# 760237971 | N-012-MP-8G1-F12YL/D



Fiber Indoor Cable, Low Smoke Zero Halogen Riser MPO Trunk Cable, 12 fiber, gel-free, singlemode G.657.A2/B2, feet jacket marking, yellow cable jacket color, Dca Flame Rating

#### Product Classification

| Regional Availability        | Asia   Australia/New Zealand   EMEA   Latin America   North<br>America |
|------------------------------|--|
| Portfolio                    | CommScope®   |
| Product Type                 | Fiber indoor cable   |
| Product Series               | N-MP   |
| General Specifications       |  |
| Cable Type                   | MPO trunk cable  |
| Construction Type            | Non-armored  |
| Subunit Type                 | Gel-free   |
| Jacket Color                 | Yellow   |
| Jacket Marking               | Feet   |
| Total Fiber Count            | 12   |
| Dimensions                   |  |
| Buffer Tube/Subunit Diameter | 3 mm   0.118 in  |
| Diameter Over Jacket         | 5.4 mm   0.213 in  |
|                              |  |

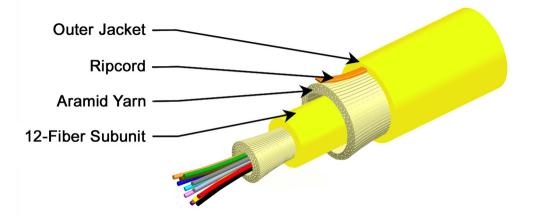
#### Representative Image

Page 1 of 6

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#### Mechanical Specifications

| Minimum Bend Radius, loaded       | 81 mm   3.189 in                      |
|-----------------------------------|---------------------------------------|
| Minimum Bend Radius, unloaded     | 54 mm   2.126 in                      |
| Tensile Load, long term, maximum  | 200 N   44.962 lbf                    |
| Tensile Load, short term, maximum | 667 N   149.948 lbf                   |
| Compression                       | 10 N/mm   57.101 lb/in                |
| Compression Test Method           | FOTP-41   IEC 60794-1 E3              |
| Flex                              | 300 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            | 500 m   1,640.42 ft                   |
| Optical Specifications            |                                       |

Fiber Type

G.657.A2/B2 | G.657.A2/B2

#### **Environmental Specifications**

| Installation temperature | -20 °C to +60 °C (-4 °F to +140 °F) |
|--------------------------|-------------------------------------|
| Operating Temperature    | -20 °C to +70 °C (-4 °F to +158 °F) |

Page 2 of 6

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## 760237971 | N-012-MP-8G1-F12YL/D

| Storage Temperature                          | -40 °C to +70 °C (-40 °F to +158 °F)                        |
|--|---|
| Cable Qualification Standards                | ANSI/ICEA S-83-596   Telcordia GR-409                       |
| EN50575 CPR Cable EuroClass Fire Performance | Dca   |
| EN50575 CPR Cable EuroClass Smoke Rating     | sla   |
| EN50575 CPR Cable EuroClass Droplets Rating  | d1  |
| EN50575 CPR Cable EuroClass Acidity Rating   | al  |
| Environmental Space                          | Low Smoke Zero Halogen (LSZH)   Riser                       |
| Flame Test Listing                           | NEC OFNR-ST1 (ETL) and c(ETL)                               |
| Flame Test Method                            | IEC 60332-3   IEC 60754-2   IEC 61034-2   UL 1666   UL 1685 |

#### **Environmental Test Specifications**

| Heat Age                      | -20 °C to +85 °C (-4 °F to +185 °F) |
|-------------------------------|-------------------------------------|
| Heat Age Test Method          | IEC 60794-1 F9                      |
| Low High Bend                 | -20 °C to +70 °C (-4 °F to +158 °F) |
| Low High Bend Test Method     | FOTP-37   IEC 60794-1 E11           |
| Temperature Cycle             | -20 °C to +70 °C (-4 °F to +158 °F) |
| Temperature Cycle Test Method | FOTP-3   IEC 60794-1 F1             |
|                               |                                     |

#### Packaging and Weights

28 kg/km | 18.815 lb/kft

#### Regulatory Compliance/Certifications

| Agency        | Classification   |
|---------------|--|
| CENELEC       | EN 50575 compliant, Declaration of Performance (DoP) available                 |
| CHINA-ROHS    | Below maximum concentration value  |
| ISO 9001:2015 | Designed, manufactured and/or distributed under this quality management system |
| ROHS          | Compliant  |
| UK-ROHS       | Compliant  |
|               |  |

#### Included Products

CS-8G1-MP

Enhanced Low Macrobending, Zero Water Peak, Dispersion-Unshifted Singlemode Fiber (ITU-T G.657.A2, B2)

Page 3 of 6

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#### \* Footnotes

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

Page 4 of 6

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## CS-8G1-MP

Enhanced Low Macrobending, Zero Water Peak, Dispersion-Unshifted Singlemode Fiber (ITU-T G. 657.A2, B2)

### Product Classification

| Portfolio                                      | CommScope®                              |
|--|---|
| Product Type                                   | Optical fiber                           |
| General Specifications                         |   |
| Cladding Diameter                              | 125 µm                                  |
| Cladding Diameter Tolerance                    | ±0.3 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/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, 15 mm Ø mandrel, 1 turn          | 0.50 dB @ 1,550 nm   1.00 dB @ 1,625 nm |
| Macrobending, 20 mm Ø mandrel, 1 turn          | 0.10 dB @ 1,550 nm   0.20 dB @ 1,625 nm |
| Macrobending, 30 mm Ø mandrel, 10 turns        | 0.03 dB @ 1,550 nm   0.10 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                         |   |
| Cabled Cutoff Wavelength, maximum              | 1260 nm                                 |
| Point Defects, maximum                         | 0.1 dB                                  |

Page 5 of 6

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### CS-8G1-MP

| Zero Dispersion Slope, maximum                          | 0.092 ps/[km-nm-nm]   |
|---|---|
| Zero Dispersion Wavelength, maximum                     | 1324 nm   |
| Zero Dispersion Wavelength, minimum                     | 1302 nm   |
| Optical Specifications, Wavelength Specific             |   |
| Attenuation, maximum                                    | 0.40 dB/km @ 1,310 nm   0.40 dB/km @ 1,385<br>nm   0.40 dB/km @ 1,550 nm   0.50 dB/km @ 1,625<br>nm |
| Dispersion, maximum                                     | 18 ps(nm-km) at 1550 nm ( 3.5 ps(nm-km) from 1285<br>nm to 1330 nm at 1310 nm                       |
| Index of Refraction                                     | 1.467 @ 1,310 nm   1.467 @ 1,385 nm   1.468 @ 1,550<br>nm   |
| Mode Field Diameter                                     | 8.6 μm @ 1,310 nm \mid 9.8 μm @ 1,550 nm  |
| Mode Field Diameter Tolerance                           | ±0.4 μm @ 1310 nm   ±0.5 μm @ 1550 nm   |
| Polarization Mode Dispersion Link Design Value, maximum | 0.06 ps/sqrt(km)  |
| Standards Compliance                                    | ITU-T G.657.A2   ITU-T G.657.B2   |

#### 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

| 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 |

Page 6 of 6

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