

CommScope® FiberGuard® Interlocking Armored Distribution Cable

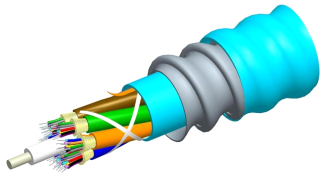
Available aluminum interlocking armor with an outer jacket

For installations where conduit or innerduct are typically installed, CommScope offers premise fiber optic cables inside an interlocking armor that provides protection against damage due to extreme conditions. This construction can eliminate the need for installing conventional conduit or innerduct and then pulling in the fiber optic cable, thus reducing the overall time and cost of the installation.

CommScope's FiberGuard Interlocking Armored Cable offers outstanding mechanical protection for sensitive cables combined with excellent flexibility and reduces the potential of data transmission loss/failures caused by accidental cut through, crushing, mechanical vibration and rub through damage via adjacent cables or other objects.

Applications: • Local Area Networks • Factory Automation • Critical Data Lines • Video, Robotics • Commercial Construction or Renovations (Schools, Health Care) • Heavy Industry: Mining, Pulp & Paper, Petro-chemical • High Security Areas: Hospitals, Military Installations, Financial Centers, Casinos

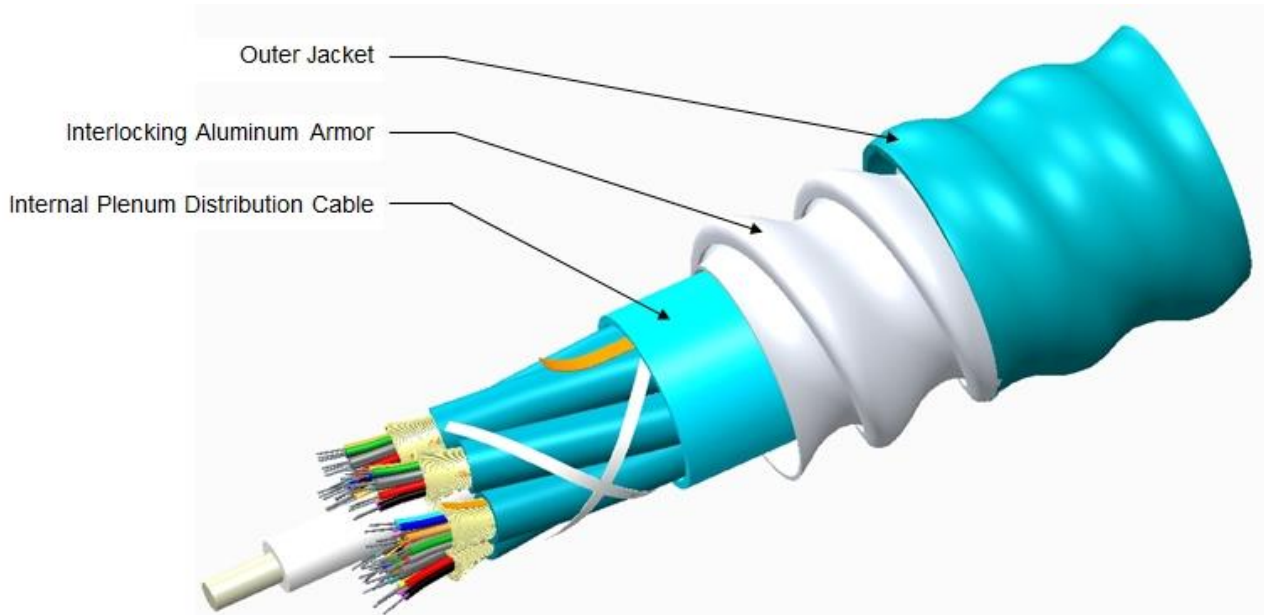
- Flame Rating: NEC & CEC compliant for OFCR, OFCP and OFCR-LS (Limited Smoke)
- Outer jacket colored for easy identification
- Printing on outer jacket for ease of identification with sequential length marking in feet or meters
- Indoor cable constructions



760127910 | P-024-DZ-5K-FSUAQ

Plenum Distribution Cable, interlocking aluminum armored with plenum jacket, 24 fiber single-unit

Representative Image



General Specifications

Cable Type	Distribution
Construction Type	Armored
Subunit Type	Gel-free

Construction Materials

Fiber Type Solution	LazrSPEED® 550, 50 µm multimode fiber (OM4)
Total Fiber Count	24
Armor Type	Interlocking aluminum
Fiber Type	LazrSPEED® 550, 50 µm multimode fiber (OM4)
Fiber Type, quantity	24
Jacket Color	Aqua

Dimensions

Cable Weight	206.0 lb/kft 307.0 kg/km
Diameter Over Armor	13.34 mm 0.53 in
Diameter Over Jacket	17.40 mm 0.69 in

Physical Specifications

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Minimum Bend Radius, loaded	34.8 cm		13.7 in
Minimum Bend Radius, unloaded	24.4 cm		9.6 in
Tensile Load, long term, maximum	400 N		90 lbf
Tensile Load, short term, maximum	1335 N		300 lbf
Vertical Rise, maximum	133.0 m		436.4 ft

Flame Test Specifications

Flame Test Listing	NEC OFCP (ETL) and c(ETL)
Flame Test Method	NFPA 262

Environmental Specifications

Environmental Space	Plenum
Installation Temperature	0 °C to +70 °C (+32 °F to +158 °F)
Operating Temperature	-20 °C to +70 °C (-4 °F to +158 °F)
Storage Temperature	-40 °C to +70 °C (-40 °F to +158 °F)

Mechanical Test Specifications

Compression	485 lb/in		85 N/mm
Compression Test Method	FOTP-41		IEC 60794-1 E3
Flex	25 cycles		
Flex Test Method	FOTP-104		IEC 60794-1 E6
Impact	25.80 ft lb		35.00 N-m
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

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

Qualification Specifications

Cable Qualification Standards	ANSI/ICEA S-83-596 Telcordia GR-409
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Regulatory Compliance/Certifications

Agency	Classification
RoHS 2011/65/EU	Compliant
ISO 9001:2008	Designed, manufactured and/or distributed under this quality management system



Included Products

CS-5K-TB (Product Component—not orderable) — LazrSPEED® 550 OM4 Bend-Insensitive Multimode Fiber

LazrSPEED® 550 CS-5K-TB LazrSPEED® 550 OM4 Bend-Insensitive Multimode Fiber

Optical Specifications, Wavelength Specific

Standards Compliance	IEC 61793-2-10, type A1a.3a IEC 61793-2-10, type A1a.3b TIA-492AAAD (OM4)
Attenuation, maximum	1.00 dB/km @ 1300 nm 3.00 dB/km @ 850 nm
Differential Mode Delay Note	Superior to TIA-492AAAC and IEC 60793-2-10 at 850 nm
Index of Refraction	1.479 @ 1300 nm 1.483 @ 850 nm
1 Gbps Ethernet Distance	600 m @ 1300 nm 1110 m @ 850 nm
10 Gbps Ethernet Distance	550 m @ 850 nm 1804 ft @ 850 nm
Bandwidth, Laser, minimum	500 MHz-km @ 1300 nm 4700 MHz-km @ 850 nm
Bandwidth, OFL, minimum	500 MHz-km @ 1300 nm 3500 MHz-km @ 850 nm
Differential Mode Delay	0.70 ps/m @ 850 nm 0.88 ps/m @ 1300 nm
Backscatter Coefficient	-75.7 dB @ 1300 nm -68.0 dB @ 850 nm

Physical Specifications

Cladding Diameter	125.0 μm
Cladding Diameter Tolerance	$\pm 1.0 \mu\text{m}$
Cladding Non-Circularity, maximum	1.0 %
Coating Diameter (Colored)	254 μm
Coating Diameter (Uncolored)	245 μm
Coating Diameter Tolerance (Colored)	$\pm 7 \mu\text{m}$
Coating Diameter Tolerance (Uncolored)	$\pm 10 \mu\text{m}$
Tight Buffer Diameter	900 μm
Tight Buffer Diameter Tolerance	$\pm 40 \mu\text{m}$
Coating/Cladding Concentricity Error, maximum	6 μm
Core Diameter	50.0 μm
Core Diameter Tolerance	$\pm 2.5 \mu\text{m}$
Core/Clad Offset, maximum	1.5 μm

Optical Specifications, General

Numerical Aperture Tolerance	± 0.015
Numerical Aperture	0.200
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

Mechanical Specifications

Coating Strip Force, maximum	8.9 N 2.0 lbf
Coating Strip Force, minimum	1.3 N 0.3 lbf
Dynamic Fatigue Parameter, minimum	18
Macrobending, 15 mm mandrel, 2 turns	0.20 dB @ 850 nm 0.50 dB @ 1300 nm
Macrobending, 30 mm mandrel, 2 turns	0.10 dB @ 850 nm 0.30 dB @ 1300 nm
Macrobending, 75 mm mandrel, 100 turns	0.50 dB @ 850 nm 0.50 dB @ 1300 nm
Proof Test	0.69 N/mm ² 100.00 psi

Environmental Specifications

Heat Aging, maximum	0.20 dB @ 85 °C
Temperature Dependence, maximum	0.10 dB
Temperature Humidity Cycling, maximum	0.20 dB
Water Immersion, maximum	0.20 dB @ 23 °C

Regulatory Compliance/Certifications

Agency	Classification
ISO 9001:2008	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