760086678 | R-048-LN-CM-F12BK/25D/8W024 /6F024



Fiber Indoor/Outdoor cable, TeraSPEED®, Single Jacket, 48 fiber, All-Dielectric, Riser Rated, Gel-Free, Stranded Loose Tube, Singlemode + Multimode OM1, 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	R-LN
General Specifications	
Cable Type	Stranded loose tube
Construction Type	Non-armored
Subunit Type	Gel-free
Filler, quantity	1
Jacket Color	Black
Jacket Marking	Feet
Subunit, quantity	4
Fibers per Subunit, quantity	12
Composite Fiber Count	24 + 24
Total Fiber Count	48
Dimensions	
Buffer Tube/Subunit Diameter	2.5 mm 0.098 in
Diameter Over Jacket	11.5 mm 0.453 in

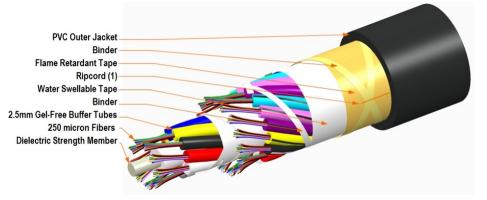
Representative Image

Page 1 of 3

©2025 CommScope, Inc. All rights reserved. CommScope and the CommScope logo are registered trademarks of CommScope and/or its affiliates in the U.S. and other countries. For additional trademark information see https://www.commscope.com/trademarks. All product names, trademarks and registered trademarks are property of their respective owners. Revised: May 1, 2025



760086678 | R-048-LN-CM-F12BK/25D/8W024 /6F024



Mechanical Specifications

Minimum Bend Radius, loaded	173 mm 6.811 in
Minimum Bend Radius, unloaded	115 mm 4.528 in
Tensile Load, long term, maximum	800 N 179.847 lbf
Tensile Load, short term, maximum	2700 N 606.984 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	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
Vertical Rise, maximum	692 m 2,270.341 ft
Optical Specifications	
Fiber Type	Composite MM/SM G.652.D and G.657.A1, TeraSPEED® OM1, OptiSPEED®

Environmental Specifications

Installation temperature

Operating Temperature

-10 °C to +60 °C (+14 °F to +140 °F) -40 °C to +70 °C (-40 °F to +158 °F)

Page 2 of 3

©2025 CommScope, Inc. All rights reserved. CommScope and the CommScope logo are registered trademarks of CommScope and/or its affiliates in the U.S. and other countries. For additional trademark information see https://www.commscope.com/trademarks. All product names, trademarks and registered trademarks are property of their respective owners. Revised: May 1, 2025



760086678 | R-048-LN-CM-F12BK/25D/8W024 /6F024

Storage Temperature	-40 °C to +75 °C (-40 °F to +167 °F)	
Cable Qualification Standards	ANSI/ICEA S-104-696 EN 187105 Telcordia GR-409	
Environmental Space	Riser	
Flame Test Listing	NEC OFNR (ETL) and c(ETL)	
Flame Test Method	UL 1666	
Jacket UV Resistance	UV stabilized	
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	-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

118 kg/km | 79.292 lb/kft

Regulatory Compliance/Certifications

Classification

Agency

ISO 9001:2015

Designed, manufactured and/or distributed under this quality management system

Included Products

- CS-6F-LT OptiSPEED® OM1 Multimode Fiber
- CS-8W-IOLT TeraSPEED® OS2 Singlemode Fiber

* Footnotes

Operating Temperature Specification applicable to non-terminated bulk fiber cable

Page 3 of 3

