# P-024-MP-8W-F36

Fiber indoor cable, TeraSPEED® Plenum for MPO Light Duty Patchcords, 24 fiber, Singlemode G. 652.D and G.657.Al, Feet jacket marking

#### **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

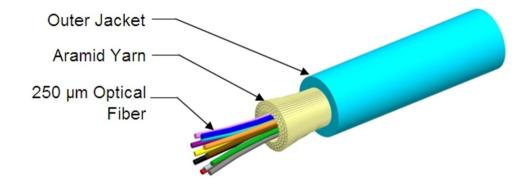
### General Specifications

Cable TypeMPO trunk cableConstruction TypeNon-armoredSubunit TypeGel-freeJacket MarkingFeetTotal Fiber Count24

**Dimensions** 

**Diameter Over Jacket** 3.6 mm | 0.142 in

## Representative Image



## Mechanical Specifications

Minimum Bend Radius, loaded 54 mm | 2.126 in

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Minimum Bend Radius, unloaded29 mm1.142 inTensile Load, long term, maximum120 N26.977 lbf

Tensile Load, short term, maximum 400 N | 89.924 lbf

Compression 4 N/mm | 22.841 lb/in

**Compression Test Method** FOTP-41 | IEC 60794-1 E3

Flex 300 cycles

Flex Test Method FOTP-104 | IEC 60794-1 E6

**Impact** 0.74 N-m | 6.55 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** 500 m | 1,640.42 ft

Optical Specifications

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

### **Environmental Specifications**

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

Operating Temperature  $0 \,^{\circ}\text{C}$  to +70  $\,^{\circ}\text{C}$  (+32  $\,^{\circ}\text{F}$  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 StandardsANSI/ICEA S-83-596Telcordia GR-409

Environmental Space Plenum

Flame Test Listing NEC OFNP (ETL) and c(ETL)

Flame Test Method 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**  $0 \, ^{\circ}\text{C} \text{ to } +70 \, ^{\circ}\text{C} \text{ (+32 } ^{\circ}\text{F to } +158 \, ^{\circ}\text{F)}$ 

**Low High Bend Test Method** FOTP-37 | IEC 60794-1 E11

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

COMMSC PE®

# P-024-MP-8W-F36

Temperature Cycle Test Method

FOTP-3 | IEC 60794-1 F1

Packaging and Weights

Cable weight 12 kg/km | 8.064 lb/kft

Regulatory Compliance/Certifications

Agency Classification

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

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)

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# 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