

Fiber OSP Cable, Non-Armored, All-Dielectric, 192 fiber, Gel-Filled Central Tube Ribbon, Multimode OM3 bend insensitive, Feet jacket marking, Black jacket color

OBSOLETE

Product Classification

| | |
|-----------------------|---|
| Regional Availability | Asia Australia/New Zealand EMEA Latin America North America |
| Portfolio | CommScope® |
| Product Type | Fiber OSP cable |
| Product Series | O-CN |

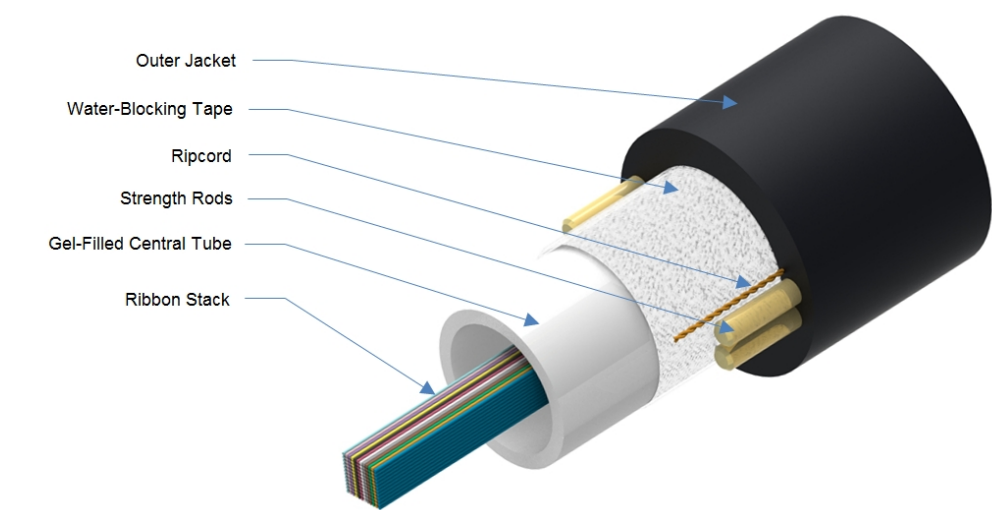
General Specifications

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|-----------------------------|---------------------|
| Cable Type | Ribbon central tube |
| Construction Type | Non-armored |
| Subunit Type | Gel-filled |
| Fibers per Ribbon, quantity | 12 |
| Jacket Color | Black |
| Jacket Marking | Feet |
| Total Fiber Count | 192 |

Dimensions

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|------------------------------|-------------------|
| Buffer Tube/Subunit Diameter | 9.9 mm 0.39 in |
| Diameter Over Jacket | 16.5 mm 0.65 in |

Representative Image



Mechanical Specifications

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|-----------------------------------|---------------------------------------|
| Minimum Bend Radius, loaded | 330.2 mm 13 in |
| Minimum Bend Radius, unloaded | 165.1 mm 6.5 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 | 4.4 N-m 38.943 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 |

Optical Specifications

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|------------|---|
| Fiber Type | OM3, bend insensitive OM3, bend insensitive |
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Environmental Specifications

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|--------------------------|--------------------------------------|
| Installation temperature | -30 °C to +60 °C (-22 °F to +140 °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 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

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|-------------------------------|--------------------------------------|
| Drip | 70 °C 158 °F |
| Drip Test Method | FOTP-81 |
| 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 | 241 kg/km 161.945 lb/kft |
|--------------|----------------------------|

Regulatory Compliance/Certifications

| Agency | Classification |
|--|--|
| ISO 9001:2015 | Designed, manufactured and/or distributed under this quality management system |
|  | |

Included Products

| | |
|----------|---|
| CS-5Y-RB | – 50µm OM3 Bend-Insensitive Multimode Fiber |
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* Footnotes

Operating Temperature Specification applicable to non-terminated bulk fiber cable

CS-5Y-RB

50µm OM3 Bend-Insensitive Multimode Fiber

Product Classification

| | |
|--------------|---------------|
| Portfolio | CommScope® |
| Product Type | Optical fiber |

General Specifications

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|---|----------------------------|
| Cladding Diameter | 125 µm |
| Cladding Diameter Tolerance | ±1.0 µm |
| Cladding Non-Circularity, maximum | 1 % |
| Coating Diameter (Colored) | 250 µm |
| Coating Diameter (Uncolored) | 245 µm |
| Coating Diameter Tolerance (Colored) | ±15 µm |
| Coating Diameter Tolerance (Uncolored) | ±10 µm |
| Coating/Cladding Concentricity Error, maximum | 12 µm |
| Core Diameter | 50 µm |
| Core Diameter Tolerance | ±3 µm |
| Core/Clad Offset, maximum | 1 µm |
| Proof Test | 689.476 N/mm² 100000 psi |

Mechanical Specifications

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| Macrobending, 15 mm Ø mandrel, 2 turns | 0.20 dB @ 850 nm 0.50 dB @ 1,300 nm |
| Macrobending, 30 mm Ø mandrel, 2 turns | 0.10 dB @ 850 nm 0.30 dB @ 1,300 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 | 18 |

Optical Specifications

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|-------------------------------------|---------------------|
| Numerical Aperture | 0.2 |
| Numerical Aperture Tolerance | ±0.015 |
| Point Defects, maximum | 0.2 dB |
| Zero Dispersion Slope, maximum | 0.105 ps/[km-nm-nm] |
| Zero Dispersion Wavelength, maximum | 1340 nm |

CS-5Y-RB

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|---|--|
| Zero Dispersion Wavelength, minimum | 1295 nm |
| Optical Specifications, Wavelength Specific | |
| Attenuation, maximum | 1.50 dB/km @ 1,300 nm 3.50 dB/km @ 850 nm |
| Backscatter Coefficient | -68.0 dB @ 850 nm -75.7 dB @ 1,300 nm |
| Bandwidth, Laser, minimum | 2,000 MHz-km @ 850 nm 500 MHz-km @ 1,300 nm |
| Bandwidth, OFL, minimum | 1,500 MHz-km @ 850 nm 500 MHz-km @ 1,300 nm |
| Differential Mode Delay Note | Superior to TIA-492AAAC and IEC 60793-2-10 at 850 nm |
| Index of Refraction | 1.478 @ 1,300 nm 1.482 @ 850 nm |
| Standards Compliance | TIA-492AAAC (OM3) |

Environmental Specifications

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|---------------------------------------|--------------------|
| Heat Aging, maximum | 0.10 dB/km @ 85 °C |
| Temperature Dependence, maximum | 0.1 dB/km |
| Temperature Humidity Cycling, maximum | 0.1 dB/km |
| Water Immersion, maximum | 0.10 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 |