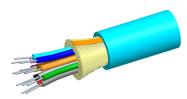
## 760057117 | P-012-DS-CM-FSUAQ/8W006/5K006



Fiber indoor cable, TeraSPEED® Plenum Distribution, 12-Fiber Single-Unit, Multimode composite, Feet jacket marking, Aqua jacket color

#### **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-DS

General Specifications

Cable Type Distribution

Construction Type Non-armored

**Subunit Type** Gel-free

Jacket Color Aqua

Jacket Marking Feet

**Composite Fiber Count** 6 + 6

**Total Fiber Count** 12

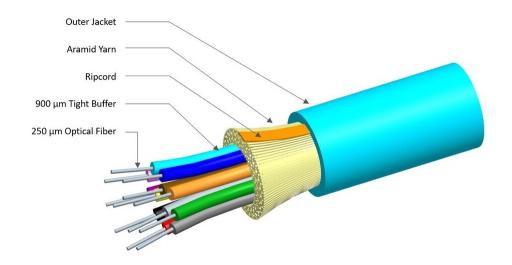
Dimensions

**Diameter Over Jacket** 5.77 mm | 0.227 in

Representative Image



# 760057117 | P-012-DS-CM-FSUAQ/8W006/5K006



### Mechanical Specifications

Minimum Bend Radius, loaded86 mm | 3.386 inMinimum Bend Radius, unloaded58 mm | 2.283 inTensile Load, long term, maximum200 N | 44.962 lbfTensile Load, short term, maximum667 N | 149.948 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
 2.94 N-m | 26.021 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** 500 m | 1,640.42 ft

Optical Specifications

Fiber Type Composite MM/SM | G.652.D and G.657.A1, TeraSPEED® | OM4, LazrSPEED® 550



## 760057117 | P-012-DS-CM-FSUAQ/8W006/5K006

## **Environmental Specifications**

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

**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 °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 31 kg/km | 20.831 lb/kft

## Regulatory Compliance/Certifications

Agency Classification

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

#### Included Products

CS-5K-TB – LazrSPEED® 550 OM4 Bend-Insensitive Multimode

Fiber

CS-8W-TB - TeraSPEED® Singlemode Fiber

#### \* Footnotes

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



#### LazrSPEED® 550 OM4 Bend-Insensitive Multimode Fiber

## LazrSPEED® 550

#### **Product Classification**

 Portfolio
 CommScope®

 Product Type
 Optical fiber

#### General Specifications

**Cladding Diameter** 125 µm **Cladding Diameter Tolerance** ±5 µm Cladding Non-Circularity, maximum 1 % **Coating Diameter (Colored)** 254 µm **Coating Diameter (Uncolored)** 245 µm **Coating Diameter Tolerance (Colored)** ±7 µm **Coating Diameter Tolerance (Uncolored)** ±10 μm Coating/Cladding Concentricity Error, maximum 12 µm **Core Diameter** 50 µm **Core Diameter Tolerance** ±2.5 µm Core/Clad Offset, maximum  $1.5 \, \mu m$ 

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

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

### Mechanical Specifications

 Macrobending, 15 mm Ø mandrel, 2 turns
 0.20 dB @ 850 nm | 0.50 dB @ 1,300 nm

 Macrobending, 30 mm Ø mandrel, 2 turns
 0.10 dB @ 850 nm | 0.30 dB @ 1,300 nm

 Macrobending, 75 mm Ø mandrel, 100 turns
 0.50 dB @ 1,300 nm | 0.50 dB @ 850 nm

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

**Dynamic Fatigue Parameter, minimum** 18

COMMSCOPE®

## CS-5K-TB

### Optical Specifications

Numerical Aperture 0.2

Numerical Aperture Tolerance±0.015Point Defects, maximum0.15 dB

**Zero Dispersion Slope, maximum** 0.105 ps/[km-nm-nm]

**Zero Dispersion Wavelength, maximum** 1316 nm **Zero Dispersion Wavelength, minimum** 1297 nm

#### Optical Specifications, Wavelength Specific

**1 Gbps Ethernet Distance** 1,110 m @ 850 nm | 600 m @ 1,300 nm

**10 Gbps Ethernet Distance** 550 m @ 850 nm

**Attenuation, maximum** 1.00 dB/km @ 1,300 nm | 3.00 dB/km @ 850 nm

**Backscatter Coefficient** -68.0 dB @ 850 nm | -75.7 dB @ 1,300 nm

 Bandwidth, Laser, minimum
 4,700 MHz-km @ 850 nm | 500 MHz-km @ 1,300 nm

 Bandwidth, OFL, minimum
 3,500 MHz-km @ 850 nm | 500 MHz-km @ 1,300 nm

**Differential Mode Delay** 0.70 ps/m @ 850 nm

Differential Mode Delay Note Superior to ANSI/TIA TIA-492AAAF and IEC 60793-2-10 at 850 nm

**Index of Refraction** 1.479 @ 1,300 nm | 1.483 @ 850 nm

**Standards Compliance** ANSI/TIA-492AAAF (OM4) | IEC 60793-2-10, A1 (OM4)

## **Environmental Specifications**

**Heat Aging, maximum** 0.20 dB/km @ 85 °C

Temperature Dependence, maximum0.1 dB/kmTemperature Humidity Cycling, maximum0.2 dB/km

**Water Immersion, maximum** 0.20 dB/km @ 23 °C

### Regulatory Compliance/Certifications

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)

Page 5 of 9



# CS-5K-TB

up to 95% relative humidity



## TeraSPEED®

#### TeraSPEED® Singlemode Fiber

12 µm

#### Product Classification

 Portfolio
 CommScope®

 Product Type
 Optical fiber

General Specifications

Cladding Diameter125 μmCladding Diameter Tolerance±0.7 μmCladding Non-Circularity, maximum0.7 %Coating Diameter (Colored)249 μmCoating Diameter (Uncolored)242 μmCoating Diameter Tolerance (Colored)±13 μmCoating Diameter Tolerance (Uncolored)±5 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

Fiber Curl, minimum 4 m | 13.123 ft

Mechanical Specifications

Coating/Cladding Concentricity Error, maximum

 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

**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

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

\* Footnotes

COMMSCSPE®

## 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

