

FREEDM™ Gel-filled Central Tube Dielectric Armour Indoor/Outdoor Cable, U-DQ(ZN)BH 4F SMF-28® Ultra CT 2.0, Dca-s1a,d0,a1

CORNING

Part Number:
004ZEU-83120A2G

FREEDM™ gel-filled MPC (Multipurpose Cables) can be deployed both indoor and outdoor for campus backbone, in conduits, ducts and in-house. Fibres are colour-coded for quick and easy identification. Central buffer tube cable construction makes it compact, light and flexible, ideal for connections requiring a moderate fibre count.

Features and Benefits

All-dielectric cable construction

Requires no grounding or bonding

Small diameter and bend radius

Easy installation in space-constrained areas

UV- and microbe-resistant

Can be installed in ducts or conduits

Laminated glass yarns

For improved rodent resistance

Fibres colour coding to Telcordia-Bellcore

Easy identification of the individual fibres

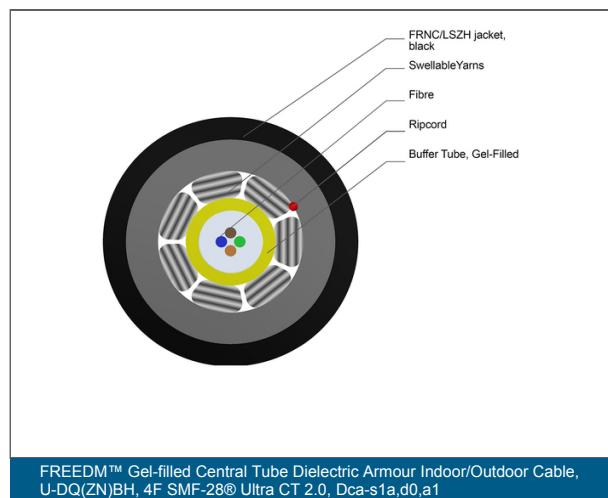
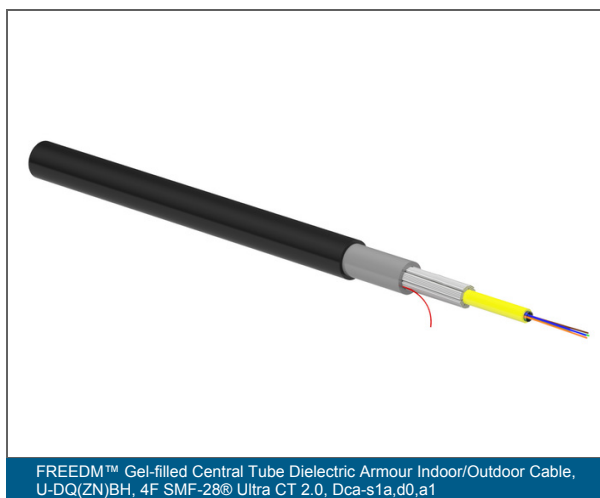
Silicon-free outer jacket

Cable jacket is free of components harmful to paint structures

Flame retardant

LSZH/FRNC

Meets industry standard waterblocking requirements for outdoor cable



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Specifications

General Specifications

Installation Methods	Duct
Cable type	Central 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-DQ(ZN)BH
Cable geometry	Round

Standards

Reaction to Fire	Dca, s1a, d0, a1
RoHS	Free of hazardous substances according to RoHS 2011/65/EU
Flame propagation test	Flame retardant according to IEC 60332-1-2 (single cable) and IEC 60332-3-24 (bunch of cables)
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	-30 °C to 70 °C

Cable Design

Tube Filling Type	Gel-filled
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Cable Design	
Cable marking	Metre - Handset - CE 23 EN 50575 Dca-s1a,d0,a1 - Sinus - CORNING - Fibre Optic Cable - Year - U-DQ(ZN)BH 4 SMF-28® Ultra CT 2.0 - G.652.D & G.657.A1 - LSZH(TM)/FRNC
Fibre count	4
Number of ripcords	1
Buffer tube colour coding, layer 1	Yellow
Outer jacket colour	Black
Outer jacket material	Flame-retardant, non-corrosive/low-smoke, zero-halogen (FRNC/LSZH) material
Outer jacket nominal thickness	1.7 mm
Number of active tubes	1
Strength members	Glass yarn armouring
Cable marking colour	White
Fibre colouring	Blue, orange, green, brown
Colour Code Standards	Telcordia
Inner Tube Diameter	1.95 mm

Mechanical Specifications	
Crush resistance	1000 N/10 cm
Max. tensile strength for installation	1500 N
Min. bend radius installation	132 mm
Min. bend radius operation	66 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)

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Optical Characteristics

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

Dimensions

Outer diameter	6.6 mm
Cable Weight	57.3 kg/km
Max. cable length per reel/drum	6000 m



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