P-012-DZ-6F-FSU



Fiber indoor cable, OptiSPEED® Plenum Distribution, interlocking aluminum armored with plenum jacket, 12 fiber single-unit, Gel-free, 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-DZ

General Specifications

Armor Type Interlocking aluminum

Cable Type Distribution

Construction Type Armored

Subunit Type Gel-free

Jacket Marking Feet

Total Fiber Count 12

Dimensions

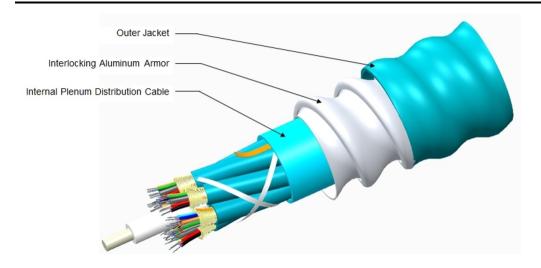
Diameter Over Armor 10.8 mm | 0.425 in

Diameter Over Jacket 12.8 mm | 0.504 in

Representative Image



P-012-DZ-6F-FSU



Mechanical Specifications

Minimum Bend Radius, loaded257 mm10.118 inMinimum Bend Radius, unloaded180 mm7.087 inTensile Load, long term, maximum200 N44.962 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 25 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 136 m | 446.194 ft

Optical Specifications

Fiber Type OM1, OptiSPEED® | OM1, OptiSPEED®

Environmental Specifications

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

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Operating Temperature $-20 \,^{\circ}\text{C} \text{ to } +70 \,^{\circ}\text{C} \left(-4 \,^{\circ}\text{F to } +158 \,^{\circ}\text{F}\right)$

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

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 262

Environmental Test Specifications

Heat Age -20 °C to +85 °C (-4 °F to +185 °F)

Heat Age Test Method IEC 60794-1 F9

Low High Bend -20 °C to +70 °C (-4 °F to +158 °F)

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

Temperature Cycle $-20 \,^{\circ}\text{C} \text{ to } +70 \,^{\circ}\text{C} \, (-4 \,^{\circ}\text{F to } +158 \,^{\circ}\text{F})$

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

Packaging and Weights

Cable weight 151 kg/km | 101.467 lb/kft

Regulatory Compliance/Certifications

Agency Classification

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

Included Products

CS-6F-TB - OptiSPEED® OM1 Multimode

Fiber

* Footnotes

Operating Temperature Specification applicable to non-terminated bulk fiber cable



OptiSPEED®

OptiSPEED® OM1 Multimode Fiber

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

Proof Tensile Stress 100,000 psi (0.69 GPa)

Tight Buffer Diameter 900 μm Tight Buffer Diameter Tolerance $\pm 40 \ \mu m$

Mechanical Specifications

Core Diameter Tolerance

Core/Clad Offset, maximum

Macrobending, 75 mm Ø mandrel, 100 turns 0.50 dB @ 1,300 nm | 0.50 dB @ 850 nm

±2.5 µm

1 µm

Coating Strip Force, maximum $8.9 \,\mathrm{N}$ | $2.001 \,\mathrm{lbf}$ Coating Strip Force, minimum $1.3 \,\mathrm{N}$ | $0.292 \,\mathrm{lbf}$

Dynamic Fatigue Parameter, minimum 18

Optical Specifications

Numerical Aperture 0.275

COMMSCOPE®

CS-6F-TB

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, maximum0.1 dB/kmTemperature Humidity Cycling, maximum0.2 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

