

Fiber Indoor/Outdoor cable, LazrSPEED®, Plenum Distribution Cable, 48 fiber multi-unit with 12 fiber subunits, Gel-free, Multimode OM5, Feet jacket marking, Black jacket color

Product Classification

Regional Availability	Asia Australia/New Zealand Latin America Middle East /Africa North America
Portfolio	CommScope®
Product Type	Fiber indoor/outdoor cable
Product Series	P-OD

General Specifications

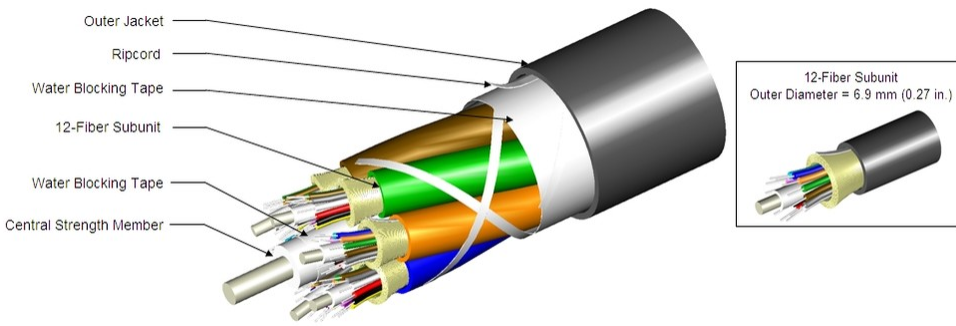
Cable Type	Distribution
Construction Type	Non-armored
Subunit Type	Gel-free
Jacket Color	Black
Jacket Marking	Feet
Subunit, quantity	4
Fibers per Subunit, quantity	12
Total Fiber Count	48

Dimensions

Buffer Tube/Subunit Diameter	6.9 mm 0.272 in
Diameter Over Jacket	18.9 mm 0.744 in

Representative Image

760238377 | P-048-OD-5G-FMUBK



Mechanical Specifications

Minimum Bend Radius, loaded	283 mm 11.142 in
Minimum Bend Radius, unloaded	189 mm 7.441 in
Tensile Load, long term, maximum	1068 N 240.096 lbf
Tensile Load, short term, maximum	3560 N 800.32 lbf
Compression	22 N/mm 125.623 lb/in
Compression Test Method	FOTP-41 IEC 60794-1 E3
Flex	100 cycles
Flex Test Method	FOTP-104 IEC 60794-1 E6
Impact	5.88 N-m 52.042 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	330 m 1,082.677 ft

Optical Specifications

Fiber Type	OM5, LazrSPEED® wideband OM5, LazrSPEED® wideband
-------------------	---

Environmental Specifications

Installation temperature	-30 °C to +70 °C (-22 °F to +158 °F)
Operating Temperature	-25 °C to +70 °C (-13 °F to +158 °F)
Storage Temperature	-40 °C to +75 °C (-40 °F to +167 °F)

760238377 | P-048-OD-5G-FMUBK

Cable Qualification Standards	ANSI/ICEA S-104-696 Telcordia GR-20 (water penetration) Telcordia GR-409
Environmental Space	Plenum
Flame Test Listing	NEC OFNP (ETL) and c(ETL)
Flame Test Method	NFPA 130 NFPA 262
Jacket UV Resistance	UV stabilized
Water Penetration	24 h
Water Penetration Test Method	FOTP-82 IEC 60794-1 F5

Environmental Test Specifications

Cable Freeze Test Method	IEC 60794-1 F15
Heat Age	-40 °C to +85 °C (-40 °F to +185 °F)
Heat Age Test Method	IEC 60794-1 F9
Low High Bend	-40 °C to +70 °C (-40 °F to +158 °F)
Low High Bend Test Method	FOTP-37 IEC 60794-1 E11
Temperature Cycle	-40 °C to +70 °C (-40 °F to +158 °F)
Temperature Cycle Test Method	FOTP-3 IEC 60794-1 F1

Packaging and Weights

Cable weight	330 kg/km 221.75 lb/kft
---------------------	---------------------------

Regulatory Compliance/Certifications

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

Included Products

CS-5G-TB	– LazrSPEED® OM5 WideBand Multimode Fiber
----------	---

* Footnotes

Operating Temperature Specification applicable to non-terminated bulk fiber cable

LazrSPEED® OM5 WideBand Multimode Fiber

LazrSPEED®

Product Classification

Portfolio	CommScope®
Product Type	Optical fiber

General Specifications

Cladding Diameter	125 µm
Cladding Diameter Tolerance	±0.8 µm
Cladding Non-Circularity, maximum	0.7 %
Coating Diameter (Colored)	254 µm
Coating Diameter (Uncolored)	242 µm
Coating Diameter Tolerance (Colored)	±7 µm
Coating Diameter Tolerance (Uncolored)	±5 µm
Coating/Cladding Concentricity Error, maximum	12 µm
Core Diameter	50 µm
Core Diameter Tolerance	±2.5 µm
Core/Clad Offset, maximum	1 µm
Proof Test	689.476 N/mm ² 100000 psi
Tight Buffer Diameter	900 µm
Tight Buffer Diameter Tolerance	±40 µm

Mechanical Specifications

Macrobending, 15 mm Ø mandrel, 2 turns	0.20 dB @ 850 nm 0.50 dB @ 1,300 nm
Macrobending, 30 mm Ø mandrel, 2 turns	0.10 dB @ 850 nm 0.30 dB @ 1,300 nm
Macrobending, 75 mm Ø mandrel, 100 turns	0.50 dB @ 1,300 nm 0.50 dB @ 850 nm
Coating Strip Force, maximum	4.5 N 1.012 lbf

CS-5G-TB

Coating Strip Force, minimum	0.9 N 0.202 lbf
Dynamic Fatigue Parameter, minimum	18

Optical Specifications

Numerical Aperture	0.2
Numerical Aperture Tolerance	±0.010
Point Defects, maximum	0.15 dB
Zero Dispersion Slope, maximum (OM5)	-412/(840(1-(λ0/840)^4)) ps/[km-nm-nm]
Zero Dispersion Wavelength, maximum	1328 nm
Zero Dispersion Wavelength, minimum	1297 nm

Optical Specifications, Wavelength Specific

1 Gbps Ethernet Distance	1,110 m @ 850 nm 600 m @ 1,300 nm
10 Gbps Ethernet Distance	550 m @ 850 nm
Attenuation, maximum	1.00 dB/km @ 1,300 nm 2.20 dB/km @ 953 nm 3.00 dB/km @ 850 nm
Bandwidth, Laser, minimum	2,600 MHz-km @ 953 nm 4,700 MHz-km @ 850 nm 500 MHz-km @ 1,300 nm
Bandwidth, OFL, minimum	1,950 MHz-km @ 953 nm 3,500 MHz-km @ 850 nm 500 MHz-km @ 1,300 nm
Index of Refraction	1.478 @ 1,300 nm 1.483 @ 850 nm
Standards Compliance	ANSI/TIA-568.3-D wideband multimode fiber cable IEC 60793-2-10, edition 6, model A1a.4 ISO 11801-1 cabled optical fiber performance category OM5 TIA-492AAAE (OM5)

Environmental Specifications

Heat Aging, maximum	0.10 dB/km @ 85 °C
Temperature Dependence, maximum	0.1 dB/km
Temperature Humidity Cycling, maximum	0.1 dB/km
Water Immersion, maximum	0.10 dB/km @ 23 °C

Regulatory Compliance/Certifications

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

* Footnotes

CS-5G-TB

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