

Fiber Indoor cable, TeraSPEED® Plenum Distribution, interlocking aluminum armored with plenum jacket, 24 fiber single-unit, Gel-free, Singlemode G.652.D and G.657.A1, Feet jacket marking, Yellow jacket color, Build America Buy America (BABA)

#### **Product Classification**

Regional Availability

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

America

Portfolio CommScope®

Product Type Fiber indoor cable

**Product Series** P-DZ

General Specifications

Armor Type Interlocking aluminum

Cable TypeDistributionConstruction TypeArmoredSubunit TypeGel-freeJacket ColorYellow

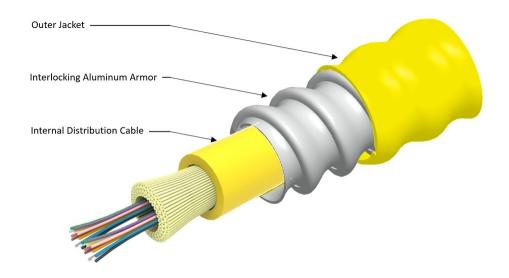
Jacket Marking Feet
Total Fiber Count 24

**Dimensions** 

Diameter Over Armor13.34 mm | 0.525 inDiameter Over Jacket17.4 mm | 0.685 in

Representative Image





### Mechanical Specifications

Minimum Bend Radius, loaded261 mm | 10.276 inMinimum Bend Radius, unloaded174 mm | 6.85 inTensile Load, long term, maximum400 N | 89.924 lbfTensile Load, short term, maximum1335 N | 300.12 lbf

 Compression
 85 N/mm | 485.363 lb/in

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

Flex 25 cycles

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

**Impact** 35 N-m | 309.776 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** 133 m | 436.352 ft

**Optical Specifications** 

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



#### **Environmental Specifications**

Installation temperature0 °C to +70 °C (+32 °F to +158 °F)Operating Temperature-20 °C to +70 °C (-4 °F to +158 °F)

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

Cable Qualification StandardsANSI/ICEA S-83-596Telcordia GR-409

Environmental Space Plenum

Flame Test Listing NEC OFCP (ETL) and c(ETL)

Flame Test Method NFPA 130 | NFPA 262

#### **Environmental Test Specifications**

**Heat Age** -20 °C to +85 °C (-4 °F to +185 °F)

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

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

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

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

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

Packaging and Weights

**Cable weight** 307 kg/km | 206.294 lb/kft

### Regulatory Compliance/Certifications

Agency Classification
ANATEL Compliant

CHINA-ROHS Below maximum concentration value

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

ROHS Compliant UK-ROHS Compliant



#### Included Products

CS-8W-TB - TeraSPEED® Singlemode Fiber

\* Footnotes



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

### TeraSPEED®

#### TeraSPEED® Singlemode Fiber

 $0.5 \, \mu m$ 

#### 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)**  $242 \, \mu m$ **Coating Diameter Tolerance (Colored)** ±13 µm **Coating Diameter Tolerance (Uncolored)** ±5 µm Coating/Cladding Concentricity Error, maximum 12 µm **Core Diameter** 8.3 µm

**Proof Tensile Stress** 100,000 psi (0.69 GPa)

Tight Buffer Diameter $900 \, \mu m$ Tight Buffer Diameter Tolerance $\pm 40 \, \mu m$ 

**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

Coating Strip Force, maximum8.9 N | 2.001 lbfCoating Strip Force, minimum1.3 N | 0.292 lbf

**COMMSCOPE®** 

### CS-8W-TB

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** 0.50 dB/km @ 1,310 nm | 0.50 dB/km @ 1,385

nm | 0.50 dB/km @ 1,490 nm | 0.50 dB/km @ 1,550 nm | 0.50 dB/km @ 1,575 nm | 0.70 dB/km @ 1,270

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**  $10.4 \, \mu \text{m} \ @ \ 1,550 \, \text{nm} \ | \ 9.2 \, \mu \text{m} \ @ \ 1,310 \, \text{nm} \ | \ 9.6 \, \mu \text{m} \ @ \ 1,000 \, \text{m} \ | \ 9.6 \, \mu \text{m} \ | \ 9.6 \,$ 

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 (OS1a)

**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

\* Footnotes

COMMSC PE°

# CS-8W-TB

**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

