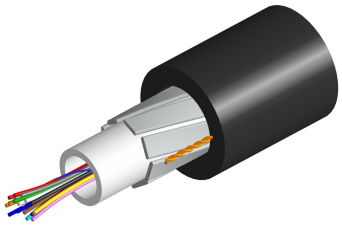
810009998/DB | O-006-CN-8F-M06BK/28G/HD



Fiber OSP cable, Single Jacket All-Dielectric, 6 fiber Gel-Filled, Outdoor Central Tube, Singlemode G.652.D, Meters jacket marking, Black jacket color

Product Classification

Regional Availability	Asia | Australia/New Zealand | EMEA | Latin America | North America
Portfolio	CommScope®
Product Type	Fiber OSP cable
Product Series	O-CN

General Specifications

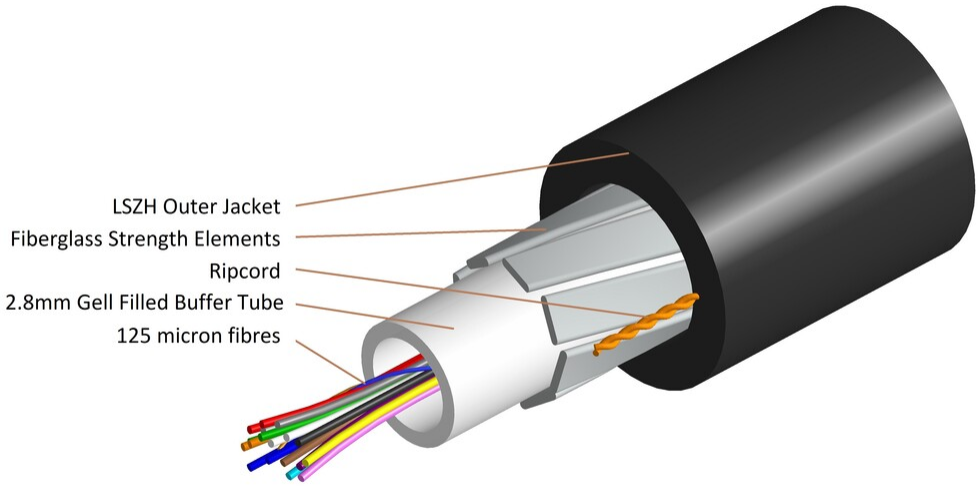
Cable Type	Central loose tube
Construction Type	Non-armored
Subunit Type	Gel-filled
Jacket Color	Black
Jacket Marking	Meters
Jacket Marking Method	Inkjet
Jacket Marking Text	COMMSCOPE GB F.O. CABLE 810009998/DB 6 x 9 /125 G857A1 HDPE (serial number) (metre mark)
Subunit, quantity	1
Fibers per Subunit, quantity	6
Total Fiber Count	6

Dimensions

Buffer Tube/Subunit Diameter	2.8 mm | 0.11 in
Diameter Over Jacket	5.3 mm | 0.209 in

Representative Image

810009998/DB | 0-006-CN-8F-M06BK/28G/HD



Material Specifications

Jacket Material	High density polyethylene (HDPE)

Mechanical Specifications

Minimum Bend Radius, loaded	120 mm | 4.724 in
Minimum Bend Radius, unloaded	100 mm | 3.937 in
Tensile Load, long term, maximum	800 N | 179.847 lbf
Tensile Load, short term, maximum	1200 N | 269.771 lbf
Compression	15 N/mm | 85.652 lb/in
Compression Test Method	IEC 60794-1-2 E3
Flex	25 cycles
Flex Test Method	IEC 60794-1 E6
Impact	5 N-m | 44.254 in lb
Impact Test Method	IEC 60794-1 E4
Strain	See long and short term tensile loads
Strain Test Method	IEC 60794-1-2-E1
Twist	5 cycles
Twist Test Method	IEC 60794-1 E7

Optical Specifications

Fiber Type	G.652.D

Environmental Specifications

Installation temperature	-30 °C to +70 °C (-22 °F to +158 °F)
Operating Temperature	-30 °C to +70 °C (-22 °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
Environmental Space	Aerial, lashed | Buried
Jacket UV Resistance	UV stabilized
Water Penetration	24 h

Environmental Test Specifications

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	IEC 60794-1 F1

Packaging and Weights

Cable weight	27 kg/km | 18.143 lb/kft

Included Products

CS-8F-TB	–	Low Macrobending, Zero Water Peak, Dispersion-Unshifted Singlemode Fiber

* Footnotes

Operating Temperature Specification applicable to non-terminated bulk fiber cable

CS-8F-TB

Low Macrobending, Zero Water Peak, Dispersion-Unshifted 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/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
Macrobending, 50 mm Ø mandrel, 100 turns	0.03 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	0.09 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
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.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

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