

Fiber Indoor/Outdoor cable, TeraSPEED® Low Smoke Zero Halogen Riser Distribution, 36 fiber multi-unit with 12 fiber subunits, Gel-free, Singlemode G.652.D and G.657.A1, Feet jacket marking, Black jacket color, Cca flame rating

## Product Classification

<b>Regional Availability</b>	Asia   Australia/New Zealand   EMEA   Latin America   North America
<b>Portfolio</b>	CommScope®
<b>Product Type</b>	Fiber indoor/outdoor cable
<b>Product Series</b>	Z-DS

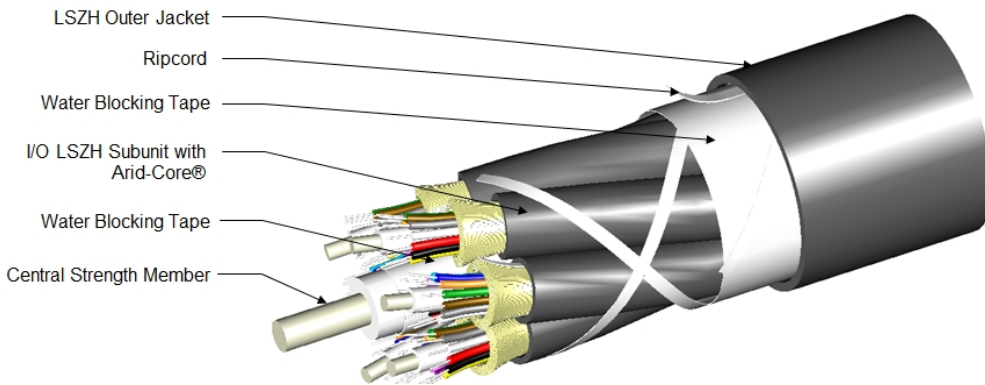
## General Specifications

<b>Cable Type</b>	Distribution
<b>Construction Type</b>	Non-armored
<b>Subunit Type</b>	Gel-free
<b>Jacket Color</b>	Black
<b>Jacket Marking</b>	Feet
<b>Subunit, quantity</b>	3
<b>Fibers per Subunit, quantity</b>	12
<b>Total Fiber Count</b>	36

## Dimensions

<b>Buffer Tube/Subunit Diameter</b>	7.2 mm   0.283 in
<b>Diameter Over Jacket</b>	17.1 mm   0.673 in

## Representative Image



## Mechanical Specifications

<b>Minimum Bend Radius, loaded</b>	256 mm   10.079 in
<b>Minimum Bend Radius, unloaded</b>	171 mm   6.732 in
<b>Tensile Load, long term, maximum</b>	1068 N   240.096 lbf
<b>Tensile Load, short term, maximum</b>	3560 N   800.32 lbf
<b>Compression</b>	22 N/mm   125.623 lb/in
<b>Compression Test Method</b>	FOTP-41   IEC 60794-1 E3
<b>Flex</b>	100 cycles
<b>Flex Test Method</b>	FOTP-104   IEC 60794-1 E6
<b>Impact</b>	5.88 N-m   52.042 in lb
<b>Impact Test Method</b>	FOTP-25   IEC 60794-1 E4
<b>Strain</b>	See long and short term tensile loads
<b>Strain Test Method</b>	FOTP-33   IEC 60794-1 E1
<b>Twist</b>	10 cycles
<b>Twist Test Method</b>	FOTP-85   IEC 60794-1 E7
<b>Vertical Rise, maximum</b>	451 m   1,479.659 ft

## Optical Specifications

<b>Fiber Type</b>	G.652.D and G.657.A1, TeraSPEED®
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## Environmental Specifications

<b>Installation temperature</b>	-30 °C to +60 °C (-22 °F to +140 °F)
<b>Operating Temperature</b>	-40 °C to +70 °C (-40 °F to +158 °F)
<b>Storage Temperature</b>	-40 °C to +75 °C (-40 °F to +167 °F)

# 760004200 | Z-036-DS-8W-FMUBK/C

## Cable Qualification Standards

ANSI/ICEA S-104-696 | EN 187105 | Telcordia GR-20 (water penetration) | Telcordia GR-409

### EN50575 CPR Cable EuroClass Fire Performance

Cca

### EN50575 CPR Cable EuroClass Smoke Rating

s1b

### 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

242 kg/km | 162.616 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](http://www.commscope.com/ProductCompliance)

ROHS

Compliant

UK-ROHS

Compliant



## Included Products

CS-8W-TB - TeraSPEED® Singlemode Fiber

## \* Footnotes

**Operating Temperature** Specification applicable to non-terminated bulk fiber cable

## TeraSPEED®

## TeraSPEED® Singlemode Fiber

### Product Classification

<b>Portfolio</b>	CommScope®
<b>Product Type</b>	Optical fiber

### General Specifications

<b>Cladding Diameter</b>	125 µm
<b>Cladding Diameter Tolerance</b>	±0.7 µm
<b>Cladding Non-Circularity, maximum</b>	0.7 %
<b>Coating Diameter (Colored)</b>	249 µm
<b>Coating Diameter (Uncolored)</b>	242 µm
<b>Coating Diameter Tolerance (Colored)</b>	±13 µm
<b>Coating Diameter Tolerance (Uncolored)</b>	±5 µm
<b>Coating/Cladding Concentricity Error, maximum</b>	12 µm
<b>Core Diameter</b>	8.3 µm
<b>Core/Clad Offset, maximum</b>	0.5 µm
<b>Proof Test</b>	689.476 N/mm <sup>2</sup>   100000 psi
<b>Tight Buffer Diameter</b>	900 µm
<b>Tight Buffer Diameter Tolerance</b>	±40 µm

### Dimensions

<b>Fiber Curl, minimum</b>	4 m   13.123 ft
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### Mechanical Specifications

<b>Macrobending, 20 mm Ø mandrel, 1 turn</b>	0.75 dB @ 1,550 nm   1.50 dB @ 1,625 nm
<b>Macrobending, 30 mm Ø mandrel, 10 turns</b>	0.25 dB @ 1,550 nm   1.00 dB @ 1,625 nm
<b>Macrobending, 60 mm Ø mandrel, 100 turns</b>	0.05 dB @ 1,550 nm   0.05 dB @ 1,625 nm
<b>Coating Strip Force, maximum</b>	8.9 N   2.001 lbf
<b>Coating Strip Force, minimum</b>	1.3 N   0.292 lbf
<b>Dynamic Fatigue Parameter, minimum</b>	20

# CS-8W-TB

## Optical Specifications

<b>Cabled Cutoff Wavelength, maximum</b>	1260 nm
<b>Point Defects, maximum</b>	0.1 dB
<b>Zero Dispersion Slope, maximum</b>	0.092 ps/[km-nm-nm]
<b>Zero Dispersion Wavelength, maximum</b>	1324 nm
<b>Zero Dispersion Wavelength, minimum</b>	1300 nm

## Optical Specifications, Wavelength Specific

<b>Attenuation, maximum</b>	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
<b>Backscatter Coefficient</b>	-79.6 dB @ 1,310 nm   -82.1 dB @ 1,550 nm
<b>Dispersion, maximum</b>	18 ps(nm-km) at 1550 nm   3.5 ps(nm-km) from 1285 nm to 1330 nm at 1310 nm
<b>Index of Refraction</b>	1.467 @ 1,310 nm   1.467 @ 1,385 nm   1.468 @ 1,550 nm
<b>Mode Field Diameter</b>	10.4 $\mu\text{m}$ @ 1,550 nm   9.2 $\mu\text{m}$ @ 1,310 nm   9.6 $\mu\text{m}$ @ 1,385 nm
<b>Mode Field Diameter Tolerance</b>	$\pm 0.4 \mu\text{m}$ @ 1310 nm   $\pm 0.5 \mu\text{m}$ @ 1550 nm   $\pm 0.6 \mu\text{m}$ @ 1385 nm
<b>Polarization Mode Dispersion Link Design Value, maximum</b>	0.04 ps/sqrt(km)
<b>Standards Compliance</b>	ITU-T G.652.D   ITU-T G.657.A1   TIA-492CAAB (OS1a)

## Environmental Specifications

<b>Heat Aging, maximum</b>	0.05 dB/km @ 85 °C
<b>Temperature Dependence, maximum</b>	0.05 dB/km
<b>Temperature Humidity Cycling, maximum</b>	0.05 dB/km
<b>Water Immersion, maximum</b>	0.05 dB/km @ 23 °C

## Regulatory Compliance/Certifications

<b>Agency</b>	<b>Classification</b>
ISO 9001:2015	Designed, manufactured and/or distributed under this quality management system



# CS-8W-TB

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## \* 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