

Fiber indoor cable, TeraSPEED® Low Smoke Zero Halogen Riser MPO Trunk, 72 fiber multi-unit with 12 fiber subunits, Gel-free, Singlemode + Multimode OM4, Feet jacket marking, Orange jacket color, Dca flame rating

### **Product Classification**

Regional Availability

Asia | Australia/New Zealand | EMEA | Latin America | North

America

Portfolio CommScope®

Product Type Fiber indoor cable

**Product Series** N-MP

General Specifications

Cable TypeMPO trunk cable

Construction Type Non-armored

**Subunit Type** Gel-free

**Jacket Color** Orange

Jacket Marking Feet

**Subunit, quantity** 6

Fibers per Subunit, quantity 12

Composite Fiber Count 36 + 36

**Total Fiber Count** 72

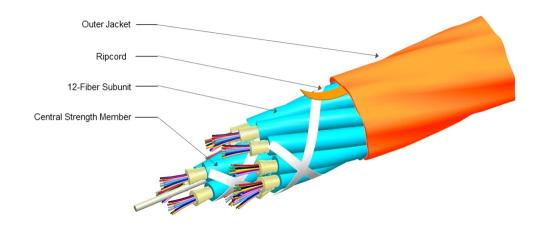
**Dimensions** 

**Buffer Tube/Subunit Diameter** 3 mm | 0.118 in

**Diameter Over Jacket** 10.75 mm | 0.423 in

Representative Image





### Mechanical Specifications

Minimum Bend Radius, loaded

Minimum Bend Radius, unloaded

Tensile Load, long term, maximum

Tensile Load, short term, maximum

Compression

**Compression Test Method** 

Flex

Flex Test Method

**Impact** 

**Impact Test Method** 

Strain

**Strain Test Method** 

**Twist** 

**Twist Test Method** 

Vertical Rise, maximum

Optical Specifications

**Fiber Type** 

161 mm | 6.339 in

107 mm | 4.213 in

400 N | 89.924 lbf

1335 N | 300.12 lbf

10 N/mm | 57.101 lb/in

FOTP-41 | IEC 60794-1 E3

300 cycles

FOTP-104 | IEC 60794-1 E6

2.94 N-m | 26.021 in lb

FOTP-25 | IEC 60794-1 E4

See long and short term tensile loads

FOTP-33 | IEC 60794-1 E1

10 cycles

FOTP-85 | IEC 60794-1 E7

401 m | 1,315.617 ft

Composite MM/SM  $\,\,$  | G.652.D and G.657.A1, TeraSPEED®  $\,\,$  | OM4,

LazrSPEED® 550 | OS2 | OS2

### **Environmental Specifications**

Installation temperature  $-20 \,^{\circ}\text{C}$  to  $+60 \,^{\circ}\text{C}$  (-4  $^{\circ}\text{F}$  to  $+140 \,^{\circ}\text{F}$ )

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

Storage Temperature -40 °C to +70 °C (-40 °F to +158 °F)

Cable Qualification Standards ANSI/ICEA S-83-596 | Telcordia GR-409

EN50575 CPR Cable EuroClass Fire PerformanceDcaEN50575 CPR Cable EuroClass Smoke Ratings1aEN50575 CPR Cable EuroClass Droplets Ratingd1

Environmental Space Low Smoke Zero Halogen (LSZH) | Riser

Flame Test Listing NEC OFNR-ST1 (ETL) and c(ETL)

Flame Test Method | IEC 60332-3 | IEC 60754-2 | IEC 61034-2 | UL 1666 | UL 1685

a1

**Environmental Test Specifications** 

**EN50575 CPR Cable EuroClass Acidity Rating** 

**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 $-20 \,^{\circ}\text{C}$  to  $+70 \,^{\circ}\text{C}$  (-4 °F to  $+158 \,^{\circ}\text{F}$ )Low High Bend Test MethodFOTP-37 | IEC 60794-1 E11Temperature Cycle $-20 \,^{\circ}\text{C}$  to  $+70 \,^{\circ}\text{C}$  (-4 °F to  $+158 \,^{\circ}\text{F}$ )

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

Packaging and Weights

**Cable weight** 102 kg/km | 68.541 lb/kft

### Regulatory Compliance/Certifications

#### Agency Classification

CENELEC EN 50575 compliant, Declaration of Performance (DoP) available

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

CENELEC

#### Included Products

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

Fiber

CS-8W-MP - TeraSPEED® OS2 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  $\mu$ m Cladding Diameter Tolerance  $\pm 5 \mu$ m Cladding Non-Circularity, maximum 1 % Coating Diameter (Colored) 254  $\mu$ m Coating Diameter (Uncolored) 245  $\mu$ m Coating Diameter Tolerance (Colored)  $\pm 7 \mu$ m Coating Diameter Tolerance (Uncolored)  $\pm 10 \mu$ m

Coating/Cladding Concentricity Error, maximum 12  $\mu m$  Core Diameter 50  $\mu m$  ±2.5  $\mu m$ 

 $\textbf{Core/Clad Offset, maximum} \hspace{1.5cm} 1.5 \, \mu m$ 

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

### 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, maximum $8.9 \,\mathrm{N}$  |  $2.001 \,\mathrm{lbf}$ Coating Strip Force, minimum $1.3 \,\mathrm{N}$  |  $0.292 \,\mathrm{lbf}$ 

**Dynamic Fatigue Parameter, minimum** 18

Optical Specifications

Numerical Aperture 0.2

### CS-5K-MP

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)

up to 95% relative humidity

### TeraSPEED® OS2 Singlemode Fiber

 $0.5 \, \mu m$ 

## TeraSPEED®

### **Product Classification**

 Portfolio
 CommScope®

 Product Type
 Optical fiber

General Specifications

Cladding Diameter  $125 \, \mu m$ Cladding Diameter Tolerance  $\pm 0.7 \, \mu m$ Cladding Non-Circularity, maximum  $0.7 \, \%$ Coating Diameter (Colored)  $249 \, \mu m$ Coating Diameter (Uncolored)  $242 \, \mu m$ Coating Diameter Tolerance (Colored)  $\pm 13 \, \mu m$ Coating Diameter Tolerance (Uncolored)  $\pm 5 \, \mu m$ 

Proof Tensile Stress 100,000 psi (0.69 GPa)

**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
 | 1.50 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

Dynamic Fatigue Parameter, minimum 20

# CS-8W-MP

### **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** 0.40 dB/km @ 1,310 nm | 0.40 dB/km @ 1,385

nm | 0.40 dB/km @ 1,490 nm | 0.40 dB/km @ 1,550 nm | 0.50 dB/km @ 1,270 nm | 0.50 dB/km @ 1,575

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/sgrt(km)

Standards Compliance ITU-T G.652.D | ITU-T G.657.A1 | TIA-492CAAB (OS2)

### **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

Temperature Dependence, maximum

Temperature dependence is conducted at -60 °C to +85 °C (-76 °F to +185 °F)

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# CS-8W-MP

**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