## 760211417 | Z-024-CN-RB-F12NS/8W/99F



Fiber indoor/outdoor Cable, LSZH Riser All-Dielectric Central Tube Ribbon, Singlemode G.652.D and G.657.Al, 24-fiber, feet jacket marking, black jacket color

#### **Product Classification**

Regional Availability

Asia | Australia/New Zealand | EMEA | Latin America | North

America

Portfolio CommScope®

Product Type Fiber indoor/outdoor cable

**Product Series** Z-CN

General Specifications

 Cable Type
 Ribbon central tube

Construction Type Non-armored

**Subunit Type** Gel-free

Fibers per Ribbon, quantity 12

Jacket Color Black

Jacket Marking Feet

Total Fiber Count 24

**Dimensions** 

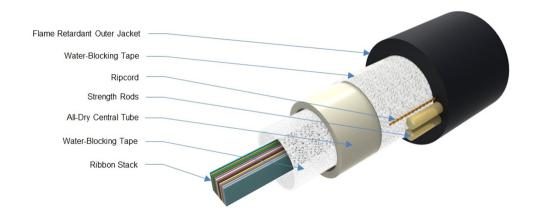
Buffer Tube/Subunit Diameter 6 mm | 0.236 in

Diameter Over Jacket 13 mm | 0.512 in

Representative Image



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### Mechanical Specifications

Minimum Bend Radius, loaded 259.1 mm | 10.201 in

Minimum Bend Radius, unloaded 129.5 mm | 5.098 in

**Tensile Load, long term, maximum** 800 N | 179.847 lbf

**Tensile Load, short term, maximum** 2670 N | 600.24 lbf

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

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

Flex 25 cycles

**FIXET TEST Method** FOTP-104 | IEC 60794-1 E6

**Impact** 2.94 N-m | 26.021 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

Optical Specifications

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

## **Environmental Specifications**

Installation temperature  $-30 \,^{\circ}\text{C}$  to  $+60 \,^{\circ}\text{C}$  (-22 °F to +140 °F)

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

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

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Cable Qualification Standards ANSI/ICEA S-104-696 | Telcordia GR-20 | Telcordia GR-409

Environmental Space Aerial, lashed | Buried | Low Smoke Zero Halogen (LSZH) | Riser

Flame Test Listing NEC OFNR (UL) and c(UL)

Flame Test Method UL 1666

Jacket UV Resistance UV stabilized

Water Penetration 24 h

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

**Environmental Test Specifications** 

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

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

Low High Bend -30 °C to +60 °C (-22 °F to +140 °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** 193 kg/km | 129.69 lb/kft

### Regulatory Compliance/Certifications

#### Agency Classification

CHINA-ROHS Below maximum concentration value

ISO 9001:2015 Designed, manufactured and/or distributed under this quality management system

REACH-SVHC Compliant as per SVHC revision on www.commscope.com/ProductCompliance

ROHS Compliant UK-ROHS Compliant



#### Included Products

CS-8W-RB-I/O - TeraSPEED® Singlemode Fiber Flat

\* Footnotes

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

**COMMSCOPE®** 

# TeraSPEED®

### TeraSPEED® Singlemode Fiber Flat Ribbon

#### Product Classification

 Portfolio
 CommScope®

 Product Type
 Optical fiber

General Specifications

**Cladding Diameter** 125 µm **Cladding Diameter Tolerance**  $\pm 0.7 \, \mu m$ 0.7 % Cladding Non-Circularity, maximum **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 Diameter** 8.3 µm Core/Clad Offset, maximum  $0.5 \, \mu m$ 

**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



## CS-8W-RB-I/O

### **Optical Specifications**

Cabled Cutoff Wavelength, maximum1260 nmPoint Defects, maximum0.1 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** 0.25 dB/km @ 1,550 nm | 0.35 dB/km @ 1,310 nm

**Backscatter Coefficient** -79.6 dB @ 1,310 nm | -82.1 dB @ 1,550 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 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

