P-096-DZ-8W-FMU



Fiber indoor cable, TeraSPEED® Plenum Distribution, interlocking aluminum armored with plenum jacket, Singlemode G.652.D and G.657. A1, 96 fiber multi-unit with 12 fiber subunits, Feet cable marking

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 TypeDistribution

Construction Type Armored

Subunit Type Gel-free

Jacket Marking Feet

Subunit, quantity 8

Fibers per Subunit, quantity 12

Total Fiber Count 96

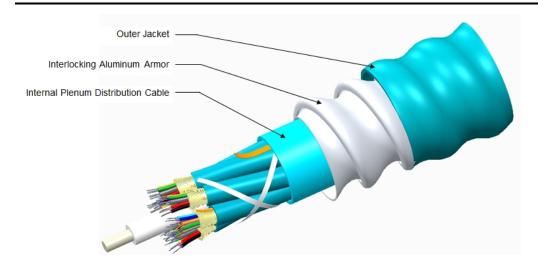
Dimensions

Buffer Tube/Subunit Diameter5.77 mm | 0.227 inDiameter Over Armor29.85 mm | 1.175 inDiameter Over Jacket31.9 mm | 1.256 in

Representative Image



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Mechanical Specifications

Minimum Bend Radius, loaded 638 mm | 25.118 in

Minimum Bend Radius, unloaded 446 mm | 17.559 in

Tensile Load, long term, maximum 400 N | 89.924 lbf

Tensile Load, short term, maximum 1335 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 48 m | 157.48 ft

Optical Specifications

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

Environmental Specifications

Installation temperature 0 °C to +70 °C (+32 °F to +158 °F)

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

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

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

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

Temperature Cycle -20 °C to +70 °C (-4 °F to +158 °F)

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

Packaging and Weights

Cable weight 847 kg/km | 569.158 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 μm 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 $10.4 \, \mu \text{m} \ @ \ 1,550 \, \text{nm} \ | \ 9.2 \, \mu \text{m} \ @ \ 1,310 \, \text{nm} \ | \ 9.6 \, \mu \text{m} \ @ \ 1,000 \, \text{m} \ | \ 9.6 \, \mu \text{m} \ | \ 9.6 \,$

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, 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

