



Fiber Indoor/Outdoor cable, TeraSPEED®, 120 min Fire Survival, Low Smoke Zero Halogen (LSZH), 12 fiber, Gel-Filled, Central Loose Tube, Singlemode G.652.D and G.657.A1, Meters jacket marking, Black jacket color. Provides Rodent Resistance.

Product Classification

Regional Availability	Asia Australia/New Zealand EMEA
Portfolio	CommScope®
Product Type	Fiber indoor/outdoor cable
Product Series	C-L2

General Specifications

Armor Type	Corrugated steel
Cable Type	Loose tube
Subunit Type	Gel-filled
Jacket Color	Black
Jacket Marking	Meters
Jacket Marking Method	Inkjet
Jacket Marking Text	COMMSCOPE GB SYSTEM F O CABLE X-1716211-4 INT/EXT FIRE SURVIVAL 12 X 9/125 OS2 [Serial NUMBER] [METRE MARK]
Fibers per Subunit, quantity	12
Total Fiber Count	12

Dimensions

Cable Length	2000 m 6,561.68 ft
Buffer Tube/Subunit Diameter	4 mm 0.157 in
Diameter Over Jacket	12.7 mm 0.5 in

Mechanical Specifications

Minimum Bend Radius, loaded	330 mm 12.992 in
Minimum Bend Radius, unloaded	255 mm 10.039 in
Tensile Load, long term, maximum	400 N 89.924 lbf

2-1716211-4 | C-012-L2-8W-M12BK/40G/GY/FS/B

Tensile Load, short term, maximum	1400 N 314.733 lbf
Compression	30 N/mm 171.304 lb/in
Compression Test Method	IEC 60794-1 E3
Impact	10 N-m 88.507 in lb
Impact Test Method	IEC 60794-1 E4
Strain	See long and short term tensile loads
Strain Test Method	IEC 60794-1 E1
Twist	5 cycles
Twist Test Method	IEC 60794-1 E7

Optical Specifications

Fiber Type	G.652.D and G.657.A1, TeraSPEED® OS2
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Optical Specifications, Wavelength Specific

Attenuation, maximum	0.22 dB/km @ 1,550 nm 0.34 dB/km @ 1,310 nm
Standards Compliance	TIA-492CAAB (OS2)

Environmental Specifications

Operating Temperature	-20 °C to +70 °C (-4 °F to +158 °F)
Storage Temperature	-40 °C to +70 °C (-40 °F to +158 °F)
Cable Qualification Standards	EN 187105 IEC 60794-1-2
EN50575 CPR Cable EuroClass Fire Performance	B2ca
EN50575 CPR Cable EuroClass Smoke Rating	s1b
EN50575 CPR Cable EuroClass Droplets Rating	d0
EN50575 CPR Cable EuroClass Acidity Rating	a1
Environmental Space	Aerial, lashed Buried Universal Low Smoke Zero Halogen (ULSZH)
Flame Test Listing	EN 50399 IEC 60332-1-2
Flame Test Method	EN 50399 IEC 60331-25 (120) Fire resistance: 120 minutes at 750 °C (no fiber break) IEC 60332-1-2 IEC 60754-2 IEC 61034-2
Jacket UV Resistance	UV stabilized
Water Penetration	24 h
Water Penetration Test Method	IEC 60794-1 F5

Environmental Test Specifications

2-1716211-4 | C-012-L2-8W-M12BK/40G/GY/FS/B

Low High Bend Test Method	IEC 60794-1 E11
Temperature Cycle	-25 °C to +70 °C (-13 °F to +158 °F)
Temperature Cycle Test Method	IEC 60794-1 F1

Packaging and Weights

Cable weight	216 kg/km 145.145 lb/kft
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Regulatory Compliance/Certifications

Agency	Classification
CHINA-ROHS	Below maximum concentration value
REACH-SVHC	Compliant as per SVHC revision on www.commscope.com/ProductCompliance
ROHS	Compliant
UK-ROHS	Compliant



Included Products

CS-8W-250-EMEA - LightScope ZWP® Singlemode Fiber
250um

* Footnotes

Operating Temperature Specification applicable to non-terminated bulk fiber cable

LightScope ZWP® Singlemode Fiber



Product Classification

Portfolio	CommScope®
Product Type	Optical fiber

General Specifications

Cladding Diameter	125 µm
Cladding Diameter Tolerance	±0.7 µm
Cladding Non-Circularity, maximum	0.7 %
Coating Diameter (Colored)	249 µm
Coating Diameter (Uncolored)	242 µm
Coating Diameter Tolerance (Colored)	±13 µm
Coating Diameter Tolerance (Uncolored)	±5 µm
Coating/Cladding Concentricity Error, maximum	12 µm
Core/Clad Offset, maximum	0.5 µm
Proof Test	689.476 N/mm ² 100000 psi

Dimensions

Fiber Curl, minimum	4 m 13.123 ft
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Mechanical Specifications

Macrobending, 20 mm Ø mandrel, 1 turn	0.75 dB @ 1,550 nm 1.50 dB @ 1,625 nm
Macrobending, 30 mm Ø mandrel, 10 turns	0.25 dB @ 1,550 nm 1.00 dB @ 1,625 nm
Macrobending, 60 mm Ø mandrel, 100 turns	0.05 dB @ 1,550 nm 0.05 dB @ 1,625 nm
Coating Strip Force, maximum	8.9 N 2.001 lbf
Coating Strip Force, minimum	1.3 N 0.292 lbf

CS-8W-250-EMEA | 250um

Dynamic Fatigue Parameter, minimum 20

Optical Specifications

Cabled Cutoff Wavelength, maximum 1250 nm

Point Defects, maximum 0.05 dB

Zero Dispersion Slope, maximum 0.092 ps/[km-nm-nm]

Zero Dispersion Wavelength, maximum 1324 nm

Zero Dispersion Wavelength, minimum 1300 nm

Optical Specifications, Wavelength Specific

Attenuation, maximum 0.21 dB/km @ 1,550 nm | 0.24 dB/km @ 1625 nm | 0.25 dB/km @ 1,490 nm | 0.35 dB/km @ 1,310 nm | 0.35 dB/km @ 1,385 nm

Dispersion, maximum 18 ps(nm-km) at 1550 nm | 2.2 ps(nm-km) at 1625 nm | 3.5 ps(nm-km) from 1285 nm to 1330 nm at 1310 nm

Index of Refraction 1.467 @ 1,310 nm | 1.468 @ 1,550 nm

Mode Field Diameter 10.4 μm @ 1,550 nm | 9.2 μm @ 1,310 nm

Mode Field Diameter Tolerance $\pm 0.4 \mu\text{m}$ @ 1310 nm | $\pm 0.5 \mu\text{m}$ @ 1550 nm

Polarization Mode Dispersion Link Design Value, maximum 0.06 ps/sqrt(km)

Standards Compliance ITU-T G.652.D | ITU-T G.657.A1

Environmental Specifications

Heat Aging, maximum 0.05 dB/km @ 85 °C

Temperature Dependence, maximum 0.05 dB/km

Temperature Humidity Cycling, maximum 0.05 dB/km

Water Immersion, maximum 0.05 dB/km @ 23 °C

* Footnotes

Temperature Dependence, maximum Temperature dependence is conducted at -60 °C to +85 °C (-76 °F to +185 °F)

Temperature Humidity Cycling, maximum Temperature humidity cycling is conducted at -10 °C to +85 °C (+14 °F to +185 °F) up to 95% relative humidity