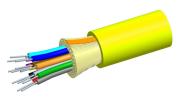
# 9100543/DB | P-012-DS-8W-FSUYL



Fiber indoor cable, TeraSPEED® Plenum Distribution, 12-Fiber Single-Unit, Singlemode G.652.D and G.657.A1, Feet jacket marking, Yellow 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	Yellow
Jacket Marking	Feet
Total Fiber Count	12
Dimensions	
Diameter Over Jacket	5.77 mm   0.227 in

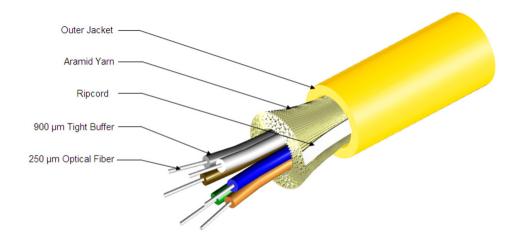
#### Representative Image

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#### Mechanical Specifications

Minimum Bend Radius, loaded	86 mm   3.386 in
Minimum Bend Radius, unloaded	58 mm   2.283 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	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	500 m   1,640.42 ft
Ontical Specifications	

#### **Optical Specifications**

Fiber Type

G.652.D and G.657.A1, TeraSPEED®

#### **Environmental Specifications**

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# 9100543/DB | P-012-DS-8W-FSUYL

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 +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

Cable weight

31 kg/km | 20.831 lb/kft

#### Regulatory Compliance/Certifications

Agency	Classification
CHINA-ROHS	Below maximum concentration value
REACH-SVHC	Compliant as per SVHC revision on www.commscope.com/ProductCompliance
ROHS	Compliant
UK-ROHS	Compliant



#### Included Products

CS-8W-TB - TeraSPEED® Singlemode Fiber

#### \* Footnotes

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

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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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### 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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