

TeraSPEED® Indoor/Outdoor, Mini Single Jacket/Single Armor, Riser Rated, Low Smoke Zero Halogen (LSZH), Gel-Filled, Stranded Loose Tube Cable

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

### **Product Classification**

Regional Availability

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

6

Portfolio CommScope®

Product Type Fiber indoor/outdoor cable

### General Specifications

Armor Type Corrugated steel

Cable Type Stranded loose tube

Construction Type Armored

Fiber Type, quantity

Fibers per Subunit, quantity 6

Filler, quantity 5

Jacket Color Black

Subunit Type Gel-filled

Subunit, quantity

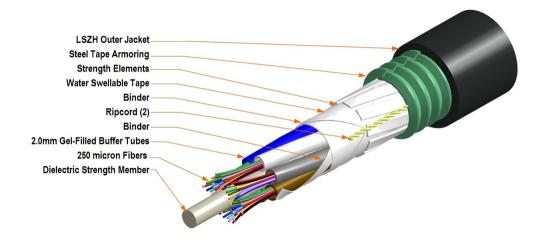
**Total Fiber Count** 6

#### **Dimensions**

Buffer Tube/Subunit Diameter2 mm | 0.079 inDiameter Over Jacket12.3 mm | 0.484 in

### Representative Image





### Mechanical Specifications

Minimum Bend Radius, loaded 185 mm | 7.283 in

Minimum Bend Radius, unloaded 123 mm | 4.843 in

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

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

 Compression
 44 N/mm | 251.246 lb/in

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

Flex 35 cycles

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

**Impact** 3 N-m | 26.552 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** 447 m | 1,466.535 ft

**Optical Specifications** 

**Fiber Type** G.652.D and G.657.A1 , TeraSPEED® | G.652.D and G.657.A1,

TeraSPEED® | OS2 | OS2

**Environmental Specifications** 

Installation temperature -30 °C to +60 °C (-22 °F to +140 °F)

Page 2 of 7



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-104-696 | EN 187105 | Telcordia GR-20 | Telcordia GR-

409

EN50575 CPR Cable EuroClass Fire PerformanceDcaEN50575 CPR Cable EuroClass Smoke Ratings2EN50575 CPR Cable EuroClass Droplets Ratingd1EN50575 CPR Cable EuroClass Acidity Ratinga1

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

Flame Test Listing NEC OFCR-ST1 (ETL) and c(ETL)

Flame Test Method | IEC 60332-3 | IEC 60754-2 | IEC 61034-2 | IEEE 383 | UL

1666 | UL 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

**Drip** 70 °C | 158 °F

**Drip Test Method** FOTP-81 | IEC 60794-1 E14

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

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

Packaging and Weights

**Cable weight** 183 kg/km | 122.97 lb/kft

Regulatory Compliance/Certifications

Agency Classification

CENELEC EN 50575 compliant, Declaration of Performance (DoP) available

CHINA-ROHS Below maximum concentration value

Page 3 of 7

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



#### Included Products

CS-8W-IOLT - TeraSPEED® OS2 Singlemode Fiber

#### \* Footnotes

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



### TeraSPEED® OS2 Singlemode Fiber

# TeraSPEED®

#### **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 Diameter** 8.3 µm Core/Clad Offset, maximum  $0.5 \, \mu m$ 

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

Dimensions

**Fiber Curl, minimum** 4 m | 13.123 ft

Mechanical Specifications

 Macrobending, 20 mm mandrel, 1 turn
 0.75 dB @ 1,550 nm
 | 1.50 dB @ 1,625 nm

 Macrobending, 30 mm mandrel, 10 turns
 0.25 dB @ 1,550 nm
 | 1.00 dB @ 1,625 nm

 Macrobending, 60 mm mandrel, 100 turns
 0.05 dB @ 1,550 nm
 | 0.05 dB @ 1,625 nm

 $\textbf{Coating Strip Force, maximum} \\ 8.9 \ \text{N} \quad | \quad 2.001 \ \text{lbf}$ 

COMMSCOPE°

## CS-8W-IOLT

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** 0.22 dB/km @ 1,550 nm | 0.23 dB/km @ 1,575

nm | 0.25 dB/km @ 1,490 nm | 0.25 dB/km @ 1,625 nm | 0.31 dB/km @ 1,385 nm | 0.34 dB/km @ 1,310

nm | 0.35 dB/km @ 1,650 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 μm @ 1,550 nm | 9.2 μm @ 1,310 nm | 9.6 μm @

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

Regulatory Compliance/Certifications

Agency Classification

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

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# CS-8W-IOLT



## \* 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

