760134858 | Z-024-DZ-8W-FSUBK



Fiber indoor/outdoor cable, TeraSPEED® Riser/LSZH rated, Distribution, interlocking aluminum armored, Singlemode G.652.D and G.657.A1, 24 fiber single-unit, 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-DZ
General Specifications	
Armor Type	Interlocking aluminum
Cable Type	Distribution
Construction Type	Armored
Jacket Color	Black
Jacket Marking	Feet
Total Fiber Count	24
Dimensions	
Diameter Over Armor	13.34 mm 0.525 in
Diameter Over Jacket	15.4 mm 0.606 in

Representative Image

Page 1 of 7

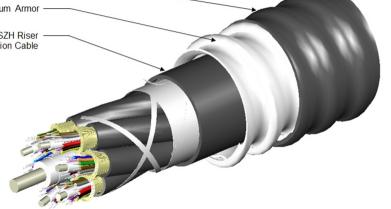


760134858 | Z-024-DZ-8W-FSUBK

LSZH Outer Jacket -

Interlocking Aluminum Armor -

Internal Indoor/Outdoor LSZH Riser Distribution Cable



Mechanical Specifications

Minimum Bend Radius, loaded	231 mm 9.094 in
Minimum Bend Radius, unloaded	154 mm 6.063 in
Tensile Load, long term, maximum	400 N 89.924 lbf
Tensile Load, short term, maximum	1335 N 300.12 lbf
Compression	85 N/mm 485.363 lb/in
Compression Test Method	FOTP-41 IEC 60794-1 E3
Flex	25 cycles
Flex Test Method	FOTP-104 IEC 60794-1 E6
Impact	35 N-m 309.776 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	193 m 633.202 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



760134858 | Z-024-DZ-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 for internal cable) Telcordia GR-409
Environmental Space	Low Smoke Zero Halogen (LSZH) Riser
Flame Test Listing	NEC OFCR-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

212 kg/km | 142.457 lb/kft

Regulatory Compliance/Certifications

Agency	Classification
CHINA-ROHS	Below maximum concentration value
ISO 9001:2015	Designed, manufactured and/or distributed under this quality management system
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

©2025 CommScope, Inc. All rights reserved. CommScope and the CommScope logo are registered trademarks of CommScope and/or its affiliates in the U.S. and other countries. For additional trademark information see https://www.commscope.com/trademarks. All product names, trademarks and registered trademarks are property of their respective owners. Revised: April 30, 2025

COMMSCOPE®

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

