

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



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

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

## Optical Specifications

<b>Fiber Type</b>	G.652.D and G.657.A1, TeraSPEED®   OS2
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## Optical Specifications, Wavelength Specific

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

## Environmental Specifications

<b>Operating Temperature</b>	-20 °C to +70 °C (-4 °F to +158 °F)
<b>Storage Temperature</b>	-33 °C to +40 °C (-27.4 °F to +104 °F)
<b>Cable Qualification Standards</b>	EN 187105   IEC 60794-1-2
<b>EN50575 CPR Cable EuroClass Fire Performance</b>	B2ca
<b>EN50575 CPR Cable EuroClass Smoke Rating</b>	s1b
<b>EN50575 CPR Cable EuroClass Droplets Rating</b>	d0
<b>EN50575 CPR Cable EuroClass Acidity Rating</b>	a1
<b>Environmental Space</b>	Aerial, lashed   Buried   Universal Low Smoke Zero Halogen (ULSZH)
<b>Flame Test Listing</b>	EN 50399   IEC 60332-1-2
<b>Flame Test Method</b>	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
<b>Jacket UV Resistance</b>	UV stabilized
<b>Water Penetration</b>	24 h
<b>Water Penetration Test Method</b>	IEC 60794-1 F5

## Environmental Test Specifications

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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 <a href="http://www.commscope.com/ProductCompliance">www.commscope.com/ProductCompliance</a>
ROHS	Compliant
UK-ROHS	Compliant



Included Products

CS-8W-250-EMEA – LightScope® ZWP Singlemode Fiber  
8W-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)	±7 µm
Coating/Cladding Concentricity Error, maximum	12 µm
Core/Clad Offset, maximum	0.5 µm
Proof Test	689.476 N/mm²   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
Dynamic Fatigue Parameter, minimum	20

Optical Specifications

# CS-8W-250-EMEA | 8W-250um

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	0.20 dB/km @ 1550 nm   0.23 dB/km @ 1,625 nm   0.344 dB/km @ 1310 nm   0.344 dB/km @ 1380 – 1385 nm
Dispersion, maximum	18 ps(nm-km) at 1550 nm   22 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   1.467 @ 1,385 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	±0.4 µm @ 1310 nm   ±0.5 µm @ 1550 nm
Polarization Mode Dispersion Link Design Value, maximum	0.05 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