

FREEDM™ Tight Buffer Indoor/Outdoor Cable

12F G50 MMF ClearCurve® OM3 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

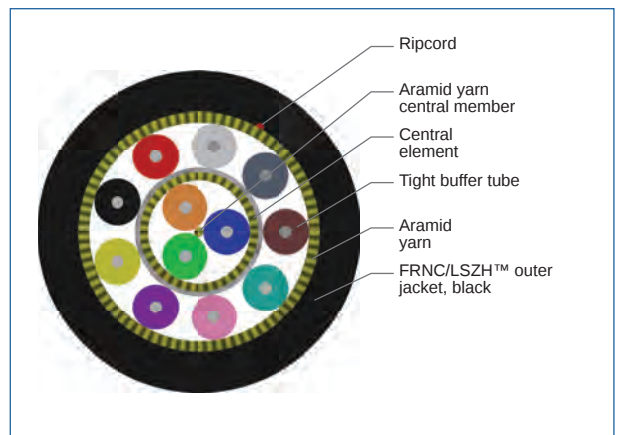
LSZH™/FRNC

Silicon-free outer jacket

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



Part Number: 012T8X-32188E2G



Cross Section of Order Number: 012T8X-32188E2G

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Standards

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

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	50 µm MM (OM3)
Coding according to EN 60794-1-1 (DIN VDE 0888-100-1)	U-VQ(ZN)H
Previous part number	LCXLN2-L5012-H700
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

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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
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 12 OM3CC TB3 0.9 LSZH(TM)/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 2011/65/EU
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Fibre Specifications

Optical Characteristics (cabled)

Fibre name	G50/125 ULTRA-BEND 7.5
Fibre code	T
Fibre core diameter	50 µm

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Fibre Specifications

Optical Characteristics (cabled)	
Fibre Category	OM3
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	1000 m / 600 m
Serial 10 gigabit ethernet	300 m / 333 m
Min. overfilled launch (OFL) bandwidth	1500 MHz*km / 500 MHz*km
Minimum effective modal bandwidth (EMB)	2000 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) Meets 0.75 ns optical skew when used in all Corning Plug and Play™/EDGE™ systems solutions.
3) Improved attenuation and bandwidth options available
4) Bend-insensitive single-mode fibres available on request.
5) Contact a Corning Customer Care Representative for additional information

Ordering Information

Part Number	012T8X-32188E2G
Product Description	FREEDM™ Tight Buffer Indoor/Outdoor Cable 12F G50 MMF ClearCurve® OM3 0.9mm TB3, Cca-s1a,d1,a1
EAN Code	4042673555148

Shipping Information

Maximum delivery length	2,000 m
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