## P-096-MP-8W-F24

Fiber indoor cable, TeraSPEED® Plenum MPO Trunk, 96 fiber multi-unit with 24 fiber subunits, Singlemode G.652.D and G.657.A1, 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 Type
 MPO trunk cable

Construction Type Non-armored
Fiber Type, quantity 96

Fibers per Subunit, quantity 24

**Jacket Marking** Feet

**Subunit Type** Gel-free

Subunit, quantity 4

**Total Fiber Count** 96

Dimensions

Buffer Tube/Subunit Diameter3.6 mm | 0.142 inDiameter Over Jacket10.25 mm | 0.404 in

Representative Image



## P-096-MP-8W-F24



### Mechanical Specifications

Minimum Bend Radius, loaded 154 mm | 6.063 in

Minimum Bend Radius, unloaded 102 mm | 4.016 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 300 cycles

FIEX 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** 429 m | 1,407.48 ft

Optical Specifications

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

### **Environmental Specifications**

Installation temperature  $0 \, ^{\circ}\text{C} \, \text{to} + 70 \, ^{\circ}\text{C} \, (+32 \, ^{\circ}\text{F} \, \text{to} + 158 \, ^{\circ}\text{F})$ Operating Temperature  $0 \, ^{\circ}\text{C} \, \text{to} + 70 \, ^{\circ}\text{C} \, (+32 \, ^{\circ}\text{F} \, \text{to} + 158 \, ^{\circ}\text{F})$ Storage Temperature  $-40 \, ^{\circ}\text{C} \, \text{to} + 70 \, ^{\circ}\text{C} \, (-40 \, ^{\circ}\text{F} \, \text{to} + 158 \, ^{\circ}\text{F})$ 

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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 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** 95 kg/km | 63.837 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® OS2 Singlemode Fiber

# TeraSPEED®

#### **Product Classification**

 Portfolio
 CommScope®

 Product Type
 Optical fiber

### General Specifications

**Cladding Diameter** 125 µm **Cladding Diameter Tolerance**  $\pm 0.7 \, \mu m$ 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 Diameter** 8.3 µm Core/Clad Offset, maximum  $0.5 \, \mu m$ 

**Proof Test** 689.476 N/mm<sup>2</sup> | 100000 psi

#### **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 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
 0.05 dB @ 1,625 nm

Coating Strip Force, maximum 8.9 N | 2.001 lbf



## CS-8W-MP

Coating Strip Force, minimum 1.3 N | 0.292 lbf

Dynamic Fatigue Parameter, minimum 20

**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

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, 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

COMMSCOPE°

# CS-8W-MP



## \* 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

