## 2-599690-4 | 0-024-CA-8W-M24BK/40G/GY/HD



Outside Plant Fiber Optic Cable, HDPE, 24-fiber, OS2, loose tube, gel-filled. Provides Rodent Resistance.

### **Product Classification**

Regional Availability Australia/New Zealand | EMEA

PortfolioCommScope®Product TypeFiber OSP cable

Product Series O-CA

General Specifications

Armor Type Corrugated steel

Cable TypeLoose tubeSubunit TypeGel-filled

Filler, quantity

Jacket ColorBlackJacket MarkingMetersJacket Marking MethodInkjet

Jacket Marking Text COMMSCOPE GB SYSTEM F.O. CABLE X-599690-4 CSA GEL LOOSE TUBE 24X9/125 OS2

HDPE (Serial NUMBER) (METRE MARK)

Fibers per Subunit, quantity 24

Total Fiber Count 24

**Dimensions** 

 Cable Length
 2000 m | 6,561.68 ft

 Diameter Over Jacket
 10.5 mm | 0.413 in

Material Specifications

Jacket Material High density polyethylene (HDPE)

COMMSC PE°

# 2-599690-4 | 0-024-CA-8W-M24BK/40G/GY/HD

### Mechanical Specifications

Minimum Bend Radius, loaded200.7 mm | 7.902 inMinimum Bend Radius, unloaded160 mm | 6.299 inTensile Load, long term, maximum625 N | 140.506 lbfTensile Load, short term, maximum1200 N | 269.771 lbf

Flex 25 cycles

**Optical Specifications** 

Fiber Type 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  $-5 \,^{\circ}\text{C}$  to  $+50 \,^{\circ}\text{C}$  (+23  $^{\circ}\text{F}$  to +122  $^{\circ}\text{F}$ )

Operating Temperature  $-20 \,^{\circ}\text{C}$  to  $+70 \,^{\circ}\text{C}$  (-4  $^{\circ}\text{F}$  to +158  $^{\circ}\text{F}$ )

Storage Temperature  $-20 \,^{\circ}\text{C}$  to  $+70 \,^{\circ}\text{C}$  (-4  $^{\circ}\text{F}$  to +158  $^{\circ}\text{F}$ )

Packaging and Weights

**Cable weight** 120 kg/km | 80.636 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 250um



# 2-599690-4 | 0-024-CA-8W-M24BK/40G/GY/HD

\* Footnotes

**Operating Temperature** Specification applicable to non-terminated bulk fiber cable

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

### LightScope ZWP® Singlemode Fiber



#### **Product Classification**

 Portfolio
 CommScope®

 Product Type
 Optical fiber

### General Specifications

**Cladding Diameter** 125 µm **Cladding Diameter Tolerance**  $\pm 0.7 \, \mu m$ 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  $0.5 \, \mu m$ 

**Proof Test** 689.476 N/mm² | 100000 psi

#### **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 1.50 dB @ 1,625 nm

 Macrobending, 30 mm Ø mandrel, 10 turns
 0.25 dB @ 1,550 nm
 1 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, maximum8.9 N | 2.001 lbfCoating Strip Force, minimum1.3 N | 0.292 lbf



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

Dynamic Fatigue Parameter, minimum 20

Optical Specifications

Cabled Cutoff Wavelength, maximum1250 nmPoint Defects, maximum0.05 dB

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

Zero Dispersion Wavelength, maximum1324 nmZero Dispersion Wavelength, minimum1300 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

 $\textbf{Mode Field Diameter} \hspace{1.5cm} 10.4~\mu\text{m} \ \textcircled{@} \ 1,550~\text{nm} \hspace{0.2cm} | \hspace{0.2cm} 9.2~\mu\text{m} \ \textcircled{@} \ 1,310~\text{nm}$ 

**Mode Field Diameter Tolerance** ±0.4 μm @ 1310 nm | ±0.5 μm @ 1550 nm

Polarization Mode Dispersion Link Design Value, maximum 0.06 ps/sgrt(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, maximum0.05 dB/kmTemperature Humidity Cycling, maximum0.05 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

**COMMSCOPE®**