

Fiber Indoor/Outdoor Drop Cable, TeraSPEED®, Low Smoke Zero Halogen Single Jacket, 8 fiber, All-Dielectric Arid-Core, Gel-filled, Singlemode + Multimode OM3, Feet jacket marking, Black jacket color, Dca flame rating

## Product Classification

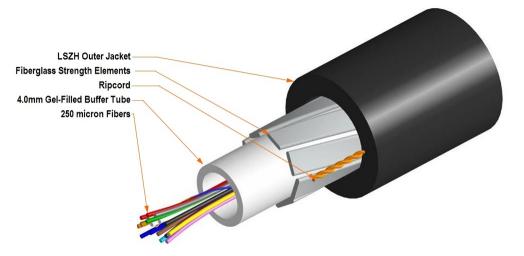
Regional Availability	Asia   Australia/New Zealand   EMEA   Latin America   North America
Portfolio	CommScope®
Product Type	Fiber drop cable
Product Series	Z-DN
General Specifications	
Cable Type	Riser rated low smoke
Construction Type	Non-armored
Subunit Type	Gel-filled
Jacket Color	Black
Jacket Marking	Feet
Subunit, quantity	1
Fibers per Subunit, quantity	8
Composite Fiber Count	4 + 4
Total Fiber Count	8
Dimensions	
Buffer Tube/Subunit Diameter	4 mm   0.157 in
Diameter Over Jacket	8.3 mm   0.327 in

# Representative Image

Page 1 of 7



Low Smoke Zero Halogen (LSZH)



## Material Specifications

#### **Jacket Material**

### Mechanical Specifications

Minimum Bend Radius, loaded 125 mm | 4.921 in Minimum Bend Radius, unloaded 83 mm | 3.268 in 400 N | 89.924 lbf Tensile Load, long term, maximum 1334 N | 299.895 lbf Tensile Load, short term, maximum Compression 10 N/mm | 57.101 lb/in FOTP-41 | IEC 60794-1 E3 **Compression Test Method** Flex 35 cycles **Flex Test Method** FOTP-104 | IEC 60794-1 E6 Impact 2.94 N-m | 26.021 in lb FOTP-25 | IEC 60794-1 E4 Impact Test Method 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 572 m | 1,876.64 ft

#### **Optical Specifications**

Fiber Type

Composite MM/SM | G.652.D and G.657.A1, TeraSPEED® | OM3, LazrSPEED® 300

Page 2 of 7



### **Environmental Specifications**

Installation temperature	-20 °C to +60 °C (-4 °F to +140 °F)
Operating Temperature	-20 °C to +70 °C (-4 °F to +158 °F)
Storage Temperature	-40 °C to +75 °C (-40 °F to +167 °F)
Cable Qualification Standards	ANSI/ICEA S-110-717
EN50575 CPR Cable EuroClass Fire Performance	Dca
EN50575 CPR Cable EuroClass Smoke Rating	s2
EN50575 CPR Cable EuroClass Droplets Rating	d1
EN50575 CPR Cable EuroClass Acidity Rating	al
Environmental Space	Aerial, lashed   Buried   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	-2 °C   28.4 °F	
Cable Freeze Test Method	FOTP-98   IEC 60794-1 F15	
Drip	70 °C   158 °F	
Drip Test Method	FOTP-81   IEC 60794-1 E14	
Heat Age Test Method	IEC 60794-1 F9	
Low High Bend	-20 °C to +60 °C (-4 °F to +140 °F)	
Low High Bend Test Method	FOTP-37   IEC 60794-1 E11	
Temperature Cycle	-20 °C to +70 °C (-4 °F to +158 °F)	
Temperature Cycle Test Method	FOTP-3   IEC 60794-1 F1	

#### Packaging and Weights

#### Cable weight

72 kg/km | 48.382 lb/kft

#### Regulatory Compliance/Certifications

Agency

Classification

Page 3 of 7



CENELEC ISO 9001:2015 EN 50575 compliant, Declaration of Performance (DoP) available Designed, manufactured and/or distributed under this quality management system

### CENELEC

### Included Products

CS-8W-IOLT - TeraSPEED® OS2 Singlemode Fiber

### \* Footnotes

Operating Temperature Specification applicable to non-terminated bulk fiber cable

Page 4 of 7



## TeraSPEED® OS2 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/mm <sup>2</sup>   100000 psi	
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	

Page 5 of 7



# CS-8W-IOLT

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	0.22 dB/km @ 1,550 nm   0.25 dB/km @ 1,490 nm   0.25 dB/km @ 1,625 nm   0.36 dB/km @ 1,310 nm   0.36 dB/km @ 1,385 nm
Attenuation, typical	0.19 dB/km @ 1,550 nm   0.33 dB/km @ 1,310 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 (OS2)
Environmental Specifications	
Heat Aging, maximum	0.05 dB/km @ 85 °C

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

#### Agency

ISO 9001:2015

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

Page 6 of 7



# CS-8W-IOLT

### \* 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

