

FREEDM[®] Loose Tube, Gel-Free Cable, Plenum

48 F, Single-mode (OS2)

CORNING

Corning FREEDM[®] loose tube gel-free plenum cables are flame-retardant, indoor/outdoor, plenum-rated cables suitable for installation in interbuilding and intrabuilding backbones in aerial, duct and riser or plenum applications. The loose tube design offers mechanical ruggedness and environmental durability while the all-dielectric cable construction requires no grounding or bonding. The water-swellable yarn eliminates the need for gel-filling compound and allows more efficient and craft-friendly cable preparation. The 250 μm color-coded fibers allow quick and easy identification during installation.

The flexible, flame-retardant outer jacket is UV-resistant and enables direct exposure to sunlight. Interlocking armor is available for special applications requiring additional mechanical durability. The plenum rating of this cable eliminates the need to transition splice when entering the building and minimizes routing restrictions once inside the building. Meeting the requirements of the National Electrical Code[®] (NEC[®]) Article 770, the cables are also OFNP and FT-6 listed.

Note: 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 while still providing all of the required environmental protection of an indoor/outdoor cable jacket. Black is the standard jacket color using the part numbers shown here. Contact Customer Care at 1-800-743-2675 to order other color options.

Features and Benefits

Gel-free waterblocking technology

Craft-friendly cable preparation

Loose tube design

Stable performance and compatibility with all common fiber types

Color-coded fibers

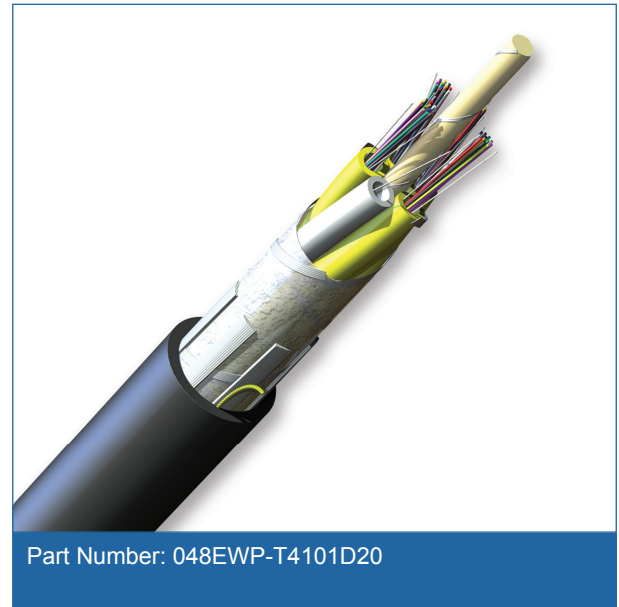
Quick and easy identification

All-dielectric construction

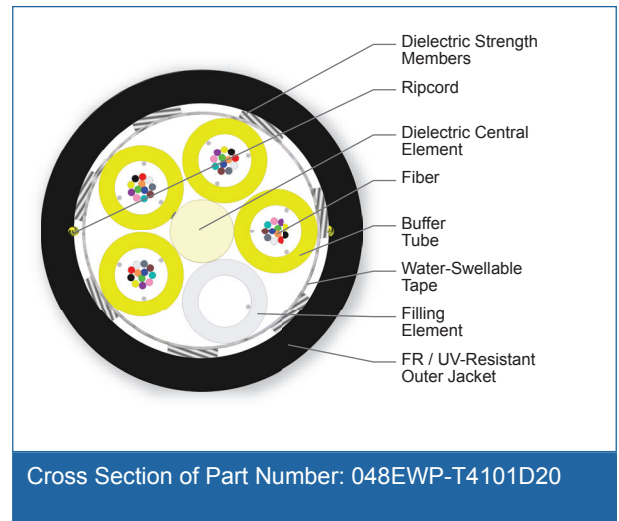
Requires no grounding or bonding

Common installations

Outdoor aerial and duct; indoor vertical riser and general purpose horizontal according to NEC Article 770



Part Number: 048EWP-T4101D20



Cross Section of Part Number: 048EWP-T4101D20

FREEDM[®] Loose Tube, Gel-Free Cable, Plenum

48 F, Single-mode (OS2)



Standards

Listings	National Electrical Code [®] (NEC [®]) OFNP
Design Criteria	CSA FT-6
Test Criteria	ANSI/ICEA S-104-696; NFPA 262 (for plenum, riser and general building appli- cations)

Specifications

General Specifications	
Environment	Indoor/Outdoor Cables
Application	Aerial, Direct Buried, Duct, General Purpose Horizontal, (Vertical Riser, Plenum)
Cable Type	Loose Tube
Product Type	Dielectric
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	-40 °C to 70 °C (-40 °F to 158 °F)

Cable Design	
Central Element	Dielectric
Fiber Count	48
Fiber Coloring	Blue, Orange, Green, Brown, Slate, White, Red, Black, Yellow, Violet, Rose, Aqua
Fibers per Tube	12
Number of Tube Positions	5
Number of Active Tubes	4
Buffer Tube Color Coding	Yellow
Number of Filling Elements	1
Tape	Water-swellaable

FREEDM[®] Loose Tube, Gel-Free Cable, Plenum

48 F, Single-mode (OS2)

CORNING

Cable Design

Tensile Strength Elements and/or Armoring - Layer 1	Dielectric strength members
Number of Ripcords	2
Outer Jacket Material	Flame-Retardant, UV-Resistant
Outer Jacket Color	Black
Buffer Tube Diameter	3.0 mm (0.1 in)

Mechanical Characteristics Cable

Weight	127 kg/km (85 lb/1000 ft)
Max. Tensile Strength, Short-Term	2700 N (600 lbf)
Max. Tensile Strength, Long-Term	810 N (180 lbf)
Min. Bend Radius Installation	171 mm (6.7 in)
Min. Bend Radius Operation	114 mm (4.5 in)
Nominal Outer Diameter	11.4 mm (0.45 in)

Chemical Characteristics

RoHS	Free of hazardous substances according to RoHS 2011/65/EU
------	---

Fiber Specifications

Optical Characteristics (cabled)

Fiber Name	Single-mode (OS2)
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

FREEDM[®] Loose Tube, Gel-Free Cable, Plenum

48 F, Single-mode (OS2)



Ordering Information

Part Number	048EWP-T4101D20
Product Description	FREEDM [®] Loose Tube, Gel-Free Cable, Plenum, 48 F, Single-mode (OS2)
EAN Code	4056418198002



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.

© 2016 Corning Optical Communications. All rights reserved.

