

Fiber indoor/outdoor cable, TeraSPEED® Plenum Distribution, interlocking aluminum armored with plenum jacket, Singlemode G.652.D and G.657.A1, 12 fiber single-unit, Black jacket color, Feet cable marking

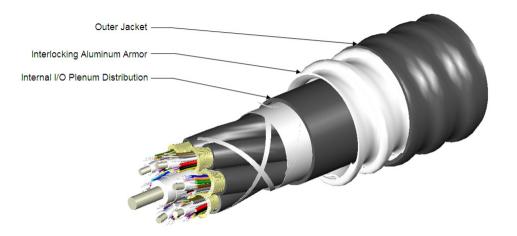
#### Product Classification

Regional Availability	Asia   Australia/New Zealand   Latin America   Middle East/Africa   North America
Portfolio	CommScope®
Product Type	Fiber indoor/outdoor cable
Product Series	P-OZ
General Specifications	
Armor Type	Interlocking aluminum
Cable Type	Distribution
Construction Type	Armored
Jacket Color	Black
Jacket Marking	Feet
Total Fiber Count	12
Dimensions	
Diameter Over Armor	12.07 mm   0.475 in
Diameter Over Jacket	14.1 mm   0.555 in

#### Representative Image

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### Mechanical Specifications

Minimum Bend Radius, loaded	211 mm   8.307 in
Minimum Bend Radius, unloaded	141 mm   5.551 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	211 m   692.257 ft
Ontical Specifications	

#### **Optical Specifications**

Fiber Type

G.652.D and G.657.A1, TeraSPEED®

#### **Environmental Specifications**

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Installation temperature	-30 °C to +70 °C (-22 °F to +158 °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-104-696   Telcordia GR-20 (water penetration for internal cable)   Telcordia GR-409
Environmental Space	Plenum
Flame Test Listing	NEC OFCP (ETL) and c(ETL)
Flame Test Method	NFPA 130   NFPA 262
Jacket UV Resistance	UV stabilized
Water Penentration	24 h
Water Penentration 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

194 kg/km | 130.362 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

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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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COMMSCOPE<sup>®</sup>

### CS-8W-TB

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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