

# FREEDM™ B2 Tight Buffer Indoor/Outdoor Cable 24F E9/125 SMF-28® ULTRA 0.9mm TB3, B2ca-s1,d1,a1



CORNING

**Part Number:**  
**024Z8X-32125E2C**

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-fiber-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	8.1 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 24 E9/125 TB3 0.9 LSZH(TM)/FRNC
Fibre count	24
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, brown, grey, white, red, black, yellow
Tight buffer colour, layer 2	Blue, orange, green, brown, grey, white, red, black, yellow, violet, pink, turquoise, 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	SMF-28® Ultra 242 Optical Fibre
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
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## Ordering Information

Product Number	024Z8X-32125E2C
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

Cable cutoff wavelength	1260 nm
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Optical Characteristics	
Fibre code	Z
Fibre name	SMF-28® Ultra 242 Optical Fibre
Fibre Type	Single-mode
Fibre compliance	ITU-T G.652.D and ITU-T G.657.A1
Cladding diameter	125 µm
Dispersion @ 1550 nm	18 nm
Dispersion in the range 1285 to 1330 nm	3.5 nm
Maximum Attenuation	0.34 dB/km / 0.34 dB/km / 0.20 dB/km
Mode-Field Diameter at 1310 nm	9.2 µm
Serial 1 gigabit ethernet	5000 MHz*km / -
Serial 10 gigabit ethernet	10000 MHz*km / 40000 MHz*km
Typical attenuation	0.32 dB/km / 0.32 dB/km / 0.18 dB/km
Wavelengths	1310 nm / 1383 nm / 1550 nm
PMD Link Design Value	0.04 ps/(nm*km)
PMD (Polarization Mode Dispersion) maximum individual fibre	0.1 ps/(nm*km)
Coating diameter	242 µm



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