

760250285 | P-004-DS-HY-8W-F29YL/2X12AWG



TeraSPEED® Plenum Hybrid Distribution Cable, 4 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	4
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	4
Fibers per Subunit, quantity	1
Total Fiber Count	4

Dimensions

Buffer Tube/Subunit Diameter	2.794 mm 0.11 in
Diameter Over Jacket	10.668 mm 0.42 in

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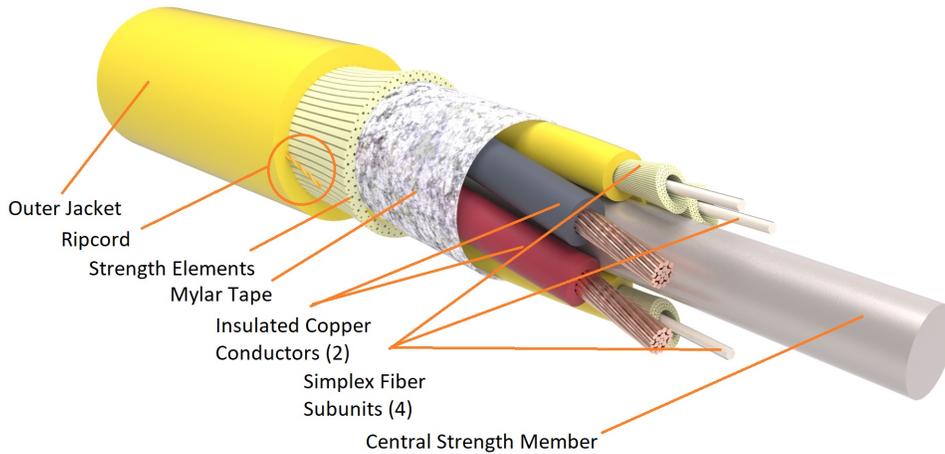
Jacket Thickness 0.762 mm | 0.03 in

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 159.004 mm | 6.26 in

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Minimum Bend Radius, unloaded	105.918 mm 4.17 in
Tensile Load, long term, maximum	275.79 N 62 lbf
Tensile Load, short term, maximum	911.885 N 205 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	169.774 m 557 ft

Optical Specifications

Fiber Type	G.652.D and G.657.A1 G.652.D and G.657.A1, TeraSPEED®
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Environmental Specifications

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

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Packaging and Weights

Cable weight 164.293 kg/km | 110.4 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

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

Fiber Curl, minimum	4 m 13.123 ft
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Mechanical Specifications

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

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

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

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