

Indoor/outdoor fiber cable, TeraSPEED® Single Jacket/Single GRP Armor, Gel-filled, Stranded Loose Tube, Singlemode OS2, black Provides Rodent Resistance.

Product Classification

Regional Availability

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

America

Portfolio CommScope®

Product Type Fiber indoor/outdoor cable

Product Series C-LA

General Specifications

Armor TypeNon-metallic rodsCable TypeStranded loose tube

Construction Type Armored
Subunit Type Gel-filled
Jacket Color Black
Jacket Marking Method Inkjet

Jacket Marking Text COMMSCOPE GB OPTICAL CABLE OS2 SM 72 FIBER EN50575 CLASS Dca

[SERIAL NUMBER] [MM/YY] [METRE MARK]

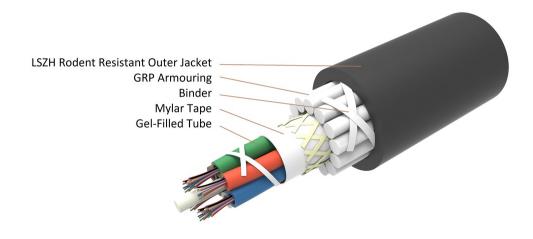
Subunit, quantity 6
Fibers per Subunit, quantity 12
Total Fiber Count 72

Dimensions

Buffer Tube/Subunit Diameter2 mm | 0.079 inDiameter Over Jacket14.5 mm | 0.571 in

Representative Image





Mechanical Specifications

Minimum Bend Radius, loaded 340 mm | 13.386 in

Minimum Bend Radius, unloaded 250 mm | 9.843 in

Tensile Load, long term, maximum 6000 N | 1,348.854 lbf

Compression 40 N/mm | 228.406 lb/in

Compression Test Method IEC 60794-1 E3

Flex 25 cycles

Impact 15 N-m | 132.761 in lb

Impact Test Method IEC 60794-1 E4

Strain See long and short term tensile loads

Strain Test Method IEC 60794-1 E1

Twist 5 cycles

Twist Test Method IEC 60794-1 E7

Optical Specifications

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

Environmental Specifications

Installation temperature $-20 \,^{\circ}\text{C}$ to $+70 \,^{\circ}\text{C}$ (-4 $^{\circ}\text{F}$ to $+158 \,^{\circ}\text{F}$)

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

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

Cable Qualification Standards IEC 60794-1-2

 EN50575 CPR Cable EuroClass Fire Performance
 Dca

 EN50575 CPR Cable EuroClass Smoke Rating
 s2

 EN50575 CPR Cable EuroClass Droplets Rating
 d2

 EN50575 CPR Cable EuroClass Acidity Rating
 a1

Environmental Space Aerial, lashed | Buried

Flame Test Listing EN 50399

Flame Test Method EN 50399 | 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

Heat Age -20 °C to +85 °C (-4 °F to +185 °F)

Heat Age Test Method IEC 60794-1 F9

Low High Bend $-20 \,^{\circ}\text{C to} + 70 \,^{\circ}\text{C } (-4 \,^{\circ}\text{F to} + 158 \,^{\circ}\text{F})$

Low High Bend Test Method IEC 60794-1 E11

Temperature Cycle -20 °C to +70 °C (-4 °F to +158 °F)

Temperature Cycle Test Method IEC 60794-1 F1

Packaging and Weights

Cable weight 241 kg/km | 161.945 lb/kft

Regulatory Compliance/Certifications

Agency Classification

CHINA-ROHS Below maximum concentration value

REACH-SVHC Compliant as per SVHC revision on www.commscope.com/ProductCompliance

ROHS Compliant UK-ROHS Compliant



Included Products



CS-8W-LT

 TeraSPEED® G652D/G657A1 Singlemode Fiber

* Footnotes

Operating Temperature Specification applicable to non-terminated bulk fiber cable

TeraSPEED® G652D/G657A1 Singlemode Fiber

8.3 µm

TeraSPEED®

Product Classification

Portfolio CommScope®

Product Type Optical fiber

General Specifications

Cladding Diameter 125 µm

 ${\color{red} \textbf{Cladding Diameter Tolerance}} \\ {\color{red} \pm 0.7~\mu m} \\$

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

Coating Diameter (Colored) 249 µm

Coating Diameter (Uncolored) 242 µm

Coating Diameter Tolerance (Colored) ±13 μm

 Coating/Cladding Concentricity Error, maximum
 12 μm

Core/Clad Offset, maximum 0.5 µm

Proof Test 689.476 N/mm² | 100000 psi

Dimensions

Core Diameter

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 nm | $\pm 0.5 \, \mu \text{m}$ @ 1550 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