# 810010427/DB | B-216-LN-8W-M24BK/14G 200



Fiber OSP cable, Zero Water Peak,® Blown Micro Single Jacket All-Dielectric Outdoor Stranded Loose Tube 200um Fiber Arid-Core™ Construction, 216 fiber, Singlemode G.652.D and G.657.A1, Gel-filled, Meters jacket marking, Black jacket color

#### **Product Classification**

Regional Availability EMEA

Portfolio CommScope®
Product Type Fiber OSP cable

Product Series B-LN

### General Specifications

 Cable Type
 Stranded loose tube

Construction TypeNon-armoredSubunit TypeGel-filledJacket ColorBlackJacket MarkingMetersJacket Marking MethodLaserSubunit, quantity9

Fibers per Subunit, quantity 24

Total Fiber Count 216

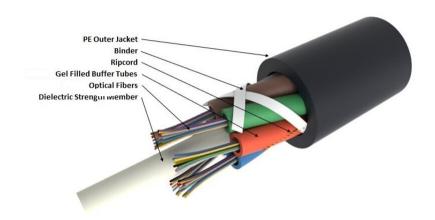
#### **Dimensions**

Buffer Tube/Subunit Diameter1.4 mm0.055 inDiameter Over Jacket6.4 mm0.252 in

### Representative Image



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## Material Specifications

Jacket Material High density polyethylene (HDPE)

## Mechanical Specifications

Minimum Bend Radius, loaded 130 mm | 5.118 in

Minimum Bend Radius, unloaded 90 mm | 3.543 in

Tensile Load, long term, maximum 360 N | 80.931 lbf

Tensile Load, short term, maximum 1200 N | 269.771 lbf

Cable Crush Resistance, maximum 5 N/mm | 28.551 lb/in

**Compression Test Method** IEC 60794-1 E3

Flex 25 cycles

Flex Test Method IEC 60794-1 E6

**Impact** 1 N-m | 8.851 in lb

Impact Test Method IEC 60794-1 E4

**Strain** See long and short term tensile loads

Strain Test Method FOTP-33 | IEC 60794-1 E1

Twist 10 cycles

Twist Test Method IEC 60794-1 E7

Optical Specifications

COMMSC PE®

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

#### **Environmental Specifications**

Installation temperature  $-15 \,^{\circ}\text{C}$  to  $+40 \,^{\circ}\text{C}$  ( $+5 \,^{\circ}\text{F}$  to  $+104 \,^{\circ}\text{F}$ )

Operating Temperature  $-30 \,^{\circ}\text{C}$  to  $+70 \,^{\circ}\text{C}$  ( $-22 \,^{\circ}\text{F}$  to  $+158 \,^{\circ}\text{F}$ )

Storage Temperature  $-40 \,^{\circ}\text{C}$  to  $+70 \,^{\circ}\text{C}$  ( $-40 \,^{\circ}\text{F}$  to  $+158 \,^{\circ}\text{F}$ )

Cable Qualification Standards IEC 60794-5-10

**Environmental Space** Air-blown, microduct

Jacket UV Resistance UV stabilized

Water Penetration 24 h

**Water Penetration Test Method** IEC 60794-1 F5

#### **Environmental Test Specifications**

 Cable Freeze Test Method
 IEC 60794-1 F15

 Drip
 70 °C | 158 °F

 Drip Test Method
 IEC 60794-1 E14

-30 °C to +85 °C (-22 °F to +185 °F)

**Heat Age Test Method** IEC 60794-1 F9

Temperature Cycle -30 °C to +70 °C (-22 °F to +158 °F)

**Temperature Cycle Test Method** IEC 60794-1 F1

Packaging and Weights

**Cable weight** 46.5 kg/km | 31.247 lb/kft

#### Included Products

CS-8W-200-EMEA – Low Macrobending, Zero Water Peak, Dispersion-Unshifted Singlemode

## \* Footnotes

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



## CS-8W-200-EMEA

#### Low Macrobending, Zero Water Peak, Dispersion-Unshifted Singlemode Fiber

#### **Product Classification**

 Portfolio
 CommScope®

 Product Type
 Optical fiber

General Specifications

**Cladding Diameter** 125 µm **Cladding Diameter Tolerance** ±0.7 µm 0.7 % **Cladding Non-Circularity, maximum Coating Diameter (Colored)** 200 um **Coating Diameter (Uncolored)** 190 µm **Coating Diameter Tolerance (Colored)** ±10 µm **Coating Diameter Tolerance (Uncolored)** ±10 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

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
 0.10 dB @ 1,625 nm
 0 0.25 dB @ 1,550 nm

 Macrobending, 50 mm Ø mandrel, 100 turns
 0.05 dB @ 1,550 nm
 0 0.05 dB @ 1,625 nm

Dynamic Fatigue Parameter, minimum 20

Optical Specifications

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

**Zero Dispersion Slope, maximum** 0.09 ps/[km-nm-nm]

**COMMSCOPE®** 

## CS-8W-200-EMEA

Zero Dispersion Wavelength, maximum1324 nmZero Dispersion Wavelength, minimum1300 nm

Optical Specifications, Wavelength Specific

**Attenuation, maximum** 0.20 dB/km @ 1550 nm | 0.24 dB/km @ 1625

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 | 1.467 @ 1,385 nm | 1.468 @ 1,550

nm

**Mode Field Diameter**  $10.4 \, \mu \text{m} \ @ \ 1,550 \, \text{nm} \ | \ 9.2 \, \mu \text{m} \ @ \ 1,310 \, \text{nm} \ | \ 9.6 \, \mu \text{m} \ @ \ 1,000 \, \text{m}$ 

1,385 nm

Mode Field Diameter Tolerance  $\pm 0.4 \, \mu \text{m}$  @ 1310 nm |  $\pm 0.5 \, \mu \text{m}$  @ 1550 nm |  $\pm 0.6 \, \mu \text{m}$ 

@ 1385 nm

Polarization Mode Dispersion Link Design Value, maximum 0.04 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, 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

