

TeraSPEED® Indoor/Outdoor Low Smoke Zero Halogen Single Jacket All-Dielectric Arid-Core Drop Cable

## Product Classification

**Regional Availability**

Asia | Australia/New Zealand | EMEA | Latin America | North America

**Portfolio**

CommScope®

**Product Type**

Fiber drop cable

## General Specifications

**Bundle, quantity**

2

**Cable Type**

Riser rated low smoke

**Construction Type**

Non-armored

**Fiber Type, quantity**

24

**Jacket Color**

Black

**Subunit Type**

Gel-filled

**Subunit, quantity**

1

**Total Fiber Count**

24

## Dimensions

**Buffer Tube/Subunit Diameter**

4 mm | 0.157 in

**Diameter Over Jacket**

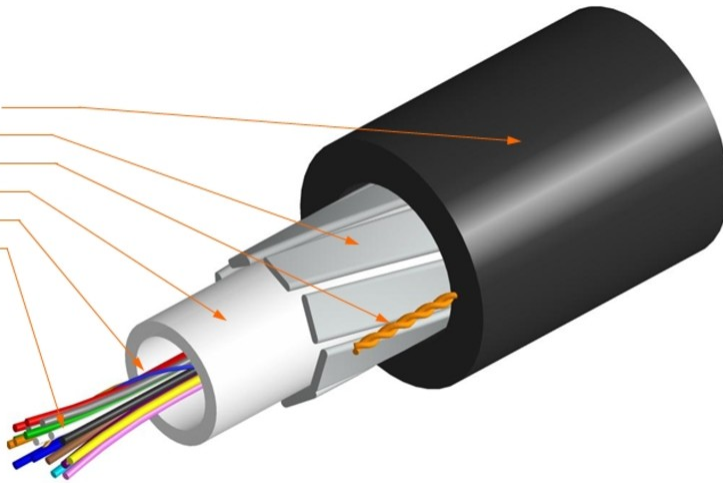
8.3 mm | 0.327 in

## Representative Image

# 760083329 | Z-024-DN-8W-F12BK/D

16-Fiber Cable Shown

LSZH Outer Jacket  
Fiberglass Strength Elements  
Ripcord  
4.0mm Gel-Filled Buffer Tube  
Binder Identification Threads  
250 micron Fibers



## Material Specifications

**Jacket Material** Low Smoke Zero Halogen (LSZH)

## Mechanical Specifications

<b>Minimum Bend Radius, loaded</b>	12.5 cm   4.921 in
<b>Minimum Bend Radius, unloaded</b>	8.3 cm   3.268 in
<b>Tensile Load, long term, maximum</b>	400 N   89.924 lbf
<b>Tensile Load, short term, maximum</b>	1334 N   299.895 lbf
<b>Compression</b>	10 N/mm   57.101 lb/in
<b>Compression Test Method</b>	FOTP-41   IEC 60794-1 E3
<b>Flex</b>	35 cycles
<b>Flex Test Method</b>	FOTP-104   IEC 60794-1 E6
<b>Impact</b>	2.94 N-m   26.021 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>	572 m   1,876.64 ft

## Optical Specifications

**Fiber Type** G.652.D and G.657.A1 , TeraSPEED® | G.652.D and G.657.A1, TeraSPEED® | OS2 | OS2

## Environmental Specifications

<b>Installation temperature</b>	-20 °C to +60 °C (-4 °F to +140 °F)
<b>Operating Temperature</b>	-20 °C to +70 °C (-4 °F to +158 °F)
<b>Storage Temperature</b>	-20 °C to +75 °C (-4 °F to +167 °F)
<b>Cable Qualification Standards</b>	ANSI/ICEA S-110-717
<b>EN50575 CPR Cable EuroClass Fire Performance</b>	Dca
<b>EN50575 CPR Cable EuroClass Smoke Rating</b>	s2
<b>EN50575 CPR Cable EuroClass Droplets Rating</b>	d1
<b>EN50575 CPR Cable EuroClass Acidity Rating</b>	a1
<b>Environmental Space</b>	Aerial, lashed   Buried   Low Smoke Zero Halogen (LSZH)   Riser
<b>Flame Test Method</b>	IEC 60332-3   IEC 60754-2   IEC 61034-2   IEEE 383   UL 1666   UL 1685
<b>Jacket UV Resistance</b>	UV stabilized
<b>Water Penetration</b>	24 h
<b>Water Penetration Test Method</b>	FOTP-82   IEC 60794-1 F5

## Environmental Test Specifications

<b>Cable Freeze</b>	-2 °C   28.4 °F
<b>Cable Freeze Test Method</b>	FOTP-98   IEC 60794-1 F15
<b>Drip</b>	70 °C   158 °F
<b>Drip Test Method</b>	FOTP-81   IEC 60794-1 E14
<b>Heat Age Test Method</b>	IEC 60794-1 F9
<b>Low High Bend</b>	-20 °C to +60 °C (-4 °F to +140 °F)
<b>Low High Bend Test Method</b>	FOTP-37   IEC 60794-1 E11
<b>Temperature Cycle</b>	-20 °C to +70 °C (-4 °F to +158 °F)
<b>Temperature Cycle Test Method</b>	FOTP-3   IEC 60794-1 F1

## Packaging and Weights

<b>Cable weight</b>	72 kg/km   48.382 lb/kft
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## Regulatory Compliance/Certifications

<b>Agency</b>	<b>Classification</b>
CENELEC	EN 50575 compliant, Declaration of Performance (DoP) available

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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



## Included Products

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

## \* Footnotes

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

## TeraSPEED® OS2 Singlemode Fiber

# TeraSPEED®

### 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

### Dimensions

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

<b>Macrobending, 20 mm mandrel, 1 turn</b>	0.75 dB @ 1,550 nm   1.50 dB @ 1,625 nm
<b>Macrobending, 30 mm mandrel, 10 turns</b>	0.25 dB @ 1,550 nm   1.00 dB @ 1,625 nm
<b>Macrobending, 60 mm 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

# CS-8W-IOLT

**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 | 0.23 dB/km @ 1,575 nm | 0.25 dB/km @ 1,490 nm | 0.25 dB/km @ 1,625 nm | 0.31 dB/km @ 1,385 nm | 0.34 dB/km @ 1,310 nm | 0.35 dB/km @ 1,650 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  $\mu\text{m}$  @ 1,550 nm | 9.2  $\mu\text{m}$  @ 1,310 nm | 9.6  $\mu\text{m}$  @ 1,385 nm

**Mode Field Diameter Tolerance**  $\pm 0.4 \mu\text{m}$  @ 1310 nm |  $\pm 0.5 \mu\text{m}$  @ 1550 nm |  $\pm 0.6 \mu\text{m}$  @ 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

**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

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

# CS-8W-IOLT

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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