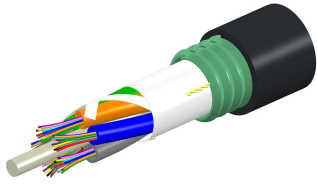


OptiSPEED® Single Jacket/Single Armor, Gel-Free, Outdoor Stranded Loose Tube Cable



- Corrugated steel tape armor is strong yet flexible, providing additional crush and rodent protection

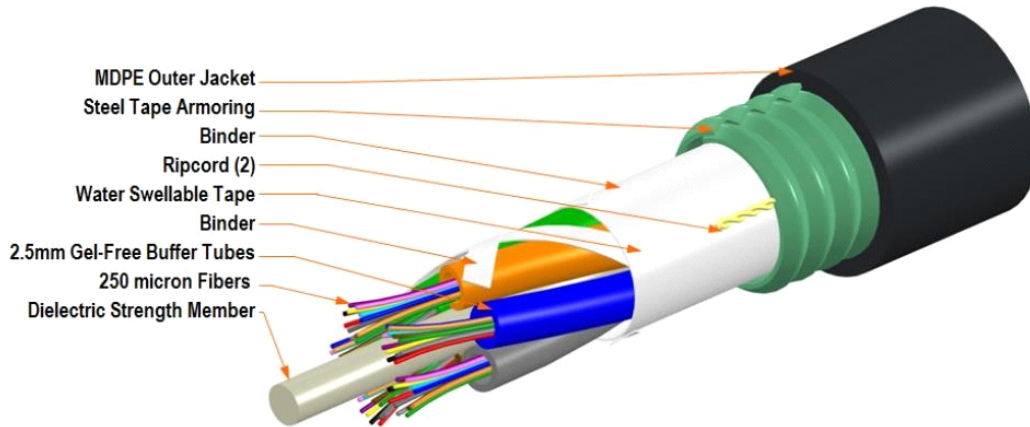
Product Classification

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

Standards And Qualifications

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



General Specifications

<b>Cable Type</b>	Stranded loose tube
<b>Construction Type</b>	Armored
<b>Subunit Type</b>	Gel-free

Construction Materials

<b>Fiber Type Solution</b>	OM1, OptiSPEED®
<b>Jacket Material</b>	PE
<b>Total Fiber Count</b>	48

<b>Armor Type</b>	Corrugated steel
<b>Fiber Type</b>	OM1, OptiSPEED®
<b>Fiber Type, quantity</b>	48
<b>Fibers per Subunit, quantity</b>	12
<b>Jacket Color</b>	Black
<b>Jacket UV Resistance</b>	UV stabilized

## Dimensions

<b>Buffer Tube/Subunit Diameter</b>	2.50 mm   0.10 in
<b>Cable Weight</b>	110.0 kg/km   74.0 lb/kft
<b>Diameter Over Jacket</b>	11.50 mm   0.45 in
<b>Filler, quantity</b>	1
<b>Subunit, quantity</b>	4

## Physical Specifications

<b>Minimum Bend Radius, loaded</b>	17.3 cm   6.8 in
<b>Minimum Bend Radius, unloaded</b>	11.5 cm   4.5 in
<b>Tensile Load, long term, maximum</b>	800 N   180 lbf
<b>Tensile Load, short term, maximum</b>	2700 N   607 lbf
<b>Vertical Rise, maximum</b>	740.0 m   2429.0 ft

## Environmental Specifications

<b>Environmental Space</b>	Aerial, lashed   Buried
<b>Installation Temperature</b>	-30 °C to +70 °C (-22 °F to +158 °F)
<b>Operating Temperature</b>	-40 °C to +70 °C (-40 °F to +158 °F)
<b>Storage Temperature</b>	-40 °C to +75 °C (-40 °F to +167 °F)

## Mechanical Test Specifications

<b>Compression</b>	44 N/mm   250 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>	4.41 N-m   3.25 ft 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

**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

<b>Portfolio</b>	CommScope®
<b>Product Type</b>	Optical fiber

## Optical Specifications, Wavelength Specific

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

## Physical Specifications

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

## Optical Specifications, General

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

## Mechanical Specifications

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

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

## Environmental Specifications

<b>Heat Aging, maximum</b>	0.20 dB/km @ 85 °C
<b>Temperature Dependence, maximum</b>	0.10 dB/km
<b>Temperature Humidity Cycling, maximum</b>	0.20 dB/km
<b>Water Immersion, maximum</b>	0.20 dB/km @ 23 °C

## Regulatory Compliance/Certifications

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



### \* Footnotes

<b>Temperature Dependence, maximum</b>	Temperature dependence is conducted at -60 °C to +85 °C (-76 °F to +185 °F)
<b>Temperature Humidity Cycling, maximum</b>	Temperature humidity cycling is conducted at -10 °C to +85 °C (+14 °F to +185 °F) up to 95% relative humidity