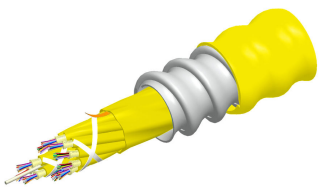
760256009 | P-048-MZ-8G1-F08YL/20T



Fiber indoor cable, Plenum MPO Trunk, interlocking aluminum armored with plenum jacket, 48 fiber multi-unit with 8 fiber subunits, Gel-free, Singlemode G.657.A2/B2, 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-MZ

General Specifications

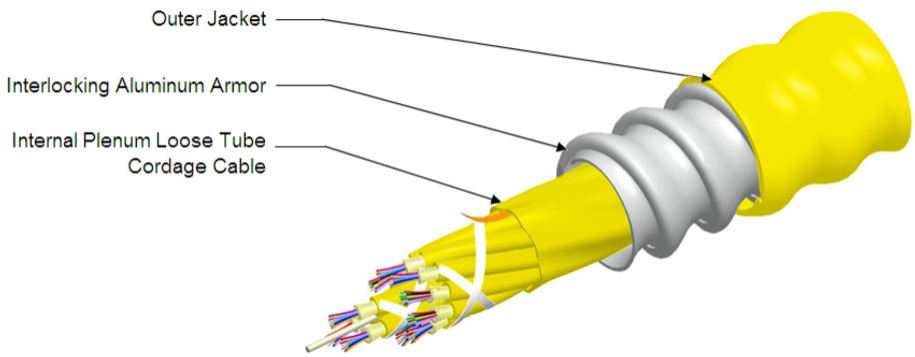
Armor Type	Interlocking aluminum
Cable Type	MPO trunk cable
Construction Type	Armored
Subunit Type	Gel-free
Jacket Color	Yellow
Jacket Marking	Feet
Subunit, quantity	6
Fibers per Subunit, quantity	8
Total Fiber Count	48

Dimensions

Buffer Tube/Subunit Diameter	2 mm | 0.079 in
Diameter Over Armor	15.9 mm | 0.626 in
Diameter Over Jacket	17.9 mm | 0.705 in

Representative Image

760256009 | P-048-MZ-8G1-F08YL/20T



Mechanical Specifications

Minimum Bend Radius, loaded	269 mm | 10.591 in
Minimum Bend Radius, unloaded	179 mm | 7.047 in
Tensile Load, long term, maximum	200 N | 44.962 lbf
Tensile Load, short term, maximum	667 N | 149.948 lbf
Compression	85 N/mm | 485.363 lb/in
Compression Test Method	FOTP-41 | IEC 60794-1 E3
Flex	300 cycles
Flex Test Method	FOTP-104 | IEC 60794-1 E6
Impact	35 N-m | 309.776 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	75 m | 246.063 ft

Optical Specifications

Fiber Type	G.657.A2/B2 | G.657.A2/B2

Environmental Specifications

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

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 OFCP (ETL) and c(ETL)
Flame Test Method	NFPA 130 | NFPA 262

Environmental Test Specifications

Heat Age	0 °C to +85 °C (+32 °F to +185 °F)
Heat Age Test Method	IEC 60794-1 F9
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	272 kg/km | 182.776 lb/kft

Included Products

CS-8G1-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-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 Test	689.476 N/mm² | 100000 psi

Dimensions

Fiber Curl, minimum	4 m | 13.123 ft

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

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