bandwidth (EMB) | 4700 MHz*km / -                |
| Maximum Attenuation                     | 2.8 dB/km / 1.0 dB/km          |
| Min. overfilled launch (OFL) bandwidth  | 3500 MHz*km / 500 MHz*km       |
| Serial 1 gigabit ethernet               | 1100 MHz*km / 600 MHz*km       |
| Serial 10 gigabit ethernet              | 550 MHz*km / -                 |
| Typical attenuation                     | 2.4 dB/km / 0.8 dB/km          |
| Wavelengths                             | 850 nm / 1300 nm               |
| Induced Attenuation                     | For 7.5 mm radius < 0.2 db / - |
| Fibre category                          | OM4                            |



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