760163030 | P-048-DS-8W-FMUBR



Fiber indoor cable, TeraSPEED® Plenum Distribution, 48 fiber multi-unit with 12 fiber subunits, Singlemode G.652.D and G.657.A1, Gel-free, Feet jacket marking, Brown jacket color

Product Classification

Regional Availability

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

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/Africa | North America

Portfolio CommScope®

Product Type Fiber indoor cable

Product Series P-DS

General Specifications

 Cable Type
 Distribution

 Construction Type
 Non-armored

Subunit Type Gel-free

Jacket Color Brown

Jacket Marking Feet

Fibers per Subunit, quantity 12

Total Fiber Count 48

Dimensions

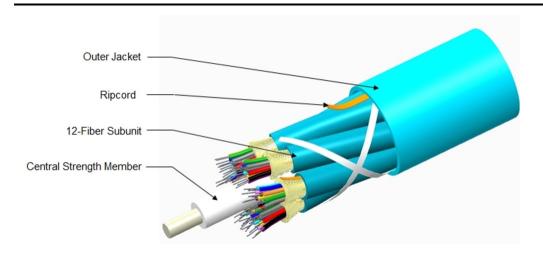
Subunit, quantity

Buffer Tube/Subunit Diameter5.77 mm | 0.227 inDiameter Over Jacket14.91 mm | 0.587 in

Representative Image



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Mechanical Specifications

Minimum Bend Radius, loaded 224 mm | 8.819 in

Minimum Bend Radius, unloaded 149 mm | 5.866 in

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

Tensile Load, short term, maximum 1335 N | 300.12 lbf

Compression 10 N/mm | 57.101 lb/in

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

Flex 100 cycles

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

Impact 5.88 N-m | 52.042 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 199 m | 652.887 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 $-20 \, ^{\circ}\text{C} \text{ to } +70 \, ^{\circ}\text{C} \, (-4 \, ^{\circ}\text{F to } +158 \, ^{\circ}\text{F})$

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 OFNP (ETL) and c(ETL)

Flame Test Method

NFPA 130 | 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 $-20 \,^{\circ}\text{C} \text{ to } +70 \,^{\circ}\text{C} \, (-4 \,^{\circ}\text{F to } +158 \,^{\circ}\text{F})$

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

Packaging and Weights

Cable weight 205 kg/km | 137.754 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® 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/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

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CS-8W-TB

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

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 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 (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

COMMSC PE®

CS-8W-TB

Agency Classification

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

