

TeraSPEED® Indoor/Outdoor Low Smoke Zero Halogen Riser Distribution Cable, 6 fiber single-unit

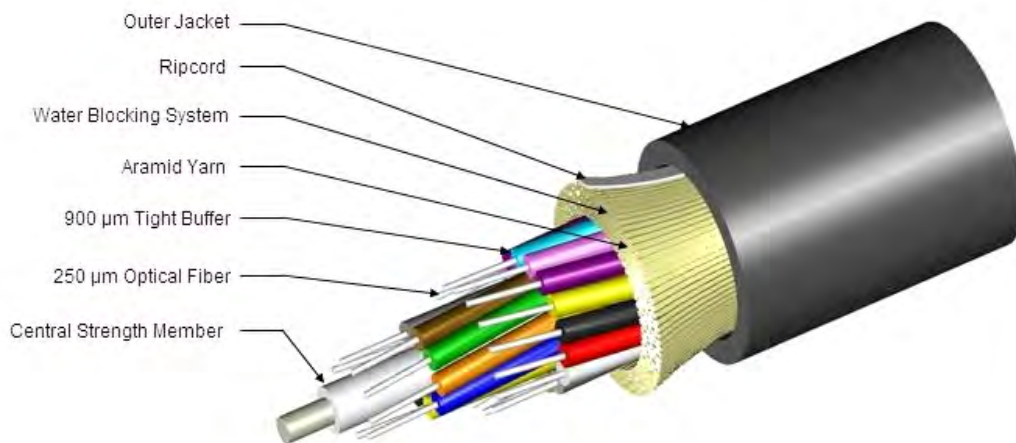
Product Classification

Portfolio	CommScope®
Product Type	Fiber indoor/outdoor cable
Regional Availability	Asia Australia/New Zealand EMEA Latin America North America

Standards And Qualifications

EN50575 CPR Cable EuroClass	Dca s1a d1 a2
Cable Qualification Standards	ANSI/ICEA S-104-696 EN 187105 Telcordia GR-20 (water penetration) Telcordia GR-409

Representative Image



General Specifications

Construction Type	Non-armored
Cable Type	Distribution

Construction Materials

Fiber Type Solution	G.652.D and G.657.A1 , TeraSPEED®
Total Fiber Count	6

Fiber Type	G.652.D and G.657.A1, TeraSPEED®
Fiber Type, quantity	6
Jacket Color	Black
Jacket UV Resistance	UV stabilized

Dimensions

Cable Weight	17.5 lb/kft 26.0 kg/km
Diameter Over Jacket	5.50 mm 0.22 in

Physical Specifications

Minimum Bend Radius, loaded	8.3 cm 3.3 in
Minimum Bend Radius, unloaded	5.5 cm 2.2 in
Tensile Load, long term, maximum	90 lbf 400 N
Tensile Load, short term, maximum	300 lbf 1335 N
Vertical Rise, maximum	500.0 m 1640.4 ft

Flame Test Specifications

Flame Test Listing	NEC OFNR-LS (ETL) and c(ETL)
Flame Test Method	IEC 60332-3 IEC 60754-2 IEC 61034-2 IEEE 383 UL 1666 UL 1685

Environmental Specifications

Environmental Space	Low Smoke Zero Halogen (LSZH) Riser
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)

Mechanical Test Specifications

Compression	126 lb/in 22 N/mm
Compression Test Method	FOTP-41 IEC 60794-1 E3
Flex	100 cycles
Flex Test Method	FOTP-104 IEC 60794-1 E6
Impact	4.34 ft lb 5.88 N-m
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
Water Penetration	24 h

Water Penetration 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

Regulatory Compliance/Certifications

Agency	Classification
RoHS 2011/65/EU	Compliant
ISO 9001:2015	Designed, manufactured and/or distributed under this quality management system
CENELEC	EN 50575 compliant, Declaration of Performance (DoP) available



Included Products

CS-8W-TB (Product Component—not orderable) — TeraSPEED® Singlemode Fiber

* Footnotes

Operating Temperature Specification applicable to non-terminated bulk fiber cable

TeraSPEED®

TeraSPEED® Singlemode Fiber

Product Classification

Portfolio	CommScope®
Product Type	Optical fiber
Regional Availability	Asia Australia/New Zealand EMEA Latin America North America

Optical Specifications, Wavelength Specific

Standards Compliance	ITU-T G.652.D ITU-T G.657.A1
Attenuation, maximum	0.50 dB/km @ 1310 nm 0.50 dB/km @ 1385 nm 0.50 dB/km @ 1490 nm 0.50 dB/km @ 1550 nm 0.50 dB/km @ 1575 nm 0.70 dB/km @ 1270 nm 0.70 dB/km @ 1625 nm 1.00 dB/km @ 1650 nm
Dispersion, maximum	18 ps(nm-km) at 1550 nm 3.5 ps(nm-km) from 1285 nm to 1330 nm at 1310 nm
Mode Field Diameter	9.2 μm @ 1310 nm 9.6 μm @ 1385 nm 10.4 μm @ 1550 nm
Mode Field Diameter Tolerance	±0.3 μm @ 1310 nm ±0.5 μm @ 1550 nm ±0.6 μm @ 1385 nm
Index of Refraction	1.467 @ 1310 nm 1.468 @ 1385 nm 1.468 @ 1550 nm
Polarization Mode Dispersion Link Design Value, maximum	0.04 ps/sqrt(km)
Backscatter Coefficient	-82.1 dB @ 1550 nm -79.6 dB @ 1310 nm

Physical Specifications

Cladding Diameter	125.0 μm
Cladding Diameter Tolerance	±0.7 μm
Cladding Non-Circularity, maximum	0.7 %
Coating Diameter (Colored)	253 μm
Coating Diameter (Uncolored)	240 μm
Coating Diameter Tolerance (Colored)	±7 μm
Coating Diameter Tolerance (Uncolored)	±5 μm
Tight Buffer Diameter	900 μm
Tight Buffer Diameter Tolerance	±40 μm

Coating/Cladding Concentricity Error, maximum	12 µm
Core/Clad Offset, maximum	0.5 µm

Optical Specifications, General

Cabled Cutoff Wavelength, maximum	1260 nm
Point Defects, maximum	0.10 dB
Zero Dispersion Slope, maximum	0.090 ps/[km-nm-nm]
Zero Dispersion Wavelength, maximum	1322 nm
Zero Dispersion Wavelength, minimum	1302 nm

Mechanical Specifications

Coating Strip Force, maximum	8.9 N 2.0 lbf
Coating Strip Force, minimum	1.3 N 0.3 lbf
Dynamic Fatigue Parameter, minimum	20
Fiber Curl, minimum	4.0 m 13.1 ft
Macrobending, 20 mm mandrel, 1 turn	0.75 dB @ 1550 nm 1.50 dB @ 1625 nm
Macrobending, 30 mm mandrel, 10 turns	0.25 dB @ 1550 nm 1.00 dB @ 1625 nm
Macrobending, 50 mm mandrel, 100 turns	0.03 dB @ 1550 nm 0.03 dB @ 1625 nm
Proof Test	689.48 N/mm ² 100000.00 psi

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



* Footnotes

Temperature Dependence, maximum	Temperature dependence is conducted at -60 °C to +85 °C (-76 °F to +185 °F)
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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