

Fiber indoor/outdoor cable, LazrSPEED®, Single Jacket/Single Armor, Low Smoke Zero Halogen (LSZH), 24 fiber, Multimode OM4, Gel-Free, Stranded Loose Tube, Black jacket color, Feet jacket marking, Cca flame rating

 Corrugated steel tape armor is strong yet flexible, providing additional crush and rodent protection

#### **Product Classification**

Regional Availability

Asia | Australia/New Zealand | EMEA | Europe | Latin

America | North America

Portfolio CommScope®

Product Type Fiber indoor/outdoor cable

Product Series Z-LA

General Specifications

Armor Type Corrugated steel

Cable Type Stranded loose tube

Construction TypeArmoredSubunit TypeGel-free

Filler, quantity 3

Jacket Color Black

Jacket Marking Feet

Subunit, quantity 2

Fibers per Subunit, quantity 12

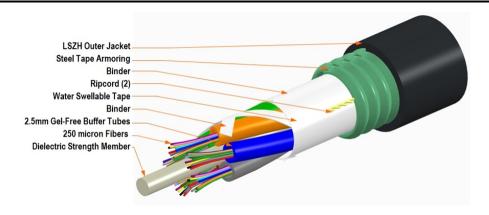
Total Fiber Count 24

Dimensions

Buffer Tube/Subunit Diameter2.5 mm | 0.098 inDiameter Over Jacket13 mm | 0.512 in

## Representative Image





## Mechanical Specifications

Minimum Bend Radius, loaded195 mm7.677 inMinimum Bend Radius, unloaded130 mm5.118 inTensile Load, long term, maximum800 N179.847 lbf

Tensile Load, short term, maximum 2700 N | 606.984 lbf

**Compression** 22 N/mm | 125.623 lb/in

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

Flex 25 cycles

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

**Impact** 3 N-m | 26.552 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** 461 m | 1,512.467 ft

Optical Specifications

Fiber Type OM4, LazrSPEED® 550 | OM4, LazrSPEED® 550

## **Environmental Specifications**

Installation temperature  $-30 \,^{\circ}\text{C to} +60 \,^{\circ}\text{C (-22 °F to} +140 \,^{\circ}\text{F)}$ Operating Temperature  $-40 \,^{\circ}\text{C to} +70 \,^{\circ}\text{C (-40 °F to} +158 \,^{\circ}\text{F)}$ 

Storage Temperature  $-40 \,^{\circ}\text{C}$  to  $+75 \,^{\circ}\text{C}$  ( $-40 \,^{\circ}\text{F}$  to  $+167 \,^{\circ}\text{F}$ )

Cable Qualification Standards ANSI/ICEA S-104-696 | EN 187105 | Telcordia GR-20 | Telcordia GR-

409

EN50575 CPR Cable EuroClass Fire PerformanceCcaEN50575 CPR Cable EuroClass Smoke Ratings1bEN50575 CPR Cable EuroClass Droplets Ratingd2EN50575 CPR Cable EuroClass Acidity Ratinga1

Environmental Space Aerial, lashed | Buried | Low Smoke Zero Halogen (LSZH)

Flame Test Listing EN 50399 | NEC OFC-ST1 (ETL) and c(ETL)

Flame Test Method EN 50399 | IEC 60332-3 | IEC 60754-2 | IEC 61034-2 | IEEE

1202 | UL 1685

Jacket UV Resistance UV stabilized

Water Penetration 24 h

Water Penetration Test Method FOTP-82 | IEC 60794-1 F5

**Environmental Test Specifications** 

**Cable Freeze** -2 °C | 28.4 °F

Cable Freeze Test Method FOTP-98 | IEC 60794-1 F15

**Heat Age** -40 °C to +85 °C (-40 °F to +185 °F)

Heat Age Test Method IEC 60794-1 F9

Low High Bend -30 °C to +60 °C (-22 °F to +140 °F)

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

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

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

Packaging and Weights

**Cable weight** 177 kg/km | 118.939 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-LT

 LazrSPEED® 550 OM4 Bend-Insensitive Multimode 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 Non-Circularity, maximum 1 %

Coating Diameter (Colored) 254 µm

Coating Diameter (Uncolored) 245 µm

Coating Diameter Tolerance (Colored)  $\pm 7 \,\mu m$ 

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 μm

**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 N | 2.001 lbf

Coating Strip Force, minimum 1.3 N | 0.292 lbf

**Dynamic Fatigue Parameter, minimum** 18

Optical Specifications

Numerical Aperture 0.2

## CS-5K-LT

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