

TeraSPEED® Indoor/Outdoor Gel-filled loose tube, Low Smoke Zero Halogen Single Jacket All-Dielectric Arid-Core Drop Cable, Dca flame rating

Product Classification

Regional Availability	EMEA
Portfolio	CommScope®
Product Type	Fiber drop cable
Product Series	C-DN

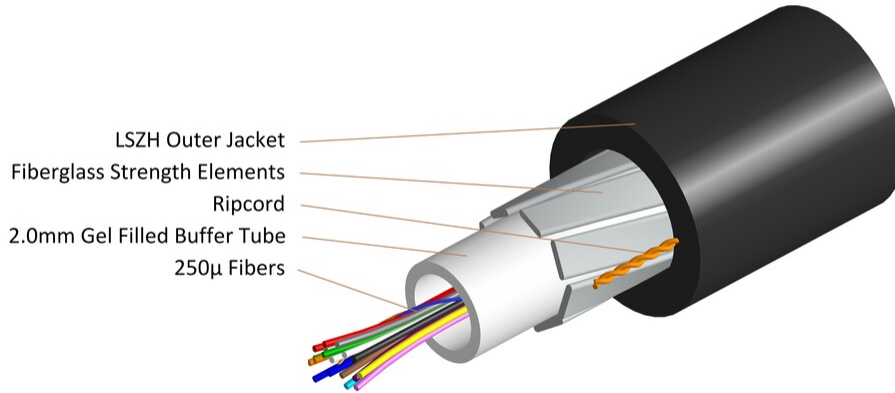
General Specifications

Cable Type	Central loose tube Drop
Construction Type	Non-armored
Subunit Type	Gel-filled
Jacket Color	Black
Jacket Marking	Meters
Subunit, quantity	1
Fibers per Subunit, quantity	12
Total Fiber Count	12

Dimensions

Buffer Tube/Subunit Diameter	2 mm 0.079 in
Diameter Over Jacket	6.1 mm 0.24 in

Representative Image



Material Specifications

Jacket Material Low Smoke Zero Halogen (LSZH)

Mechanical Specifications

Minimum Bend Radius, loaded	91 mm 3.583 in
Minimum Bend Radius, unloaded	61 mm 2.402 in
Tensile Load, long term, maximum	400 N 89.924 lbf
Tensile Load, short term, maximum	1334 N 299.895 lbf
Compression	10 N/mm 57.101 lb/in
Compression Test Method	FOTP-41 IEC 60794-1 E3
Flex	35 cycles
Flex Test Method	FOTP-104 IEC 60794-1 E6
Impact	2.21 N-m 19.56 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	927 m 3,041.339 ft

Optical Specifications

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

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 | EN 187105 | Telcordia GR-409
EN50575 CPR Cable EuroClass Fire Performance Dca
EN50575 CPR Cable EuroClass Smoke Rating s1a
EN50575 CPR Cable EuroClass Droplets Rating d0
EN50575 CPR Cable EuroClass Acidity Rating a1
Environmental Space Aerial, lashed | Buried | Low Smoke Zero Halogen (LSZH)
Flame Test Listing IEC 60332-1-2
Flame Test Method EN 50399 | IEC 60754-2 | IEC 61034-2
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 44 kg/km | 29.567 lb/kft

Included Products

CS-8W-LT - TeraSPEED® G652D/G657A1 Singlemode Fiber

* Footnotes

Operating Temperature Specification applicable to non-terminated bulk fiber cable

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 ² 100000 psi

Dimensions

Fiber Curl, minimum	4 m 13.123 ft
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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

CS-8W-LT

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	$\pm 0.4 \mu\text{m}$ @ 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	IEC 60793-2-10, edition 6, model A1a.4 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
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CS-8W-LT

ISO 9001:2015

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