144 F, 50 µm multimode (OM3)

CORNING

Corning ribbon interlocking armored riser cables are designed for use in riser and general-purpose environments in intrabuilding backbone and horizontal installations. These cables are standard ribbon riser cables placed inside spirally wrapped aluminum interlocking armor for ruggedness and superior crush resistance. This special construction facilitates routing inside buildings, through riser shafts, 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 up to 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.

Features and Benefits

Ribbon ID numbers and fiber colors Easily identifiable

Precise fiber and ribbon geometries Excellent mass splicing yields

Flame-retardant jacket Rugged and durable

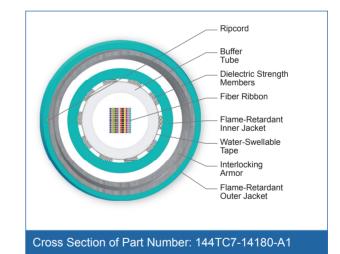
Flexible interlocking armor

Up to seven times the crush protection compared to non-armored cables

Common installations

Indoor vertical riser and general purpose horizontal according to National Electrical Code® (NEC®) Article 770





Standards

Listings	National Electrical Code [®] (NEC [®]) OFNR
Design Criteria	CSA FT-6
Test Criteria	ANSI/ICEA S-83-596



144 F, 50 µm multimode (OM3)

CORNING

Specifications

General Specifications	
Environment	Indoor
Application	General Purpose Horizontal, Vertical Riser
Cable Type	Ribbon
Flame Rating	Riser (OFCR)
Fiber Category	50 µm MM (OM3)

Temperature Range	
Storage	-40 °C to 70 °C (-40 °F to 158 °F)
Installation	-10 °C to 60 °C (14 °F to 140 °F)
Operation	-20 °C to 70 °C (-4 °F to 158 °F)

Cable Design	
Fiber Count	144
Ribbons per Tube	12
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	11 mm (0.43 in)
Tape, Layer 1	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	Aqua

Mechanical Characteristics Cable	
Max. Tensile Strength, Short-Term	1320 N (300 lbf)
Max. Tensile Strength, Long-Term	400 N (90 lbf)
Nominal Inner Cable Diameter	15.50 mm (0.61 in)
Nominal Outer Diameter	22.5 mm (0.89 in)
Min. Bend Radius Installation	338 mm (13.31 in)



144 F, 50 µm multimode (OM3)

CORNING

Mechanical Characteristics Cable	
Min. Bend Radius Operation	225 mm (8.86 in)
Weight	396 kg/km (266 lb/1000 ft)

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

Fiber Specifications

Optical Characteristics (cabled)	
Fiber Core Diameter	50 μm
Fiber Category	OM3
Fiber Code	Т
Performance Option Code	80
Wavelengths	850 nm / 1300 nm
Maximum Attenuation	3.0 dB/km / 1.0 dB/km
Serial 1 Gigabit Ethernet	1000 m / 600 m
Serial 10 Gigabit Ethernet	300 m / -
Min. Overfilled Launch (OFL) Bandwidth	1500 MHz*km / 500 MHz*km
Minimum Effective Modal Bandwidth (EMB)	2000 MHz*km / -

* Meets 0.75 ns optical skew when used in all Corning Plug and Play™/Pretium EDGE® systems solutions.

Notes: 1) 50 µm multimode fiber macrobend loss ≤ 0.2 dB at 850 nm for two turns around 7.5 mm radius mandrel.

2) Improved attenuation and bandwidth options available.

3) Bend-insensitive single-mode fibers available on request.

4) Contact a Corning Customer Care Representative for additional information.

Ordering Information

Part Number	144TC7-14180-A1
Product Description	Ribbon Interlocking Armored Cable, Riser, 144 F, 50 μm multimode (OM3)

Shipping Information

Units per Delivery



144 F, 50 µm multimode (OM3)

CORNING

Notes



Corning Optical Communications LLC • PO Box 489 • Hickory, NC 28603-0489 USA 800-743-2675 • FAX: 828-325-5060 • International: +1-828-901-5000 • www.corning.com/opcomm A complete listing of the trademarks of Corning Optical Communications is available at www.corning.com/opcomm/trademarks. All other trademarks are the properties of their respective owners. Corning Optical Communications is ISO 9001 certified. © 2015 Corning Optical Communications. All rights reserved.

