760228254 | P-024-MZ-8W-F12BK



Fiber Indoor cable, TeraSPEED® Plenum MPO Trunk, interlocking aluminum armored with plenum jacket, 24 fiber with 12 fiber subunits, Gel-free, Singlemode G.652.D and G.657.A1, Feet jacket marking, Black 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

Subunit Type Gel-free

Jacket Color Black
Jacket Marking Feet

Subunit, quantity 2

Fibers per Subunit, quantity 12

Total Fiber Count 24

Dimensions

Buffer Tube/Subunit Diameter 3 mm | 0.118 in

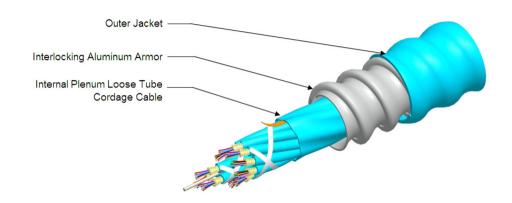
Diameter Over Armor 15.88 mm | 0.625 in

Diameter Over Jacket 17.9 mm | 0.705 in

Representative Image



760228254 | P-024-MZ-8W-F12BK



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 Tensile Load, short term, maximum 1335 N | 300.12 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

35 N-m | 309.776 in lb **Impact**

FOTP-25 | IEC 60794-1 E4 **Impact Test Method**

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 160 m | 524.934 ft

Optical Specifications

Fiber Type G.652.D and G.657.A1, TeraSPEED® | OS2 | OS2

400 N | 89.924 lbf

Environmental Specifications

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

COMMSC PE°

760228254 | P-024-MZ-8W-F12BK

Operating Temperature $0 \, ^{\circ}\text{C to } +70 \, ^{\circ}\text{C (+32 °F to } +158 \, ^{\circ}\text{F)}$

Storage Temperature $-40 \,^{\circ}\text{C} \text{ to } +70 \,^{\circ}\text{C} \, (-40 \,^{\circ}\text{F to } +158 \,^{\circ}\text{F})$

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 $0 \,^{\circ}\text{C to } +70 \,^{\circ}\text{C (+32 °F to } +158 \,^{\circ}\text{F)}$

Temperature Cycle Test Method FOTP-3 | IEC 60794-1 F1

Packaging and Weights

Cable weight 256 kg/km | 172.024 lb/kft

Regulatory Compliance/Certifications

Agency Classification

CHINA-ROHS Below maximum concentration value

ISO 9001:2015 Designed, manufactured and/or distributed under this quality management system

ROHS Compliant UK-ROHS Compliant



Included Products

CS-8W-MP - TeraSPEED® OS2 Singlemode Fiber

* Footnotes

Operating Temperature Specification applicable to non-terminated bulk fiber cable



TeraSPEED®

TeraSPEED® OS2 Singlemode Fiber

 $0.5 \, \mu m$

Product Classification

 Portfolio
 CommScope®

 Product Type
 Optical fiber

General Specifications

Cladding Diameter 125 µm **Cladding Diameter Tolerance** $\pm 0.7 \, \mu m$ 0.7 % Cladding Non-Circularity, maximum **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

Proof Tensile Stress 100,000 psi (0.69 GPa)

Dimensions

Core/Clad Offset, maximum

Fiber Curl, minimum 4 m | 13.123 ft

Mechanical Specifications

 Macrobending, 20 mm Ø mandrel, 1 turn
 0.75 dB @ 1,550 nm
 1 1.50 dB @ 1,625 nm

 Macrobending, 30 mm Ø mandrel, 10 turns
 0.25 dB @ 1,550 nm
 1 1.00 dB @ 1,625 nm

 Macrobending, 60 mm Ø mandrel, 100 turns
 0.05 dB @ 1,550 nm
 1 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



CS-8W-MP

Optical Specifications

Cabled Cutoff Wavelength, maximum1260 nmPoint Defects, maximum0.1 dB

Zero Dispersion Slope, maximum 0.092 ps/[km-nm-nm]

Zero Dispersion Wavelength, maximum1324 nmZero Dispersion Wavelength, minimum1300 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 @ 1,490 nm | 0.40 dB/km @ 1,550 nm | 0.50 dB/km @ 1,270 nm | 0.50 dB/km @ 1,575

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 | TIA-492CAAB (OS2)

Environmental Specifications

Heat Aging, maximum 0.05 dB/km @ 85 °C

Temperature Dependence, maximum0.05 dB/kmTemperature Humidity Cycling, maximum0.05 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)

Page 5 of 6

CS-8W-MP

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