

Fiber OSP cable, LightScope® ZWP Blown Micro Single Jacket All-Dielectric, 96 fiber, Stranded Loose Tube Arid-Core™ Construction, Gel-filled, Singlemode G.652.D and G.657.A1, Feet jacket marking, Black jacket color, Build America Buy America (BABA)

Product Classification

Regional Availability	Asia Australia/New Zealand EMEA Latin America North America
Portfolio	CommScope®
Product Type	Fiber OSP cable
Product Series	B-LN

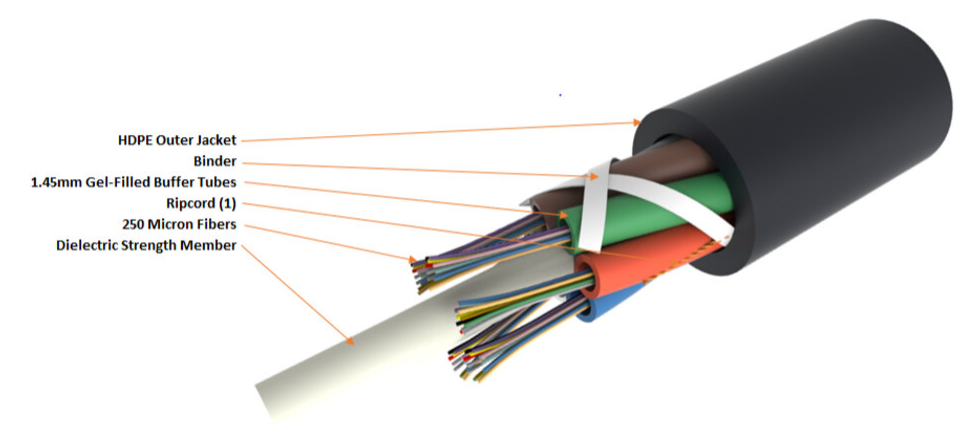
General Specifications

Cable Type	Stranded loose tube
Construction Type	Non-armored
Subunit Type	Gel-filled
Filler, quantity	0
Jacket Color	Black
Jacket Marking	Feet
Jacket Marking Method	Laser
Jacket Marking Text	COMMScope OPTICAL CABLE OS2 SM 96F (SERIAL NUMBER) MM/YYYY XXXXXXXFT
Subunit, quantity	8
Fibers per Subunit, quantity	12
Total Fiber Count	96

Dimensions

Buffer Tube/Subunit Diameter	1.45 mm 0.057 in
Diameter Over Jacket	6.5 mm 0.256 in

Representative Image



Material Specifications

Jacket Material

High density polyethylene (HDPE)

Mechanical Specifications

Minimum Bend Radius, loaded	279.4 mm 11 in
Minimum Bend Radius, unloaded	110 mm 4.331 in
Tensile Load, long term, maximum	267 N 60.024 lbf
Tensile Load, short term, maximum	890 N 200.08 lbf
Compression	10 N/mm 57.101 lb/in
Compression Test Method	IEC 60794-1-21 E3
Flex	25 cycles
Flex Test Method	IEC 60794-1 E6
Impact	0.3 N-m 2.655 in lb
Impact Test Method	IEC 60794-1-21 E4
Strain	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	752 m 2,467.192 ft

Optical Specifications

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

Environmental Specifications

Installation temperature -30 °C to +70 °C (-22 °F to +158 °F)

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

Storage Temperature -30 °C to +75 °C (-22 °F to +167 °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 °C to +85 °C (-22 °F to +185 °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 38 kg/km | 25.535 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	±0.7 µm
Cladding Non-Circularity, maximum	0.7 %
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 µm
Proof Tensile Stress	100,000 psi (0.69 GPa)

Dimensions

Fiber Curl, minimum	4 m 13.123 ft
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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
Coating Strip Force, minimum	1.3 N 0.292 lbf
Dynamic Fatigue Parameter, minimum	20

CS-8W-250-B-LN

Optical Specifications

Cabled Cutoff Wavelength, maximum	1260 nm
Point Defects, maximum	0.1 dB
Zero Dispersion Slope, maximum	0.092 ps/[km-nm-nm]
Zero Dispersion Wavelength, maximum	1324 nm
Zero Dispersion Wavelength, minimum	1300 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 µm @ 1,550 nm 9.2 µm @ 1,310 nm 9.6 µm @ 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/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, maximum	0.05 dB/km
Temperature Humidity Cycling, maximum	0.05 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