



Fiber OSP Cable, Single Jacket All-Dielectric, Gel-Free, 60 fibers, Stranded Loose Tube, Singlemode G.655.C/E and G.656, Feet jacket marking, Black jacket color

## Product Classification

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

## General Specifications

<b>Cable Type</b>	Stranded loose tube
<b>Construction Type</b>	Non-armored
<b>Subunit Type</b>	Gel-free
<b>Jacket Color</b>	Black
<b>Jacket Marking</b>	Feet
<b>Subunit, quantity</b>	5
<b>Fibers per Subunit, quantity</b>	12
<b>Total Fiber Count</b>	60

## Dimensions

<b>Buffer Tube/Subunit Diameter</b>	2.5 mm   0.098 in
<b>Diameter Over Jacket</b>	10.2 mm   0.402 in

## Representative Image



## Material Specifications

**Jacket Material** PE

## Mechanical Specifications

**Minimum Bend Radius, loaded** 153 mm | 6.024 in  
**Minimum Bend Radius, unloaded** 102 mm | 4.016 in  
**Tensile Load, long term, maximum** 800 N | 179.847 lbf  
**Tensile Load, short term, maximum** 2700 N | 606.984 lbf  
**Compression** 22 N/mm | 125.623 lb/in  
**Compression Test Method** FOTP-41 | IEC 60794-1 E3  
**Flex** 25 cycles  
**Flex Test Method** FOTP-104 | IEC 60794-1 E6  
**Impact** 4.41 N-m | 39.032 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** 1307 m | 4,288.058 ft

## Optical Specifications

**Fiber Type** G.655.C/E and G.656 | G.655.C/E and G.656

## Environmental Specifications

<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)
<b>Cable Qualification Standards</b>	ANSI/ICEA S-87-640   EN 187105
<b>Environmental Space</b>	Aerial, lashed   Buried
<b>Jacket UV Resistance</b>	UV stabilized
<b>Water Penetration</b>	24 h
<b>Water Penetration Test Method</b>	FOTP-82   IEC 60794-1 F5

## Environmental Test Specifications

<b>Cable Freeze</b>	-2 °C   28.4 °F
<b>Cable Freeze Test Method</b>	FOTP-98   IEC 60794-1 F15
<b>Heat Age</b>	-40 °C to +85 °C (-40 °F to +185 °F)
<b>Heat Age Test Method</b>	IEC 60794-1 F9
<b>Low High Bend</b>	-30 °C to +60 °C (-22 °F to +140 °F)
<b>Low High Bend Test Method</b>	FOTP-37   IEC 60794-1 E11
<b>Temperature Cycle</b>	-40 °C to +70 °C (-40 °F to +158 °F)
<b>Temperature Cycle Test Method</b>	FOTP-3   IEC 60794-1 F1

## Packaging and Weights

<b>Cable weight</b>	63 kg/km   42.334 lb/kft
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## Regulatory Compliance/Certifications

<b>Agency</b>	<b>Classification</b>
CHINA-ROHS	Below maximum concentration value
ISO 9001:2015	Designed, manufactured and/or distributed under this quality management system
REACH-SVHC	Compliant as per SVHC revision on <a href="http://www.commscope.com/ProductCompliance">www.commscope.com/ProductCompliance</a>
ROHS	Compliant
UK-ROHS	Compliant



## Included Products

CS-8R-LT

# 760136416 | D-060-LN-8R-F12NS

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- Type 8R Optical Fiber Non-Zero Dispersion-Shifted Singlemode Fiber for Wideband Optical Transport; ITU-T G655.C,E | G656

## \* Footnotes

**Operating Temperature** Specification applicable to non-terminated bulk fiber cable

# CS-8R-LT

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Type 8R Optical Fiber Non-Zero Dispersion-Shifted Singlemode Fiber for Wideband Optical Transport; ITU-T G655.C,E | G656

## Product Classification

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

## General Specifications

<b>Cladding Diameter</b>	125 µm
<b>Cladding Diameter Tolerance</b>	±0.7 µm
<b>Cladding Non-Circularity, maximum</b>	0.7 %
<b>Coating Diameter (Colored)</b>	256 µm
<b>Coating Diameter (Uncolored)</b>	245 µm
<b>Coating Diameter Tolerance (Colored)</b>	±8 µm
<b>Coating Diameter Tolerance (Uncolored)</b>	±5 µm
<b>Coating/Cladding Concentricity Error, maximum</b>	12 µm
<b>Core/Clad Offset, maximum</b>	0.5 µm
<b>Proof Test</b>	689.476 N/mm <sup>2</sup>   100000 psi

## Dimensions

<b>Fiber Curl, minimum</b>	4 m   13.123 ft
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## Mechanical Specifications

<b>Macrobending, 32 mm Ø mandrel, 1 turn</b>	0.50 dB @ 1,550 nm
<b>Macrobending, 75 mm Ø mandrel, 100 turns</b>	0.05 dB @ 1,550 nm   0.05 dB @ 1,625 nm
<b>Coating Strip Force, maximum</b>	8.9 N   2.001 lbf
<b>Coating Strip Force, minimum</b>	1.3 N   0.292 lbf
<b>Dynamic Fatigue Parameter, minimum</b>	20

## Optical Specifications

<b>Cabled Cutoff Wavelength, maximum</b>	1310 nm
<b>Dispersion Slope</b>	0.045 ps/[km-nm-nm] @ 1,550 nm
<b>Point Defects, maximum</b>	0.1 dB

# CS-8R-LT

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## Optical Specifications, Wavelength Specific

<b>Attenuation, maximum</b>	0.23 dB/km @ 1,550 nm   0.26 dB/km @ 1,625 nm   0.45 dB/km @ 1,310 nm
<b>Attenuation, typical</b>	0.20 dB/m @ 1,550 nm
<b>Dispersion, maximum</b>	5.5 ps(nm-km) to 8.9 ps(nm-km) from 1530 nm to 1565 nm at 1550 nm   6.9 ps(nm-km) to 11.4 ps(nm-km) from 1565 nm to 1625 nm at 1625 nm
<b>Index of Refraction</b>	1.470 @ 1,550 nm   1.470 @ 1,625 nm   1.471 @ 1,310 nm
<b>Mode Field Diameter</b>	8.6 $\mu\text{m}$ @ 1,550 nm   9.1 $\mu\text{m}$ @ 1,625 nm
<b>Mode Field Diameter Tolerance</b>	$\pm 0.4 \mu\text{m}$ @ 1550 nm   $\pm 0.6 \mu\text{m}$ @ 1625 nm
<b>Polarization Mode Dispersion Link Design Value, maximum</b>	0.04 ps/sqrt(km)
<b>Standards Compliance</b>	ITU-T G.655   ITU-T G.656

## Regulatory Compliance/Certifications

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