## D-144-LA-8W-F24NS/200



Fiber OSP cable, Single Jacket/Single Armor, 144 fiber, Gel-Free, Stranded Loose Tube, Singlemode G.652.D and G.657.A1, 200um fiber, Feet jacket marking, Black jacket color

• Corrugated steel tape armor is strong yet flexible, providing additional crush and rodent protection

### **Product Classification**

**Regional Availability** Asia | Australia/New Zealand | EMEA | Latin America | North

America

Gel-free

**Portfolio** CommScope® Fiber OSP cable **Product Type** 

**Product Series** D-LA

General Specifications

**Armor Type** Corrugated steel

**Cable Type** Stranded loose tube

**Construction Type** Armored

**Subunit Type Jacket Color** Black

**Jacket Marking** Feet

Subunit, quantity

Fibers per Subunit, quantity 24

**Total Fiber Count** 144

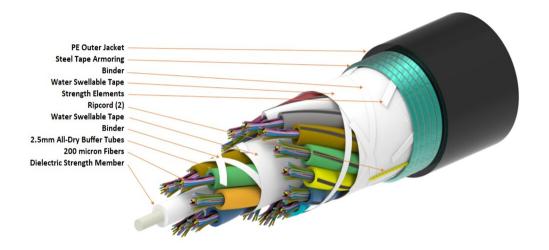
Dimensions

2.5 mm | 0.098 in **Buffer Tube/Subunit Diameter Diameter Over Jacket** 11.8 mm | 0.465 in

Representative Image



# D-144-LA-8W-F24NS/200



## Material Specifications

Jacket Material PE

## Mechanical Specifications

Minimum Bend Radius, loaded177 mm6.969 inMinimum Bend Radius, unloaded118 mm4.646 inTensile Load, long term, maximum800 N | 179.847 lbf

Tensile Load, long term, maximum 2700 N | 606.984 lbf

**Compression** 22 N/mm | 125.623 lb/in

Compression Test Method FOTP-41 | IEC 60794-1 E3

**Flex** 25 cycles

Flex Test Method FOTP-104 | IEC 60794-1 E6

**Impact** 4.4 N-m | 38.943 in lb

Impact Test Method FOTP-25 | 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 FOTP-85 | IEC 60794-1 E7

**Vertical Rise, maximum** 500 m | 1,640.42 ft

Optical Specifications

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

**COMMSCOPE®** 

## D-144-LA-8W-F24NS/200

### **Environmental Specifications**

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

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

Storage Temperature  $-40 \,^{\circ}\text{C}$  to  $+75 \,^{\circ}\text{C}$  (-40  $^{\circ}\text{F}$  to  $+167 \,^{\circ}\text{F}$ )

Cable Qualification Standards ANSI/ICEA S-87-640 | EN 187105 | Telcordia GR-20

Environmental Space Aerial, lashed | Buried

Jacket UV Resistance UV stabilized

Water Penetration 24 h

Water Penetration Qualification Method ANSI/ICEA S-87-640

**Water Penetration Test Method** FOTP-82 | IEC 60794-1 F5

**Environmental Test Specifications** 

**Cable Freeze** -2 °C | 28.4 °F

Cable Freeze Test Method FOTP-98 | IEC 60794-1 F15

**Heat Age** -40 °C to +85 °C (-40 °F to +185 °F)

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

**Low High Bend**  $-30 \,^{\circ}\text{C} \text{ to } +60 \,^{\circ}\text{C} \, (-22 \,^{\circ}\text{F to } +140 \,^{\circ}\text{F})$ 

**Low High Bend Test Method** FOTP-37 | IEC 60794-1 E11

**Temperature Cycle** -40 °C to +70 °C (-40 °F to +158 °F)

**Temperature Cycle Test Method** FOTP-3 | IEC 60794-1 F1

Packaging and Weights

**Cable weight** 122 kg/km | 81.98 lb/kft

### Included Products

CS-8W-200UM-LT – 200 Micron Low Macrobending, Zero Water Peak, Dispersion-Unshifted Singlemode Fiber

## \* Footnotes

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



# CS-8W-200UM-LT

### 200 Micron 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

**Proof Test** 689.476 N/mm<sup>2</sup> | 100000 psi

**Dimensions** 

Core/Clad Offset, maximum

**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

0.5 µm

Dynamic Fatigue Parameter, minimum 20

Optical Specifications

Cabled Cutoff Wavelength, maximum1260 nmPoint Defects, maximum0.05 dB

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



# CS-8W-200UM-LT

Zero Dispersion Wavelength, maximum1324 nmZero Dispersion Wavelength, minimum1300 nm

Optical Specifications, Wavelength Specific

**Attenuation, maximum** 0.25 dB/km @ 1,550 nm | 0.29 dB/km @ 1,625

nm | 0.36 dB/km @ 1,310 nm | 0.36 dB/km @ 1,385

nm

**Dispersion, maximum** 18 ps(nm-km) at 1550 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** ±0.4 μm @ 1310 nm | ±0.5 μm @ 1550 nm | ±0.6 μm

@ 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 | TIA-492CAAB (OS2)

## **Environmental Specifications**

**Heat Aging, maximum**  $0.05 \text{ dB/km} \otimes 85 \text{ }^{\circ}\text{C}$ 

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

