

Fiber indoor/outdoor cable, TeraSPEED® High Tensile Strength (LSZH) Mini All-Dielectric Single Jacket, 2 fiber, Singlemode G.652.D and G.657. Al, Gel-Filled, Stranded Loose Tube, Meters jacket marking, Dca flame rating. Provides Rodent Resistance

Product Classification

Regional Availability

Asia | Australia/New Zealand | EMEA

Portfolio CommScope®

Product Type Fiber indoor/outdoor cable

Product Series C-LN

General Specifications

Cable Type Stranded loose tube

Subunit Type Gel-filled

Filler, quantity 5

Jacket ColorBlackJacket MarkingMetersJacket Marking MethodInkjet

Jacket Marking Text COMMSCOPE GB OPTICAL CABLE 760243315 2x OS2 SM LSZH

EN50575 CLASS D [SERIAL NUMBER] [METER MARK]

Subunit, quantity 1

Fibers per Subunit, quantity 2

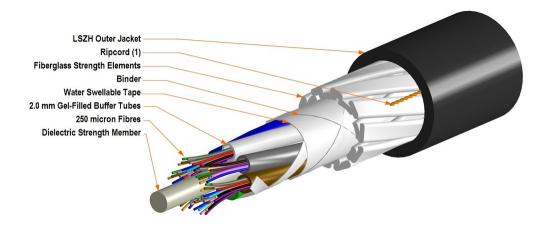
Total Fiber Count 2

Dimensions

Buffer Tube/Subunit Diameter2 mm | 0.079 inDiameter Over Jacket12.8 mm | 0.504 in

Representative Image





Mechanical Specifications

Minimum Bend Radius, loaded 193 mm | 7.598 in

Minimum Bend Radius, unloaded 128 mm | 5.039 in

Tensile Load, long term, maximum1334 N | 299.895 lbfTensile Load, short term, maximum4448 N | 999.95 lbf

Compression 22 N/mm | 125.623 lb/in

Compression Test Method IEC 60794-1 E3

Flex 25 cycles

Flex Test Method IEC 60794-1 E6
Impact Test Method IEC 60794-1 E4

Strain See long and short term tensile loads

Strain Test Method IEC 60794-1 E1

Twist 10 cycles

Twist Test Method IEC 60794-1 E7

Vertical Rise, maximum 816 m | 2,677.165 ft

Optical Specifications

Fiber Type G.652.D and G.657.A1, TeraSPEED® | OS2

Environmental Specifications

Installation temperature $-30 \,^{\circ}\text{C} \, \text{to} + 60 \,^{\circ}\text{C} \, (-22 \,^{\circ}\text{F} \, \text{to} + 140 \,^{\circ}\text{F})$ Operating Temperature $-40 \,^{\circ}\text{C} \, \text{to} + 70 \,^{\circ}\text{C} \, (-40 \,^{\circ}\text{F} \, \text{to} + 158 \,^{\circ}\text{F})$ Storage Temperature $-40 \,^{\circ}\text{C} \, \text{to} + 75 \,^{\circ}\text{C} \, (-40 \,^{\circ}\text{F} \, \text{to} + 167 \,^{\circ}\text{F})$

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Cable Qualification StandardsEN 187105I EC 60794-1-2

EN50575 CPR Cable EuroClass Fire PerformanceDcaEN50575 CPR Cable EuroClass Smoke Ratings2EN50575 CPR Cable EuroClass Droplets Ratingd0EN50575 CPR Cable EuroClass Acidity Ratinga1

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

Flame Test Method | IEC 60332-1-2 | IEC 60754-2 | IEC 61034-2

Jacket UV Resistance UV stabilized

Water Penetration 24 h

Water Penetration Test Method IEC 60794-1 F5

Environmental Test Specifications

Cable Freeze -2 °C | 28.4 °F

Cable Freeze Test Method IEC 60794-1 F15

Heat Age $-40 \,^{\circ}\text{C}$ to $+85 \,^{\circ}\text{C}$ ($-40 \,^{\circ}\text{F}$ to $+185 \,^{\circ}\text{F}$)

Heat Age Test Method IEC 60794-1 F9

-30 °C to +60 °C (-22 °F to +140 °F)

Low High Bend Test Method IEC 60794-1 E11

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

Temperature Cycle Test Method IEC 60794-1 F1

Packaging and Weights

Cable weight 167 kg/km | 112.219 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

ROHS Compliant UK-ROHS Compliant

CENELEC

Included Products

CS-8W-LT - TeraSPEED® G652D/G657A1 Singlemode

Fiber

COMMSC PE®

* Footnotes

Operating Temperature Specification applicable to non-terminated bulk fiber cable

TeraSPEED® G652D/G657A1 Singlemode Fiber

TeraSPEED®

Product Classification

Portfolio CommScope®

Product Type Optical fiber

General Specifications

Cladding Diameter 125 µm

 ${\bf Cladding\ Non-Circularity,\ maximum} \\ {\bf 0.7\ \%}$

Coating Diameter (Colored) 249 μm

Coating Diameter Tolerance (Colored) ±13 μm

Coating Diameter Tolerance (Uncolored) ±5 µm

 $\textbf{Coating/Cladding Concentricity Error, maximum} \hspace{1.5cm} 12~\mu m$

Core Diameter 8.3 μm

 $\textbf{Core/Clad Offset, maximum} \hspace{1.5cm} 0.5\,\mu\text{m}$

Proof Test 689.476 N/mm² | 100000 psi

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, maximum 8.9 N | 2.001 lbf

COMMSCOPE®

CS-8W-LT

Coating Strip Force, minimum 1.3 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 0.22 dB/km @ 1,550 nm | 0.25 dB/km @ 1,490

nm | 0.25 dB/km @ 1,625 nm | 0.36 dB/km @ 1,310

nm | 0.36 dB/km @ 1,385 nm

Attenuation, typical 0.19 dB/km @ 1,550 nm | 0.33 dB/km @ 1,310 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 $\pm 0.4 \, \mu \text{m} \ @ \ 1310 \, \text{nm} \ | \ \pm 0.5 \, \mu \text{m} \ @ \ 1550 \, \text{nm} \ | \ \pm 0.6 \, \mu \text{m}$

@ 1385 nm

Polarization Mode Dispersion Link Design Value, maximum 0.04 ps/sgrt(km)

Standards Compliance IEC 60793-2-10, edition 6, model A1a.4 | 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, 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

Agency Classification

COMMSCOPE®

CS-8W-LT

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

