



Fiber OSP cable, 24-fiber, HDPE, loose tube, gel-filled, Singlemode G.652. D and G.657.A1, Meters jacket marking, Red jacket color, 1000 m. Provides Rodent Resistance

Product Classification

Regional Availability	Australia/New Zealand EMEA
Portfolio	CommScope®
Product Type	Fiber OSP cable
Product Series	O-CA

General Specifications

Armor Type	Corrugated steel
Cable Type	Loose tube
Construction Type	Armored
Subunit Type	Gel-filled
Filler, quantity	1
Jacket Color	Red
Jacket Marking	Meters
Jacket Marking Method	Inkjet
Jacket Marking Text	COMMScope GB SYSTEM F.O. CABLE 760252101 CSA GEL LOOSE TUBE 24X9/125 OS2 HDPE (Serial NUMBER) (METER MARK)
Fibers per Subunit, quantity	24
Total Fiber Count	24

Dimensions

Cable Length	1000 m 3,280.84 ft
Buffer Tube/Subunit Diameter	4 mm 0.157 in
Diameter Over Jacket	10.5 mm 0.413 in

Material Specifications

Jacket Material	High density polyethylene (HDPE)
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Mechanical Specifications

760252101 | O-024-CA-8W-M12RD/GY/HD

Minimum Bend Radius, loaded	210 mm 8.268 in
Minimum Bend Radius, unloaded	160 mm 6.299 in
Tensile Load, long term, maximum	1250 N 281.011 lbf
Compression	3000 N/mm 17,130.441 lb/in
Compression Test Method	IEC 60794-1-2 E3
Flex	25 cycles
Impact	5 N-m 44.254 in lb
Impact Test Method	IEC 60794-1 E4
Twist	5 cycles
Twist Test Method	IEC 60794-1 E7

Optical Specifications

Fiber Type	OS2
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Optical Specifications, Wavelength Specific

Attenuation, maximum	0.35 dB/km @ 1,300 nm 0.35 dB/km @ 1,550 nm 0.45 dB/km @ 1,310 nm
Standards Compliance	IEC 60794-1 TIA-492CAAB (OS2)

Environmental Specifications

Installation temperature	-5 °C to +50 °C (+23 °F to +122 °F)
Operating Temperature	-20 °C to +70 °C (-4 °F to +158 °F)
Storage Temperature	-20 °C to +70 °C (-4 °F to +158 °F)
Water Penetration	24 h
Water Penetration Test Method	IEC 60794-1 F5

Environmental Test Specifications

Temperature Cycle	-20 °C to +70 °C (-4 °F to +158 °F)
Temperature Cycle Test Method	IEC 60794-1-2 F1

Packaging and Weights

Cable weight	151 kg/km 101.467 lb/kft
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Included Products

DB-8W-LT - LightScope ZWP® Singlemode

Fiber

* Footnotes

Operating Temperature Specification applicable to non-terminated bulk fiber cable

DB-8W-LT

LightScope ZWP® 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 Test	689.476 N/mm ² 100000 psi

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

DB-8W-LT

Coating Strip Force, minimum	1.3 N 0.292 lbf
Dynamic Fatigue Parameter, minimum	20

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	0.22 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/sqrt(km)
Standards Compliance	ITU-T G.652.D ITU-T G.657.A1

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
ISO 9001:2015	Designed, manufactured and/or distributed under this quality management system

DB-8W-LT

* 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