## 860646607/DB | O-096-LA-8W-M12NS/20G

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


## Product Classification

Regional Availability
Portfolio
Product Type
Product Series

## General Specifications

## Armor Type

Cable Type
Construction Type
Subunit Type
Jacket Color
Jacket Marking
Jacket Marking Method
Jacket Marking Text

Subunit, quantity
Fibers per Subunit, quantity
Total Fiber Count
Dimensions
Buffer Tube/Subunit Diameter
Diameter Over Jacket
Representative Image

EMEA

CommScope®
Fiber OSP cable
O-LA

## Corrugated steel

Stranded loose tube

## Armored

Gel-filled
Black
Meters
Inkjet
COMMSCOPE GB OPTICAL CABLE TYPE OS2 SM 96 FIBER [SERIAL NUMBER] [MM/YYYY] [METRE MARK]

8
12
96
$2 \mathrm{~mm} \mid 0.079 \mathrm{in}$
12.2 mm | 0.48 in

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## Material Specifications

## Jacket Material

Mechanical Specifications

PE

Minimum Bend Radius, unloaded
Tensile Load, long term, maximum
Tensile Load, short term, maximum
Compression
Compression Test Method
Flex
Flex Test Method
Impact
Impact Test Method
Strain
Strain Test Method
Twist
Twist Test Method
Vertical Rise, maximum

## Optical Specifications

183 mm | 7.205 in
122 mm | 4.803 in
800 N | 179.847 lbf
2700 N | 606.984 lbf
$44 \mathrm{~N} / \mathrm{mm}$ | $251.246 \mathrm{lb} / \mathrm{in}$
IEC 60794-1 E3
25 cycles
IEC 60794-1 E6
4.41 N-m | 39.032 in lb

IEC 60794-1 E4
See long and short term tensile loads
IEC 60794-1 E1
10 cycles
IEC 60794-1 E7
583 m | $1,912.73 \mathrm{ft}$

## 860646607/DB | O-096-LA-8W-MI2NS/20G

## Environmental Specifications

Installation temperature
Operating Temperature

## Storage Temperature

Cable Qualification Standards
Environmental Space
Jacket UV Resistance
Water Penetration
Water Penetration Test Method
$-30^{\circ} \mathrm{C}$ to $+70^{\circ} \mathrm{C}\left(-22^{\circ} \mathrm{F}\right.$ to $\left.+158^{\circ} \mathrm{F}\right)$
$-40^{\circ} \mathrm{C}$ to $+70^{\circ} \mathrm{C}\left(-40^{\circ} \mathrm{F}\right.$ to $\left.+158^{\circ} \mathrm{F}\right)$
$-40^{\circ} \mathrm{C}$ to $+75^{\circ} \mathrm{C}\left(-40^{\circ} \mathrm{F}\right.$ to $\left.+167^{\circ} \mathrm{F}\right)$
ANSI/ICEA S-87-640 | EN 187105 | IEC 60794-1-2
Aerial, lashed | Buried
UV stabilized
24 h
IEC 60794-1 F5

## Environmental Test Specifications

## Cable Freeze

Cable Freeze Test Method
Drip
Drip Test Method

## Heat Age

Heat Age Test Method

## Low High Bend

Low High Bend Test Method
Temperature Cycle
Temperature Cycle Test Method
$-2{ }^{\circ} \mathrm{C} \mid 28.4{ }^{\circ} \mathrm{F}$
IEC 60794-1 F15
$70^{\circ} \mathrm{C} \mid 158{ }^{\circ} \mathrm{F}$
IEC 60794-1 E14
$-40^{\circ} \mathrm{C}$ to $+85^{\circ} \mathrm{C}\left(-40^{\circ} \mathrm{F}\right.$ to $\left.+185^{\circ} \mathrm{F}\right)$
IEC 60794-1 F9
$-30^{\circ} \mathrm{C}$ to $+60^{\circ} \mathrm{C}\left(-22^{\circ} \mathrm{F}\right.$ to $\left.+140^{\circ} \mathrm{F}\right)$
IEC 60794-1 E11
$-40^{\circ} \mathrm{C}$ to $+70^{\circ} \mathrm{C}\left(-40^{\circ} \mathrm{F}\right.$ to $\left.+158^{\circ} \mathrm{F}\right)$
IEC 60794-1 F1

## Packaging and Weights

Cable weight
$140 \mathrm{~kg} / \mathrm{km} \mid 94.076 \mathrm{lb} / \mathrm{kft}$

## Regulatory Compliance/Certifications

## Agency

CHINA-ROHS
ISO 9001:2015
REACH-SVHC
ROHS
UK-ROHS

## Classification

Below maximum concentration value
Designed, manufactured and/or distributed under this quality management system
Compliant as per SVHC revision on www.commscope.com/ProductCompliance
Compliant
Compliant

## 860646607/DB | O-096-LA-8W-M12NS/20G

## Included Products

CS-8W-250-EMEA - LightScope ZWP® Singlemode Fiber
250um

* Footnotes

Operating Temperature Specification applicable to non-terminated bulk fiber cable

## LightScope ZWP® Singlemode Fiber

## LightScope"empo

## Product Classification

## Portfolio <br> Product Type <br> General Specifications

Cladding Diameter $125 \mu \mathrm{~m}$
Cladding Diameter Tolerance $\quad \pm 0.7 \mu \mathrm{~m}$
Cladding Non-Circularity, maximum $0.7 \%$
Coating Diameter (Colored) $249 \mu \mathrm{~m}$
Coating Diameter (Uncolored) $242 \mu \mathrm{~m}$
Coating Diameter Tolerance (Colored) $\pm 13 \mu \mathrm{~m}$
Coating Diameter Tolerance (Uncolored) $\quad \pm 5 \mu \mathrm{~m}$
Coating/Cladding Concentricity Error, maximum $12 \mu \mathrm{~m}$
Core/Clad Offset, maximum $0.5 \mu \mathrm{~m}$
Proof Test
$689.476 \mathrm{~N} / \mathrm{mm}^{2}$ | 100000 psi

## Dimensions

Fiber Curl, minimum

## Mechanical Specifications

Macrobending, $20 \mathrm{~mm} \varnothing$ mandrel, 1 turn
Macrobending, $30 \mathrm{~mm} \varnothing$ mandrel, 10 turns
Macrobending, $60 \mathrm{~mm} \varnothing$ mandrel, 100 turns
Coating Strip Force, maximum
Coating Strip Force, minimum
0.75 dB @ 1,550 nm | $1.50 \mathrm{~dB} @ 1,625 \mathrm{~nm}$
0.25 dB @ 1,550 nm | $1.00 \mathrm{~dB} @ 1,625 \mathrm{~nm}$
0.05 dB @ 1,550 nm | 0.05 dB @ 1,625 nm
$8.9 \mathrm{~N} \mid 2.001 \mathrm{lbf}$
$1.3 \mathrm{~N} \mid 0.292 \mathrm{lbf}$

## CS-8W-250-EMEA | 250um

Dynamic Fatigue Parameter, minimum

## Optical Specifications

| Cabled Cutoff Wavelength, maximum | 1250 nm |
| :--- | :--- |
| Point Defects, maximum | 0.05 dB |
| Zero Dispersion Slope, maximum | $0.092 \mathrm{ps} /[\mathrm{km}-\mathrm{nm}-\mathrm{nm}]$ |
| Zero Dispersion Wavelength, maximum | 1324 nm |
| Zero Dispersion Wavelength, minimum | 1300 nm |

## Optical Specifications, Wavelength Specific

## Attenuation, maximum

Dispersion, maximum

Index of Refraction

## Mode Field Diameter

## Mode Field Diameter Tolerance

Polarization Mode Dispersion Link Design Value, maximum
Standards Compliance

## Environmental Specifications

Heat Aging, maximum
Temperature Dependence, maximum
Temperature Humidity Cycling, maximum
Water Immersion, maximum

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0.21 dB/km @ 1,550 nm | 0.24 dB/km @ 1625

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0.21 dB/km @ 1,550 nm | 0.24 dB/km @ 1625
nm | 0.25 dB/km@ 1,490 nm | 0.35 dB/km@ 1,310
nm | 0.25 dB/km@ 1,490 nm | 0.35 dB/km@ 1,310
nm | 0.35 dB/km@ 1,385 nm
nm | 0.35 dB/km@ 1,385 nm
18 ps(nm-km) at 1550 nm | 2.2 ps(nm-km) at 1625
18 ps(nm-km) at 1550 nm | 2.2 ps(nm-km) at 1625
nm | 3.5 ps(nm-km) from 1285 nm to 1330 nm at 1310
nm | 3.5 ps(nm-km) from 1285 nm to 1330 nm at 1310
nm
nm
1.467@ 1,310 nm | 1.468@ 1,550 nm
1.467@ 1,310 nm | 1.468@ 1,550 nm
10.4 \mum@ 1,550 nm | 9.2 \mum @ 1,310 nm
10.4 \mum@ 1,550 nm | 9.2 \mum @ 1,310 nm
\pm0.4 \mum @ 1310 nm | }\pm0.5\mu\textrm{m}@1550\textrm{nm
\pm0.4 \mum @ 1310 nm | }\pm0.5\mu\textrm{m}@1550\textrm{nm
0.06 ps/sqrt(km)
0.06 ps/sqrt(km)
ITU-T G.652.D | ITU-T G.657.A1

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ITU-T G.652.D | ITU-T G.657.A1

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```20
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1250 nmdB
0.092 ps/[km-nm-nm]
1300 nm
$0.05 \mathrm{~dB} / \mathrm{km}$ @ $85^{\circ} \mathrm{C}$
0.05 dB/km
0.05 dB/km
0.05 dB/km @ $23^{\circ} \mathrm{C}$

## * Footnotes

Temperature Dependence, maximum Temperature dependence is conducted at $-60^{\circ} \mathrm{C}$ to $+85^{\circ} \mathrm{C}\left(-76^{\circ} \mathrm{F}\right.$ to $\left.+185^{\circ} \mathrm{F}\right)$
Temperature Humidity Cycling, maximum Temperature humidity cycling is conducted at $-10{ }^{\circ} \mathrm{C}$ to $+85^{\circ} \mathrm{C}\left(+14^{\circ} \mathrm{F}\right.$ to $\left.+185^{\circ} \mathrm{F}\right)$ up to $95 \%$ relative humidity

