

Optical Fiber OSP Drop cable, HDPE jacket, ST buffer, Singlemode, G.657. A2, 12 fiber, meter marked, black jacket color. Box Packaged in 500m lengths.

Product Classification

Regional Availability	Asia Australia/New Zealand EMEA Latin America
Portfolio	CommScope®
Product Type	Fiber drop cable
Product Series	D-DN

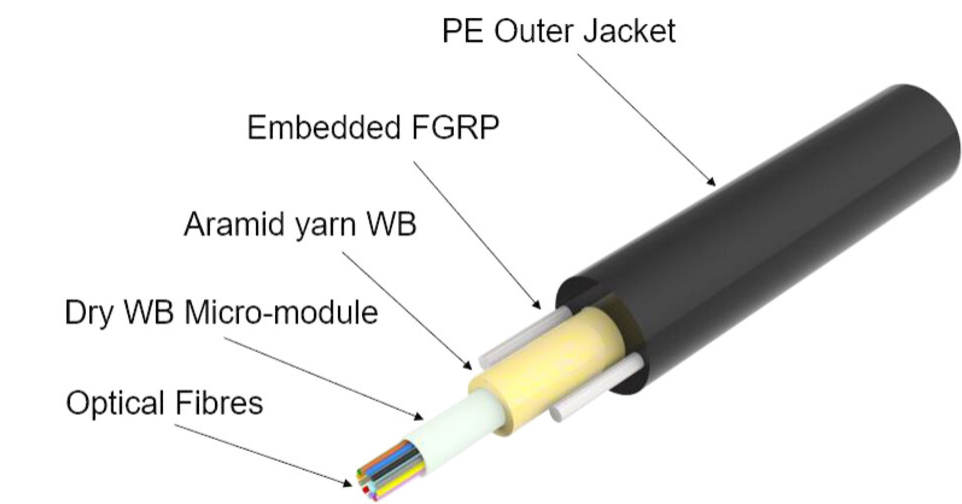
General Specifications

Cable Type	Drop
Construction Type	Non-armored
Jacket Color	Black
Jacket Marking	Meters
Fibers per Subunit, quantity	12
Total Fiber Count	12
Buffer Type	Micro-module
Buffer Strip	500 mm 19.685 in

Dimensions

Cable Length	500 m 1,640.42 ft
Buffer Tube/Subunit Diameter	1.45 mm 0.057 in
Diameter Over Jacket	5 mm 0.197 in

Representative Image



Material Specifications

Jacket Material

High density polyethylene (HDPE)

Mechanical Specifications

Minimum Bend Radius, loaded	60 mm 2.362 in
Minimum Bend Radius, unloaded	30 mm 1.181 in
Tensile Load, long term, maximum	400 N 89.924 lbf
Fiber Strain, long term, maximum	0.33 %
Tensile Load, short term, maximum	800 N 179.847 lbf
Fiber Strain, short term, maximum	0.66 %
Compression	20 N/mm 114.203 lb/in
Compression Test Method	FOTP-41 IEC 60794-1 E3
Flex	100 cycles
Flex Test Method	FOTP-104 IEC 60794-1 E6
Impact	10 N-m 88.507 in lb
Impact Test Method	FOTP-25 IEC 60794-1 E4
Strain Test Method	FOTP-33 IEC 60794-1 E1
Twist	10 cycles
Twist Test Method	FOTP-85 IEC 60794-1 E7

Optical Specifications

Fiber TypeG.657.A2

Environmental Specifications

Installation temperature-10 °C to +60 °C (+14 °F to +140 °F)

Operating Temperature-20 °C to +70 °C (-4 °F to +158 °F)

Storage Temperature-20 °C to +70 °C (-4 °F to +158 °F)

Cable Qualification StandardsIEC 60794-1-2 | Telcordia GR-20

Environmental SpaceAerial, self-support | Buried | Drop | Façade | Underground (duct)

Jacket UV ResistanceUV stabilized

Water Penetration24 h

Water Penetration Test MethodFOTP-82 | IEC 60794-1 F5

Environmental Test Specifications

Cable Freeze Test MethodFOTP-98 | IEC 60794-1 F15

Heat Age-20 °C to +85 °C (-4 °F to +185 °F)

Heat Age Test MethodIEC 60794-1 F9

Low High Bend-10 °C to +60 °C (+14 °F to +140 °F)

Low High Bend Test MethodFOTP-37 | IEC 60794-1 E11

Temperature Cycle-20 °C to +60 °C (-4 °F to +140 °F)

Temperature Cycle Test MethodFOTP-3 | IEC 60794-1 F1

Packaging and Weights

Cable weight15 kg/km | 10.08 lb/kft

Included Products

CS-8G-MP – Enhanced Low Macrobending, Zero Water Peak, Dispersion-Unshifted Singlemode Fiber (ITU-T G.657.A2, B2)

* Footnotes

Operating Temperature Specification applicable to non-terminated bulk fiber cable

CS-8G-MP

Enhanced Low Macrobending, Zero Water Peak, Dispersion-Unshifted Singlemode Fiber (ITU-T G. 657.A2, B2)

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/Clad Offset, maximum	0.5 µm
Proof Tensile Stress	100,000 psi (0.69 GPa)

Dimensions

Fiber Curl, minimum	4 m 13.123 ft
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Mechanical Specifications

Macrobending, 15 mm Ø mandrel, 1 turn	0.50 dB @ 1,550 nm 1.00 dB @ 1,625 nm
Macrobending, 20 mm Ø mandrel, 1 turn	0.10 dB @ 1,550 nm 0.20 dB @ 1,625 nm
Macrobending, 30 mm Ø mandrel, 10 turns	0.03 dB @ 1,550 nm 0.10 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

CS-8G-MP

Zero Dispersion Slope, maximum	0.092 ps/[km-nm-nm]
Zero Dispersion Wavelength, maximum	1324 nm
Zero Dispersion Wavelength, minimum	1302 nm
Optical Specifications, Wavelength Specific	
Attenuation, maximum	0.40 dB/km @ 1,310 nm 0.40 dB/km @ 1,385 nm 0.40 dB/km @ 1,550 nm 0.50 dB/km @ 1,625 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	8.6 µm @ 1,310 nm 9.8 µm @ 1,550 nm
Mode Field Diameter Tolerance	±0.4 µm @ 1310 nm ±0.5 µm @ 1550 nm
Polarization Mode Dispersion Link Design Value, maximum	0.06 ps/sqrt(km)
Standards Compliance	ITU-T G.657.A2 ITU-T G.657.B2

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

* 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