

TeraSPEED® Plenum Hybrid Distribution Cable, 2 simplex single fiber, 2 conductor 12 AWG

OBSOLETE

Product Classification

| | |
|------------------------------|--------------------------------|
| Regional Availability | North America |
| Portfolio | CommScope® |
| Product Type | Hybrid cable, copper and fiber |
| Product Brand | TeraSPEED® |

General Specifications

| | |
|-------------------------------------|---|
| Cable Type | Distribution Hybrid Stranded indoor |
| Conductor Type, singles | Stranded |
| Conductors, quantity | 2 |
| Construction Type | Non-armored |
| Fiber Short Description | P-001-SP29 |
| Subunit Type | Gel-free |
| Filler, quantity | 0 |
| Jacket Color | Yellow |
| Subunit Jacket Color | Yellow |
| Subunit, quantity | 2 |
| Fibers per Subunit, quantity | 1 |
| Total Fiber Count | 2 |

Dimensions

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|-------------------------------------|--------------------|
| Buffer Tube/Subunit Diameter | 2.794 mm 0.11 in |
| Diameter Over Jacket | 9.144 mm 0.36 in |

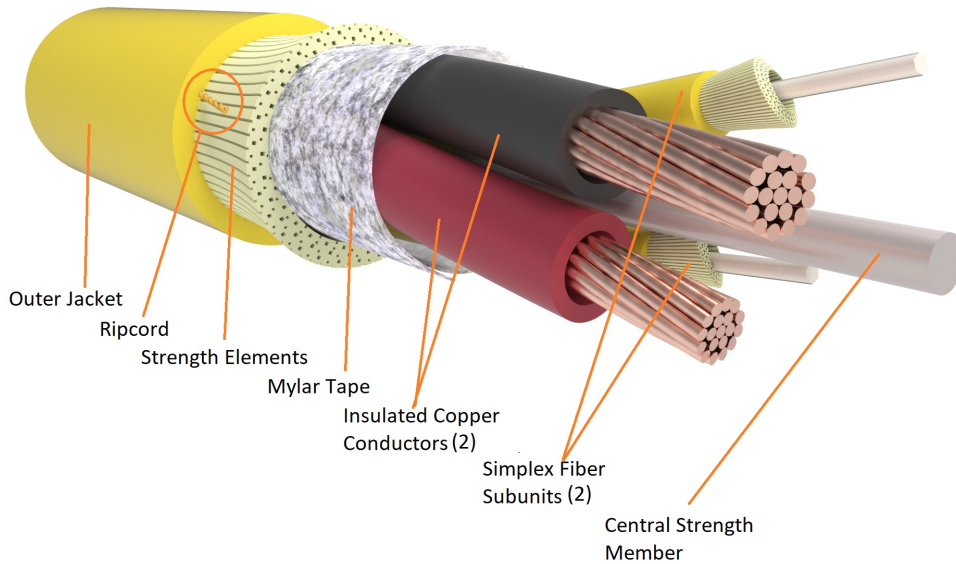
760250282 | P-002-DS-HY-8W-F29YL/2X12AWG

Conductor Gauge 12 AWG

Electrical Specifications

Conductor dc Resistance 5.413 ohms/km | 1.65 ohms/kft

Representative Image



Material Specifications

Conductor Material Bare copper | Stranded copper wire

Insulation Material, singles PVC

Jacket Material Fire retardant PVC

Ripcord Material Polyester

Mechanical Specifications

Minimum Bend Radius, loaded 135.89 mm | 5.35 in

Minimum Bend Radius, unloaded 90.678 mm | 3.57 in

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|--|---------------------------------------|
| Tensile Load, long term, maximum | 240.204 N 54 lbf |
| Tensile Load, short term, maximum | 796.231 N 179 lbf |
| Compression | 1.018 kg/mm 57 lb/in |
| Compression Test Method | FOTP-41 |
| Flex | 25 cycles |
| Flex Test Method | FOTP-104 |
| Impact | 2.17 ft lb 2.942 N-m |
| Impact Test Method | FOTP-25 |
| Strain | See long and short term tensile loads |
| Strain Test Method | FOTP-33 |
| Twist | 10 cycles |
| Twist Test Method | FOTP-85 |
| Vertical Rise, maximum | 183.642 m 602.5 ft |

Optical Specifications

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

Environmental Specifications

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|--------------------------------------|--|
| Installation temperature | 0 °C to +70 °C (-32 °F to +158 °F) |
| Operating Temperature | -20 °C to +70 °C (-4 °F to +158 °F) |
| Storage Temperature | -40 °C to +75 °C (-40 °F to +167 °F) |
| Cable Qualification Standards | ANSI/ICEA S-83-596 Telcordia GR-409 UL 13 UL 444 |
| Environmental Space | Plenum Wireless installation |
| Flame Test Listing | NEC CL3P-OF (ETL) and c(ETL) NEC CMP-OF (ETL) and c(ETL) |
| Flame Test Method | NFPA 262 |

Environmental Test Specifications

| | |
|--------------------------------------|------------------------------------|
| Low High Bend | 0 °C to +70 °C (+32 °F to +158 °F) |
| Low High Bend Test Method | FOTP-37 |
| Temperature Cycle | 0 °C to +70 °C (+32 °F to +158 °F) |
| Temperature Cycle Test Method | FOTP-3 |

Packaging and Weights

760250282 | P-002-DS-HY-8W-F29YL/2X12AWG

Cable weight

133.339 kg/km | 89.6 lb/kft

Included Products

CS-8W-TB – TeraSPEED® Singlemode Fiber

* Footnotes

Operating Temperature Specification applicable to non-terminated bulk fiber cable

TeraSPEED®

TeraSPEED® Singlemode Fiber

Product Classification

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

General Specifications

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|--|--|
| Cladding Diameter | 125 µm |
| Cladding Diameter Tolerance | ±0.7 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 Diameter | 8.3 µm |
| Core/Clad Offset, maximum | 0.5 µm |
| Proof Test | 689.476 N/mm ² 100000 psi |
| Tight Buffer Diameter | 900 µm |
| Tight Buffer Diameter Tolerance | ±40 µm |

Dimensions

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

Mechanical Specifications

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|---|---|
| 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 |
| Coating Strip Force, minimum | 1.3 N 0.292 lbf |
| Dynamic Fatigue Parameter, minimum | 20 |

CS-8W-TB

Optical Specifications

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|--|---------------------|
| Cabled Cutoff Wavelength, maximum | 1260 nm |
| Point Defects, maximum | 0.1 dB |
| Zero Dispersion Slope, maximum | 0.092 ps/[km-nm-nm] |
| Zero Dispersion Wavelength, maximum | 1324 nm |
| Zero Dispersion Wavelength, minimum | 1300 nm |

Optical Specifications, Wavelength Specific

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|--|---|
| Attenuation, maximum | 0.50 dB/km @ 1,310 nm 0.50 dB/km @ 1,385 nm 0.50 dB/km @ 1,490 nm 0.50 dB/km @ 1,550 nm 0.50 dB/km @ 1,575 nm 0.70 dB/km @ 1,270 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/sqrt(km) |
| Standards Compliance | ITU-T G.652.D ITU-T G.657.A1 TIA-492CAAB (OS1a) |

Environmental Specifications

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|--|--------------------|
| 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 |



CS-8W-TB

* 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