

810009724/DB | B-144-LN-8F-M24NS/17T 200



Fiber OSP cable, Zero Water Peak® Blown Micro Single Jacket All-Dielectric Stranded Loose Tube, Singlemode G.657.A1, 144 fiber, Gel-filled, 200um Fiber Arid-Core® Construction, Meters 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

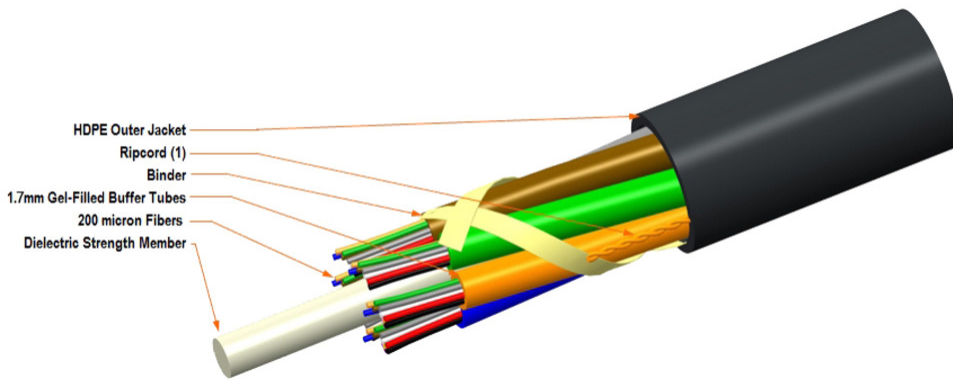
General Specifications

Cable Type	Stranded loose tube
Construction Type	Non-armored
Subunit Type	Gel-filled
Filler, quantity	0
Jacket Color	Black
Jacket Marking	Meters
Jacket Marking Method	Laser
Jacket Marking Text	COMMSCOPE OPTICAL CABLE G657A1 SM 144F [SERIAL NUMBER] MM/YYYY [METERS] M
Subunit, quantity	6
Fibers per Subunit, quantity	24
Total Fiber Count	144

Dimensions

Buffer Tube/Subunit Diameter	1.7 mm 0.067 in
Diameter Over Jacket	6.2 mm 0.244 in

Representative Image



Material Specifications

Jacket Material High density polyethylene (HDPE)

Mechanical Specifications

Minimum Bend Radius, loaded 93 mm | 3.661 in

Minimum Bend Radius, unloaded 62 mm | 2.441 in

Tensile Load, long term, maximum 335 N | 75.311 lbf

Tensile Load, short term, maximum 1000 N | 224.809 lbf

Compression 10 N/mm | 57.101 lb/in

Compression Test Method FOTP-41 | IEC 60794-1 E3

Flex 25 cycles

Flex Test Method FOTP-104 | IEC 60794-1 E6

Impact 0.3 N-m | 2.655 in lb

Impact Test Method FOTP-25 | IEC 60794-1 E4

Strain See long and short term tensile loads

Strain Test Method FOTP-33 | IEC 60794-1 E1

Twist 10 cycles

Twist Test Method FOTP-85 | IEC 60794-1 E7

Vertical Rise, maximum 769 m | 2,522.966 ft

Optical Specifications

Fiber Type G.657.A1, TeraSPEED®

Environmental Specifications

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Installation temperature	-30 °C to +70 °C (-22 °F to +158 °F)
Operating Temperature	-40 °C to +70 °C (-40 °F to +158 °F)
Storage Temperature	-40 °C to +70 °C (-40 °F to +158 °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	FOTP-82 IEC 60794-1 F5

Environmental Test Specifications

Cable Freeze	-2 °C 28.4 °F
Cable Freeze Test Method	FOTP-98 IEC 60794-1 F15
Drip	70 °C 158 °F
Drip Test Method	FOTP-81 IEC 60794-1 E14
Heat Age	-40 °C to +85 °C (-40 °F to +185 °F)
Heat Age Test Method	IEC 60794-1 F9
Low High Bend	-30 °C to +60 °C (-22 °F to +140 °F)
Low High Bend Test Method	FOTP-37 IEC 60794-1 E11
Temperature Cycle	-40 °C to +70 °C (-40 °F to +158 °F)
Temperature Cycle Test Method	FOTP-3 IEC 60794-1 F1

Packaging and Weights

Cable weight	33.2 kg/km 22.309 lb/kft
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Included Products

CS-8F-200UM-LT	–	200 Micron Low Macrobending, Zero Water Peak, Dispersion-Unshifted Singlemode Fiber
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* Footnotes

Operating Temperature Specification applicable to non-terminated bulk fiber cable

CS-8F-200UM-LT

200 Micron Low Macrobending, Zero Water Peak, Dispersion-Unshifted 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)	200 µm
Coating Diameter (Uncolored)	190 µm
Coating Diameter Tolerance (Colored)	±10 µm
Coating Diameter Tolerance (Uncolored)	±10 µm
Coating/Cladding Concentricity Error, maximum	12 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, 50 mm Ø mandrel, 100 turns	0.03 dB @ 1,550 nm 0.05 dB @ 1,625 nm
Coating Strip Force, maximum	8.9 N 2.001 lbf
Coating Strip Force, minimum	0.5 N 0.112 lbf
Dynamic Fatigue Parameter, minimum	20

Optical Specifications

Cabled Cutoff Wavelength, maximum	1260 nm
Point Defects, maximum	0.1 dB
Zero Dispersion Slope, maximum	0.09 ps/[km-nm-nm]

CS-8F-200UM-LT

Zero Dispersion Wavelength, maximum	1324 nm
Zero Dispersion Wavelength, minimum	1300 nm

Optical Specifications, Wavelength Specific

Attenuation, maximum	0.25 dB/km @ 1,550 nm 0.27 dB/km @ 1,490 nm 0.27 dB/km @ 1,625 nm 0.33 dB/km @ 1,385 nm 0.36 dB/km @ 1,310 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	8.6 μm @ 1,310 nm 9.8 μm @ 1,550 nm
Mode Field Diameter Tolerance	$\pm 0.4 \mu\text{m}$ @ 1310 nm $\pm 0.5 \mu\text{m}$ @ 1550 nm
Polarization Mode Dispersion Link Design Value, maximum	0.06 ps/sqrt(km)
Standards Compliance	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
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