

Loose Tube Circuit Integrity Indoor/Outdoor Cable

1x12 G50 MMF ClearCurve® OM3 LT 2.0

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Corning MPC (multi-purpose cable) loose tube cables are flame-retardant, indoor/outdoor cables designed for interbuilding and intrabuilding backbones; with a special focus on usage in tunnels and underground transportation systems.

The loose tube cable construction, by isolating the fibres from installation and environmental rigors, provides stable and highly reliable transmission parameters. The buffer tubes and fibers in each tube are color-coded for quick, easy identification.

The SZ-stranded construction further reduces installation and environmental influences on the transmission parameters and allows mid-span access.

These cables are designed for installation in conduits, ducts and in-house.

Features and Benefits

Circuit integrity technology

Tunnel and secured areas applications

All-dielectric cable construction

Requires no grounding or bonding

UV- and microbe-resistant

Can be installed in ducts or conduits

Dry core

Allows efficient and craft-friendly cable preparation in outdoor or indoor/outdoor applications

Laminated glass yarns

For improved rodent resistance

Fibres/buffer tubes colour coded to Telcordia-Bellcore

Easy identification of the individual tubes and fibres

SZ-stranded, loose tube design

Isolates fibres from installation and environmental rigors and facilitates mid-span access

Flame retardant

LSZH™/FRNC

Standards

Flame Resistance

Circuit Integrity to IEC
60331-25 (90 min @ 750 °C)

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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

Specifications

General Specifications	
Environment	Indoor/Outdoor Universal Cable
Application	Duct, Vertical Riser, General Purpose Horizontal
Cable type	Loose Tube
Product type	Dielectric armour
Flame rating	LSZH™/FRNC
Reaction to fire	Cca,s1b,d1,a1
Fibre category	50 µm MM (OM3)
Coding according to EN 60794-1-1 (DIN VDE 0888-100-1)	U-DQ(ZN)BH

Temperature Range	
Installation and assembly	-5 °C to 50 °C
Operation	-30 °C to 70 °C
Storage	-40 °C to 70 °C

Cable Design	
Central element	Dielectric
Central element diameter	6.1 mm
Fibre count	12
Fibre colouring	Blue, Orange, Green, Brown, Grey, White, Red, Black, Yellow, Violet, Pink, Turquoise
Fibres per tube	12

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Cable Design

Number of tube positions	6
Number of active tubes	1
Buffer tube colour coding	Blue
Buffer tube diameter	1.95 mm
Number of filling elements	5
Number of glass yarns filling elements	6
Tape	Mica tape
Number of ripcords	1
Tensile strength elements and/or armouring	Laminated swelling glass yarn armour
Outer jacket material	Flame-retardant, non-corrosive/low-smoke, zero-halogen (FRNC/LSZH) material
Outer jacket colour	Black
Outer jacket nominal thickness	1.95 mm
Cable marking	Metre - Handset - CE 17 EN 50575 Cca, s1b, d1, a1 - Sine - CORNING - Fibre Optic Cable - Year - U-DQ(ZN)BH 12 OM3CC LT 2.0 LSZH(TM)/FRNC

Mechanical Characteristics Cable

Nominal Outer Diameter	16.2 mm
Weight	270 kg/km
Min. Bend Radius Installation	283.5 mm
Min. Bend Radius Operation	245 mm
Max. tensile strength for installation	5000 N
Crush resistance (reversible)	2000 N/10 cm
Fire Load	3.65 MJ/m

Chemical Characteristics

RoHS	RoHS compliant
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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	1100 m / 600 m
Serial 10 gigabit ethernet	550 m / -
Min. overfilled launch (OFL) bandwidth	3500 MHz*km / 500 MHz*km
Minimum effective modal bandwidth (EMB)	4700 MHz*km / -
Induced attenuation @ 7.5 mm radius	< 0.2 dB / -

Notes: 1) Meets 0.75 ns optical skew when used in all Corning Plug and Play™/EDGE™ systems solutions.
2) 50 µm multimode fibre macrobend loss ≤ 0.2 dB at 850 nm for two turns around 7.5 mm radius mandrel
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	012TPU-T3188D2C
Product Description	Loose Tube Circuit Integrity Indoor/Outdoor Cable 1x12 G50 MMF ClearCurve® OM3 LT 2.0

Shipping Information

Maximum delivery length	6,000 m
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