# P-012-DZ-8W-FSU



Fiber Indoor cable, TeraSPEED® Plenum Distribution, interlocking aluminum armored with plenum jacket, 12 fiber single-unit, Gel-free, Singlemode G.652.D and G.657.A1, Feet jacket marking

### **Product Classification**

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

America

**Portfolio** CommScope®

Fiber indoor cable **Product Type** 

**Product Series** P-DZ

# General Specifications

**Armor Type** Interlocking aluminum

**Cable Type** Distribution **Construction Type** Armored **Subunit Type** Gel-free **Jacket Marking** Feet 12

**Total Fiber Count** 

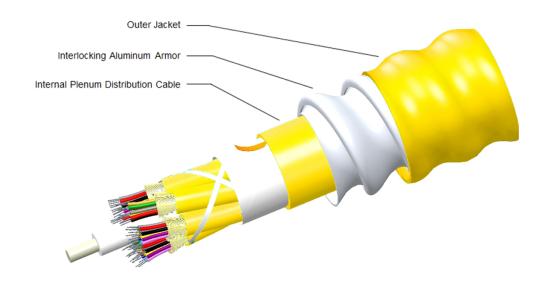
### Dimensions

**Diameter Over Armor** 10.8 mm | 0.425 in **Diameter Over Jacket** 12.8 mm | 0.504 in

# Representative Image



# P-012-DZ-8W-FSU



# Mechanical Specifications

Minimum Bend Radius, loaded257 mm10.118 inMinimum Bend Radius, unloaded180 mm7.087 inTensile Load, long term, maximum200 N44.962 lbfTensile Load, short term, maximum667 N149.948 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** 136 m | 446.194 ft

Optical Specifications

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

# **Environmental Specifications**

**COMMSCOPE®** 

# P-012-DZ-8W-FSU

Installation temperature  $0 \,^{\circ}\text{C}$  to +70  $^{\circ}\text{C}$  (+32  $^{\circ}\text{F}$  to +158  $^{\circ}\text{F}$ )

Operating Temperature  $-20 \,^{\circ}\text{C}$  to +70  $^{\circ}\text{C}$  (-4  $^{\circ}\text{F}$  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-83-596 | Telcordia GR-409

Environmental Space Plenum

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

Flame Test Method NFPA 262

# **Environmental Test Specifications**

**Heat Age**  $-20 \, ^{\circ}\text{C} \text{ to } +85 \, ^{\circ}\text{C} \, (-4 \, ^{\circ}\text{F to } +185 \, ^{\circ}\text{F})$ 

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

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

Packaging and Weights

**Cable weight** 151 kg/km | 101.467 lb/kft

## Regulatory Compliance/Certifications

#### Agency Classification

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



### Included Products

CS-8W-TB - TeraSPEED® Singlemode Fiber

### \* Footnotes

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



# TeraSPEED®

### TeraSPEED® Singlemode Fiber

### **Product Classification**

 Portfolio
 CommScope®

 Product Type
 Optical fiber

# General Specifications

**Cladding Diameter** 125 µm **Cladding Diameter Tolerance** ±0.7 µm 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 Test** 689.476 N/mm² | 100000 psi

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

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

Dynamic Fatigue Parameter, minimum 20

COMMSCOPE®

# CS-8W-TB

# **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} \ @ \ 1,310 \, \text{nm} \ | \ 9.6 \, \mu \text{m} \ @ \ 1,310 \, \text{nm} \ | \ 9.6 \, \mu \text{m} \ @ \ 1,310 \, \text{nm} \ | \ 9.6 \, \mu \text{m} \ @ \ 1,310 \, \text{nm} \ | \ 9.6 \, \mu \text{m} \ @ \ 1,310 \, \text{nm} \ | \ 9.6 \, \mu \text{m} \ @ \ 1,310 \, \text{nm} \ | \ 9.6 \, \mu \text{m} \ @ \ 1,310 \, \text{nm} \ | \ 9.6 \, \mu \text{m} \ @ \ 1,310 \, \text{nm} \ | \ 9.6 \, \mu \text{m} \ @ \ 1,310 \, \text{nm} \ | \ 9.6 \, \mu \text{m} \ @ \ 1,310 \, \text{nm} \ | \ 9.6 \, \mu \text{m} \ @ \ 1,310 \, \text{nm} \ | \ 9.6 \, \mu \text{m} \ @ \ 1,310 \, \text{nm} \ | \ 9.6 \, \mu \text{m} \ @ \ 1,310 \, \text{nm} \ | \ 9.6 \, \mu \text{m} \ @ \ 1,310 \, \text{nm} \ | \ 9.6 \, \mu \text{m} \ @ \ 1,310 \, \text{nm} \ | \ 9.6 \, \mu \text{m} \ @ \ 1,310 \, \text{nm} \ | \ 9.6 \, \mu \text{m} \ @ \ 1,310 \, \text{nm} \ | \ 9.6 \, \mu \text{m} \ @ \ 1,310 \, \text{nm} \ | \ 9.6 \, \mu \text{m} \ @ \ 1,310 \, \text{nm} \ | \ 9.6 \, \mu \text{m} \ @ \ 1,310 \, \text{nm} \ | \ 9.6 \, \mu \text{m} \ @ \ 1,310 \, \text{nm} \ | \ 9.6 \, \mu \text{m} \ @ \ 1,310 \, \text{nm} \ | \ 9.6 \, \mu \text{m} \ @ \ 1,310 \, \text{nm} \ | \ 9.6 \, \mu \text{m} \ @ \ 1,310 \, \text{nm} \ | \ 9.6 \, \mu \text{m} \ @ \ 1,310 \, \text{nm} \ | \ 9.6 \, \mu \text{m} \ @ \ 1,310 \, \text{nm} \ | \ 9.6 \, \mu \text{m} \ @ \ 1,310 \, \text{nm} \ | \ 9.6 \, \mu \text{m} \ @ \ 1,310 \, \text{nm} \ | \ 9.6 \, \mu \text{m} \ @ \ 1,310 \, \text{nm} \ | \ 9.6 \, \mu \text{m} \ @ \ 1,310 \, \text{nm} \ | \ 9.6 \, \mu \text{m} \ @ \ 1,310 \, \text{nm} \ | \ 9.6 \, \mu \text{m} \ @ \ 1,310 \, \text{nm} \ | \ 9.6 \, \mu \text{m} \ @ \ 1,310 \, \text{nm} \ | \ 9.6 \, \mu \text{m} \ @ \ 1,310 \, \text{nm} \ | \ 9.6 \, \mu \text{m} \ @ \ 1,310 \, \text{nm} \ | \ 9.6 \, \mu \text{m} \ @ \ 1,310 \, \text{nm} \ | \ 9.6 \, \mu \text{m} \ @ \ 1,310 \, \text{nm} \ | \ 9.6 \, \mu \text{m} \ @ \ 1,310 \, \text{nm} \ | \ 9.6 \, \mu \text{m} \ @ \ 1,310 \, \text{nm} \ | \ 9.6 \, \mu \text{m} \ @ \ 1,310 \, \text{nm} \ | \ 9.6 \, \mu \text{m} \ | \ 1,310 \, \text{nm} \ | \ 9.6 \, \mu \text{m} \ | \ 1,310 \, \text{nm} \ | \ 1,310$ 

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, maximum0.05 dB/kmTemperature Humidity Cycling, maximum0.05 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





# CS-8W-TB

# \* 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

