



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

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

## General Specifications

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

## Dimensions

Buffer Tube/Subunit Diameter	2.5 mm   0.098 in
Diameter Over Jacket	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

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)
Cable Qualification Standards	ANSI/ICEA S-87-640   EN 187105   Telcordia GR-20
Environmental Space	Aerial, lashed   Buried
Jacket UV Resistance	UV stabilized
Water Penetration	24 h
Water Penetration Test Method	FOTP-82   IEC 60794-1 F5

## Environmental Test Specifications

Cable Freeze	-2 °C   28.4 °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

## Packaging and Weights

Cable weight	63 kg/km   42.334 lb/kft
--------------	--------------------------

## Regulatory Compliance/Certifications

Agency	Classification
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

-----	–	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

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

## Product Classification

Portfolio	CommScope®
Product Type	Optical fiber

## General Specifications

Cladding Diameter	125 µm
Cladding Diameter Tolerance	±0.7 µm
Cladding Non-Circularity, maximum	0.7 %
Coating Diameter (Colored)	256 µm
Coating Diameter (Uncolored)	245 µm
Coating Diameter Tolerance (Colored)	±8 µm
Coating Diameter Tolerance (Uncolored)	±5 µm
Coating/Cladding Concentricity Error, maximum	12 µm
Core/Clad Offset, maximum	0.5 µm
Proof Tensile Stress	100,000 psi (0.69 GPa)

## Dimensions

Fiber Curl, minimum	4 m   13.123 ft
---------------------	-----------------

## Mechanical Specifications

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

## Optical Specifications

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

# CS-8R-LT

## Optical Specifications, Wavelength Specific

Attenuation, maximum	0.23 dB/km @ 1,550 nm   0.26 dB/km @ 1,625 nm   0.45 dB/km @ 1,310 nm
Attenuation, typical	0.20 dB/m @ 1,550 nm
Dispersion, maximum	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
Index of Refraction	1.470 @ 1,550 nm   1.470 @ 1,625 nm   1.471 @ 1,310 nm
Mode Field Diameter	8.6 µm @ 1,550 nm   9.1 µm @ 1,625 nm
Mode Field Diameter Tolerance	±0.4 µm @ 1550 nm   ±0.6 µm @ 1625 nm
Polarization Mode Dispersion Link Design Value, maximum	0.04 ps/sqrt(km)
Standards Compliance	ITU-T G.655   ITU-T G.656

## Regulatory Compliance/Certifications

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