

FREEDM™ Tight Buffer Indoor/Outdoor Cable 6F E9/125 SMF-28® ULTRA 0.9mm TB3, Dca-s1a, d1, a1



CORNING

Part Number:
006Z8X-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-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

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Specifications

General Specifications	
Installation Methods	Direct Buried, Duct, Riser, Horizontal
Cable type	Tight-buffered
Environment	Indoor/Outdoor
Product type	Dielectric
Fibre category	SMF-28® Ultra 242 Optical Fibre
Flame rating	LSZH/FRNC
Coding according to EN 60794-1-1 (DIN VDE 0888-100-1)	U-VQ(ZN)H
Cable geometry	Round

Standards	
Reaction to Fire	Dca, s1a, d1, a1
RoHS	Free of hazardous substances according to RoHS 2011/65/EU
Waterblocking	IEC 60794-1-22 Method F5B
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 to IEC 61034
Halogen content test	Zero Halogen according to IEC 60754-1
Level of corrosion	Non-corrosive according to IEC 60754-2

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

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Cable Design	
Cable marking	Metre - Handset - Sine- CORNING - Fiber Optic Cable - Year - FREEDM(TM) U-VQ(ZN)H 6 E9/125 TB3 0.9 LSZH(TM)/FRNC
Central element	Aramid yarn with swellable elements
Fibre count	6
Number of ripcords	1
Outer jacket colour	Black
Buffering diameter	900 µm
Outer jacket material	Flame-retardant, non-corrosive/low-smoke, zero-halogen (FRNC/LSZH) material
Outer jacket nominal thickness	0.8 mm
Tensile strength elements and/or armouring - Layer 1	Aramid yarn with swellable elements
Tensile strength elements and/or armouring	Aramid yarn with swellable elements
Tight buffer colour	Blue, orange, green, brown, grey, white
Tight buffer type	TB3 (easy strip up to 10 cm)
Flame rating	LSZH/FRNC

Mechanical Specifications	
Crush resistance	750 N/10 cm
Crush resistance (reversible), outdoor cable	750 N/10 cm
Fire load	0.54 MJ/m
Max. tensile strength for installation	750 N
Min. bend radius installation	102 mm
Min. bend radius operation	51 mm
Nominal outer diameter	5.1 mm

Optical Characteristics	
Fibre code	Z
Performance option code	25
Fibre category	OS2

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Optical Characteristics

Fibre Type	Single-mode (OS2) / 250 µm
Fibre name	Bend-Improved Single-mode (OS2)
Maximum Attenuation	0.38 dB/km / 0.38 dB/km / 0.25 dB/km
Wavelengths	1310 nm / 1383 nm / 1550 nm
Fibre compliance	ITU-T G.652.D and ITU-T G.657.A1
Fibre core diameter	8.2 µm
Cladding diameter	125 µm
Coating diameter	242 µm
Dispersion @ 1550 nm	≤ 18 [ps/(nm*km)]
Dispersion @ 1625 nm	≤ 22 [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
PMD Link Design Value	≤ 0.04 ps/√km
PMD (Polarization Mode Dispersion) maximum individual fibre	≤ 0.1 ps/√km

Dimensions

Cable Weight	25 kg/km
Max. cable length per reel/drum	2000 m



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