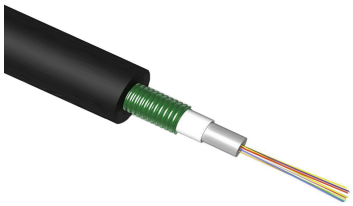
810009836/DB | O-024-CA-8W-M24BK/GY/HD



Fiber OSP cable, 24-fiber, OS2, HDPE, loose tube, 24 fiber, gel-filled, Singlemode G.652.D and G.657.A1, 1000 m, Meters jacket marking, Black jacket color

Product Classification

Regional Availability	Australia/New Zealand | EMEA
Portfolio	CommScope®
Product Type	Fiber OSP cable
Product Series	O-CA

General Specifications

Armor Type	Corrugated steel
Cable Type	Loose tube
Construction Type	Armored
Subunit Type	Gel-filled
Filler, quantity	1
Jacket Color	Black
Jacket Marking	Meters
Jacket Marking Method	Inkjet
Jacket Marking Text	COMMSCOPE GB SYSTEM F.O. CABLE 810009836/DB CSA GEL LOOSE TUBE 24X9 /125 OS2 HDPE (Serial NUMBER) (METER MARK)
Fibers per Subunit, quantity	24
Total Fiber Count	24

Dimensions

Cable Length	1000 m | 3,280.84 ft
Buffer Tube/Subunit Diameter	4 mm | 0.157 in
Diameter Over Jacket	10.5 mm | 0.413 in

Material Specifications

Jacket Material	High density polyethylene (HDPE)

Mechanical Specifications

Minimum Bend Radius, loaded	210 mm | 8.268 in
Minimum Bend Radius, unloaded	160 mm | 6.299 in
Tensile Load, long term, maximum	1250 N | 281.011 lbf
Compression	3000 N/mm | 17,130.441 lb/in
Compression Test Method	IEC 60794-1-2 E3
Flex	25 cycles
Impact	5 N-m | 44.254 in lb
Impact Test Method	IEC 60794-1 E4
Twist	5 cycles
Twist Test Method	IEC 60794-1 E7

Optical Specifications

Fiber Type	G.652.D and G.657.A1

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)
Storage Temperature	-20 °C to +70 °C (-4 °F to +158 °F)
Water Penetration	24 h
Water Penetration Test Method	IEC 60794-1 F5

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	151 kg/km | 101.467 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

Included Products

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

* Footnotes

Operating Temperature Specification applicable to non-terminated bulk fiber cable

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

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 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

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