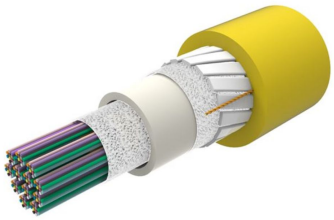
760246291 | N-432-CN-RR-F12YL/8G1/99G/C



Fiber indoor cable, All-Dielectric, LSZH/Riser-Rated, Gel-Free, Central Tube Rollable Ribbon, 432 fiber, Singlemode G.657.A2/B2, Feet jacket marking, Yellow jacket color, Cca flame rating

Product Classification

Regional Availability	Asia | Australia/New Zealand | EMEA | Latin America | North America
Portfolio	CommScope®
Product Type	Fiber indoor cable
Product Series	N-CN

General Specifications

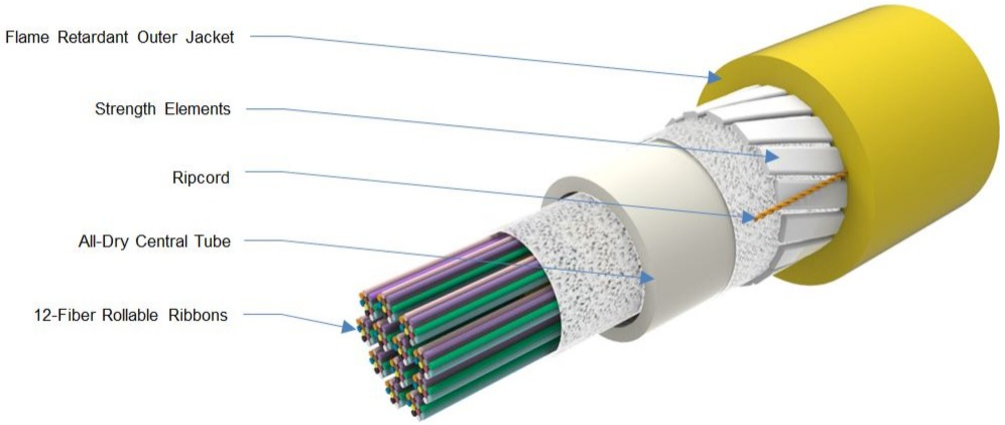
Cable Type	Ribbon central tube
Construction Type	Non-armored
Subunit Type	Gel-free
Fibers per Ribbon, quantity	12
Jacket Color	Yellow
Jacket Marking	Feet
Total Fiber Count	432

Dimensions

Buffer Tube/Subunit Diameter	10.4 mm | 0.409 in
Diameter Over Jacket	15.5 mm | 0.61 in

Representative Image

760246291 | N-432-CN-RR-F12YL/8G1/99G/C



Mechanical Specifications

Minimum Bend Radius, loaded	310 mm | 12.205 in
Minimum Bend Radius, storage coils	620 mm | 24.409 in
Minimum Bend Radius, unloaded	102 mm | 4.016 in
Tensile Load, long term, maximum	800 N | 179.847 lbf
Tensile Load, short term, maximum	2700 N | 606.984 lbf
Compression	10 N/mm | 57.101 lb/in
Compression Test Method	FOTP-41 | IEC 60794-1 E3
Flex	25 cycles
Flex Test Method	FOTP-104 | IEC 60794-1 E6
Impact	2.94 N-m | 26.021 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	G.657.A2/B2 | G.657.A2/B2

Environmental Specifications

Installation temperature	-20 °C to +60 °C (-4 °F to +140 °F)

Operating Temperature	-40 °C to +70 °C (-40 °F to +158 °F)
Storage Temperature	-40 °C to +70 °C (-40 °F to +158 °F)
Cable Qualification Standards	ANSI/ICEA S-104-696 | EN 187105 | Telcordia GR-409
EN50575 CPR Cable EuroClass Fire Performance	Cca
EN50575 CPR Cable EuroClass Smoke Rating	s1a
EN50575 CPR Cable EuroClass Droplets Rating	d0
EN50575 CPR Cable EuroClass Acidity Rating	a1
Environmental Space	Low Smoke Zero Halogen (LSZH) | Riser
Flame Test Listing	NEC OFNR-ST1 (UL) and c(UL)
Flame Test Method	CSA FT4 | IEC 60332-1-2 | IEC 60754-2 | IEC 61034-2 | UL 1666 | UL 1685
Water Penetration	24 h
Water Penetration Test Method	FOTP-82 | IEC 60794-1 F5

Environmental Test Specifications

Cable Freeze	-2 °C | 28.4 °F
Cable Freeze Test Method	FOTP-98 | 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	-20 °C to +60 °C (-4 °F to +140 °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	254 kg/km | 170.68 lb/kft

Regulatory Compliance/Certifications

Agency	Classification
CHINA-ROHS	Below maximum concentration value
REACH-SVHC	Compliant as per SVHC revision on www.commscope.com/ProductCompliance
ROHS	Compliant
UK-ROHS	Compliant

Included Products

CS-8G1-RR-INDOOR	–	Enhanced Low Macrobending, Zero Water Peak, Dispersion-Unshifted Singlemode Rollable Ribbon Fiber (ITU-T G.657.A2, B2)

* Footnotes

Operating Temperature Specification applicable to non-terminated bulk fiber cable

CS-8G1-RR-INDOOR

Enhanced Low Macrobending, Zero Water Peak, Dispersion-Unshifted Singlemode Rollable Ribbon Fiber (ITU-T G.657.A2, B2)

Product Classification

Portfolio	CommScope®
Product Type	Optical fiber

General Specifications

Cladding Diameter	125 µm
Cladding Diameter Tolerance	±0.3 µm
Cladding Non-Circularity, maximum	0.7 %
Coating Diameter (Colored)	249 µm
Coating Diameter (Uncolored)	242 µm
Coating Diameter Tolerance (Colored)	±13 µm
Coating Diameter Tolerance (Uncolored)	±5 µm
Coating/Cladding Concentricity Error, maximum	12 µm
Core/Clad Offset, maximum	0.5 µm
Proof Test	689.476 N/mm² | 100000 psi

Dimensions

Fiber Curl, minimum	4 m | 13.123 ft

Mechanical Specifications

Macrobending, 15 mm Ø mandrel, 1 turn	0.50 dB @ 1,550 nm | 1.00 dB @ 1,625 nm
Macrobending, 20 mm Ø mandrel, 1 turn	0.10 dB @ 1,550 nm | 0.20 dB @ 1,625 nm
Macrobending, 30 mm Ø mandrel, 10 turns	0.03 dB @ 1,550 nm | 0.10 dB @ 1,625 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	20

Optical Specifications

Cabled Cutoff Wavelength, maximum	1260 nm
Point Defects, maximum	0.1 dB

Zero Dispersion Slope, maximum	0.092 ps/[km-nm-nm]
Zero Dispersion Wavelength, maximum	1324 nm
Zero Dispersion Wavelength, minimum	1302 nm

Optical Specifications, Wavelength Specific

Attenuation, maximum	0.3 dB/km @ 1,550 nm | 0.35 dB/km @ 1,385 nm | 0.4 dB/km @ 1,310 nm
Dispersion, maximum	18 ps(nm-km) at 1550 nm | 3.5 ps(nm-km) from 1285 nm to 1330 nm at 1310 nm
Index of Refraction	1.467 @ 1,310 nm | 1.467 @ 1,385 nm | 1.468 @ 1,550 nm
Mode Field Diameter	8.6 µm @ 1,310 nm | 9.8 µm @ 1,550 nm
Mode Field Diameter Tolerance	±0.4 µm @ 1310 nm | ±0.5 µm @ 1550 nm
Polarization Mode Dispersion Link Design Value, maximum	0.06 ps/sqrt(km)
Standards Compliance	ITU-T G.657.A2 | ITU-T G.657.B2

Environmental Specifications

Heat Aging, maximum	0.05 dB/km @ 85 °C
Temperature Dependence, maximum	0.05 dB/km
Temperature Humidity Cycling, maximum	0.05 dB/km
Water Immersion, maximum	0.05 dB/km @ 23 °C

* 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