

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, B2ca 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-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

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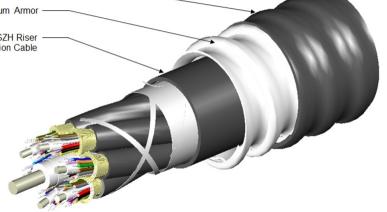
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LSZH Outer Jacket -

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)

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erating Temperature	-40 °C to +70 °C (-40 °F to +158 °F)
rage Temperature	-40 °C to +75 °C (-40 °F to +167 °F)
le Qualification Standards	ANSI/ICEA S-104-696 EN 187105 Telcordia GR-20 (water penetration for internal cable) Telcordia GR-409
0575 CPR Cable EuroClass Fire Performance	B2ca
0575 CPR Cable EuroClass Smoke Rating	s1a
0575 CPR Cable EuroClass Droplets Rating	d0
50575 CPR Cable EuroClass Acidity Rating	al
ironmental Space	Low Smoke Zero Halogen (LSZH) Riser
ne Test Listing	NEC OFCR-ST1 (ETL) and c(ETL)
ne Test Method	IEC 60332-3 IEC 60754-2 IEC 61034-2 UL 1666 UL 1685
ket UV Resistance	
ket ov resistance	UV stabilized
ter Penentration	UV stabilized 24 h

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
CENELEC	EN 50575 compliant, Declaration of Performance (DoP) available
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

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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® 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
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

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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	0.50 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	

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CS-8W-TB

Agency

ISO 9001:2015

Classification

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

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