2-599172-4 | C-012-CA-8W-M12YL/28G/GRP/D



Fiber Optic Cable, 12-fiber, OS2, ULSZH, loose tube, gel-filled. Provides Rodent Resistance.

OBSOLETE

This product was discontinued on: March 31, 2023

Product Classification

Regional Availability	Australia/New Zealand EMEA	
Portfolio	CommScope®	
Product Type	Fiber indoor/outdoor cable	
Product Series	C-CA	
General Specifications		
Armor Type	Non-metallic rods	
Cable Type	Loose tube	
Subunit Type	Gel-filled	
Filler, quantity	1	
Jacket Color	Yellow	
Jacket Marking	Meters	
Fibers per Subunit, quantity	12	
Total Fiber Count	12	
Dimensions		
Cable Length	2000 m 6,561.68 ft	
Diameter Over Jacket	9 mm 0.354 in	
Mechanical Specifications		
Minimum Bend Radius, loaded	228.6 mm 9 in	
Minimum Bend Radius, unloaded	175.3 mm 6.902 in	
Tensile Load, long term, maximum	750 N 168.607 lbf	

Page 1 of 5

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2-599172-4 | C-012-CA-8W-M12YL/28G/GRP/D

3000 N | 674.427 lbf Tensile Load, short term, maximum **Cable Crush Resistance, maximum** 30 N/mm | 171.304 lb/in **Compression Test Method** IEC 60794-1-2 E3 **Optical Specifications Fiber Type** G.652.D and G.657.A1, TeraSPEED® | OS2 Optical Specifications, Wavelength Specific Attenuation, maximum 0.35 dB/km @ 1,300 nm | 0.35 dB/km @ 1,550 nm | 0.45 dB/km @ 1,310 nm **Standards Compliance** IEC 60794-1 | TIA-492CAAB (OS2) **Environmental Specifications** Installation temperature -5 °C to +50 °C (+23 °F to +122 °F) **Operating Temperature** -20 °C to +70 °C (-4 °F to +158 °F) -20 °C to +70 °C (-4 °E to +158 °E) Storage Temperature

otorage remperature	20 0 10 170 0 (4 1 10 1100 1)
EN50575 CPR Cable EuroClass Fire Performance	Dca
EN50575 CPR Cable EuroClass Smoke Rating	s2
EN50575 CPR Cable EuroClass Droplets Rating	d2
EN50575 CPR Cable EuroClass Acidity Rating	al
Environmental Space	Universal Low Smoke Zero Halogen (ULSZH)

Environmental Test Specifications

Temperature Cycle	-20 °C to +70 °C (-4 °F to +158 °F)
Temperature Cycle Test Method	IEC 60794-1-2 F1

Packaging and Weights

Cable weight

94 kg/km | 63.165 lb/kft

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

Page 2 of 5

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2-599172-4 | C-012-CA-8W-M12YL/28G/GRP/D



Included Products

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

* Footnotes

Operating Temperature Specification applicable to non-terminated bulk fiber cable

Page 3 of 5

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

LightScope® ZWP Singlemode Fiber

LightScope[®] 2000

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 Tensile Stress	100,000 psi (0.69 GPa)	
Dimensions		
Fiber Curl, minimum	4 m 13.123 ft	
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

Page 4 of 5

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COMMSCOPE®

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

Page 5 of 5

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