810010471/DB/GS | B-048-LN-HY-F12NS/15G /8W048/1X24AWG/GS



Fiber OSP cable, LightScope® ZWP Blown Micro Single Jacket All-Dielectric, Tone Wire Outdoor, 48 fiber, Stranded Loose Tube Arid-Core™ Construction, Gel-filled, Singlemode G.652.D and G.657.Al, Feet jacket marking, Black jacket color

Product Classification

Regional Availability

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

America

 Portfolio
 CommScope®

 Product Type
 Fiber OSP cable

Product Series B-LN

General Specifications

 Cable Type
 Stranded loose tube

Construction Type Non-armored

Subunit Type Gel-filled

Filler, quantity 1

Jacket ColorBlackJacket MarkingFeetJacket Marking MethodLaser

Jacket Marking Text COMMSCOPE OPTICAL CABLE OS2 SM 48F (SERIAL NUMBER) MM/YYYY

XXXXXXXFT

Subunit, quantity 4

Fibers per Subunit, quantity 12

Total Fiber Count 48

Dimensions

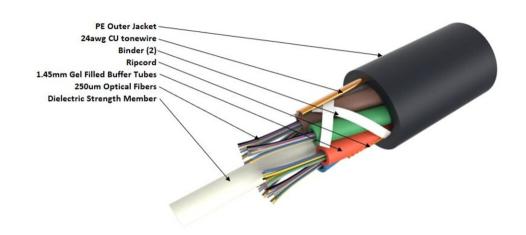
Buffer Tube/Subunit Diameter1.45 mm | 0.057 inDiameter Over Jacket5.1 mm | 0.201 in

Tone Wire Gauge 24 AWG

Representative Image



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Material Specifications

Jacket Material High density polyethylene (HDPE)

Mechanical Specifications

Minimum Bend Radius, loaded 208.3 mm | 8.201 in Minimum Bend Radius, unloaded 55 mm | 2.165 in

Tensile Load, long term, maximum 97 N | 21.806 lbf

Tensile Load, short term, maximum 324 N | 72.838 lbf

10 N/mm | 57.101 lb/in Compression

Compression Test Method IEC 60794-1-21 E3

Flex 25 cycles

Flex Test Method IEC 60794-1 E6

0.3 N-m | 2.655 in lb **Impact** IEC 60794-1-21 E4

Impact Test Method

See long and short term tensile loads

Strain Test Method IEC 60794-1-21 E1

Twist 10 cycles

Twist Test Method IEC 60794-1-21 E7 Vertical Rise, maximum 492 m | 1.614.173 ft

Optical Specifications

Strain

Fiber Type G.652.D | G.652.D and G.657.A1

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Environmental Specifications

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

Cable Qualification Standards IEC 60794-5-10

Environmental Space Air-blown, microduct

Jacket UV Resistance UV stabilized

Water Penetration 24 h

Water Penetration Test Method IEC 60794-1 F4

Environmental Test Specifications

 Cable Freeze
 -2 °C | 28.4 °F

 Cable Freeze Test Method
 IEC 60794-1 F15

 Drip
 70 °C | 158 °F

Drip Test Method IEC 60794-1-21 E14

Heat Age $-30 \,^{\circ}\text{C} \text{ to } +85 \,^{\circ}\text{C} \, (-22 \,^{\circ}\text{F to } +185 \,^{\circ}\text{F})$

Heat Age Test Method IEC 60794-1-22 F9

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

Low High Bend Test Method IEC 60794-1-21 E11

Temperature Cycle -30 °C to +70 °C (-22 °F to +158 °F)

Temperature Cycle Test Method IEC 60794-1-22 F1

Packaging and Weights

Cable weight 22 kg/km | 14.783 lb/kft

Included Products

CS-8W-250-B-LN - TeraSPEED® G652D/G657A1 Singlemode Fiber

* Footnotes

Operating Temperature Specification applicable to non-terminated bulk fiber cable



TeraSPEED®

TeraSPEED® G652D/G657A1 Singlemode Fiber

Product Classification

 Portfolio
 CommScope®

 Product Type
 Optical fiber

General Specifications

Cladding Diameter 125 µm **Cladding Diameter Tolerance** $\pm 0.7 \, \mu m$ 0.7 % Cladding Non-Circularity, maximum **Coating Diameter (Colored)** 249 µm **Coating Diameter (Uncolored)** 242 µm **Coating Diameter Tolerance (Colored)** ±13 µm **Coating Diameter Tolerance (Uncolored)** ±5 µm Coating/Cladding Concentricity Error, maximum 12 µm **Core Diameter** 8.3 µm Core/Clad Offset, maximum $0.5 \, \mu m$

Proof Tensile Stress 100,000 psi (0.69 GPa)

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

Dynamic Fatigue Parameter, minimum 20

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CS-8W-250-B-LN

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 0.25 dB/km @ 1,490 nm | 0.25 dB/km @ 1,550

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 \, \mu \text{m} \ @ \ 1,550 \, \text{nm} \ | \ 9.2 \, \mu \text{m} \ @ \ 1,310 \, \text{nm} \ | \ 9.6 \, \mu \text{m} \ @ \ 1,310 \, \text{nm} \ | \ 9.6 \, \mu \text{m} \ @ \ 1,310 \, \text{nm} \ | \ 9.6 \, \mu \text{m} \ @ \ 1,310 \, \text{nm} \ | \ 9.6 \, \mu \text{m} \ @ \ 1,310 \, \text{nm} \ | \ 9.6 \, \mu \text{m} \ @ \ 1,310 \, \text{nm} \ | \ 9.6 \, \mu \text{m} \ @ \ 1,310 \, \text{nm} \ | \ 9.6 \, \mu \text{m} \ @ \ 1,310 \, \text{nm} \ | \ 9.6 \, \mu \text{m} \ @ \ 1,310 \, \text{nm} \ | \ 9.6 \, \mu \text{m} \ @ \ 1,310 \, \text{nm} \ | \ 9.6 \, \mu \text{m} \ @ \ 1,310 \, \text{nm} \ | \ 9.6 \, \mu \text{m} \ @ \ 1,310 \, \text{nm} \ | \ 9.6 \, \mu \text{m} \ @ \ 1,310 \, \text{nm} \ | \ 9.6 \, \mu \text{m} \ @ \ 1,310 \, \text{nm} \ | \ 9.6 \, \mu \text{m} \ @ \ 1,310 \, \text{nm} \ | \ 9.6 \, \mu \text{m} \ @ \ 1,310 \, \text{nm} \ | \ 9.6 \, \mu \text{m} \ @ \ 1,310 \, \text{nm} \ | \ 9.6 \, \mu \text{m} \ @ \ 1,310 \, \text{nm} \ | \ 9.6 \, \mu \text{m} \ @ \ 1,310 \, \text{nm} \ | \ 9.6 \, \mu \text{m} \ @ \ 1,310 \, \text{nm} \ | \ 9.6 \, \mu \text{m} \ @ \ 1,310 \, \text{nm} \ | \ 9.6 \, \mu \text{m} \ @ \ 1,310 \, \text{nm} \ | \ 9.6 \, \mu \text{m} \ @ \ 1,310 \, \text{nm} \ | \ 9.6 \, \mu \text{m} \ @ \ 1,310 \, \text{nm} \ | \ 9.6 \, \mu \text{m} \ @ \ 1,310 \, \text{nm} \ | \ 9.6 \, \mu \text{m} \ @ \ 1,310 \, \text{nm} \ | \ 9.6 \, \mu \text{m} \ @ \ 1,310 \, \text{nm} \ | \ 9.6 \, \mu \text{m} \ @ \ 1,310 \, \text{nm} \ | \ 9.6 \, \mu \text{m} \ @ \ 1,310 \, \text{nm} \ | \ 9.6 \, \mu \text{m} \ @ \ 1,310 \, \text{nm} \ | \ 9.6 \, \mu \text{m} \ @ \ 1,310 \, \text{nm} \ | \ 9.6 \, \mu \text{m} \ @ \ 1,310 \, \text{nm} \ | \ 9.6 \, \mu \text{m} \ @ \ 1,310 \, \text{nm} \ | \ 9.6 \, \mu \text{m} \ @ \ 1,310 \, \text{nm} \ | \ 9.6 \, \mu \text{m} \ @ \ 1,310 \, \text{nm} \ | \ 9.6 \, \mu \text{m} \ @ \ 1,310 \, \text{nm} \ | \ 9.6 \, \mu \text{m} \ @ \ 1,310 \, \text{nm} \ | \ 9.6 \, \mu \text{m} \ @ \ 1,310 \, \text{nm} \ | \ 9.6 \, \mu \text{m} \ @ \ 1,310 \, \text{nm} \ | \ 9.6 \, \mu \text{m} \ @ \ 1,310 \, \text{nm} \ | \ 9.6 \, \mu \text{m} \ @ \ 1,310 \, \text{nm} \ | \ 9.6 \, \mu \text{m} \ | \ 9.6$

1,385 nm

@ 1385 nm

Polarization Mode Dispersion Link Design Value, maximum 0.04 ps/sqrt(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, maximum0.05 dB/kmTemperature Humidity Cycling, maximum0.05 dB/km

Water Immersion, maximum 0.05 dB/km @ 23 °C

* 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

COMMSCOPE®