760218313 | HEC-24MM-1204M-AHF

HELIAX® FiberFeed® LazrSPEED® Hybrid Cable

Product Classification

Regional Availability	Asia | Australia/New Zealand | EMEA | Latin America | North America
Portfolio	CommScope®
Product Type	Hybrid cable, copper and fiber
Product Brand	FiberFeed® | HELIAX® | LazrSPEED®

General Specifications

Application	Remote radio head
Cable Type	Wireless feeder
Conductors, quantity	12
Construction Type	Shielded
Fiber Short Description	RFF–4 mm²
Fiber Type, quantity	24
Fibers per Subunit, quantity	12
Inner Shield (Tape) Material	Corrugated aluminum
Jacket Color	Black
Outer Shield (Tape) Material	Fire retardant PE
Strength Members	Glass reinforced plastic rod
Subunit, quantity	2
Total Fiber Count	24
Water Blocking Method	Water blocking tape(s) | Water blocking threads

Dimensions

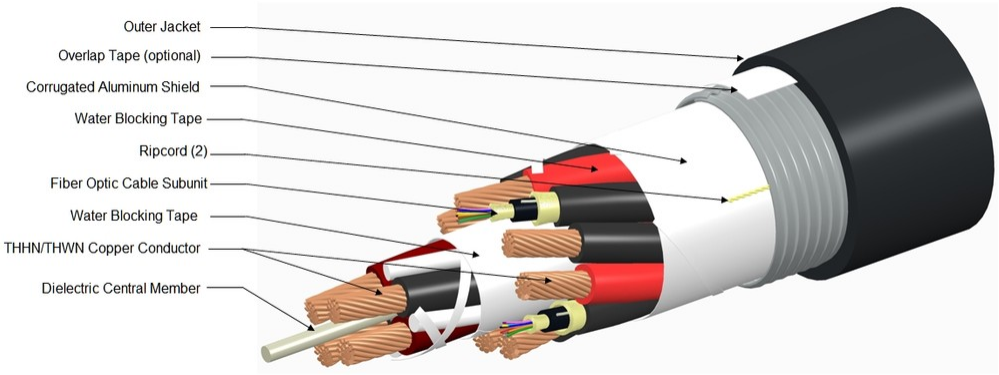
Buffer Tube/Subunit Diameter	3.556 mm | 0.14 in
Diameter Over Jacket	23.368 mm | 0.92 in
Conductor Gauge	4 mm² class 2

Electrical Specifications

dc Resistance Note	Maximum value based on a standard condition of 20 °C (68 °F)
dc Resistance, maximum	4.61 ohms/km | 1.405 ohms/kft

760218313 | HEC-24MM-1204M-AHF

Representative Image



Material Specifications

Ripcord Material	Para-aramid synthetic fiber

Mechanical Specifications

Minimum Bend Radius, multiple bends, loaded	467.36 mm | 18.4 in
Minimum Bend Radius, multiple bends, unloaded	279.4 mm | 11 in
Minimum Bend Radius, single bend, unloaded	162.56 mm | 6.4 in
Tensile Load, long term, maximum	800.68 N | 180 lbf
Tensile Load, short term, maximum	2,668.932 N | 600 lbf
Compression	2.25 kg/mm | 126 lb/in
Compression Test Method	FOTP-41
Flex Test Method	FOTP-104
Impact	4.34 ft lb | 5.884 N-m
Impact Test Method	FOTP-25
Twist	10 cycles
Twist Test Method	FOTP-85

Optical Specifications

Fiber Type	OM2+, LazrSPEED® 150 | OM2+, LazrSPEED® 150

Environmental Specifications

Installation temperature	-30 °C to +70 °C (-22 °F to +158 °F)
Operating Temperature	-40 °C to +80 °C (-40 °F to +176 °F)

Storage Temperature	-40 °C to +80 °C (-40 °F to +176 °F)
Cable Qualification Standards	ANSI/ICEA S-87-640 | Telcordia GR-20 | Telcordia GR-409
Environmental Space	Wireless installation

Packaging and Weights

Cable weight	818.49 kg/km | 550 lb/kft

Regulatory Compliance/Certifications

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

Included Products

CS-5M-MP	–	LazrSPEED® 150 OM2+ Bend-Insensitive Multimode Fiber

* Footnotes

Operating Temperature Specification applicable to non-terminated bulk fiber cable

CS-5M-MP

LazrSPEED® 150 OM2+ Bend-Insensitive Multimode Fiber

LazrSPEED® 150

Product Classification

Portfolio	CommScope®
Product Type	Optical fiber

General Specifications

Cladding Diameter	125 µm
Cladding Diameter Tolerance	±0.8 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	50 µm
Core Diameter Tolerance	±2.5 µm
Core/Clad Offset, maximum	1.5 µm
Proof Test	689.476 N/mm² | 100000 psi

Mechanical Specifications

Macrobending, 15 mm mandrel, 2 turns	0.20 dB @ 850 nm | 0.50 dB @ 1,300 nm
Macrobending, 30 mm mandrel, 2 turns	0.10 dB @ 850 nm | 0.30 dB @ 1,300 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	0.2
Numerical Aperture Tolerance	±0.015
Point Defects, maximum	0.15 dB
Zero Dispersion Slope, maximum	0.105 ps/[km-nm-nm]
Zero Dispersion Wavelength, maximum	1316 nm
Zero Dispersion Wavelength, minimum	1297 nm

Optical Specifications, Wavelength Specific

1 Gbps Ethernet Distance	600 m @ 1,300 nm | 800 m @ 850 nm
10 Gbps Ethernet Distance	150 m @ 850 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, Laser, minimum	500 MHz-km @ 1,300 nm | 950 MHz-km @ 850 nm
Bandwidth, OFL, minimum	500 MHz-km @ 1,300 nm | 700 MHz-km @ 850 nm
Differential Mode Delay	0.70 ps/m @ 850 nm | 0.88 ps/m @ 1,300 nm
Index of Refraction	1.479 @ 1,300 nm | 1.483 @ 850 nm
Standards Compliance	TIA-492AAAB (OM2+)

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