FREEDM® Loose Tube, Gel-Free Cable, Plenum

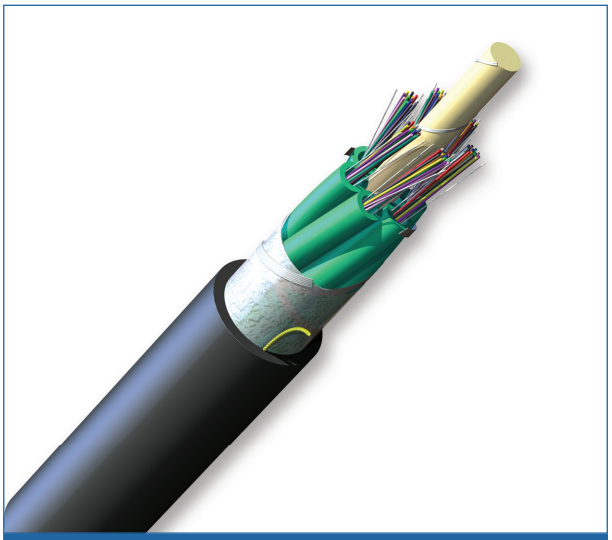
72 F, 50 µm multimode (OM4)

CORNING

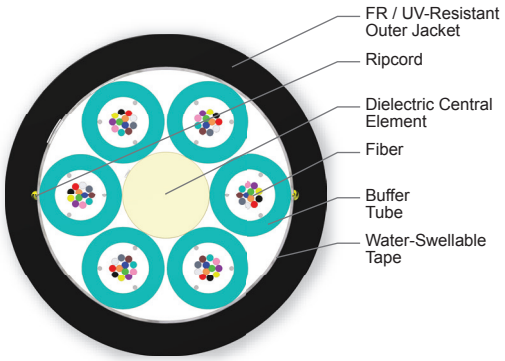
Corning FREEDM® loose tube gel-free plenum cables are flame-retardant, indoor/outdoor, plenum-rated cables suitable for installation in interbuilding and intrabuilding backbones in aerial, duct and riser or plenum applications. The loose tube design offers mechanical ruggedness and environmental durability 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.



Part Number: 072TWP-T4190D20



Cross Section of Part Number: 072TWP-T4190D20

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

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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 applications)

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	50 µm MM (OM4)

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	72
Fiber Coloring	Blue, Orange, Green, Brown, Slate, White, Red, Black, Yellow, Violet, Rose, Aqua
Fibers per Tube	12
Number of Tube Positions	6
Number of Active Tubes	6
Buffer Tube Color Coding	Aqua
Tape	Water-swellable
Tensile Strength Elements and/or Armoring - Layer 1	Dielectric strength members

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Cable Design	
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	143 kg/km (96 lb/1000 ft)
Nominal Outer Diameter	11.8 mm (0.46 in)
Max. Tensile Strength, Short-Term	2700 N (600 lbf)
Max. Tensile Strength, Long-Term	810 N (180 lbf)
Min. Bend Radius Installation	177 mm (7 in)
Min. Bend Radius Operation	118 mm (4.6 in)

Chemical Characteristics	
RoHS	Free of hazardous substances according to RoHS 2011/65/EU

Fiber Specifications

Optical Characteristics (cabled)	
Fiber Core Diameter	50 µm
Fiber Category	OM4
Fiber Code	T
Performance Option Code	90
Wavelengths	850 nm / 1300 nm
Maximum Attenuation	3.0 dB/km / 1.0 dB/km
Serial 1 Gigabit Ethernet	1100 m / 600 m
Serial 10 Gigabit Ethernet	550 m / -
Min. Overfilled Launch (OFL) Bandwidth	3500 MHz*km / 500 MHz*km
Minimum Effective Modal Bandwidth (EMB)	4700 MHz*km / -

** Assumes 1.0 dB maximum total connector/splice loss.*
** Meets 0.75 ns optical skew when used in all Corning Plug and Play™/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.*

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Ordering Information

Part Number	072TWP-T4190D20
Product Description	FREEDM® Loose Tube, Gel-Free Cable, Plenum, 72 F, 50 µm multimode (OM4)
EAN Code	4056418169651

RoHS COMPLIANT

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