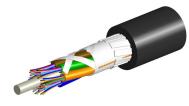
# 860646631/DB | 0-144-LN-8G-M12NS/20G/BK



Fiber OSP cable, LightScope® ZWP Mini Single Jacket, All-Dielectric, 144 fiber, Gel-Filled, Stranded Loose Tube, Singlemode G.657.A2, Meters jacket marking, Black jacket color

### Product Classification

Regional Availability	EMEA
Portfolio	CommScope®
Product Type	Fiber OSP cable
Product Series	O-LN
General Specifications	
Cable Type	Stranded loose tube
Construction Type	Non-armored
Subunit Type	Gel-filled
Jacket Color	Black
Jacket Marking	Meters
Jacket Marking Method	Inkjet
Jacket Marking Text	COMMSCOPE GB OPTICAL CABLE TYPE G657A2 SM 144 FIBER [SERIAL NUMBER] [MM /YYYY] [METRE MARK]
Subunit, quantity	12
Fibers per Subunit, quantity	12
Total Fiber Count	144
Dimensions	
Buffer Tube/Subunit Diameter	2 mm   0.079 in
Diameter Over Jacket	13.3 mm   0.524 in

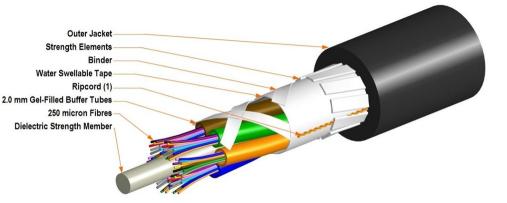
## Representative Image

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# 860646631/DB | 0-144-LN-8G-M12NS/20G/BK



## Material Specifications

Jacket Material	PE
Mechanical Specifications	
Minimum Bend Radius, loaded	200 mm   7.874 in
Minimum Bend Radius, unloaded	133 mm   5.236 in
Tensile Load, long term, maximum	800 N   179.847 lbf
Tensile Load, short term, maximum	2700 N   606.984 lbf
Compression	22 N/mm   125.623 lb/in
Compression Test Method	IEC 60794-1 E3
Flex	25 cycles
Flex Test Method	IEC 60794-1 E6
Impact	4.41 N-m   39.032 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	10 cycles
Twist Test Method	IEC 60794-1 E7
Vertical Rise, maximum	594 m   1,948.819 ft
Optical Specifications	

Fiber Type

G.657.A2 | G.657.A2, 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 +75 °C (-40 °F to +167 °F)
Cable Qualification Standards	ANSI/ICEA S-87-640   EN 187105   IEC 60794-1-2
Environmental Space	Aerial, lashed   Buried
Jacket UV Resistance	UV stabilized
Water Penetration	24 h
Water Penetration Test Method	IEC 60794-1 F5

## 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 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	IEC 60794-1 E11
Temperature Cycle	-40 °C to +70 °C (-40 °F to +158 °F)
Temperature Cycle Test Method	IEC 60794-1 F1

### Packaging and Weights

Cable weight

138 kg/km | 92.732 lb/kft

### Regulatory Compliance/Certifications

#### Agency Classification

ISO 9001:2015

Designed, manufactured and/or distributed under this quality management system

### Included Products

CS-8G-LT

Enhanced Low Macrobending, Zero Water Peak, Dispersion-Unshifted Singlemode Fiber (ITU-T G.657.A2, B2)

## \* Footnotes

**Operating Temperature** Specification applicable to non-terminated bulk fiber cable

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# CS-8G-LT

Enhanced Low Macrobending, Zero Water Peak, Dispersion-Unshifted Singlemode Fiber (ITU-T G. 657.A2, B2)

### 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/Clad Offset, maximum	0.5 µm
Proof Tensile Stress	100,000 psi (0.69 GPa)
Dimensions	
Fiber Curl, minimum	4 m   13.123 ft
Mechanical Specifications	
Macrobending, 15 mm Ø mandrel, 1 turn	0.50 dB @ 1,550 nm   1.00 dB @ 1,625 nm
Macrobending, 20 mm Ø mandrel, 1 turn	0.10 dB @ 1,550 nm   0.20 dB @ 1,625 nm
Macrobending, 30 mm Ø mandrel, 10 turns	0.03 dB @ 1,550 nm   0.10 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
Optical Specifications	
Cabled Cutoff Wavelength, maximum	1260 nm
Point Defects, maximum	0.1 dB

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# CS-8G-LT

Zero Dispersion Slope, maximum	0.092 ps/[km-nm-nm]
Zero Dispersion Wavelength, maximum	1324 nm
Zero Dispersion Wavelength, minimum	1302 nm
Optical Specifications, Wavelength Specific	
Attenuation, maximum	0.25 dB/km @ 1,550 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	±0.4 μm @ 1310 nm   ±0.5 μm @ 1550 nm
Polarization Mode Dispersion Link Design Value, maximum	0.06 ps/sqrt(km)
Standards Compliance	ITU-T G.657.A2   ITU-T G.657.B2

# 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

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