



TeraSPEED® Single Jacket/Single GRP Armor, Gel, Indoor/Outdoor Stranded Loose Tube cable. Provides Rodent Resistance. Tube Colours Red, Green, 10 x Natural

- GRP armor is strong yet flexible, providing additional crush and rodent protection

## Product Classification

Regional Availability	Asia   Australia/New Zealand   EMEA   Latin America   North America
Portfolio	CommScope®
Product Type	Fiber indoor/outdoor cable
Product Series	C-LA

## General Specifications

Armor Type	Non-metallic rods
Cable Type	Stranded loose tube
Construction Type	Armored
Subunit Type	Gel-filled
Jacket Color	Yellow
Jacket Marking	Meters
Jacket Marking Method	Laser
Jacket Marking Text	COMMScope GB OPTICAL CABLE [MID] 144 X G652D EN50575 CLASS D ULSZH [MM/YY] [Serial number] [metre mark]
Subunit, quantity	12
Fibers per Subunit, quantity	12
Total Fiber Count	144

## Dimensions

Buffer Tube/Subunit Diameter	2.5 mm   0.098 in
Diameter Over Jacket	21.7 mm   0.854 in

## Material Specifications

Inner Jacket Material	Low Smoke Zero Halogen (LSZH)
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# 760256743 | C-144-LA-8W-M12YL/25G/GRP/D

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## Mechanical Specifications

<b>Minimum Bend Radius, loaded</b>	432 mm   17.008 in
<b>Minimum Bend Radius, unloaded</b>	324 mm   12.756 in
<b>Tensile Load, long term, maximum</b>	2000 N   449.618 lbf
<b>Tensile Load, short term, maximum</b>	6000 N   1,348.854 lbf
<b>Compression</b>	40 N/mm   228.406 lb/in
<b>Compression Test Method</b>	IEC 60794-1 E3
<b>Impact</b>	15 N-m   132.761 in lb
<b>Impact Test Method</b>	IEC 60794-1 E4
<b>Strain</b>	See long and short term tensile loads
<b>Strain Test Method</b>	IEC 60794-1 E1
<b>Twist</b>	5 cycles
<b>Twist Test Method</b>	IEC 60794-1 E7

## Optical Specifications

<b>Fiber Type</b>	G.652.D and G.657.A1, TeraSPEED®   OS2
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## Environmental Specifications

<b>Installation temperature</b>	-40 °C to +70 °C (-40 °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 +70 °C (-40 °F to +158 °F)
<b>Cable Qualification Standards</b>	IEC 60794-1-2
<b>EN50575 CPR Cable EuroClass Fire Performance</b>	Dca
<b>EN50575 CPR Cable EuroClass Smoke Rating</b>	s1
<b>EN50575 CPR Cable EuroClass Droplets Rating</b>	d2
<b>EN50575 CPR Cable EuroClass Acidity Rating</b>	a1
<b>Environmental Space</b>	Aerial, lashed   Buried
<b>Flame Test Method</b>	IEC 60332-1-2
<b>Jacket UV Resistance</b>	UV stabilized
<b>Water Penetration</b>	24 h
<b>Water Penetration Test Method</b>	IEC 60794-1 F5

## Environmental Test Specifications

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Heat Age	0 °C to +85 °C (+32 °F to +185 °F)
Temperature Cycle	-40 °C to +70 °C (-40 °F to +158 °F)
Temperature Cycle Test Method	IEC 60794-1 F1

## Packaging and Weights

Cable weight	452 kg/km   303.73 lb/kft
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## Included Products

CS-8W-LT	- TeraSPEED® G652D/G657A1 Singlemode Fiber
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## \* Footnotes

Operating Temperature	Specification applicable to non-terminated bulk fiber cable
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TeraSPEED®

TeraSPEED® G652D/G657A1 Singlemode Fiber

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)	249 µm
Coating Diameter (Uncolored)	242 µm
Coating Diameter Tolerance (Colored)	±13 µm
Coating Diameter Tolerance (Uncolored)	±5 µm
Coating/Cladding Concentricity Error, maximum	12 µm
Core Diameter	8.3 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
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Mechanical Specifications

Macrobending, 20 mm Ø mandrel, 1 turn	0.75 dB @ 1,550 nm   1.50 dB @ 1,625 nm
Macrobending, 30 mm Ø mandrel, 10 turns	0.25 dB @ 1,550 nm   1.00 dB @ 1,625 nm
Macrobending, 60 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

# CS-8W-LT

## Optical Specifications

Cabled Cutoff Wavelength, maximum	1260 nm
Point Defects, maximum	0.1 dB
Zero Dispersion Slope, maximum	0.092 ps/[km-nm-nm]
Zero Dispersion Wavelength, maximum	1324 nm
Zero Dispersion Wavelength, minimum	1300 nm

## Optical Specifications, Wavelength Specific

Attenuation, maximum	0.22 dB/km @ 1,550 nm   0.25 dB/km @ 1,490 nm   0.25 dB/km @ 1,625 nm   0.36 dB/km @ 1,310 nm   0.36 dB/km @ 1,385 nm
Attenuation, typical	0.19 dB/km @ 1,550 nm   0.33 dB/km @ 1,310 nm
Backscatter Coefficient	-79.6 dB @ 1,310 nm   -82.1 dB @ 1,550 nm
Dispersion, maximum	18 ps(nm-km) at 1550 nm   3.5 ps(nm-km) from 1285 nm to 1330 nm at 1310 nm
Index of Refraction	1.467 @ 1,310 nm   1.467 @ 1,385 nm   1.468 @ 1,550 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	±0.4 μm @ 1310 nm   ±0.5 μm @ 1550 nm   ±0.6 μm @ 1385 nm
Polarization Mode Dispersion Link Design Value, maximum	0.04 ps/sqrt(km)
Standards Compliance	IEC 60793-2-10, edition 6, model A1a.4   ITU-T G.652.D   ITU-T G.657.A1   TIA-492CAAB (OS2)

## 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

# CS-8W-LT

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<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