D-144-LA-8W-F24NS/200



Fiber OSP cable, Single Jacket/Single Armor, 144 fiber, Gel-Free, Stranded Loose Tube, Singlemode G.652.D and G.657.A1, 200um fiber, Feet jacket marking, Black jacket color

• Corrugated steel tape armor is strong yet flexible, providing additional crush and rodent protection

Product Classification

Regional Availability	Asia Australia/New Zealand EMEA Latin America North America
Portfolio	CommScope®
Product Type	Fiber OSP cable
Product Series	D-LA
General Specifications	
Armor Type	Corrugated steel
Cable Type	Stranded loose tube
Construction Type	Armored
Subunit Type	Gel-free
Jacket Color	Black
Jacket Marking	Feet
Subunit, quantity	6
Fibers per Subunit, quantity	24
Total Fiber Count	144
Dimensions	
Buffer Tube/Subunit Diameter	2.5 mm 0.098 in
Diameter Over Jacket	11.8 mm 0.465 in

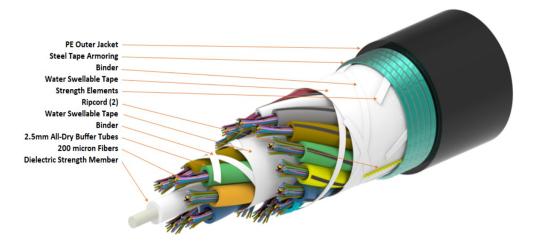
Representative Image

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Material Specifications

Jacket Material

ΡE

Minimum Bend Radius, loaded	177 mm 6.969 in
Minimum Bend Radius, unloaded	118 mm 4.646 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	FOTP-41 IEC 60794-1 E3
Flex	25 cycles
Flex Test Method	FOTP-104 IEC 60794-1 E6
Impact	4.4 N-m 38.943 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	500 m 1,640.42 ft

Optical Specifications

Fiber Type

G.652.D and G.657.A1

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D-144-LA-8W-F24NS/200

Environmental Specifications

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 Telcordia GR-20
Environmental Space	Aerial, lashed Buried
Jacket UV Resistance	UV stabilized
Water Penentration	24 h
Water Penentration Test Method	FOTP-82 IEC 60794-1 F5

Environmental Test Specifications

-2 °C 28.4 °F
FOTP-98 IEC 60794-1 F15
-40 °C to +85 °C (-40 °F to +185 °F)
IEC 60794-1 F9
-30 °C to +60 °C (-22 °F to +140 °F)
FOTP-37 IEC 60794-1 E11
-40 °C to +70 °C (-40 °F to +158 °F)
FOTP-3 IEC 60794-1 F1
122 kg/km 81.98 lb/kft

Included Products

CS-8W-200UM-LT

200 Micron Low Macrobending, Zero Water Peak, Dispersion-Unshifted Singlemode Fiber

* Footnotes

Operating Temperature Specification applicable to non-terminated bulk fiber cable

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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/mm² 100000 psi
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, 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	0.05 dB
Zero Dispersion Slope, maximum	0.09 ps/[km-nm-nm]

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COMMSCOPE°

CS-8W-200UM-LT

Zero Dispersion Wavelength, maximum Zero Dispersion Wavelength, minimum	1324 nm 1300 nm	
Optical Specifications, Wavelength Specific		
Attenuation, maximum	0.25 dB/km @ 1,550 nm 0.29 dB/km @ 1,625 nm 0.36 dB/km @ 1,310 nm 0.36 dB/km @ 1,385 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	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

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