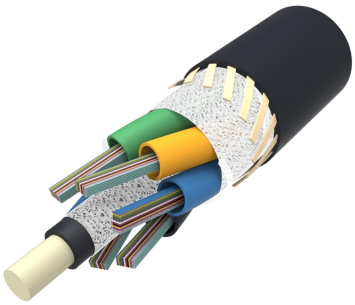
760214239 | O-864-LN-RB-F12NS/5X/99C



Fiber OSP Cable, Non-Armored, All-Dielectric, 864 fiber, Gel-Filled Loose Tube Ribbon, Multimode OM4 bend insensitive, Feet jacket marking, Black jacket color

OBSOLETE

Product Classification

Regional Availability	Asia | Australia/New Zealand | EMEA | Latin America | North America
Portfolio	CommScope®
Product Type	Fiber OSP cable
Product Series	O-LN

General Specifications

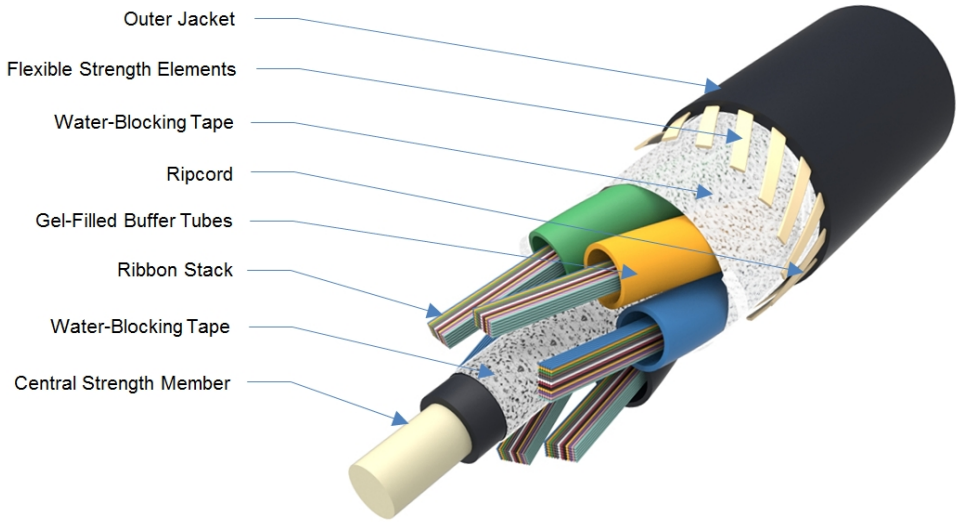
Cable Type	Ribbon loose tube
Construction Type	Non-armored
Subunit Type	Gel-filled
Fibers per Ribbon, quantity	12
Jacket Color	Black
Jacket Marking	Feet
Total Fiber Count	864

Dimensions

Buffer Tube/Subunit Diameter	7.2 mm | 0.283 in
Diameter Over Jacket	25.1 mm | 0.988 in

Representative Image

760214239 | 0-864-LN-RB-F12NS/5X/99C



Mechanical Specifications

Minimum Bend Radius, loaded	375.9 mm | 14.799 in
Minimum Bend Radius, unloaded	375.9 mm | 14.799 in
Tensile Load, long term, maximum	1480 N | 332.717 lbf
Tensile Load, short term, maximum	4500 N | 1,011.64 lbf
Compression	22 N/mm | 125.623 lb/in
Compression Test Method	FOTP-41 | IEC 60794-1 E3
Flex	25 cycles
Flex Test Method	FOTP-104 | IEC 60794-1 E6
Impact	4.4 N-m | 38.943 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

Optical Specifications

Fiber Type	OM4, bend insensitive | OM4, bend insensitive

Environmental Specifications

Installation temperature	-30 °C to +60 °C (-22 °F to +140 °F)
Operating Temperature	-40 °C to +70 °C (-40 °F to +158 °F)
Storage Temperature	-40 °C to +75 °C (-40 °F to +167 °F)
Cable Qualification Standards	ANSI/ICEA S-87-640 | RUS PE-90 (7CFR 1755.900)
Environmental Space	Aerial, lashed | Buried
Jacket UV Resistance	UV stabilized
Water Penentration	24 h
Water Penentration Test Method	FOTP-82 | IEC 60794-1 F5

Environmental Test Specifications

Drip	70 °C | 158 °F
Drip Test Method	FOTP-81
Heat Age	-40 °C to +85 °C (-40 °F to +185 °F)
Heat Age Test Method	IEC 60794-1 F9
Low High Bend	-30 °C to +60 °C (-22 °F to +140 °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	459 kg/km | 308.434 lb/kft

Regulatory Compliance/Certifications

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

Included Products

CS-5X-RB	– 50µm OM4 Bend-Insensitive Multimode Fiber

* Footnotes

Operating Temperature Specification applicable to non-terminated bulk fiber cable

CS-5X-RB

50µm OM4 Bend-Insensitive 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)	250 µm
Coating Diameter (Uncolored)	245 µm
Coating Diameter Tolerance (Colored)	±15 µm
Coating Diameter Tolerance (Uncolored)	±10 µm
Coating/Cladding Concentricity Error, maximum	12 µm
Core Diameter	50 µm
Core Diameter Tolerance	±3 µm
Core/Clad Offset, maximum	1 µm
Proof Test	689.476 N/mm² | 100000 psi

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
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	0.2 dB
Zero Dispersion Slope, maximum	0.105 ps/[km-nm-nm]
Zero Dispersion Wavelength, maximum	1340 nm

Zero Dispersion Wavelength, minimum	1295 nm

Optical Specifications, Wavelength Specific

1 Gbps Ethernet Distance	1,000 m @ 850 nm | 550 m @ 1,300 nm
10 Gbps Ethernet Distance	550 m @ 850 nm
Attenuation, maximum	1.50 dB/km @ 1,300 nm | 3.50 dB/km @ 850 nm
Backscatter Coefficient	-68.0 dB @ 850 nm | -75.7 dB @ 1,300 nm
Bandwidth, Laser, minimum	4,700 MHz-km @ 850 nm | 500 MHz-km @ 1,300 nm
Bandwidth, OFL, minimum	3,500 MHz-km @ 850 nm | 500 MHz-km @ 1,300 nm
Differential Mode Delay Note	Superior to TIA-492AAAC and IEC 60793-2-10 at 850 nm
Index of Refraction	1.478 @ 1,300 nm | 1.482 @ 850 nm
Standards Compliance	TIA-492AAAD (OM4)

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

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