

FREEDM™ Gel-Free Indoor/Outdoor Cable

12F E9/125 SMF-28® Ultra

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

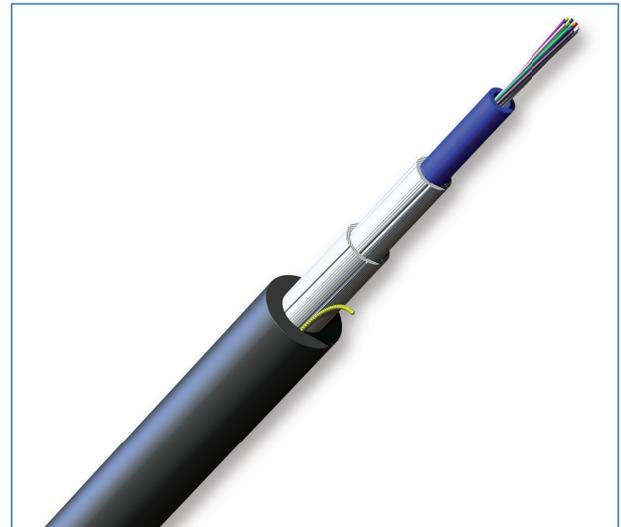
OSP (outdoor) applications

Silicon-free outer jacket

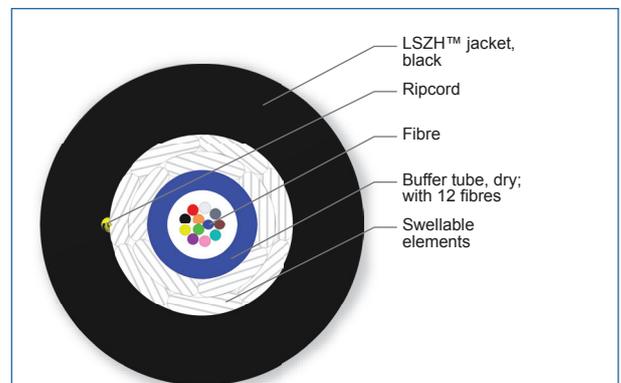
The cable jacket is free of harmful to paint structures

Flame retardant

LSZH™/FRNC



Part Number: 012ZSZ-T3101D2G



Cross Section of Order Number: 012ZSZ-T3101D2G

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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	SMF-28® Ultra fibre

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	12
Fibre colouring	Blue, Orange, Green, Brown, Grey, White, Red, Black, Yellow, Violet, Pink, Turquoise
Fibres per tube	12
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-swellaible dielectric strength members

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Cable Design

Number of ripcords	1
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
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Fibre Specifications

Optical Characteristics (cabled)

Fibre name	SMF-28® Ultra fibre
Fibre Category	ITU-TG.657.A1
Fibre code	Z
Performance Option Code	01
Wavelengths	1310 nm / 1383 nm / 1550 nm
Maximum attenuation	0.4 dB/km / 0.4 dB/km / 0.3 dB/km
Typical attenuation	0.33 dB/km / 0.33 dB/km / 0.19 dB/km

* For more information on typical attenuation please see the Corning whitepaper at: http://csmedia.corning.com/opcomm//Resource_Documents/whitepapers_rl/LAN-1863-AEN.pdf

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The CORNING logo is displayed in white, uppercase letters on a solid blue square background.

Ordering Information

Part Number	012ZSZ-T3101D2G
Product Description	FREEDM™ Gel-Free Indoor/Outdoor Cable 12F E9/125 SMF-28® Ultra, Dca,s2,d2,a1



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