

FREEDM™ Tight Buffer Indoor/Outdoor Cable 4F G50 MMF ClearCurve® OM4 0.9mm TB3, Dca-s1a, d1, a1

CORNING

Part Number:
004T8X-32198E2G

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

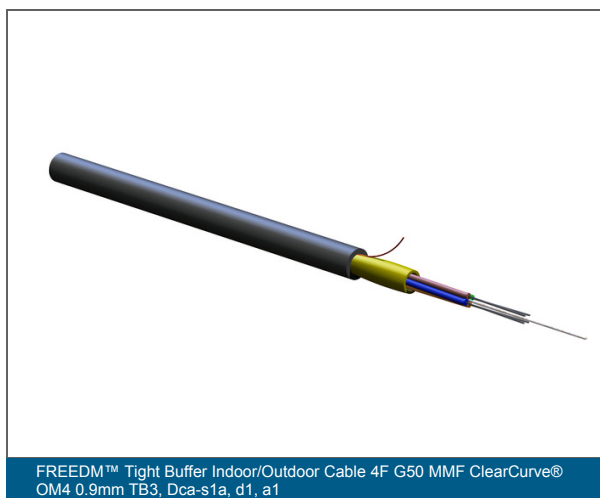
Easy installation in space-constrained areas

TB3 tight buffered construction

Easy and consistent stripping up to 10 cm

Flame retardant

LSZH/FRNC



FREEDM™ Tight Buffer Indoor/Outdoor Cable 4F G50 MMF ClearCurve® OM4 0.9mm TB3, Dca-s1a, d1, a1

CORNING

Specifications

General Specifications

Cable Type	Tight-Buffered
Environment	Indoor/Outdoor
Product Type	Dielectric
Fiber Category	50 µm MM (OM4)
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 60794-1-22 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 according 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 (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)

FREEDM™ Tight Buffer Indoor/Outdoor Cable 4F G50 MMF ClearCurve® OM4 0.9mm TB3, Dca-s1a, d1, a1

CORNING

Cable Design	
Cable Marking	Meter - Handset - CE 23 EN 50575 Dca-s1a,d1,a1 - Sine - CORNING - Fiber Optic Cable - Year - FREEDM(TM) U-VQ(ZN)H 4 OM4CC TB3 0.9 LSZH(TM)/FRNC
Fiber Count	4
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
Outer Jacket Nominal Thickness	0.8 mm
Tensile Strength Elements and/or Armoring - Layer 1	Aramid Yarn
Tensile Strength Elements and/or Armoring	Aramid Yarn
Tight Buffer Color	Blue, Orange, Green, Brown
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	0.4 MJ/m
Max. Tensile Strength for Installation	600 N
Min. Bend Radius Installation	90 mm
Min. Bend Radius Operation	45 mm
Nominal Outer Diameter	4.5 mm

Optical Characteristics	
Fiber Code	T
Performance Option Code	98
Fiber Category	OM4
Fiber Type	Multimode

FREEDM™ Tight Buffer Indoor/Outdoor Cable 4F G50 MMF ClearCurve® OM4 0.9mm TB3, Dca-s1a, d1, a1

CORNING

Optical Characteristics

Fiber Name	50 µm MM (OM4)
Maximum Attenuation	2.8 dB/km / 1.0 dB/km
Wavelengths	850 nm / 1300 nm
Fiber Compliance	IEC 60793-2-10
Fiber Core Diameter	50 µm
Cladding diameter	125 µm
Coating diameter	242 µm
Serial 1 Gigabit Ethernet	1000 m / 600 m
Serial 10 Gigabit Ethernet	550 m / -
Minimum Effective Modal Bandwidth (EMB)	4700 MHz*km / -
Min. Overfilled Launch (OFL) Bandwidth	3500 MHz*km / 500 MHz*km

Dimensions

Cable Weight	20 kg/km
Max. cable length per reel/drum	4000 m



Corning Optical Communications LLC • 4200 Corning Place • Charlotte, NC • 28216 • United States
800-743-2675 • FAX: 828-325-5060 • International: +1-828-901-5000 • www.corning.com/opcomm

A complete listing of the trademarks of Corning Optical Communications is available at www.corning.com/opcomm/emea/trademarks. Corning Optical Communications is ISO 9001 and ISO 14001 certified. © 2025 Corning Optical Communications. All rights reserved.