

Indoor/Outdoor, All-Dielectric, Low Smoke Zero Halogen (LSZH), Riser-Rated, Gel-Free, Central Tube Ribbon Cable

#### **OBSOLETE**

#### 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 24

Jacket Color Black
Jacket Marking Feet

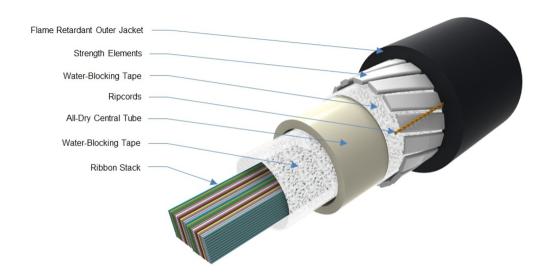
Total Fiber Count 288

**Dimensions** 

Buffer Tube/Subunit Diameter12 mm0.472 inDiameter Over Jacket17 mm0.669 in

Representative Image





### Mechanical Specifications

Minimum Bend Radius, loaded 340 mm | 13.386 in

Minimum Bend Radius, unloaded 170 mm | 6.693 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

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

**Impact** 5.15 N-m | 45.581 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 -20 °C to +60 °C (-4 °F to +140 °F)

Page 2 of 6



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

Cable Qualification Standards ANSI/ICEA S-104-696 | EN 187105 | Telcordia GR-409

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

Flame Test Listing NEC OFNR-LS (ETL) and c(ETL)

1685

Jacket UV Resistance UV stabilized

Water Penentration 24 h

Water Penentration 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**  $-40 \,^{\circ}\text{C} \text{ to } +85 \,^{\circ}\text{C} \, (-40 \,^{\circ}\text{F to } +185 \,^{\circ}\text{F})$ 

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

 Low High Bend
 -20 °C to +60 °C (-4 °F to +140 °F)

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

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

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

Packaging and Weights

**Cable weight** 259 kg/km | 174.04 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

COMMSC PE°

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

### \* Footnotes

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

### TeraSPEED® Singlemode Fiber Flat Ribbon

8.3 µm

## TeraSPEED®

#### **Product Classification**

 Portfolio
 CommScope®

 Product Type
 Optical fiber

General Specifications

Cladding Non-Circularity, maximum 0.7 %

Coating Diameter (Colored)249 μmCoating 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 µm

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

**Dimensions** 

**Core Diameter** 

**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

**COMMSCOPE®** 

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

Coating Strip Force, minimum 1.3 N | 0.292 lbf

Dynamic Fatigue Parameter, minimum 20

**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

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/sgrt(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

**COMMSCOPE®**