

Fiber indoor cable, Plenum MPO Trunk Cable, 144 fiber with 24-fiber, 3.0 mm subunits, Gel-free, Singlemode G.657.A2, 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-MP

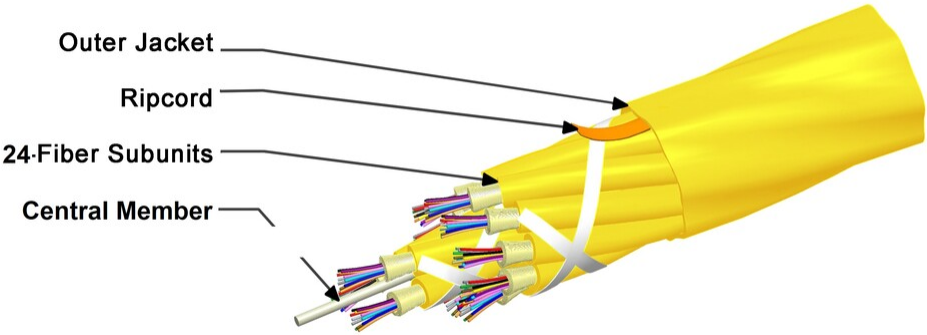
General Specifications

Cable Type	MPO trunk cable
Construction Type	Non-armored
Subunit Type	Gel-free
Jacket Color	Yellow
Jacket Marking	Feet
Subunit, quantity	6
Fibers per Subunit, quantity	24
Total Fiber Count	144

Dimensions

Buffer Tube/Subunit Diameter	3 mm 0.118 in
Diameter Over Jacket	11 mm 0.433 in

Representative Image



Mechanical Specifications

Minimum Bend Radius, loaded	164 mm 6.457 in
Minimum Bend Radius, unloaded	110 mm 4.331 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	25 cycles
Flex Test Method	FOTP-104 IEC 60794-1 E6
Impact	2.94 N-m 26.021 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	325 m 1,066.273 ft

Optical Specifications

Fiber Type	G.657.A2 G.657.A2/B2
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Environmental Specifications

Installation temperature	0 °C to +70 °C (+32 °F to +158 °F)
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Operating Temperature	0 °C to +70 °C (+32 °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

Low High Bend	0 °C to +70 °C (+32 °F to +158 °F)
Low High Bend Test Method	FOTP-37 IEC 60794-1 E11
Temperature Cycle	0 °C to +70 °C (+32 °F to +158 °F)
Temperature Cycle Test Method	FOTP-3 IEC 60794-1 F1

Packaging and Weights

Cable weight	126 kg/km 84.668 lb/kft
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Included Products

CS-8G1-MP	–	Enhanced Low Macrobending, Zero Water Peak, Dispersion-Unshifted Singlemode Fiber (ITU-T G.657.A2, B2)
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* Footnotes

Operating Temperature	Specification applicable to non-terminated bulk fiber cable
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CS-8G1-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	±0.3 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-8G1-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