FREEDM™ Gel-Free Indoor/Outdoor Cable

4F G50 MMF ClearCurve® OM2

CORNING

FREEDM™ gel-free MPC (Multipurpose Cables) can be deployed both indoor and outdoor for campus backbone and building backbone (riser) cabling as well as for the cabling between floor distributors. The innovative dry, gel-free design with water-blocking technology eliminates the need for traditional flooding compound, providing more efficient and craft-friendly cable preparation. The cables can be installed in conduits, ducts and be buried directly in the ground.

Features and Benefits

Dry, gel-free tube
Needs minimal cleaning, saving about 20 minutes per fan-out (12 fibres), splicing is made faster and more accurate, resulting in reliable, consistently low-loss terminations

All-dielectric cable construction
Requires no grounding or bonding

Laminated swelling glass yarns
Improved rodent resistance and longitudinal water protection

UV- and microbe-resistant
Can be installed in ducts or conduits

Small diameter and bend radius
Easy installation in space-constrained areas

Fibres colour coding to Telcordia-Bellcore
Easy identification of the individual fibres
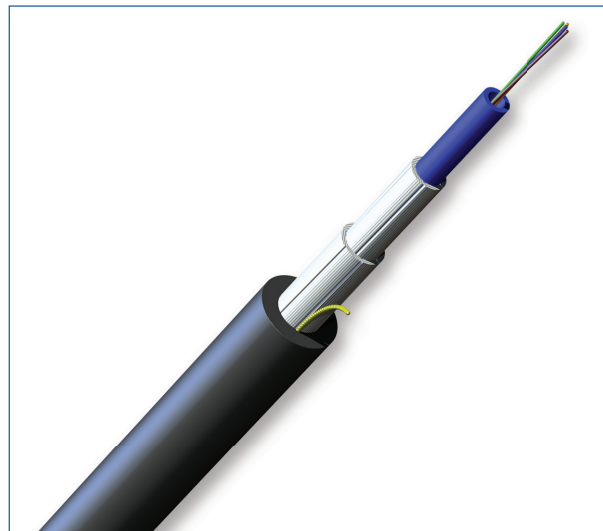
Waterblocking technology
OSP (outdoor) applications
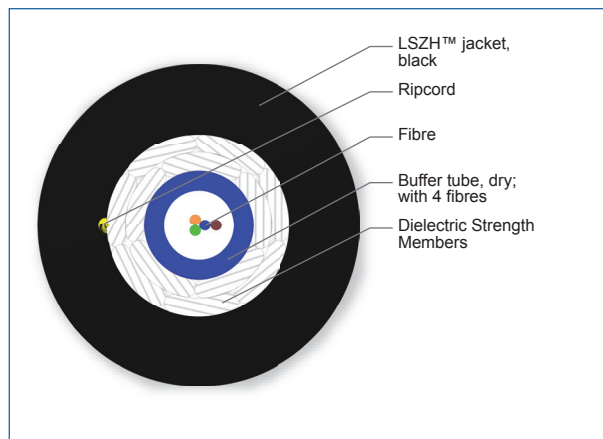
Silicon-free outer jacket
The cable jacket is free of harmful to paint structures

Flame retardant
LSZH™/FRNC

Part Number: 004TSZ-T3131D2G

LSZH™ jacket, black
Ripcord
Fibre
Buffer tube, dry; with 4 fibres
Dielectric Strength Members

Cross Section of Order Number: 004TSZ-T3131D2G

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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
	Non Corrosive to IEC 60754-2
Waterblocking	IEC 60794-1-2F5

Specifications

General Specifications	
Environment	Indoor/Outdoor Universal Cable
Application	Aerial, Direct Buried, Duct, General Purpose Horizontal
Cable type	Loose Tube
Product type	Dielectric armour
Flame rating	LSZH™/FRNC
Reaction to fire	Dca,s2,d2,a1
Fibre Category	50 µm MM (OM2)

Temperature Range	
Installation and assembly	-10 °C to 60 °C
Operation	-30 °C to 70 °C
Storage	-30 °C to 70 °C

Cable Design	
Fibre count	4
Fibre colouring	Blue, orange, green, brown
Fibres per tube	4
Number of tube positions	1
Tensile Strength Elements and/or Armouring - Layer 1	Dielectric strength members
Tensile strength elements and/or armouring - Layer 2	Water-swellable dielectric strength members
Number of ripcords	1

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Cable Design	
Outer jacket material	Flame-retardant, non-corrosive/low-smoke, zero-halogen (FRNC/LSZH) material
Outer jacket colour	Black

Mechanical Characteristics Cable	
Weight	42 kg/km
Nominal Outer Diameter	6.6 mm
Max. tensile strength, short-term	1000 N
Max. Tensile Strength, Long-Term	300 N
Min. Bend Radius Installation	99 mm
Min. Bend Radius Operation	66 mm

Chemical Characteristics	
RoHS	Free of hazardous substances according to RoHS 2011/65/EU

Fibre Specifications

Optical Characteristics (cabled)	
Fibre core diameter	50 µm
Fibre Category	OM2
Fibre code	T
Performance Option Code	31
Wavelengths	850 nm / 1300 nm
Maximum attenuation	3.0 dB/km / 1.0 dB/km
Serial 1 gigabit ethernet	750 m / 500 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 / -

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*

CORNING

Ordering Information

Part Number	004TSZ-T3131D2G
Product Description	FREEDM™ Gel-Free Indoor/Outdoor Cable 4F G50 MMF ClearCurve® OM2, Dca,s2,d2,a1

RoHS COMPLIANT