

FREEDM™ Tight Buffer Indoor/Outdoor Cable

CORNING

Features and Benefits

Waterblocking technology

OSP (outdoor) applications

All-dielectric cable construction

Requires no grounding or bonding

UV- and microbe-resistant

Can be installed in ducts or conduits

Dry cable core by means of water swellable elements

Allows efficient and craft-friendly cable preparation in outdoor or indoor/outdoor applications

Small diameter and bend radius

Easy installation in space-constrained areas

TB3 tight-buffered construction

Easy and consistent stripping up to 10 cm

Flame retardant

LSZH™/FRNC

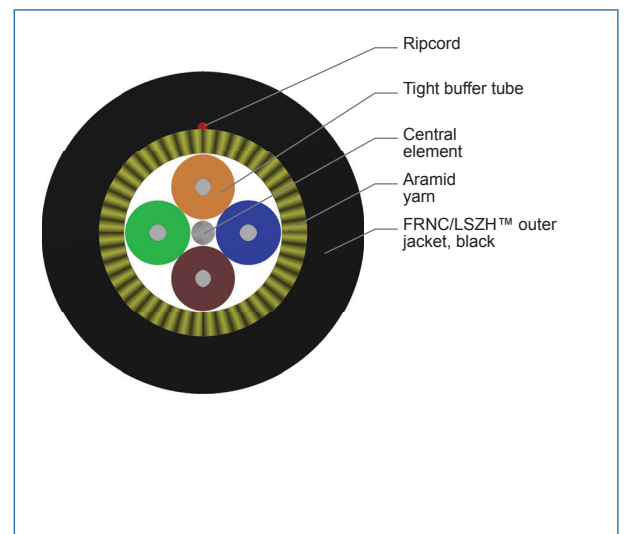
Corning MPC (multipurpose cable) tight-buffered cables are flame-retardant, indoor/outdoor cables designed for interbuilding and intrabuilding backbones in duct and riser applications.

The tight-buffered construction facilitates easier termination for low-fibre-count applications in the local area network (LAN) and eliminates need for fan-out kits.

These cables are designed for installation in conduits, ducts and in-house.



FREEDM™ Tight Buffer Indoor/Outdoor Cable, 4 Fibres



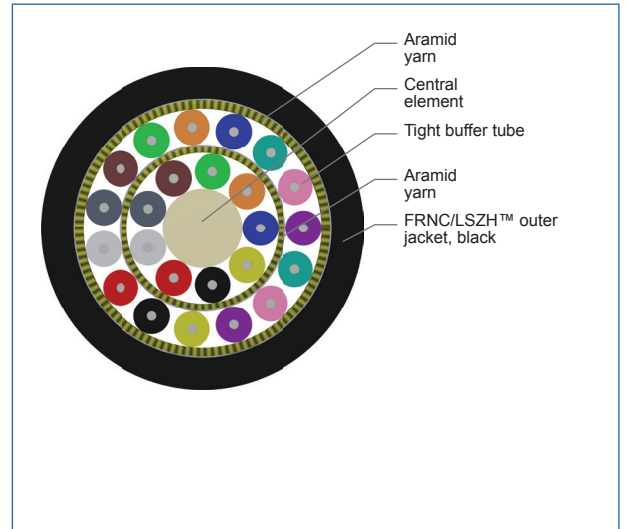
FREEDM™ Tight Buffer Indoor/Outdoor Cable, 4 Fibres

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FREEDM™ Tight Buffer Indoor/Outdoor Cable, 24 Fibres



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Specifications

Cable Design

Buffering diameter	900 µm
Number of ripcords	1
Outer jacket material	Flame-retardant, non-corrosive/low-smoke, zero-halogen (FRNC/LSZH) material
Outer jacket colour	Black
Outer jacket nominal thickness	0.8 mm
Cable marking	Metre - Handset - CE 17 EN 50575 B2ca-s1a,d1,a1 - Sine - CORNING - Fibre Optic Cable - Year - FREEDM(TM) U-VQ(ZN)H Fibre Count, Fibre Category TB3 0.9 LSZH(TM)/FRNC

Temperature Range

Installation and assembly	-5 °C to 50 °C
Operation	-20 °C to 60 °C
Storage	-25 °C to 70 °C

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Fibre count	Nominal Outer Diameter	Min. Bend Radius Installation	Min. Bend Radius Operation	Weight	Crush resistance (reversible)	Max. tensile strength for installation
OM2, OM3 and OM4						
4	4.5 mm	68 mm	23 mm	22 kg/km	750 N/10 cm	600 N
6 - 8	5.5 mm	85 mm	27 mm	32 kg/km	750 N/10 cm	800 N
12	6.5 mm	100 mm	33 mm	40 kg/km	750 N/10 cm	1500 N
16	6.5 mm	100 mm	33 mm	45 kg/km	750 N/10 cm	1500 N
24	8.1 mm	120 mm	41 mm	65 kg/km	750 N/10 cm	1500 N
OS2 and OM1						
4	4.5 mm	68 mm	45 mm	22 kg/km	750 N/10 cm	600 N
6 - 8	5.5 mm	85 mm	55 mm	32 kg/km	750 N/10 cm	800 N
12	6.5 mm	100 mm	65 mm	40 kg/km	750 N/10 cm	1500 N
16	6.5 mm	100 mm	65 mm	45 kg/km	750 N/10 cm	1500 N
24	8.1 mm	120 mm	80 mm	65 kg/km	750 N/10 cm	1500 N

Chemical Characteristics

RoHS	Free of hazardous substances according to RoHS 2011/65/EU
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Transmission Performance

Multimode				
Fibre name	G50/125 ULTRA-BEND 7.5	G50/125 ULTRA-BEND 7.5	G50/125 ULTRA-BEND 7.5	G62.5L/125 InfiniCor® 300
Fibre code	T	T	T	K
Fibre core diameter (µm)	50	50	50	62.5
Fibre Category	OM4	OM3	OM2	OM1
Wavelengths (nm)	850/1300	850/1300	850/1300	850/1300
Maximum attenuation (dB/km)	2.8/1.0	2.8/1.0	2.8/1.0	3.1/0.8
Typical attenuation (dB/km)	2.4/0.8	2.4/0.8	2.4/0.8	2.9/0.7
Serial 1 gigabit ethernet (m)	1100/600	1000/600	750/600	300/550
Serial 10 gigabit ethernet (m)	550/-	300/333	150/-	33/-
Min. overfilled launch (OFL) bandwidth (MHz*km)	3500/500	1500/500	700/500	200/600
Minimum effective modal bandwidth (EMB) (MHz*km)	4700/-	2000/-	950/-	220/-
Induced attenuation @ 7.5 mm radiusdB	<0.2/-	<0.2/-	<0.2/-	-

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Single-mode		
Fibre name	SMF-28® Ultra TB Cable Optical Fibre	Corning® ClearCurve® ZBL Bend Insensitive Single mode Fibre
Mode-Field Diameter at 1310 nm (µm)	9.2	8.6+/- 0.4
Fibre code	Z	U
Coating diameter (µm)	242	242
Cladding diameter (µm)	125	125+/- 0.7
Wavelengths (nm)	1310/1383/1550	1310/1550
Maximum attenuation (dB/km)	0.38/0.38/0.25	0.34/0.34/0.20
Serial 1 gigabit ethernet	5000/-	-
Serial 10 gigabit ethernet	10000/40000	-
Cable cutoff wavelength (nm)	1260	1260
Dispersion in the range 1285 to 1330 nm (ps / (nm * km))	≤3.5	≤3.5
Dispersion @ 1550 nm (ps / (nm * km))	≤18	≤18
PMD Link Design Value (PS / √km)	≤0.04	0.06
PMD maximum individual fibre (PS / √km)	≤0.1	≤0.2
Fibre compliance	ITU-T G.652.D and ITU-T G.657.A1	ITU-T G.652.D and ITU-T G.657.B3

Ordering Information | Note: For other options, please contact our Customer Care at cc.emea@corning.com or 00800 2676 4641.

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1 **2** **3**

1 Select fibre count.

002 = 2 fibres
004 = 4 fibres
006 = 6 fibres
008 = 8 fibres
012 = 12 fibres
016 = 16 fibres
024 = 24 fibres

2 Select fibre type.

Z = 9 µm, single-mode (SMF-28e® ULTRA)
U = ClearCurve® ZBL Bend Insensitive Single-mode Fibre
K = 62.5 µm multimode (OM1)
T = 50 µm multimode (OM2/OM3/OM4)

3 Select transmission option.

25 = SMF-28e® ULTRA, ClearCurve® ZBL
08 = OM1
38 = OM2
88 = OM3
98 = OM4

FREEDM™ Tight Buffer Indoor/Outdoor Cable

The Corning logo consists of a solid blue square with the word "CORNING" in white, uppercase, sans-serif font centered within it.

Notes



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