

760136416 | D-060-LN-8R-F12NS



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

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|---------------------|--------------------------|
| 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 www.commscope.com/ProductCompliance |
| ROHS | Compliant |
| UK-ROHS | Compliant |



Included Products

CS-8R-LT

760136416 | D-060-LN-8R-F12NS

- 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 Test | 689.476 N/mm ² 100000 psi |

Dimensions

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

Mechanical Specifications

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|---|---|
| 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

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|--|--------------------------------|
| 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 | $\pm 0.4 \mu\text{m}$ @ 1550 nm $\pm 0.6 \mu\text{m}$ @ 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 |