

FREEDM™ Tight Buffer Indoor/Outdoor Cable

12F G50 MMF ClearCurve® OM2 0.9mm TB3

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

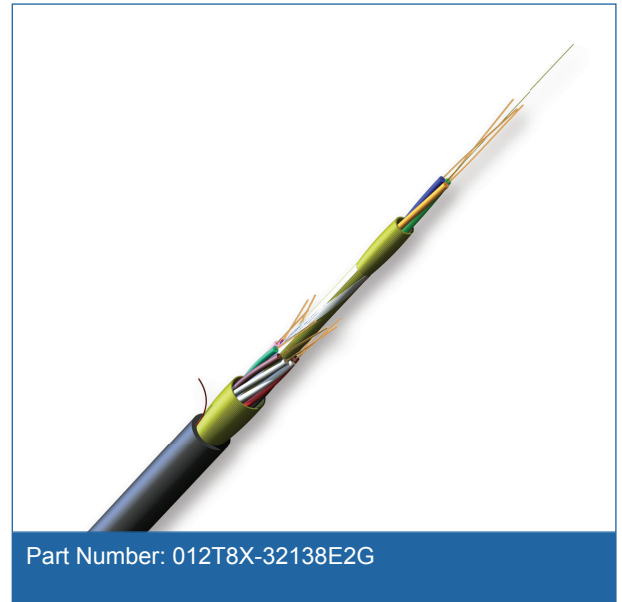
Easy installation in space-constrained areas

TB3 tight-buffered construction

Easy and consistent stripping up to 10 cm

Silicon-free outer jacket

The cable jacket and the outer jacket of subunits (not valid for 900µm tight buffers) are free of harmful to paint structures



Part Number: 012T8X-32138E2G

Standards

Flame Test Method

Flame retardant to IEC 60332-1-2 (single cable)

Flame retardant to IEC 60332-3-24 (bunch of cables)

Low Smoke to IEC 61034 and Zero Halogen to IEC 60754-1

Non Corrosive to IEC 60754-2

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Standards

Waterblocking IEC 60794-1-2F5

Specifications

General Specifications	
Environment	Indoor / Outdoor
Application	Direct Buried, Duct, Vertical Riser, General Purpose Horizontal
Cable Type	Tight-Buffered
Product Type	Dielectric
Flame Rating	LSZH™/FRNC
Fibre category	50 µm MM (OM2)
Coding according to EN 60794-1-1 (DIN VDE 0888-100-1)	U-VQ(ZN)H
Previous Part Number	LCXLN2-L5012-G700
Previous coding following DIN VDE 0888-3	A-VQH

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

Cable Design	
Central Element	Aramid yarn with swellable elements
Fibre Count	12
Buffering Diameter	900 µm
Tight Buffer Type	TB3 (strippable up to 10 cm)
Tight buffer colour, layer 1	Blue, orange, green
Tensile Strength Elements and/or Armouring - Layer 1	Aramid yarn with swellable elements
Tight buffer colour, layer 2	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

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Cable Design

Outer Jacket Nominal Thickness	0.8 mm
Cable Marking	Meter Handset Sine CORNING Fibre Optic Cable Year FREEDM™ U-VQ(ZN)H 12 OM2CC TB 0.9 LSZH™/FRNC

Mechanical Characteristics Cable

Nominal Outer Diameter	6.3 mm
Weight	37 kg/km
Min. Bend Radius Installation	95 mm
Min. Bend Radius Operation	31 mm
Max. Tensile Strength for Installation	1100 N
Crush Resistance (reversible)	750 N/10 cm
Fire Load	0.76 MJ/m

Chemical characteristics

RoHS	Free of hazardous substances according to RoHS 2002/95/EG
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Fibre Specifications

Optical Characteristics (cabled)

Fibre Name	G50/125 ULTRA-BEND 7.5
Fibre Core Diameter	50 µm
Fibre category	OM2
Fibre Code	G
Wavelengths	850 nm / 1300 nm
Maximum Attenuation	2.8 dB/km / 1.0 dB/km
Typical attenuation	2.4 dB/km / 0.8 dB/km
Serial 1 Gigabit Ethernet	750 m / 600 m
Serial 10 Gigabit Ethernet	150 m / -
Min. Overfilled Launch (OFL) Bandwidth	700 MHz*km / 500 MHz*km
Minimum Effective Modal Bandwidth (EMB)	950 MHz*km / -
Induced attenuation @ 7.5 mm radius	< 0.2 dB / -

- Notes:
- 1) 50 µm multimode fibre macrobend loss ≤ 0.2 dB at 850 nm for two turns around 7.5 mm radius mandrel
 - 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

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Ordering Information

Part Number	012T8X-32138E2G
Product Description	FREEDM™ Tight Buffer Indoor/Outdoor Cable 12F G50 MMF ClearCurve® OM2 0.9mm TB3
EAN Code	4042673571551

Shipping Information

Maximum Delivery Length	2,000 m
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