

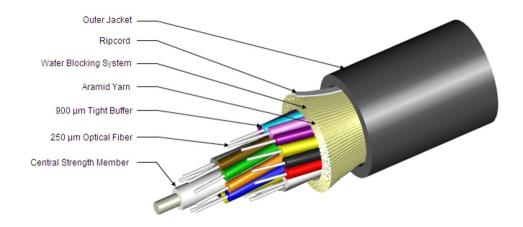
Fiber indoor/outdoor cable, TeraSPEED® LSZH Riser Distribution, 6 fiber single-unit, Singlemode G.652.D and G.657.A1, Feet jacket marking, Black jacket color, Dca flame rating

Product Classification

Regional Availability	Asia Australia/New Zealand EMEA Latin America North America
Portfolio	CommScope®
Product Type	Fiber indoor/outdoor cable
Product Series	Z-DS
General Specifications	
Cable Type	Distribution
Construction Type	Non-armored
Jacket Color	Black
Jacket Marking	Feet
Total Fiber Count	6
Dimensions	
Diameter Over Jacket	5.5 mm 0.217 in
Representative Image	

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Mechanical Specifications

Minimum Bend Radius, loaded	83 mm 3.268 in	
Minimum Bend Radius, unloaded	55 mm 2.165 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		

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)

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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
EN50575 CPR Cable EuroClass Fire Performance	Dca
EN50575 CPR Cable EuroClass Smoke Rating	s1a
EN50575 CPR Cable EuroClass Droplets Rating	d1
EN50575 CPR Cable EuroClass Acidity Rating	a2
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

26 kg/km | 17.471 lb/kft

Regulatory Compliance/Certifications

Classification
EN 50575 compliant, Declaration of Performance (DoP) available
Below maximum concentration value
Designed, manufactured and/or distributed under this quality management system
Compliant as per SVHC revision on www.commscope.com/ProductCompliance
Compliant
Compliant

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Included Products

CS-8W-TB - TeraSPEED® Singlemode Fiber

* Footnotes

Operating Temperature Specification applicable to non-terminated bulk fiber cable

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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 Test	689.476 N/mm² 100000 psi	
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	
Coating Strip Force, minimum	1.3 N 0.292 lbf	

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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

Classification

ISO 9001:2015

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

* Footnotes

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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

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