# 810010332/DB | D-024-HA-8W-F12NS/LTS



HeliARC™ LightScope ZWP® 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 complies with the Build America, Buy America Act (BABAA) requirements of the Infrastructure Investment and Jobs Act of 2021 (Pub. L. 117- 58, §§ 70901-70953), or is the subject of a waiver approved by the Secretary of Commerce or designee. Compliance requirements and waiver applicability vary based on government funding program. Check the laws and regulations for your specific program.

### **Product Classification**

Regional Availability

Asia | Australia/New Zealand | EMEA | Latin America | North

America

 Portfolio
 CommScope®

 Product Type
 Fiber OSP cable

**Product Series** D-HA

Government Funding Build America Buy America (BABA) compliant\*

General Specifications

**Armor Type** Corrugated steel

Cable Type Stranded loose tube

Construction Type Armored
Subunit Type Gel-free
Jacket Color Black
Jacket Marking Feet
Subunit, quantity 2
Fibers per Subunit, quantity 12

Total Fiber Count 24

Dimensions

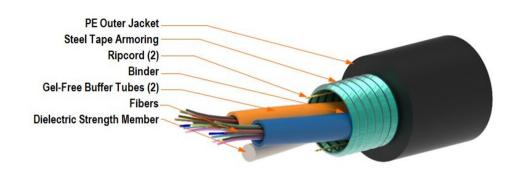
**Buffer Tube/Subunit Diameter** 2.5 mm | 0.098 in

**Diameter Over Jacket** 9 mm | 0.354 in

Representative Image



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## Material Specifications

Jacket Material PE

## Mechanical Specifications

Minimum Bend Radius, loaded135 mm | 5.315 inMinimum Bend Radius, unloaded92 mm | 3.622 inTensile Load, long term, maximum400 N | 89.924 lbfTensile Load, short term, maximum1334 N | 299.895 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** 2.94 N-m | 26.021 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** 529 m | 1,735.564 ft

Optical Specifications

Fiber Type G.652.D and G.657.A1, TeraSPEED® | OS2



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### **Environmental Specifications**

Installation temperature  $-30 \,^{\circ}\text{C}$  to  $+70 \,^{\circ}\text{C}$  (-22 °F to  $+158 \,^{\circ}\text{F}$ )

Operating Temperature  $-40 \,^{\circ}\text{C}$  to  $+70 \,^{\circ}\text{C}$  (-40 °F to  $+158 \,^{\circ}\text{F}$ )

Storage Temperature  $-40 \,^{\circ}\text{C}$  to  $+75 \,^{\circ}\text{C}$  (-40 °F to  $+167 \,^{\circ}\text{F}$ )

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 Qualification Method ANSI/ICEA S-87-640

**Water Penetration Test Method** FOTP-82 | IEC 60794-1 F5

**Environmental Test Specifications** 

**Heat Age**  $-40 \,^{\circ}\text{C} \text{ to } +85 \,^{\circ}\text{C} \, (-40 \,^{\circ}\text{F to } +185 \,^{\circ}\text{F})$ 

**Heat Age Test Method** IEC 60794-1 F9

**Low High Bend**  $-30 \,^{\circ}\text{C} \text{ to } +60 \,^{\circ}\text{C} \, (-22 \,^{\circ}\text{F to } +140 \,^{\circ}\text{F})$ 

**Low High Bend Test Method** FOTP-37 | IEC 60794-1 E11

**Temperature Cycle**  $-40 \,^{\circ}\text{C} \text{ to } +70 \,^{\circ}\text{C} \, (-40 \,^{\circ}\text{F to } +158 \,^{\circ}\text{F})$ 

**Temperature Cycle Test Method** FOTP-3 | IEC 60794-1 F1

Packaging and Weights

Cable weight 64 kg/km | 43.006 lb/kft

#### Included Products

CS-8W-LT – TeraSPEED® G652D/G657A1 Singlemode

### \* Footnotes

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



### TeraSPEED® G652D/G657A1 Singlemode Fiber

# TeraSPEED®

### **Product Classification**

Portfolio CommScope®

**Product Type** Optical fiber

General Specifications

Cladding Diameter 125 µm

 ${\color{red} \textbf{Cladding Diameter Tolerance}} \\ {\color{red} \pm 0.7~\mu m} \\$ 

 ${\bf Cladding\ Non-Circularity,\ maximum} \\ {\bf 0.7\ \%}$ 

Coating Diameter (Colored) 249 µm

Coating Diameter (Uncolored) 242 µm

**Coating Diameter Tolerance (Colored)** ±13 μm

Coating Diameter Tolerance (Uncolored) ±5 µm

 $\textbf{Coating/Cladding Concentricity Error, maximum} \hspace{1.5cm} 12~\mu m$ 

Core Diameter 8.3 μm

**Core/Clad Offset, maximum** 0.5 μm

**Proof Test** 689.476 N/mm² | 100000 psi

**Dimensions** 

**Fiber Curl, minimum** 4 m | 13.123 ft

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

**COMMSCOPE®** 

## CS-8W-LT

Coating Strip Force, minimum 1.3 N | 0.292 lbf

Dynamic Fatigue Parameter, minimum 20

**Optical Specifications** 

Cabled Cutoff Wavelength, maximum1260 nmPoint Defects, maximum0.1 dB

**Zero Dispersion Slope, maximum** 0.092 ps/[km-nm-nm]

Zero Dispersion Wavelength, maximum1324 nmZero Dispersion Wavelength, minimum1300 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  $\pm 0.4 \, \mu \text{m}$  @ 1310 nm |  $\pm 0.5 \, \mu \text{m}$  @ 1550 nm |  $\pm 0.6 \, \mu \text{m}$ 

@ 1385 nm

Polarization Mode Dispersion Link Design Value, maximum 0.04 ps/sgrt(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

COMMSCOPE®

# CS-8W-LT

ISO 9001:2015

Designed, manufactured and/or distributed under this quality management system

### \* Footnotes

**Temperature Dependence, maximum** Temperature dependence is conducted at -60 °C to +85 °C (-76 °F to +185 °F)

Temperature Humidity Cycling, maximum Temperature humidity cycling is conducted at -10 °C to +85 °C (+14 °F to +185 °F)

up to 95% relative humidity

