

Ribbon Cable, Plenum

48 F, 50 μ m multimode (OM3)

CORNING

Corning Cable Systems Ribbon Plenum Cables are designed for use in plenum, riser and general purpose environments for intrabuilding backbone installations and for high-fiber-count data centers. These cables consist of 12 to 216 fibers organized into 12-fiber ribbons inside a central tube. Dielectric strength members provide tensile strength 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. The precise fiber and ribbon geometries result in excellent mass splicing yields. The ribbon plenum cables are available preconnectorized for easy field installation and reduced labor costs and compatible with standard ribbon cable procedures and hardware. These cables are also OFNP and FT-6 listed and RoHS compliant.

This cable is available in 12 different jacket colors - blue, orange, green, brown, slate, white, red, black, yellow, purple, 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

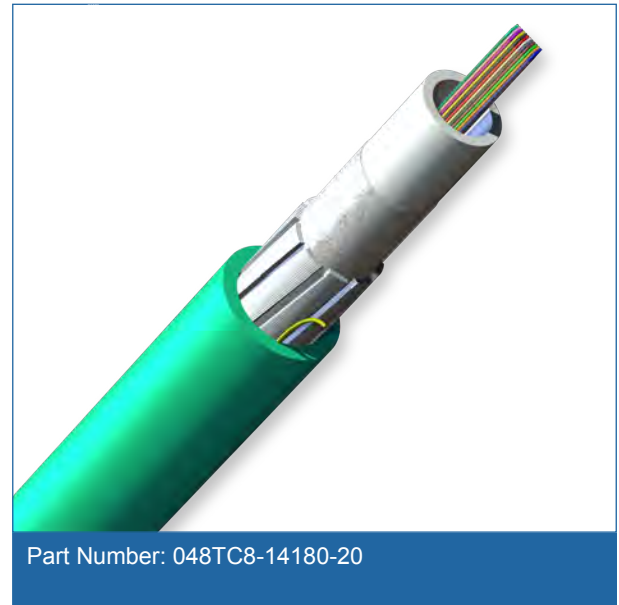
Craft-friendly cable preparation

Innovative waterblocking technology

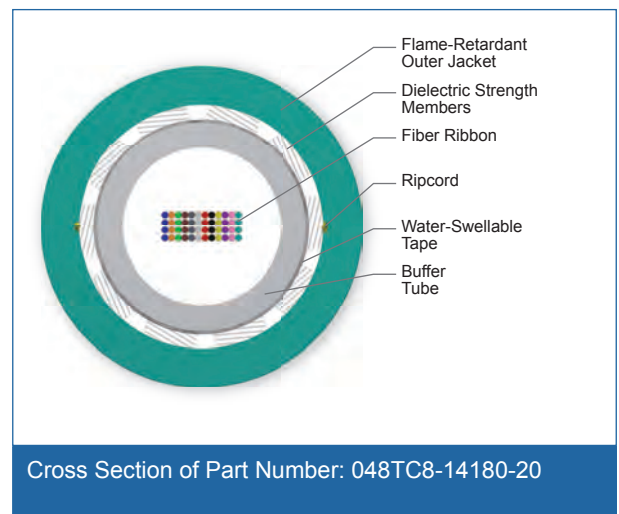
Prevents water penetration

Flame-retardant jacket

Rugged and durable



Part Number: 048TC8-14180-20



Cross Section of Part Number: 048TC8-14180-20

Standards

Approval and Listings

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

Common Installations

Indoor plenum, riser and
general building applica-
tions

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Standards

Flame Resistance

NFPA 262 (for plenum, riser and general building applications)

Specifications

General Specifications

Environment	Indoor
Application	General Purpose Horizontal, Vertical Riser, Plenum
Cable Type	Ribbon
Product Type	Distribution
Flame Rating	Plenum (OFNP)
Fiber Category	50 μ m MM (OM3)

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
Outer Jacket Material	Flame-retardant
Outer Jacket Color	Aqua

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Mechanical Characteristics Cable

Max. Tensile Strengths, Short-Term	1320 N (300 lbf)
Max. Tensile Strengths, Long-Term	400 N (90 lbf)
Weight	153 kg/km (103 lb/1000 ft)
Nominal Outer Diameter	12.4 mm (0.49 in)
Min. Bend Radius Installation	186 mm (7.3 in)
Min. Bend Radius Operation	124 mm (4.9 in)

Chemical Characteristics

RoHS	Free of hazardous substances according to RoHS 2002/95/EG
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Fiber Specifications

Optical Characteristics (cabled)

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

* Meets 0.75 ns optical skew when used in all Corning Cable Systems Plug & Play™/Pretium EDGE® Systems Solutions.

Notes: 1) 50 μ m 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 Cable Systems Customer Care Representative for additional information.

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Ordering Information

Part Number	048TC8-14180-20
Product Description	Ribbon Cable, Plenum, 48 F, 50 µm multimode (OM3)



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