48 F, Single-mode (OS2)



Corning ribbon interlocking armored plenum cables are designed for use in plenum, riser and general-purpose environments for intrabuilding backbone and horizontal installations. These cables are standard ribbon plenum cables placed inside spirally wrapped aluminum interlocking armor for ruggedness and superior crush resistance. This special construction facilitates routing inside buildings, through riser shafts and air-handling spaces, to telecommunication rooms and to workstations. Ideal for heavy traffic or more challenging mechanical exposure conditions, this cable design consists of fibers organized into 12-fiber ribbons inside a central tube surrounded by dielectric strength members to provide tensile strength. The flexible interlocking armor offers over seven times the crush protection of nonarmored cables, while a specially formulated flame-retardant outer jacket allows the design to meet the requirements of the NFPA 262 flame test. The 12-fiber ribbons have readily identifiable ribbon ID numbers and fiber colors with easy access to individual fibers.

This cable is available in 12 different jacket colors – blue, orange, green, brown, slate, white, red, black, yellow, violet, rose and aqua. The colored jacket allows for easy visual identification of the cables. The standard jacket color will be determined by the dominant fiber type in the cable and will use the standard part numbers shown here. Contact Customer Care at 1-800-743-2675 to order other color options.

Features and Benefits

Precise fiber and ribbon geometries

Excellent mass splicing yields

Gel-free waterblocking technology

Craft-friendly cable preparation

Innovative waterblocking technology

Prevents water penetration

12-fiber ribbons with ribbon IDs

Easy identification

Flame-retardant jacket

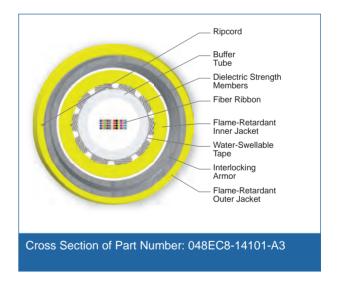
Rugged and durable

Standards

Approval and Listings

National Electrical Code® (NEC®) OFCP, CSA FT-6, ANSI/ICEA S-83-596







48 F, Single-mode (OS2)



Standards

Flame Resistance NFPA 262 (for plenum, riser

and general building appli-

cations)

Specifications

General Specifications	
Environment	Indoor
Application	General Purpose Horizontal, Vertical Riser, Plenum
Cable Type	Ribbon
Product Type	Interlocking armor
Flame Rating	Plenum (OFCP)
Fiber Category	Single-mode (OS2)

Temperature Range	
Storage	-40 °C to 70 °C (-40 °F to 158 °F)
Installation	0 °C to 60 °C (32 °F to 140 °F)
Operation	0 °C to 70 °C (32 °F to 158 °F)

Cable Design	
Fiber Count	48
Ribbons per Tube	4
Fibers per Ribbon	12
Fiber Coloring	Blue, Orange, Green, Brown, Slate, White, Red, Black, Yellow, Violet, Rose, Aqua
Buffer Tube Color	Natural
Buffer Tube Diameter	8.1 mm (0.32 in)
Tape	Water-swellable
Tensile Strength Elements and/or Armoring - Layer 1	Dielectric strength members
Number of Ripcords	2
Inner Jacket Material	Flame-retardant
Tensile Strength Elements and/or Armoring - Layer 3	Interlocking armor
Outer Jacket Material	Flame-retardant
Outer Jacket Color	Yellow



48 F, Single-mode (OS2)



Mechanical Characteristics Cable	
Max. Tensile Strength, Short-Term	1320 N (300 lbf)
Max. Tensile Strength, Long-Term	400 N (90 lbf)
Weight	326 kg/km (219 lb/1000 ft)
Nominal Inner Cable Diameter	12.4 mm (0.49 in)
Nominal Outer Diameter	19.9 mm (0.78 in)
Min. Bend Radius Installation	299 mm (11.8 in)
Min. Bend Radius Operation	199 mm (7.8 in)

Chemical Characteristics	
RoHS	Free of hazardous substances according to RoHS 2002/95/ EG

Fiber Specifications

Optical Characteristics (cabled)		
Fiber Name	SMF-28e+® fiber	
Fiber Category	G.652.D	
Fiber Code	E	
Performance Option Code	01	
Wavelengths	1310 nm / 1383 nm / 1550 nm	
Maximum Attenuation	0.4 dB/km / 0.4 dB/km / 0.3 dB/km	
Typical attenuation	0.33 dB/km / 0.33 dB/km / 0.19 dB/km	

^{*} Typical attenuation values match the attenuation values listed in the optical fiber specifications. See www.corning.com/opticalfiber for Corning optical fiber specifications. Better attenuation performance options are available for some fiber and cable types. Contact Customer Care for additional fiber options.

* * SMF-28® Ultra and ClearCurve® XB fiber deliver up to 10x better macrobend loss performance compared to the G.652.D standard and up to 33 percent better

Ordering Information

Part Number	048EC8-14101-A3
Product Description	Ribbon Interlocking Armored Cable, Plenum, 48 F, Single-mode (OS2)



macrobend loss performance than the G.657.A1 standard for 10mm radii bends.

48 F, Single-mode (OS2)



Notes



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