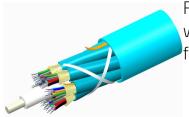
760008193 | P-048-DS-CM-FMUAQ/8W012 /5L036



Fiber indoor cable, TeraSPEED® Plenum Distribution, 48 fiber multi-unit with 12 fiber subunits, Composite OM3 and G.652.D and G.657.A1, Gelfree, Feet jacket marking, Aqua jacket color

Product Classification

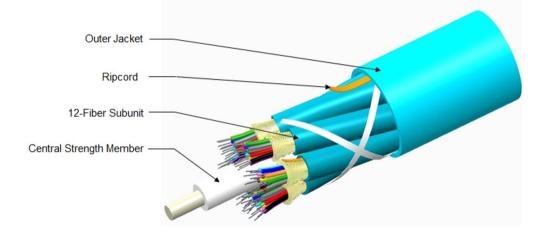
Regional Availability	Asia Australia/New Zealand Latin America Middle East /Africa North America
Portfolio	CommScope®
Product Type	Fiber indoor cable
Product Series	P-DS
General Specifications	
Cable Type	Distribution
Construction Type	Non-armored
Subunit Type	Gel-free
Jacket Color	Aqua
Jacket Marking	Feet
Subunit, quantity	4
Fibers per Subunit, quantity	12
Composite Fiber Count	12 + 36
Total Fiber Count	48
Dimensions	
Buffer Tube/Subunit Diameter	5.77 mm 0.227 in
Diameter Over Jacket	14.91 mm 0.587 in

Representative Image

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Mechanical Specifications

Minimum Bend Radius, loaded	224 mm 8.819 in
Minimum Bend Radius, unloaded	149 mm 5.866 in
Tensile Load, long term, maximum	400 N 89.924 lbf
Tensile Load, short term, maximum	1335 N 300.12 lbf
Compression	10 N/mm 57.101 lb/in
Compression Test Method	FOTP-41 IEC 60794-1 E3
Flex	100 cycles
Flex Test Method	FOTP-104 IEC 60794-1 E6
Impact	5.88 N-m 52.042 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	199 m 652.887 ft
Optical Specifications	

Fiber Type

Composite MM/SM | G.652.D and G.657.A1, TeraSPEED® | OM3, LazrSPEED® 300

Environmental Specifications

Installation temperature

0 °C to +70 °C (+32 °F to +158 °F)

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Operating Temperature	-20 °C to +70 °C (-4 °F to +158 °F)	
Storage Temperature	-40 °C to +70 °C (-40 °F to +158 °F)	
Cable Qualification Standards	ANSI/ICEA S-83-596 Telcordia GR-409	
Environmental Space	Plenum	
Flame Test Listing	NEC OFNP (ETL) and c(ETL)	
Flame Test Method	NFPA 130 NFPA 262	

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

205 kg/km | 137.754 lb/kft

Regulatory Compliance/Certifications

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

Included Products

CS-5L-TB – LazrSPEED® 300 OM3 Bend-Insensitive Multimode Fiber CS-8W-TB – TeraSPEED® Singlemode Fiber

* Footnotes

Operating Temperature Specification applicable to non-terminated bulk fiber cable

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LazrSPEED® 300 OM3 Bend-Insensitive Multimode Fiber

LazrSPEED® 300

Product Classification

Portfolio	CommScope®
Product Type	Optical fiber
General Specifications	
Cladding Diameter	125 µm
Cladding Diameter Tolerance	±0.8 µm
Cladding Non-Circularity, maximum	1 %
Coating Diameter (Colored)	254 µm
Coating Diameter (Uncolored)	245 µm
Coating Diameter Tolerance (Colored)	±7 μm
Coating Diameter Tolerance (Uncolored)	±10 μm
Coating/Cladding Concentricity Error, maximum	12 µm
Core Diameter	50 µm
Core Diameter Tolerance	±2.5 μm
Core/Clad Offset, maximum	1.5 µm
Proof Test	689.476 N/mm² 100000 psi
Tight Buffer Diameter	900 µm
Tight Buffer Diameter Tolerance	±40 μm
Mechanical Specifications	

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
Macrobending, 75 mm Ø mandrel, 100 turns	0.50 dB @ 1,300 nm 0.50 dB @ 850 nm
Coating Strip Force, maximum	8.9 N 2.001 lbf

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CS-5L-TB

Coating Strip Force, minimum	1.3 N 0.292 lbf
Dynamic Fatigue Parameter, minimum	18
Optical Specifications	
Numerical Aperture	0.2
Numerical Aperture Tolerance	±0.015
Point Defects, maximum	0.15 dB
Zero Dispersion Slope, maximum	0.105 ps/[km-nm-nm]
Zero Dispersion Wavelength, maximum	1316 nm
Zero Dispersion Wavelength, minimum	1297 nm

Optical Specifications, Wavelength Specific

1 Gbps Ethernet Distance	1,020 m @ 850 nm 600 m @ 1,300 nm
10 Gbps Ethernet Distance	300 m @ 850 nm
Attenuation, maximum	1.00 dB/km @ 1,300 nm 3.00 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 \mid 500 MHz-km @ 1,300 nm
Differential Mode Delay	0.70 ps/m @ 850 nm
Differential Mode Delay Note	Superior to ANSI/TIA TIA-492AAAF and IEC 60793-2-10 at 850 nm
Index of Refraction	1.479 @ 1,300 nm 1.483 @ 850 nm
Standards Compliance	ANSI/TIA-492AAAF (OM3)

Environmental Specifications

Heat Aging, maximum	0.20 dB/km @ 85 °C
Temperature Dependence, maximum	0.1 dB/km
Temperature Humidity Cycling, maximum	0.2 dB/km
Water Immersion, maximum	0.20 dB/km @ 23 °C

Regulatory Compliance/Certifications

Agency	

Classification

ISO 9001:2015

Designed, manufactured and/or distributed under this quality management system

* Footnotes

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CS-5L-TB

Temperature Dependence, maximumTemperature dependence is conducted at -60 °C to +85 °C (-76 °F to +185 °F)Temperature Humidity Cycling, maximumTemperature humidity cycling is conducted at -10 °C to +85 °C (+14 °F to +185 °F)

up to 95% relative humidity

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TeraSPEED® Singlemode Fiber

TeraSPEED®

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/mm² 100000 psi
Tight Buffer Diameter	900 µm
Tight Buffer Diameter Tolerance	±40 μm
Dimensions	
Fiber Curl, minimum	4 m 13.123 ft
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

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CS-8W-TB

Temperature Humidity Cycling, maximum

Regulatory Compliance/Certifications

Water Immersion, maximum

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	
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	±0.4 μm @ 1310 nm ±0.5 μm @ 1550 nm ±0.6 μm @ 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	

0.05 dB/km

0.05 dB/km @ 23 °C

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COMMSCOPE°

CS-8W-TB

Agency

ISO 9001:2015

Classification

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

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