

FREEDM™ Tight Buffer Indoor/Outdoor Cable 24F E9 SMF-28e+® 0.9mm TB3, Dca-s1a,d1,a1

CORNING

Part Number:
024E8X-32125E2G

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

All-dielectric 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

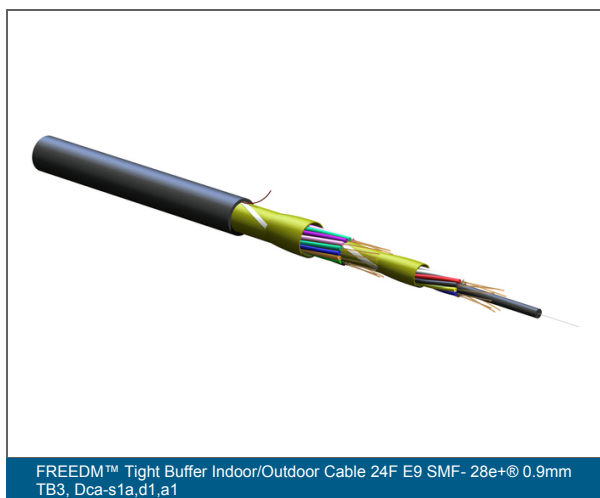
Easy installation in space-constrained areas

TB3 tight buffered construction

Easy and consistent stripping up to 10 cm

Flame retardant

LSZH/FRNC



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Specifications

General Specifications

Cable Type	Tight-Buffered
Environment	Indoor/Outdoor
Product Type	Dielectric
Fiber Category	9 µm SM (OS2)
Flame Rating	LSZH/FRNC
Coding according to EN 60794-1-1 (DIN VDE 0888-100-1)	U-VQ(ZN)H
Application	Direct Buried, Duct, Vertical Riser, General purpose, Horizontal
Cable geometry	Round

Standards

Reaction to Fire	Dca, s1a, d1, a1
RoHS	Free of hazardous substances according to RoHS 2011/65/EU
Waterblocking	IEC 60794-1-2 F5
Flame propagation test	Flame retardant according to IEC 60332-1-2 (single cable) and IEC 60332-3-24 (bunch of cables)
Reaction to Fire Requirements	Reaction to fire according to EN 50575 and EN 13501-6
Smoke density	Low smoke according to IEC 61034
Halogen content test	Zero Halogen to IEC 60754-1
Level of corrosion	Non-corrosive according to IEC 60754-2

Environmental Conditions

Temperature Range, Installation	-5 °C to 50 °C (23 °F to 122 °F)
Temperature Range, Operation	-20 °C to 60 °C (-4 °F to 140 °F)
Temperature Range, Storage	-25 °C to 70 °C (-13 °F to 158 °F)

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Cable Design

Cable Marking	Meter - Handset - CE 17 EN 50575 Dca-s1a,d1,a1 - Sine - CORNING - Fibre Optic Cable - Year - FREEDM(TM) UVQ(ZN)H 24 E9 TB3 0.9 LSZH(TM)/FRNC
Central Element	FRNC/LSZH
Fiber Count	24
Number of Ripcords	1
Outer Jacket Color	Black
Buffering Diameter	900 µm
Outer Jacket Material	Flame-retardant, non-corrosive/low-smoke, zero-halogen (FRNC/LSZH) material
Central Element Diameter	1.95 mm
Outer Jacket Nominal Thickness	0.8 mm
Tensile Strength Elements and/or Armoring - Layer 1	Aramid yarn with swellable elements
Tensile Strength Elements and/or Armoring - Layer 2	Aramid yarn with swellable elements
Tensile Strength Elements and/or Armoring	Aramid yarn with swellable elements
Tensile Strength Elements and/or Armoring - Layer 3	Aramid yarn with swellable elements
Tight Buffer Color, Layer 1	Blue, Orange, Green, Brown, Slate, White, Red, Black, Yellow
Tight Buffer Color, Layer 2	Violet, Rose, Aqua, Blue*, Orange*, Green*, Brown*, Slate*, White *, Red*, Black*, Yellow*, Violet*, Rose*, Aqua*
Tight Buffer Type	TB3 (easy strip up to 10 cm)

Mechanical Specifications

Crush Resistance	750 N/10 cm
Crush Resistance (reversible), Outdoor Cable	750 N/10 cm
Fire Load	1.15 MJ/m
Max. Tensile Strength for Installation	1500 N
Min. Bend Radius Installation	160 mm
Min. Bend Radius Operation	121.5 mm
Nominal Outer Diameter	8.1 mm

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Optical Characteristics

Fiber Code	E
Performance Option Code	25
Fiber Category	OS2
Fiber Type	Single-mode (OS2) / 250 µm
Fiber Name	Single-mode (OS2)
Maximum Attenuation	0.38 dB/km / 0.38 dB/km / 0.25 dB/km
Wavelengths	1310 nm / 1383 nm / 1550 nm
Fiber Compliance	ITU-T G.652.D
Cladding diameter	125 µm
Coating diameter	242 µm
Dispersion @ 1550 nm	≤ 18 [ps/(nm*km)]
Dispersion @ 1625 nm	≤ 22 [ps/(nm*km)]
Dispersion in the range 1285 to 1330 nm	≤ 3.5 [ps/(nm*km)]
Cable cutoff wavelength	1260 nm
Mode-Field Diameter at 1310 nm	9.2 µm
Mode-Field Diameter at 1550 nm	10.4 µm

Dimensions

Cable Weight	61 kg/km
Max. cable length per reel/drum	4000 m



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