

# FREEDM™ Tight Buffer Indoor/Outdoor Cable

24F E9 SMF-28e+® 0.9mm TB3, Cca -s1a, d1, a1

CORNING

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

### All-dielectric cable construction

Requires no grounding or bonding

### UV- and microbe-resistant

Can be installed in ducts or conduits

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

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

### Small diameter and bend radius

Easy installation in space-constrained areas

### TB3 tight-buffered construction

Easy and consistent stripping up to 10 cm

### Flame retardant

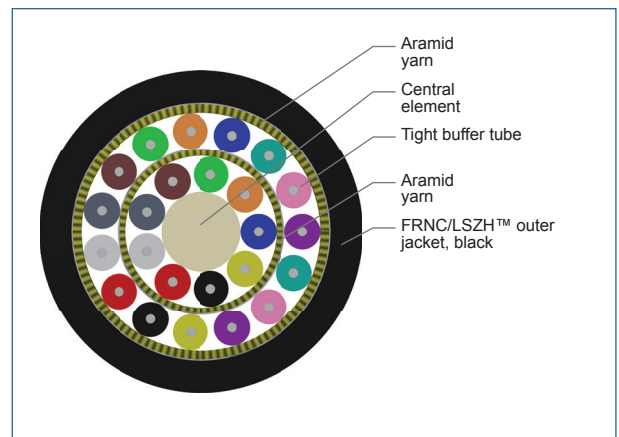
LSZH™/FRNC

### 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



Part Number: 024E8X-32125E2G



Cross Section of Order Number: 024E8X-32125E2G

# FREEDM™ Tight Buffer Indoor/Outdoor Cable

24F E9 SMF-28e+® 0.9mm TB3, Cca -s1a, d1, a1

CORNING

## Standards

|                          |  |
|--------------------------|--|
| <b>Flame Test Method</b> | Flame retardant to IEC 60332-1-2 (single cable); IEC 60332-3-24 (bunch of cables)<br>Reaction to fire according to EN 50575 and EN 13501-6<br>Low Smoke to IEC 61034 and Zero Halogen to IEC 60754-1<br>Non-corrosive to IEC 60754-2 |
| <b>Waterblocking</b>     | IEC 60794-1-2 F5   |

## Specifications

| General Specifications                                |   |
|---|---|
| Environment   | Indoor/Outdoor Universal Cable                                  |
| Application   | Direct Buried, Duct, Vertical Riser, General Purpose Horizontal |
| Cable type  | Tight-buffered  |
| Product type  | Dielectric  |
| Flame rating  | LSZH™/FRNC  |
| Fibre category  | SM (OS2)  |
| Coding according to EN 60794-1-1 (DIN VDE 0888-100-1) | U-VQ(ZN)H   |
| Previous part number                                  | LCXLN2-D5024-U700   |
| Previous coding following DIN VDE 0888-3              | A-VQH   |
| Product category                                      | Core product / Fastship   |
| Reaction to fire                                      | Cca,s1a,d1,a1   |

| Temperature Range         |                 |
|---------------------------|-----------------|
| Installation and assembly | -5 °C to 50 °C  |
| Operation                 | -20 °C to 60 °C |
| Storage                   | -25 °C to 70 °C |

# FREEDM™ Tight Buffer Indoor/Outdoor Cable

24F E9 SMF-28e+® 0.9mm TB3, Cca -s1a, d1, a1

CORNING

| Cable Design   |   |
|--|---|
| Central element                                      | FRNC/LSZH   |
| Central element diameter                             | 1.95 mm   |
| Fibre count  | 24  |
| Buffering diameter                                   | 900 µm  |
| Tight buffer type                                    | TB3 (strippable up to 10 cm)  |
| Tight buffer colour, layer 1                         | Blue, Orange, Green, Brown, Grey, White, Red, Black, Yellow   |
| Tensile Strength Elements and/or Armouring - Layer 1 | Aramid yarn with swellable elements   |
| Tight buffer colour, layer 2                         | Violet, Pink, Turquoise, Blue*, Orange*, Green*, Brown*, Grey*, White*, Red*, Black*, Yellow*, Violet*, Pink*, Turquoise*                     |
| Tensile strength elements and/or armouring - Layer 2 | Aramid yarn with swellable elements   |
| Number of ripcords                                   | 1   |
| Outer jacket material                                | Flame-retardant, non-corrosive/low-smoke, zero-halogen (FRNC/LSZH) material   |
| Outer jacket colour                                  | Black   |
| Outer jacket nominal thickness                       | 0.8 mm  |
| Cable marking  | Metre - Handset - CE 17 EN 50575 Cca-s1a,d1,a1 - Sine - CORNING - Fibre Optic Cable - Year - FREEDM(TM) U-VQ(ZN)H 24 E9 TB3 0.9 LSZH(TM)/FRNC |

Notes: Fibres indicated by \* have black rings (white with double ring replaces black with single ring)

| Mechanical Characteristics Cable       |             |
|--|-------------|
| Nominal Outer Diameter                 | 8.1 mm      |
| Weight                                 | 61 kg/km    |
| Min. Bend Radius Installation          | 120 mm      |
| Min. Bend Radius Operation             | 80 mm       |
| Max. tensile strength for installation | 1500 N      |
| Crush resistance (reversible)          | 750 N/10 cm |
| Fire Load                              | 1.15 MJ/m   |

| Chemical Characteristics |   |
|--------------------------|---|
| RoHS                     | Free of hazardous substances according to RoHS 2011/65/EU |

# FREEDM™ Tight Buffer Indoor/Outdoor Cable

24F E9 SMF-28e+® 0.9mm TB3, Cca -s1a, d1, a1

CORNING

## Fibre Specifications

| Optical Characteristics (cabled) |                                      |
|----------------------------------|--------------------------------------|
| Fibre name                       | E9/125 SMF28e+®                      |
| Fibre core diameter              | 9 µm                                 |
| Fibre category                   | OS2                                  |
| Fibre code                       | E                                    |
| Wavelengths                      | 1310 nm / 1383 nm / 1550 nm          |
| Linear Attenuation               | 0.38 dB/km / 0.38 dB/km / 0.25 dB/km |
| Serial 1 gigabit ethernet        | 5000 m / - / -                       |
| Serial 10 gigabit ethernet       | 10000 m / - / 40000 m                |
| Cable cutoff wavelength          | 1260 nm                              |

Notes: 1) Meets 0.75 ns optical skew when used in all Corning Plug and Play™/EDGE™ systems solutions.  
2) Improved attenuation and bandwidth options available  
3) Bend-insensitive single-mode fibres available on request.  
4) Contact a Corning Customer Care Representative for additional information

## Ordering Information

|                     |   |
|---------------------|---|
| Part Number         | 024E8X-32125E2G   |
| Product Description | FREEDM™ Tight Buffer Indoor/Outdoor Cable 24F E9 SMF-28e+® 0.9mm TB3, Cca-s1a,d1,a1 |
| EAN Code            | 4042673555384   |

## Shipping Information

|                         |         |
|-------------------------|---------|
| Maximum delivery length | 2,000 m |
|-------------------------|---------|

