# P-024-MP-6F-F12

Fiber indoor cable, OptiSPEED® Plenum MPO Trunk, 24 fiber with 12 fiber subunits, Multimode OM1, 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	24
Fibers per Subunit, quantity	12
Jacket Marking	Feet
Subunit Type	Gel-free
Subunit, quantity	2
Total Fiber Count	24
Dimensions	
Height Over Jacket	3.9 mm   0.154 in
Width Over Jacket	6.9 mm   0.272 in
Buffer Tube/Subunit Diameter	3 mm   0.118 in

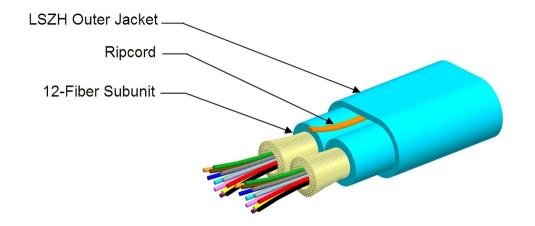
### Representative Image

Page 1 of 5

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# Mechanical Specifications

Minimum Bend Radius, loaded	58 mm   2.283 in
Minimum Bend Radius, unloaded	39 mm   1.535 in
Tensile Load, long term, maximum	200 N   44.962 lbf
Tensile Load, short term, maximum	667 N   149.948 lbf
Compression	10 N/mm   57.101 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	OM1, OptiSPEED®   OM1, OptiSPEED®

### **Environmental Specifications**

Installation temperature

0 °C to +70 °C (+32 °F to +158 °F)

Page 2 of 5

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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 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

29 kg/km | 19.487 lb/kft

#### Regulatory Compliance/Certifications

#### Agency

Classification

Designed, manufactured and/or distributed under this quality management system



ISO 9001:2015

#### Included Products

CS-6F-MP – OptiSPEED® OM1 Multimode Fiber

### \* Footnotes

**Operating Temperature** Specification applicable to non-terminated bulk fiber cable

Page 3 of 5

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#### OptiSPEED® OM1 Multimode Fiber

# OptiSPEED<sup>®</sup>

#### Product Classification

Portfolio	CommScope®
Product Type	Optical fiber
General Specifications	
Cladding Diameter	125 µm
Cladding Diameter Tolerance	±1.0 μm
Cladding Non-Circularity, maximum	1 %
Coating Diameter (Colored)	254 µm
Coating Diameter (Uncolored)	245 µm
Coating Diameter Tolerance (Colored)	±7 μm
Coating Diameter Tolerance (Uncolored)	±10 μm
Coating/Cladding Concentricity Error, maximum	12 µm
Core Diameter	62.5 μm
Core Diameter Tolerance	±2.5 μm
Core/Clad Offset, maximum	1 µm
Proof Test	689.476 N/mm <sup>2</sup>   100000 psi
Mechanical Specifications	

#### Mechanical Specifications

0.50 dB @ 1,300 nm   0.50 dB @ 850 nm
8.9 N   2.001 lbf
1.3 N   0.292 lbf
18

### **Optical Specifications**

Page 4 of 5

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# CS-6F-MP

Numerical Aperture	0.275
Numerical Aperture Tolerance	±0.015
Point Defects, maximum	0.15 dB
Zero Dispersion Slope, maximum	0.097 ps/[km-nm-nm]
Zero Dispersion Wavelength, maximum	1365 nm
Zero Dispersion Wavelength, minimum	1320 nm

# Optical Specifications, Wavelength Specific

1 Gbps Ethernet Distance	300 m @ 850 nm   550 m @ 1,300 nm
Attenuation, maximum	1.00 dB/km @ 1,300 nm   3.00 dB/km @ 850 nm
Backscatter Coefficient	-68.0 dB @ 850 nm   -75.7 dB @ 1,300 nm
Bandwidth, OFL, minimum	220 MHz-km @ 850 nm   500 MHz-km @ 1,300 nm
Index of Refraction	1.491 @ 1,300 nm   1.496 @ 850 nm
Standards Compliance	TIA-492AAAA (OM1)

## **Environmental Specifications**

Heat Aging, maximum	0.20 dB/km @ 85 °C
Temperature Dependence, maximum	0.1 dB/km
Temperature Humidity Cycling, maximum	0.2 dB/km
Water Immersion, maximum	0.20 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

Page 5 of 5

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