

FREEDM™ Gel-free Loose Tube Dielectric Armour Indoor/Outdoor Cable LT 2.3 4x12 E9/125 SMF-28® Ultra LT 2.3

CORNING

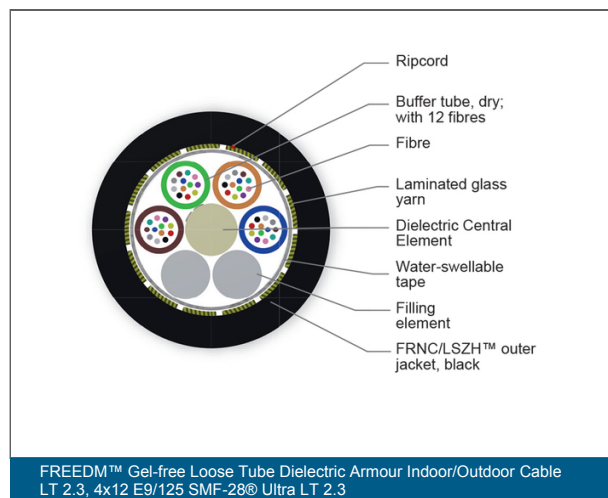
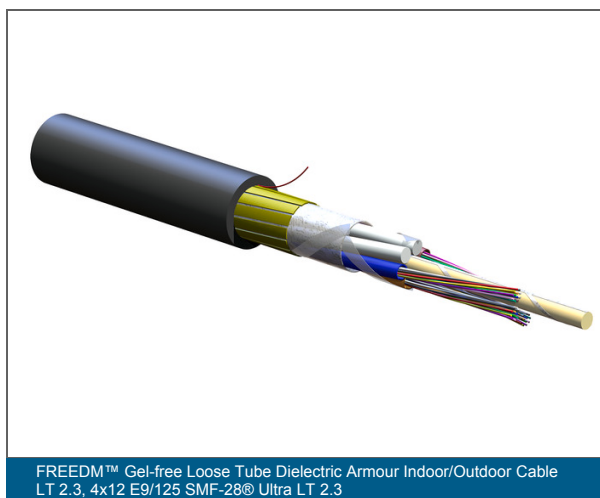
Part Number:
048ZRU-T3120D2G

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

Features and Benefits

Dry, gel-free tube

Minimal cleaning, easy cable preparation



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Specifications

General Specifications	
Cable type	Loose tube
Environment	Indoor/Outdoor
Product type	Dielectric armour
Fibre category	SMF-28® Ultra
Flame rating	LSZH/FRNC
Coding according to EN 60794-1-1 (DIN VDE 0888-100-1)	U-BQ(ZN)BH
Application	Duct, General purpose, Horizontal, Vertical Riser
Cable geometry	Round

Standards	
Reaction to Fire	Eca
RoHS	Free of hazardous substances according to RoHS 2011/65/EU
Waterblocking	IEC 60794-1-22 Method F5B

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Standards

Flame propagation test	Flame retardant according to IEC 60332-1-2 (single cable)
Reaction to Fire Requirements	Reaction to fire according to EN 50575 and EN 13501-6
Smoke density	Low Smoke to IEC 61034
Halogen content test	Zero Halogen according to IEC 60754-1
Level of corrosion	Non-corrosive according to IEC 60754-2

Environmental Conditions

Temperature range, installation	-5 °C to 50 °C
Temperature range, operation	-30 °C to 70 °C
Temperature range, storage	-40 °C to 70 °C

Cable Design

Cable marking	Metre - Handset - CE 18 EN 50575 Eca - Sine - CORNING - Fiber Optic Cable - Year - U-BQ(ZN)BH 48 E9U LT 2.3 LSZH(TM)/FRNC
Central element	Dielectric
Fibre count	48
Number of ripcords	1
Outer jacket colour	Black
Outer jacket material	Flame-retardant, non-corrosive/low-smoke, zero-halogen (FRNC/LSZH) material
Outer jacket nominal thickness	1.5 mm
Tensile strength elements and/or armouring - Layer 1	Laminated glass yarn armour
Buffer tube colour	Blue, orange, green, brown
Buffer tube diameter	2.25 mm
Central element diameter	2.5 mm
Filling element colour	Natural
Number of active tubes	4
Number of filling elements	2
Number of tube positions	6

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Cable Design

Tape	Water-swellable
Fibre colouring	Blue, orange, green, brown, grey, white, red, black, yellow, violet, pink, turquoise
Fibres per tube	12
Colour Code Standards	Telcordia

Mechanical Specifications

Crush resistance	5000 N/10 cm
Max. tensile strength for installation	4000 N
Min. bend radius installation	214 mm
Min. bend radius operation	160 mm
Nominal outer diameter	10.7 mm

Optical Characteristics

Fibre code	Z
Performance option code	20
Fibre category	OS2
Fibre Type	Single-mode (OS2) / 250 µm
Fibre name	Bend-Improved Single-mode (OS2)
Maximum Attenuation	0.34 dB/km / 0.34 dB/km / 0.20 dB/km
Wavelengths	1310 nm / 1383 nm / 1550 nm
Fibre compliance	ITU-T G.652.D and ITU-T G.657.A1
Fibre core diameter	8.2 µm
Cladding diameter	125 µm
Coating diameter	242 µm
Dispersion @ 1550 nm	≤ 18 [ps/(nm*km)]
Dispersion @ 1625 nm	≤ 22 [ps/(nm*km)]
Cable cutoff wavelength	1260 nm
Mode-Field Diameter at 1310 nm	9.2 µm

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Optical Characteristics

Mode-Field Diameter at 1550 nm	10.4 µm
PMD Link Design Value	≤ 0.04 ps/(nm*km)
PMD (Polarization Mode Dispersion) maximum individual fibre	≤ 0.1 ps/(nm*km)

Dimensions

Cable Weight	109 kg/km
Max. cable length per reel/drum	2000 m



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