

FREEDM® One Tight-Buffered Cable, Plenum

12 F, 62.5 µm multimode (OM1)

CORNING

Corning FREEDM® One plenum cables are flame-retardant, UV-resistant, indoor/outdoor cables designed for aerial and duct applications with no need for a transition splice when entering the building. The tight-buffered construction facilitates easier termination for low-fiber-count applications in the local area network (LAN) and eliminates the need for fan-out kits. The design features TIA-598 color-coded 900 µm buffered fibers for easy identification, consistent stripping and direct termination. The small diameter and bend radius of the cable allow for easy installation in space-constrained areas while the innovative waterblocking technology is ideal for outside plant (OSP) applications. The all-dielectric cable construction requires no grounding or bonding, and the UV-resistant, flame-retardant jacket is rugged, durable and easy to strip.

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

Waterblocking technology

OSP (outdoor) applications

Small diameter and bend radius

Easy installation in space-constrained areas

Color-coded fibers

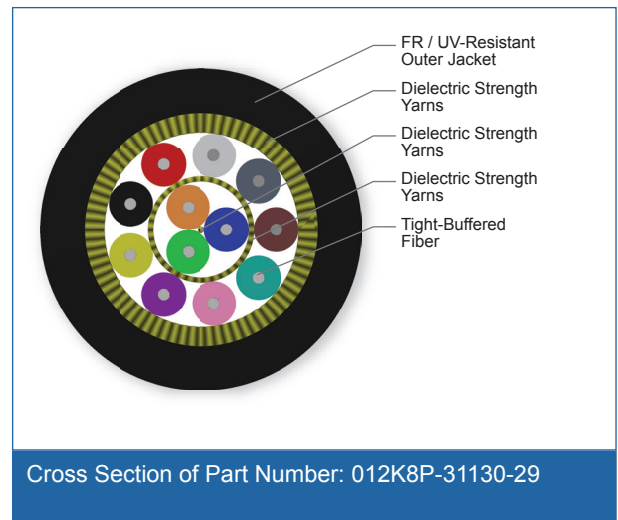
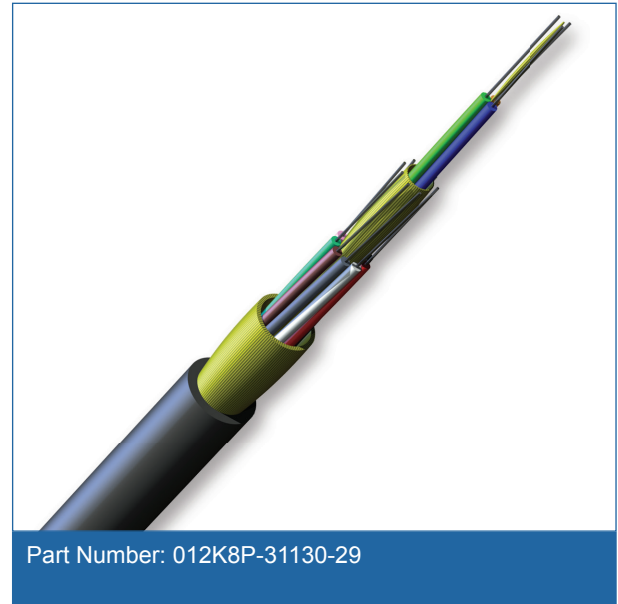
Quick and easy identification

All-dielectric construction

Requires no grounding or bonding

UV-resistant, flame-retardant jacket

Rugged, durable and easy to strip



Standards

Design and Test Criteria

NFPA 262 and CSA FT-6
(for plenum, riser and general building applications);
ICEA S-104-696

Listings

National Electrical Code®
(NEC®) OFNP, FT-6

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Specifications

General Specifications

Environment	Indoor/Outdoor Cables
Application	Aerial, Duct, General Purpose Horizontal, Vertical Riser, (Plenum)
Cable Type	Tight-Buffered
Product Type	Dielectric
Flame Rating	Plenum (OFNP)
Fiber Category	62.5 µm MM (OM1)

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	12
Tight Buffer Color	Blue, Orange, Green, Brown, Slate, White, Red, Black, Yellow, Violet, Rose, Aqua
Tensile Strength Elements and/or Armoring - Layer 1	Water-swellable strength members
Outer Jacket Material	Flame-Retardant, UV-Resistant
Outer Jacket Color	Black

Mechanical Characteristics Cable

Weight	36.6 kg/km (24.6 lb/1000 ft)
Nominal Outer Diameter	6.3 mm (.25 in)
Min. Bend Radius Installation	95 mm (3.7 in)
Min. Bend Radius Operation	63 mm (2.5 in)
Max. Tensile Strength, Short-Term	675 N (150 lbf)
Max. Tensile Strength, Long-Term	200 N (45 lbf)

Chemical Characteristics

RoHS	Free of hazardous substances according to RoHS 2011/65/EU
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Fiber Specifications

Optical Characteristics (cabled)	
Fiber Core Diameter	62.5 µm
Fiber Category	OM1
Fiber Code	K
Performance Option Code	30
Wavelengths	850 nm / 1300 nm
Maximum Attenuation	3.4 dB/km / 1.0 dB/km
Serial 1 Gigabit Ethernet	300 m / 550 m
Serial 10 Gigabit Ethernet	33 m / -
Min. Overfilled Launch (OFL) Bandwidth	200 MHz*km / 500 MHz*km
Minimum Effective Modal Bandwidth (EMB)	220 MHz*km / -

Notes: 1) Improved attenuation and bandwidth options available.
2) Bend-insensitive single-mode fibers available on request.
3) Contact a Corning Customer Care Representative for additional information.

Ordering Information

Part Number	012K8P-31130-29
Product Description	FREEDM® One Tight-Buffered Cable, Plenum, 12 F, 62.5 µm multimode (OM1)
EAN Code	4056418187723



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

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