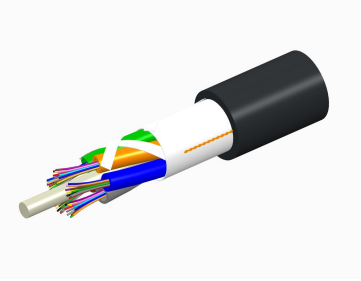
760252665 | C-144-LN-8W-M12BK/25D/E



Fiber indoor/outdoor cable, TeraSPEED®, Single Jacket All-Dielectric (LSZH), 144 fiber, Singlemode G.652.D and G.657.A1Gel-Free, Stranded Loose Tube, Black jacket color, Meters cable marking, Eca flame rating

Product Classification

Regional Availability	Asia | Australia/New Zealand | EMEA | Latin America | North America
Portfolio	CommScope®
Product Type	Fiber indoor/outdoor cable
Product Series	C-LN

General Specifications

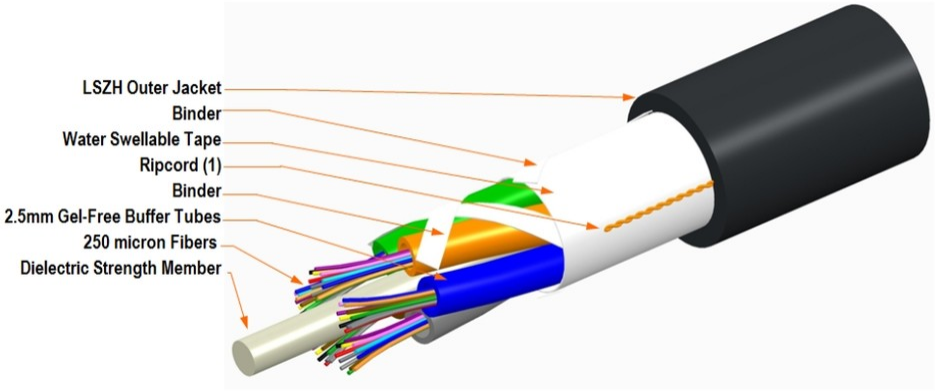
Cable Type	Stranded loose tube
Construction Type	Non-armored
Subunit Type	Gel-free
Jacket Color	Black
Jacket Marking	Meters
Jacket Marking Method	Inkjet
Jacket Marking Text	COMMSCOPE GB OPTICAL CABLE OS2 SM 144 FIBER EN50575 CLASS E [SERIAL NUMBER] [MM /YY] [METRE MARK]
Subunit, quantity	12
Fibers per Subunit, quantity	12
Total Fiber Count	144

Dimensions

Buffer Tube/Subunit Diameter	2.5 mm | 0.098 in
Diameter Over Jacket	17.3 mm | 0.681 in

Representative Image

760252665 | C-144-LN-8W-M12BK/25D/E



Mechanical Specifications

Minimum Bend Radius, loaded	206 mm | 8.11 in
Minimum Bend Radius, unloaded	173 mm | 6.811 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	3 N-m | 26.552 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	5 cycles
Twist Test Method	FOTP-85 | IEC 60794-1 E7
Vertical Rise, maximum	5 m | 16.404 ft

Optical Specifications

Fiber Type	G.652.D and G.657.A1, TeraSPEED® | OS2 | OS2

Environmental Specifications

Installation temperature	-30 °C to +60 °C (-22 °F to +140 °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-104-696 | EN 187105 | Telcordia GR-20 | Telcordia GR-409
EN50575 CPR Cable EuroClass Fire Performance	Eca
Environmental Space	Aerial, lashed | Buried | Low Smoke Zero Halogen (LSZH)
Flame Test Listing	EN 50399
Flame Test Method	EN 50399 | IEC 60332-1-2 | IEC 60754-2
Jacket UV Resistance	UV stabilized
Water Penetration	24 h
Water Penetration Test Method	FOTP-82 | IEC 60794-1 F5

Environmental Test Specifications

Heat Age	-40 °C to +85 °C (-40 °F to +185 °F)
Heat Age Test Method	IEC 60794-1 F9
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	272 kg/km | 182.776 lb/kft

Included Products

CS-8W-IOLT – TeraSPEED® OS2 Singlemode Fiber

* Footnotes

Operating Temperature Specification applicable to non-terminated bulk fiber cable

CS-8W-IOLT

TeraSPEED® OS2 Singlemode Fiber

TeraSPEED®

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/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	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	±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

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