

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



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. Fibers are color-coded for quick and easy identification. Central buffer tube cable construction makes it compact, light and flexible, ideal for connections requiring a moderate fiber 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

Improved rodent resistance

Fibers color coding to Telcordia-Bellcore

Easy identification of the individual fibers

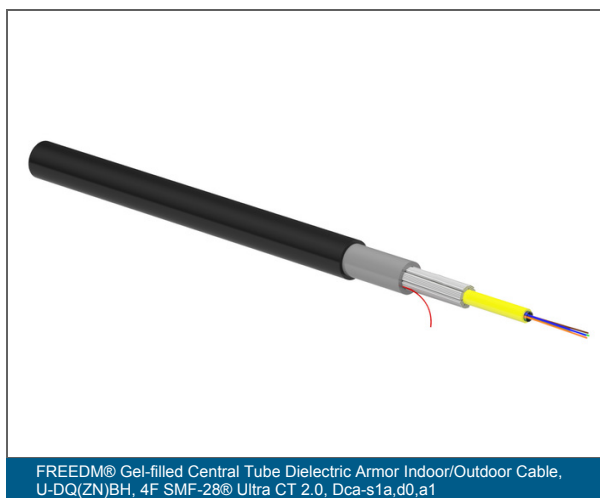
Silicon-free outer jacket

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	Single Tube
Environment	Indoor/Outdoor
Product Type	Dielectric armor
Fiber 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 according 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	Meter - Handset - CE 23 EN 50575 Dca-s1a,d0,a1 - Sinus - CORNING - Fiber Optic Cable - Year - U-DQ(ZN)BH 4 SMF-28® Ultra CT 2.0 - G.652.D & G.657.A1 - LSZH(TM)/FRNC
Fiber Count	4
Number of Ripcords	1
Buffer Tube Color Coding, Layer 1	Yellow
Outer Jacket Color	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 Armoring
Cable Marking Color	White
Fiber Coloring	Blue, Orange, Green, Brown
Color 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	
Fiber Code	Z
Performance Option Code	20
Fiber Category	OS2
Fiber Type	Single-mode (OS2) / 250 µm
Fiber Name	Bend-Improved Single-mode (OS2)

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CORNING

Optical Characteristics	
Maximum Attenuation	0.34 dB/km / 0.34 dB/km / 0.20 dB/km
Wavelengths	1310 nm / 1383 nm / 1550 nm
Fiber Compliance	ITU-T G.652.D and ITU-T G.657.A1
Fiber 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 maximum individual fiber	≤ 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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