760249855 | Z-024-DS-8W-FSUBK



Fiber Indoor/Outdoor cable, TeraSPEED® Low Smoke Zero Halogen Riser Distribution, 24 fiber single-unit, Gel-free, Singlemode G.652.D and G.657.A1, Feet jacket marking, Black jacket color

Product Classification

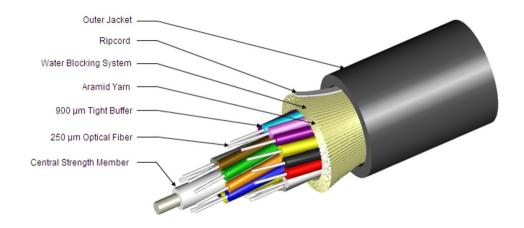
Regional Availability	Asia Australia/New Zealand EMEA Latin America North America
Portfolio	CommScope®
Product Type	Fiber indoor/outdoor cable
Product Series	Z-DS
General Specifications	
Cable Type	Distribution
Construction Type	Non-armored
Jacket Color	Black
Jacket Marking	Feet
Total Fiber Count	24
Dimensions	
Diameter Over Jacket	8.7 mm 0.343 in

Representative Image

Page 1 of 7



760249855 | Z-024-DS-8W-FSUBK



Mechanical Specifications

Minimum Bend Radius, loaded	130 mm 5.118 in
Minimum Bend Radius, unloaded	87 mm 3.425 in
Tensile Load, long term, maximum	400 N 89.924 lbf
Tensile Load, short term, maximum	1335 N 300.12 lbf
Compression	10 N/mm 57.101 lb/in
Compression Test Method	FOTP-41 IEC 60794-1 E3
Flex	100 cycles
Flex Test Method	FOTP-104 IEC 60794-1 E6
Impact	2.94 N-m 26.021 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, TeraSPEED®

Environmental Specifications

Installation temperature

-30 °C to +60 °C (-22 °F to +140 °F)

Page 2 of 7



760249855 | Z-024-DS-8W-FSUBK

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 (water penetration) Telcordia GR-409
Environmental Space	Low Smoke Zero Halogen (LSZH) Riser
Flame Test Listing	NEC OFNR-ST1 (ETL) and c(ETL)
Flame Test Method	IEC 60332-3 IEC 60754-2 IEC 61034-2 UL 1666 UL 1685
Jacket UV Resistance	UV stabilized
Water Penetration	24 h
Water Penetration Test Method	FOTP-82 IEC 60794-1 F5

Environmental Test Specifications

Cable Freeze Test Method	IEC 60794-1 F15
Heat Age	-40 °C to +85 °C (-40 °F to +185 °F)
Heat Age Test Method	IEC 60794-1 F9
Low High Bend	-40 °C to +70 °C (-40 °F to +158 °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

67 kg/km | 45.022 lb/kft

Regulatory Compliance/Certifications

Agency	Classification
CHINA-ROHS	Below maximum concentration value
REACH-SVHC	Compliant as per SVHC revision on www.commscope.com/ProductCompliance
ROHS	Compliant
UK-ROHS	Compliant



Included Products

CS-8W-TB - TeraSPEED® Singlemode Fiber

Page 3 of 7



* Footnotes

Operating Temperature Specification applicable to non-terminated bulk fiber cable

Page 4 of 7



TeraSPEED®

TeraSPEED® 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 Tensile Stress	100,000 psi (0.69 GPa)	
Tight Buffer Diameter	900 µm	
Tight Buffer Diameter Tolerance	±40 μm	
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	

Page 5 of 7



CS-8W-TB

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	0.50 dB/km @ 1,310 nm 0.50 dB/km @ 1,385 nm 0.50 dB/km @ 1,490 nm 0.50 dB/km @ 1,550 nm 0.50 dB/km @ 1,575 nm 0.70 dB/km @ 1,270 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 (OS1a)

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

Page 6 of 7

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CS-8W-TB

Temperature dependence is conducted at -60 °C to +85 °C (-76 °F to +185 °F) Temperature Dependence, maximum 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

Page 7 of 7

