

FREEDM® Ruggedized Ribbon Cables

A LANscape® Solutions Product

Corning
Cable Systems

Applications

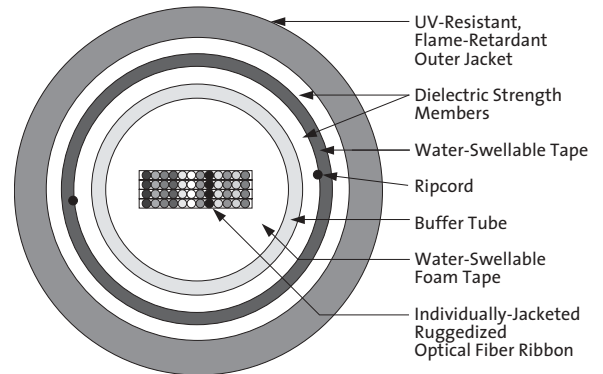
- Interbuilding backbones in riser and general-purpose applications
- Ideal for segregating secure traffic on Protected Distribution Systems (PDS)

Description

Corning Cable Systems FREEDM® Ruggedized Ribbon Cables consist of 24, 36 or 48 low-water-peak standard single-mode optical fibers organized into easily identifiable 12-fiber ruggedized ribbons inside a central tube. Each ruggedized ribbon has a uniquely colored jacket to quickly identify differing levels of segregated traffic on Protected Distribution Systems. The design is completely gel-free with dry water-blocking technology incorporating super-absorbent polymers used both inside and around the central tube. Dielectric strength members provide tensile strength. Through use of a specially formulated flame-retardant outer jacket, this cable design meets the requirements of the National Electric Code® (NEC) Article 770 and UL-1666 flame test and is listed OFNR for riser applications.

Features / Benefits

- 12-fiber individually-jacketed and uniquely-colored ruggedized ribbons provide easy identification as well as additional protection and security for each 12-fiber subunit
- Listed OFNR
- Dielectric cable construction requires no grounding or bonding
- Innovative gel-free cable design provides more efficient and installation-friendly cable preparation
- Available in lengths up to 4 km (13,000 ft)
- Precise fiber and ribbon geometries result in excellent mass-fusion splicing and multi-fiber connectorization yields



FREEDM Ruggedized Ribbon Cable | Drawing ZA-2788

Specifications

Storage Temperature	-40° to +70°C (-40° to +158°F)
Operating Temperature	-40° to +70°C (-40° to +158°F)
Installation Temperature	-10° to +60°C (+14° to +140°F)
Approvals and Listings	NEC [®] , OFNR
Common Installations	Outdoor aerial and duct; indoor vertical riser and general purpose horizontal according to NEC Article 770

Fiber Count	Nominal Weight kg/km (lb/1000 ft)	Nominal Diameter mm (in)	Minimum Bend Radius		Maximum Tensile Loads	
			Loaded cm (in)	Installed cm (in)	Short-Term N (lbf)	Long-Term N (lbf)
24	233 (156)	17.6 (0.69)	26.4 (10.4)	17.6 (6.9)	2670 (600)	800 (180)
36	238 (160)	17.6 (0.69)	26.4 (10.4)	17.6 (6.9)	2670 (600)	800 (180)
48	243 (163)	17.6 (0.69)	26.4 (10.4)	17.6 (6.9)	2670 (600)	800 (180)

Transmission Performance

Fiber Code	E
Performance Option Code	01
Fiber Type	Single-mode (1310/1383/1550 nm)
Maximum Attenuation (dB/km)	0.7/0.7/0.7
Serial Gigabit Ethernet Distance (m)	5000/ – / –
Serial 10 Gigabit Ethernet Distance (m)	10000/40000

Ordering Information

0 4 8 E C F C J 6 0 0 D 2 0
1 2 3 4 5 6 7 8 9 10 11 12 13 14

1 - 3 Defines fiber count (024, 036, 048).

7 - 11 Digits for factory use.

4 Defines fiber type (see Transmission Performance table).

13 - 14 Defines special requirements.

5 / 12 Defines cable type.

20 = No special requirements

C/D = Single tube gel-free ribbon

6 Defines outer jacket.

F = Indoor/outdoor riser rated

Corning Cable Systems LLC • PO Box 489 • Hickory, NC 28603-0489 USA
 1-800-743-2675 • FAX: +1-828-901-5973 • International: +1-828-901-5000 • <http://www.corning.com/cablesystems>

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