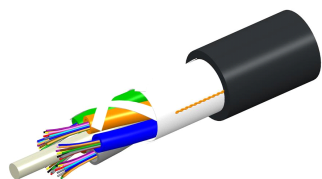


OptiSPEED® Single Jacket All-Dielectric, Gel-Free, Outdoor Stranded Loose Tube Cable



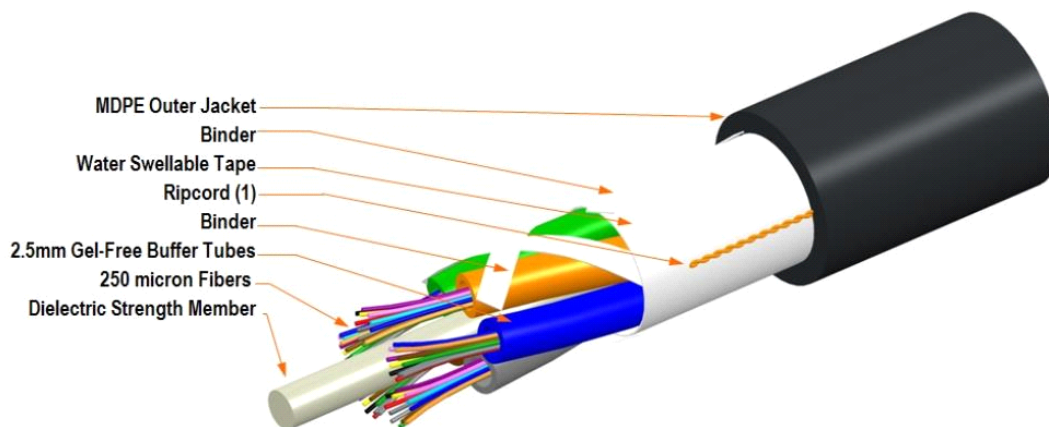
Product Classification

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
--------------------------------------	--

Representative Image



General Specifications

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

Construction Materials

Fiber Type Solution	OM1, OptiSPEED®
Jacket Material	PE
Total Fiber Count	48

Fiber Type	OM1, OptiSPEED®
Fiber Type, quantity	48
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	63.0 kg/km 42.0 lb/kft
Diameter Over Jacket	10.20 mm 0.40 in
Filler, quantity	1
Subunit, quantity	4

Physical Specifications

Minimum Bend Radius, loaded	15.3 cm 6.0 in
Minimum Bend Radius, unloaded	10.2 cm 4.0 in
Tensile Load, long term, maximum	800 N 180 lbf
Tensile Load, short term, maximum	2700 N 607 lbf
Vertical Rise, maximum	1307.0 m 4289.0 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 oz/in
Compression Test Method	FOTP-41 IEC 60794-1 E3
Flex	35 cycles
Flex Test Method	FOTP-104 IEC 60794-1 E6
Impact	4.41 N-m 3.25 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-6F-LT (Product Component—not orderable) — OptiSPEED® OM1 Multimode Fiber

* Footnotes

Operating Temperature Specification applicable to non-terminated bulk fiber cable

OptiSPEED®

Product Classification

Portfolio	CommScope®
Product Type	Optical fiber

Optical Specifications, Wavelength Specific

Standards Compliance	TIA-492AAAA (OM1)
Attenuation, maximum	1.00 dB/km @ 1,300 nm 3.00 dB/km @ 850 nm
Index of Refraction	1.491 @ 1,300 nm 1.496 @ 850 nm
1 Gbps Ethernet Distance	300 m @ 850 nm 550 m @ 1,300 nm
Bandwidth, OFL, minimum	220 MHz-km @ 850 nm 500 MHz-km @ 1,300 nm
Backscatter Coefficient	-68.0 dB @ 850 nm -75.7 dB @ 1,300 nm

Physical Specifications

Cladding Diameter	125.0 µm
Cladding Diameter Tolerance	±1.0 µm
Cladding Non-Circularity, maximum	1.0 %
Coating Diameter (Colored)	254 µm
Coating Diameter (Uncolored)	245 µm
Coating Diameter Tolerance (Colored)	±7 µm
Coating Diameter Tolerance (Uncolored)	±10 µm
Coating/Cladding Concentricity Error, maximum	12 µm
Core Diameter	62.5 µm
Core Diameter Tolerance	±2.5 µm
Core/Clad Offset, maximum	1.0 µm

Optical Specifications, General

Numerical Aperture	0.275
Numerical Aperture Tolerance	±0.015
Point Defects, maximum	0.15 dB
Zero Dispersion Slope, maximum	0.097 ps/[km-nm-nm]
Zero Dispersion Wavelength, maximum	1365 nm
Zero Dispersion Wavelength, minimum	1320 nm

Mechanical Specifications

CS-6F-LT | CS-6F-LT

Coating Strip Force, maximum	8.9 N 2.0 lbf
Coating Strip Force, minimum	1.3 N 0.3 lbf
Dynamic Fatigue Parameter, minimum	18
Macrobending, 75 mm mandrel, 100 turns	0.50 dB @ 1,300 nm 0.50 dB @ 850 nm
Proof Test	689.48 N/mm ² 100000.00 psi

Environmental Specifications

Heat Aging, maximum	0.20 dB/km @ 85 °C
Temperature Dependence, maximum	0.10 dB/km
Temperature Humidity Cycling, maximum	0.20 dB/km
Water Immersion, maximum	0.20 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