8107307/DB/GS | D-288-LA-8W-F12NS/GS



Fiber OSP cable, LightScope® ZWP Single Jacket/Single Armor, 288 fiber, Gel-Free, Stranded Loose Tube, Singlemode G.652.D and G.657.A1, Feet jacket marking, Black jacket color

• Corrugated steel tape armor is strong yet flexible, providing additional crush and rodent protection

Product Classification

Regional Availability	Asia Australia/New Zealand EMEA Latin America North America
Portfolio	CommScope®
Product Type	Fiber OSP cable
Product Series	D-LA
General Specifications	
Armor Type	Corrugated steel
Cable Type	Stranded loose tube
Construction Type	Armored
Subunit Type	Gel-free
Jacket Color	Black
Jacket Marking	Feet
Subunit, quantity	24
Fibers per Subunit, quantity	12
Total Fiber Count	288
Dimensions	
Buffer Tube/Subunit Diameter	2.5 mm 0.098 in
Diameter Over Jacket	19.6 mm 0.772 in

Representative Image

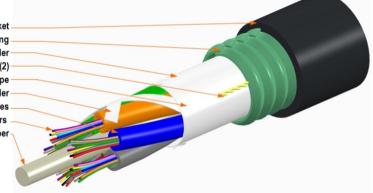
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MDPE Outer Jacket Steel Tape Armoring Binder Ripcord (2) Water Swellable Tape Binder 2.5mm Gel-Free Buffer Tubes 250 micron Fibers Dielectric Strength Member



Material Specifications

Fiber Type

Jacket Material	PE
Mechanical Specifications	
Minimum Bend Radius, loaded	294 mm 11.575 in
Minimum Bend Radius, unloaded	196 mm 7.717 in
Tensile Load, long term, maximum	800 N 179.847 lbf
Tensile Load, short term, maximum	2700 N 606.984 lbf
Compression	44 N/mm 251.246 lb/in
Compression Test Method	FOTP-41 IEC 60794-1 E3
Flex	25 cycles
Flex Test Method	FOTP-104 IEC 60794-1 E6
Impact	6.62 N-m 58.592 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	304 m 997.375 ft
Optical Specifications	

G.652.D and G.657.A1 | G.652.D and G.657.A1

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Environmental Specifications

Installation temperature	-30 °C to +70 °C (-22 °F to +158 °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 EN 187105 Telcordia GR-20
Environmental Space	Aerial, lashed Buried
Jacket UV Resistance	UV stabilized
Water Penetration	24 h
Water Penetration Qualification Method	ANSI/ICEA S-87-640
Water Penetration Test Method	FOTP-82 IEC 60794-1 F5

Environmental Test Specifications

Cable Freeze	-2 °C 28.4 °F	
Cable Freeze Test Method	FOTP-98 IEC 60794-1 F15	
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

Cable weight

269 kg/km | 180.76 lb/kft

Included Products

DB-8W-LT – LightScope® ZWP Singlemode Fiber

* Footnotes

Operating Temperature Specification applicable to non-terminated bulk fiber cable

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LightScope® ZWP Singlemode Fiber

LightScope[®] 2000

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 Tensile Stress	100,000 psi (0.69 GPa)	
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	
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	

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DB-8W-LT

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	0.22 dB/km @ 1,550 nm (0.25 dB/km @ 1,490 nm (0.25 dB/km @ 1,625 nm (0.36 dB/km @ 1,310 nm (0.36 dB/km @ 1,385 nm
Attenuation, typical	0.19 dB/km @ 1,550 nm 0.33 dB/km @ 1,310 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

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

Classification

Agency

ISO 9001:2015

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

* Footnotes

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DB-8W-LT

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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