

Fiber indoor cable, OptiSPEED® Plenum Distribution, interlocking aluminum armored with plenum jacket, 24 fiber single-unit, Gel-free, Multimode OM1, Feet jacket marking, Orange 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-DZ

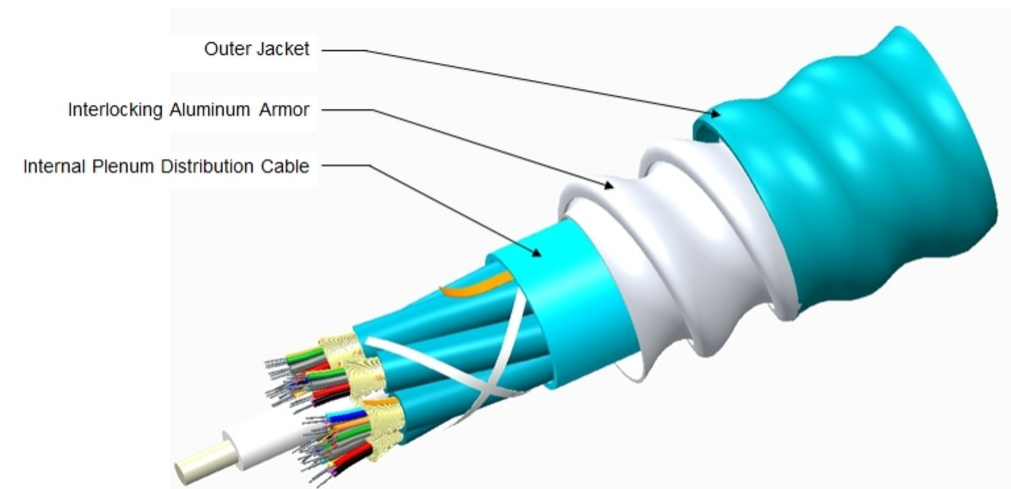
## General Specifications

Armor Type	Interlocking aluminum
Cable Type	Distribution
Construction Type	Armored
Subunit Type	Gel-free
Jacket Color	Orange
Jacket Marking	Feet
Total Fiber Count	24

## Dimensions

Diameter Over Armor	13.34 mm   0.525 in
Diameter Over Jacket	17.4 mm   0.685 in

## Representative Image



## Mechanical Specifications

Minimum Bend Radius, loaded	261 mm   10.276 in
Minimum Bend Radius, unloaded	174 mm   6.85 in
Tensile Load, long term, maximum	400 N   89.924 lbf
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	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	133 m   436.352 ft

## Optical Specifications

Fiber Type	OM1, OptiSPEED®   OM1, OptiSPEED®
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## Environmental Specifications

Installation temperature	0 °C to +70 °C (+32 °F to +158 °F)
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Operating Temperature	-20 °C to +70 °C (-4 °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 OFCP (ETL) and c(ETL)
Flame Test Method	NFPA 130   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 °C to +70 °C (-4 °F to +158 °F)
Temperature Cycle Test Method	FOTP-3   IEC 60794-1 F1

### Packaging and Weights

Cable weight	307 kg/km   206.294 lb/kft
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### Regulatory Compliance/Certifications

Agency	Classification
CHINA-ROHS	Below maximum concentration value
ISO 9001:2015	Designed, manufactured and/or distributed under this quality management system
REACH-SVHC	Compliant as per SVHC revision on <a href="http://www.commscope.com/ProductCompliance">www.commscope.com/ProductCompliance</a>
ROHS	Compliant
UK-ROHS	Compliant



### Included Products

CS-6F-TB	– OptiSPEED® OM1 Multimode Fiber
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### \* Footnotes

Operating Temperature	Specification applicable to non-terminated bulk fiber cable
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OptiSPEED®

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 Tensile Stress	100,000 psi (0.69 GPa)
Tight Buffer Diameter	900 µm
Tight Buffer Diameter Tolerance	±40 µm

Mechanical Specifications

Macrobending, 75 mm Ø mandrel, 100 turns	0.50 dB @ 1,300 nm   0.50 dB @ 850 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	18

Optical Specifications

Numerical Aperture	0.275
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# 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, 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