FREEDM[®] One Tight-Buffered, Interlocking Armoured Cable, Plenum

12 fibres, single-mode (OS2)

CORNING

Corning FREEDM® One interlocking armoured cables are flame-retardant, indoor/outdoor cables designed for interbuilding and intrabuilding backbone installations that eliminate the need for a transition splice when entering the building. Encased in a spirally wrapped, aluminum interlocking armour for ruggedness and superior crush resistance, these cables are ideal for industrial and heavy traffic areas and installations requiring extra protection for optical cables. These cables are protected against water penetration by innovative waterblocking technology, making them ideal for OSP applications. The flexible, interlocking armoured design offers up to seven times the crush protection compared to unarmoured cables (as characterized to ICEA-696) and allows easy one-step installation, thereby reducing overall installation costs. The UV-resistant, flame-retardant jacket is rugged, durable and easy to strip.

Note: This cable is available in 12 different jacket colours – blue, orange, green, brown, grey, white, red, black, yellow, violet, pink and turquoise. The coloured 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 colour using the part numbers shown here. Contact Customer Care at 1-800-743-2675 to order other colour options.

Features and Benefits

Waterblocking technology OSP (outdoor) applications

Flexible, interlocking armour design Seven times crush protection compared to unarmored cables

UV-resistant, flame-retardant jacket Rugged, durable and easy to strip

Standards

Approvals and Listings	National Electrical Code [®] (NEC [®]) OFCP, CSA FT-4, ICEA S-104-696
Flame Resistance	NFPA 262 (for plenum, riser and general building appli- cations)



Part Number: 012E8P-31131-A3



Cross Section of Order Number: 012E8P-31131-A3

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Specifications

General Specifications	
Environment	Indoor / Outdoor
Application	Aerial, Direct Buried, Duct, General Purpose Horizontal, (Vertical Riser, Plenum)
Cable type	Tight-Buffered
Product type	Interlocking armour
Flame rating	Plenum (OFCP)
Fibre Category	single-mode (OS2)

Temperature Range	
Storage	-40 °C to 70 °C (-40 °F to 158 °F)
Installation and assembly	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
Fibre Count	12
Tight Buffer Colour	Blue, orange, green, brown, grey, white, red, black, yellow, violet, pink, turquoise
Tensile Strength Elements and/or Armouring - Layer 1	Water-swellable strength members
Inner Jacket Material	Flame-Retardant, UV-Resistant
Tensile strength elements and/or armouring - Layer 2	Interlocking armour
Number of ripcords	2
Outer jacket material	Flame-Retardant, UV-Resistant
Outer jacket colour	black

Mechanical Characteristics Cable	
Nominal Inner Cable Diameter	6.3 mm (0.25 in)
Nominal Outer Diameter	11.3 mm (0.44 in)
Weight	115.7 kg/km (77.7 lb/1000 ft)
Min. Bend Radius Installation	169.5 mm (6.7 in)
Min. Bend Radius Operation	113 mm (4.4 in)
Max. tensile strength, short-term	675 N (150 lbf)
Max. Tensile Strength, Long-Term	200 N (45 lbf)

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Chemical Characteristics

RoHS

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

Ordering Information

Part Number	012E8P-31131-A3
Product Description	FREEDM [®] One Tight-Buffered, Interlocking Armoured Cable, Plenum, 12 F, Single-mode (OS2)
EAN Code	4056418198958



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