

Fiber indoor/outdoor cable, TeraSPEED®, Single Jacket All-Dielectric, Plenum Rated, 36 fiber, Singlemode G.652.D and G.657.A1, Gel-Free, Stranded Loose Tube, PVDF jacket, Black jacket color, Feet cable marking

#### **Product Classification**

Regional Availability

Asia | Australia/New Zealand | Latin America | Middle East

/Africa | North America

Portfolio CommScope®

Product Type Fiber indoor/outdoor cable

Product Series P-LN

General Specifications

Cable Type Stranded loose tube

Construction Type Non-armored

**Subunit Type** Gel-free

Filler, quantity 2

Jacket Color Black

Jacket Marking Feet

Subunit, quantity 3

Fibers per Subunit, quantity 12

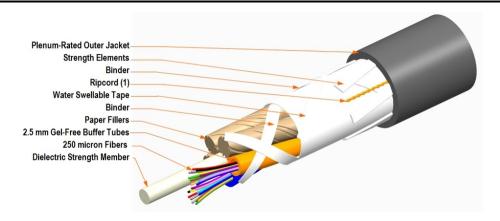
**Total Fiber Count** 36

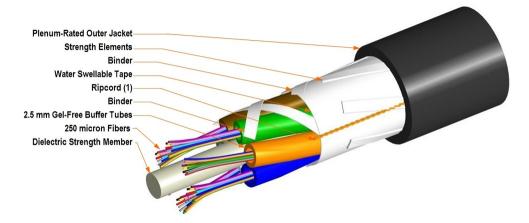
Dimensions

Buffer Tube/Subunit Diameter2.5 mm0.098 inDiameter Over Jacket9.7 mm0.382 in

Representative Image







### Mechanical Specifications

Minimum Bend Radius, loaded

Minimum Bend Radius, unloaded

Tensile Load, long term, maximum

Tensile Load, short term, maximum

Compression

**Compression Test Method** 

Flex

Flex Test Method

Impact

**Impact Test Method** 

**Strain** 

Strain Test Method

Twist

146 mm | 5.748 in

97 mm | 3.819 in

800 N | 179.847 lbf

2700 N | 606.984 lbf

22 N/mm | 125.623 lb/in

FOTP-41 | IEC 60794-1 E3

25 cycles

FOTP-104 | IEC 60794-1 E6

2.94 N-m | 26.021 in lb

FOTP-25 | IEC 60794-1 E4

See long and short term tensile loads

FOTP-33 | IEC 60794-1 E1

10 cycles



Twist Test Method FOTP-85 | IEC 60794-1 E7

**Vertical Rise, maximum** 880 m | 2,887.139 ft

**Optical Specifications** 

Fiber Type G.652.D and G.657.A1, TeraSPEED® | OS2 | OS2

**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-104-696 | EN 187105 | Telcordia GR-409

Environmental Space Plenum

Flame Test Listing NEC OFNP (ETL) and c(ETL)
Flame Test Method NFPA 130 | NFPA 262

Jacket UV Resistance UV stabilized

Water Penetration 24 h

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

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

**Low High Bend** -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** 92 kg/km | 61.821 lb/kft

Regulatory Compliance/Certifications

Agency Classification

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



#### Included Products

CS-8W-LT

 TeraSPEED® G652D/G657A1 Singlemode Fiber

### \* Footnotes

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



### TeraSPEED® G652D/G657A1 Singlemode Fiber

# TeraSPEED®

#### **Product Classification**

Portfolio CommScope®

**Product Type** Optical fiber

General Specifications

**Cladding Diameter** 125 µm

 ${\bf Cladding\ Non-Circularity,\ maximum} \\ {\bf 0.7\ \%}$ 

**Coating Diameter (Colored)** 249 μm

**Coating Diameter Tolerance (Colored)** ±13 μm

Coating Diameter Tolerance (Uncolored) ±5 µm

 $\textbf{Coating/Cladding Concentricity Error, maximum} \hspace{1.5cm} 12~\mu m$ 

Core Diameter 8.3 μm

 $\textbf{Core/Clad Offset, maximum} \hspace{1.5cm} 0.5\,\mu\text{m}$ 

**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 | 1.50 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-LT

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 | 0.25 dB/km @ 1,490

nm | 0.25 dB/km @ 1,625 nm | 0.36 dB/km @ 1,310

nm | 0.36 dB/km @ 1,385 nm

**Attenuation, typical** 0.19 dB/km @ 1,550 nm | 0.33 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 μm @ 1,550 nm | 9.2 μm @ 1,310 nm | 9.6 μm @

1,385 nm

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

@ 1385 nm

Polarization Mode Dispersion Link Design Value, maximum 0.04 ps/sgrt(km)

Standards Compliance IEC 60793-2-10, edition 6, model A1a.4 | 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

COMMSCOPE®

# CS-8W-LT

ISO 9001:2015

Designed, manufactured and/or distributed under this quality management system

### \* 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

