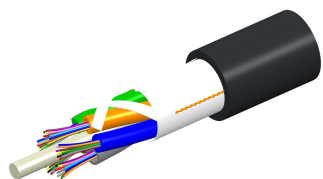


TeraSPEED® Single Jacket All-Dielectric, Gel-Free, Outdoor Stranded Loose Tube Cable



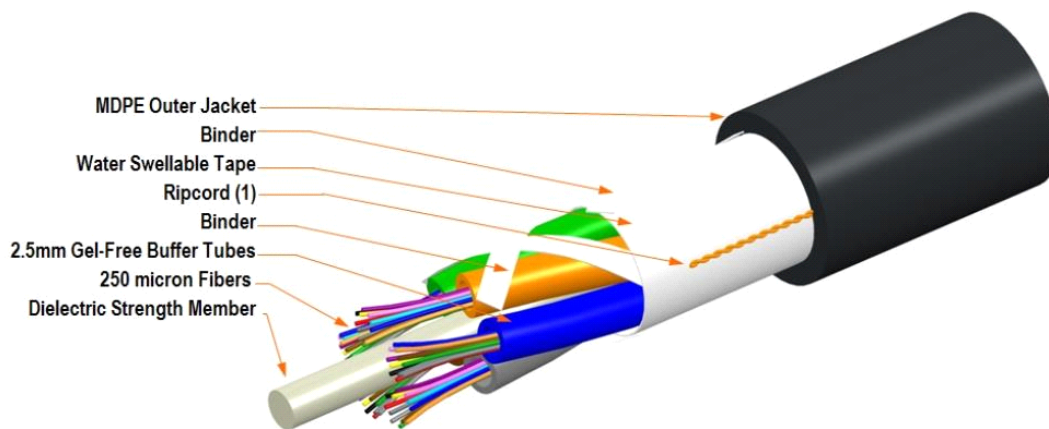
Product Classification

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

Standards And Qualifications

Cable Qualification Standards	ANSI/ICEA S-87-640 EN 187105 Telcordia GR-20
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Representative Image



General Specifications

Cable Type	Stranded loose tube
Construction Type	Non-armored
Subunit Type	Gel-free

Construction Materials

Fiber Type Solution	G.652.D and G.657.A1 , TeraSPEED® OS2
Jacket Material	PE
Total Fiber Count	288

Fiber Type	G.652.D and G.657.A1, TeraSPEED® OS2
Fiber Type, quantity	288
Fibers per Subunit, quantity	12
Jacket Color	Black
Jacket UV Resistance	UV stabilized

Dimensions

Buffer Tube/Subunit Diameter	2.50 mm 0.10 in
Cable Weight	176.0 kg/km 119.0 lb/kft
Diameter Over Jacket	18.20 mm 0.72 in
Subunit, quantity	24

Physical Specifications

Minimum Bend Radius, loaded	27.3 cm 10.7 in
Minimum Bend Radius, unloaded	18.2 cm 7.2 in
Tensile Load, long term, maximum	800 N 180 lbf
Tensile Load, short term, maximum	2700 N 607 lbf
Vertical Rise, maximum	464.0 m 1521.0 ft

Environmental Specifications

Environmental Space	Aerial, lashed Buried
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)

Mechanical Test Specifications

Compression	22 N/mm 125 lb/in
Compression Test Method	FOTP-41 IEC 60794-1 E3
Flex	35 cycles
Flex Test Method	FOTP-104 IEC 60794-1 E6
Impact	5.88 N-m 4.34 ft 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
Water Penetration	24 h
Water Penetration Test Method	FOTP-82 IEC 60794-1 F5

Environmental Test Specifications

Cable Freeze	-2 °C 28 °F
Cable Freeze Test Method	FOTP-98 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	-30 °C to +60 °C (-22 °F to +140 °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



Included Products

CS-8W-LT (Product Component—not orderable) — TeraSPEED® OS2 Singlemode Fiber

* Footnotes

Operating Temperature Specification applicable to non-terminated bulk fiber cable

TeraSPEED®

TeraSPEED® OS2 Singlemode Fiber

Product Classification

Portfolio	CommScope®
Product Type	Optical fiber

Optical Specifications, Wavelength Specific

Standards Compliance	ITU-T G.652.D ITU-T G.657.A1 TIA-492CAAB (OS2)
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
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	10.4 μm @ 1,550 nm 9.2 μm @ 1,310 nm 9.6 μm @ 1,385 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 @ 1,310 nm 1.468 @ 1,385 nm 1.468 @ 1,550 nm
Polarization Mode Dispersion Link Design Value, maximum	0.04 ps/sqrt(km)
Backscatter Coefficient	-79.6 dB @ 1,310 nm -82.1 dB @ 1,550 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
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 @ 1,550 nm 1.50 dB @ 1,625 nm
Macrobending, 30 mm mandrel, 10 turns	0.25 dB @ 1,550 nm 1.00 dB @ 1,625 nm
Macrobending, 50 mm mandrel, 100 turns	0.03 dB @ 1,550 nm 0.03 dB @ 1,625 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)
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