

Fiber OSP cable, Outdoor Steel Armored, Gel-Free, Stranded Loose Tube Rollable Ribbon, 432 fiber, Singlemode G.652.D and G.657.A1, Feet jacket marking, Black jacket color, Build America Buy America (BABA)

- \*Product complies with the Build America, Buy America Act (BABAA) requirements of the Infrastructure Investment and Jobs Act of 2021 (Pub. L. 117- 58, §§ 70901-70953), or is the subject of a waiver approved by the Secretary of Commerce or designee. Compliance requirements and waiver applicability vary based on government funding program. Check the laws and regulations for your specific program.

## Product Classification

<b>Regional Availability</b>	Asia   Australia/New Zealand   EMEA   Latin America   North America
<b>Portfolio</b>	CommScope®
<b>Product Type</b>	Fiber OSP cable
<b>Product Series</b>	D-LA
<b>Government Requirements</b>	Build America Buy America (BABA) compliant*

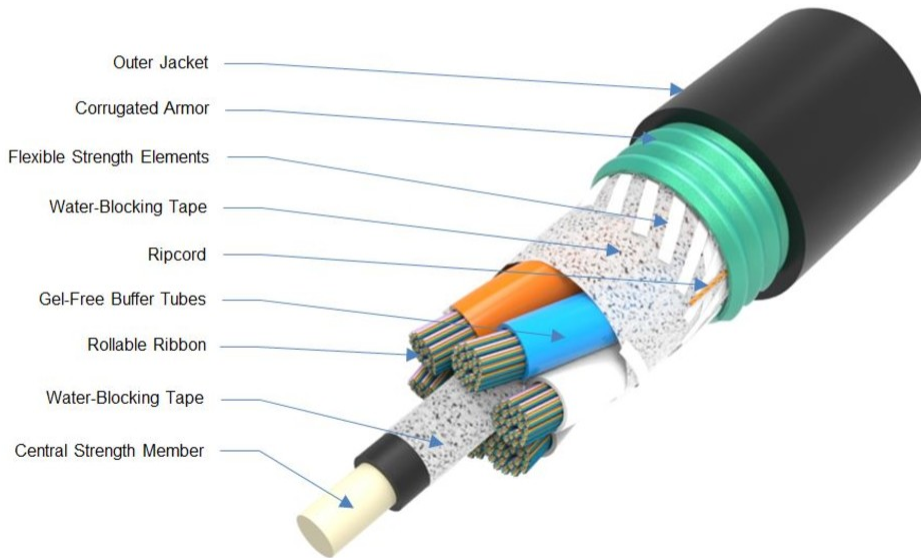
## General Specifications

<b>Cable Type</b>	Ribbon loose tube
<b>Construction Type</b>	Armored
<b>Subunit Type</b>	Gel-free
<b>Fibers per Ribbon, quantity</b>	12
<b>Filler, quantity</b>	0
<b>Jacket Color</b>	Black
<b>Jacket Marking</b>	Feet
<b>Location of Manufacturing</b>	Claremont, North Carolina
<b>Subunit, quantity</b>	6
<b>Fibers per Subunit, quantity</b>	72
<b>Total Fiber Count</b>	432

## Dimensions

<b>Buffer Tube/Subunit Diameter</b>	4.5 mm   0.177 in
<b>Diameter Over Jacket</b>	18.6 mm   0.732 in

Representative Image



Mechanical Specifications

<b>Minimum Bend Radius, loaded</b>	279 mm   10.984 in
<b>Minimum Bend Radius, unloaded</b>	279 mm   10.984 in
<b>Tensile Load, long term, maximum</b>	1481 N   332.942 lbf
<b>Tensile Load, short term, maximum</b>	4488 N   1,008.943 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>	25 cycles
<b>Flex Test Method</b>	FOTP-104   IEC 60794-1 E6
<b>Impact</b>	4.4 N-m   38.943 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

## Optical Specifications

**Fiber Type** G.652.D and G.657.A1 | G.652.D and G.657.A1

## Environmental Specifications

**Installation temperature** -30 °C to +60 °C (-22 °F to +140 °F)  
**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-87-640 | RUS PE-90 (7CFR 1755.900) | Telcordia GR-20  
**Environmental Space** Aerial, lashed | Buried  
**Jacket UV Resistance** UV stabilized  
**Water Penetration** 24 h  
**Water Penetration Qualification Method** ANSI/ICEA S-87-640  
**Water Penetration Test Method** FOTP-82 | IEC 60794-1 F5

## Environmental Test Specifications

**Heat Age** -40 °C to +85 °C (-40 °F to +185 °F)  
**Heat Age Test Method** IEC 60794-1 F9  
**Low High Bend** -30 °C to +60 °C (-22 °F to +140 °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** 290 kg/km | 194.871 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 <a href="http://www.commscope.com/ProductCompliance">www.commscope.com/ProductCompliance</a>
ROHS	Compliant
UK-ROHS	Compliant



## Included Products

CS-8W-RR-OUTDOOR – TeraSPEED® Singlemode Fiber Rollable Ribbon

## \* Footnotes

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

# CS-8W-RR-OUTDOOR

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## TeraSPEED®

TeraSPEED® Singlemode Fiber Rollable Ribbon

### 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 Tensile Stress</b>	100,000 psi (0.69 GPa)

### 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-RR-OUTDOOR

## 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>	0.3 dB/km @ 1,550 nm   0.4 dB/km @ 1,310 nm   0.4 dB/km @ 1,383 nm
<b>Attenuation, typical</b>	0.22 dB/km @ 1,550 nm   0.3 dB/km @ 1,383 nm   0.35 dB/km @ 1,310 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 (OS2)

## 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

## \* Footnotes

<b>Temperature Dependence, maximum</b>	Temperature dependence is conducted at -60 °C to +85 °C (-76 °F to +185 °F)
<b>Temperature Humidity Cycling, maximum</b>	Temperature humidity cycling is conducted at -10 °C to +85 °C (+14 °F to +185 °F) up to 95% relative humidity