

## TeraSPEED® Single Jacket/Single Armor, Gel-Filled, Outdoor Central Tube Cable

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

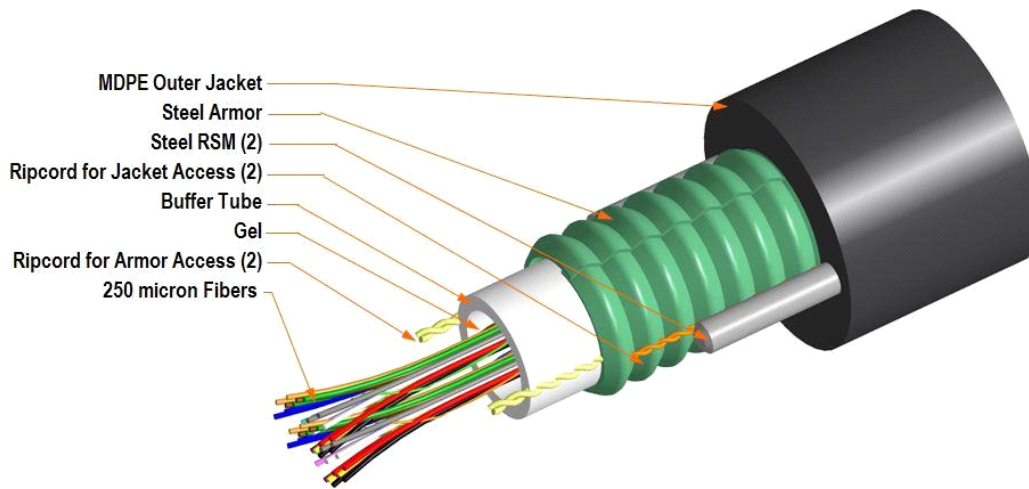
### Product Classification

<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>	Central loose tube
<b>Construction Type</b>	Armored
<b>Subunit Type</b>	Gel-filled

### Construction Materials

<b>Fiber Type Solution</b>	G.652.D and G.657.A1 , TeraSPEED®   OS2
<b>Jacket Material</b>	PE
<b>Total Fiber Count</b>	48
<b>Armor Type</b>	Corrugated steel

<b>Fiber Type</b>	G.652.D and G.657.A1, TeraSPEED®   OS2
<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>	6.00 mm   0.24 in
<b>Cable Weight</b>	118.0 lb/kft   176.0 kg/km
<b>Diameter Over Jacket</b>	13.00 mm   0.51 in
<b>Subunit, quantity</b>	4

## Physical Specifications

<b>Minimum Bend Radius, loaded</b>	19.5 cm   7.7 in
<b>Minimum Bend Radius, unloaded</b>	13.0 cm   5.1 in
<b>Tensile Load, long term, maximum</b>	180 lbf   800 N
<b>Tensile Load, short term, maximum</b>	2700 N   607 lbf
<b>Vertical Rise, maximum</b>	464.0 m   1522.3 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>	250 lb/in   44 N/mm
<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>	2.17 ft lb   2.94 N-m
<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
<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 °F
<b>Cable Freeze Test Method</b>	FOTP-98   IEC 60794-1 F15
<b>Drip</b>	70 °C   158 °F
<b>Drip Test Method</b>	FOTP-81   IEC 60794-1 E14
<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

## Regulatory Compliance/Certifications

<b>Agency</b>	<b>Classification</b>
RoHS 2011/65/EU	Compliant
ISO 9001:2015	Designed, manufactured and/or distributed under this quality management system



## Included Products

CS-8W-LT (Product Component—not orderable) — TeraSPEED® OS2 Singlemode Fiber

## \* Footnotes

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

# TeraSPEED®

TeraSPEED® OS2 Singlemode Fiber

## Product Classification

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

## Optical Specifications, Wavelength Specific

<b>Standards Compliance</b>	ITU-T G.652.D   ITU-T G.657.A1   TIA-492CAAB (OS2)
<b>Attenuation, maximum</b>	0.22 dB/km @ 1,550 nm   0.23 dB/km @ 1,575 nm   0.25 dB/km @ 1,490 nm   0.25 dB/km @ 1,625 nm   0.31 dB/km @ 1,385 nm   0.34 dB/km @ 1,310 nm   0.35 dB/km @ 1,650 nm
<b>Dispersion, maximum</b>	18 ps/(nm-km) at 1550 nm   3.5 ps/(nm-km) from 1285 nm to 1330 nm at 1310 nm
<b>Mode Field Diameter</b>	10.4 µm @ 1,550 nm   9.2 µm @ 1,310 nm   9.6 µm @ 1,385 nm
<b>Mode Field Diameter Tolerance</b>	±0.3 µm @ 1310 nm   ±0.5 µm @ 1550 nm   ±0.6 µm @ 1385 nm
<b>Index of Refraction</b>	1.467 @ 1,310 nm   1.468 @ 1,385 nm   1.468 @ 1,550 nm
<b>Polarization Mode Dispersion Link Design Value, maximum</b>	0.04 ps/sqrt(km)
<b>Backscatter Coefficient</b>	-79.6 dB @ 1,310 nm   -82.1 dB @ 1,550 nm

## Physical Specifications

<b>Cladding Diameter</b>	125.0 µm
<b>Cladding Diameter Tolerance</b>	±0.7 µm
<b>Cladding Non-Circularity, maximum</b>	0.7 %
<b>Coating Diameter (Colored)</b>	253 µm
<b>Coating Diameter (Uncolored)</b>	240 µm
<b>Coating Diameter Tolerance (Colored)</b>	±7 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

## Optical Specifications, General

<b>Cabled Cutoff Wavelength, maximum</b>	1260 nm
<b>Point Defects, maximum</b>	0.10 dB
<b>Zero Dispersion Slope, maximum</b>	0.090 ps/[km-nm-nm]
<b>Zero Dispersion Wavelength, maximum</b>	1322 nm
<b>Zero Dispersion Wavelength, minimum</b>	1302 nm

## Mechanical Specifications

<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>	20
<b>Fiber Curl, minimum</b>	4.0 m   13.1 ft
<b>Macrobending, 20 mm mandrel, 1 turn</b>	0.75 dB @ 1,550 nm   1.50 dB @ 1,625 nm
<b>Macrobending, 30 mm mandrel, 10 turns</b>	0.25 dB @ 1,550 nm   1.00 dB @ 1,625 nm
<b>Macrobending, 50 mm mandrel, 100 turns</b>	0.03 dB @ 1,550 nm   0.03 dB @ 1,625 nm
<b>Proof Test</b>	689.48 N/mm <sup>2</sup>   100000.00 psi

## Environmental Specifications

<b>Heat Aging, maximum</b>	0.05 dB/km @ 85 °C
<b>Temperature Dependence, maximum</b>	0.05 dB/km
<b>Temperature Humidity Cycling, maximum</b>	0.05 dB/km
<b>Water Immersion, maximum</b>	0.05 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