

EDGE[™] Solutions MTP[®] Indoor Ribbon and Indoor/Outdoor Trunks

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Specifications

Approvals and Listings	
	National Electric Code [®] (NEC [®]), optical fiber nonconductive-plenum (OFNP), NFPA 262, CSA FT-6, ICEA S-83-596
Indoor Plenum Trunks	EIA/TIA-568.3-D – includes low/high temperature soak of -10°C/60°C, humidity testing at 90%-95% at 40°C, connector durability (500 matings), and connector pull testing
Indoor Riser Trunks	National Electric Code (NEC), optical fiber nonconductive–riser (OFNR), CSA FT-4, ANSI/UL 1666, ICEA S-83-596
	National Electric Code (NEC), OFNR-LS, CSA FT-4-ST1, ICEA S-83-596
Indoor Riser/LSZH [™] Trunks	Reaction to fire according to EN OFCP 50575 and EN 13501-6
Indoor/Outdoor Plenum Trunks	National Electric Code (NEC), OFNP, OFCP, NFPA 262, CSA FT-6, ANSI/ICEA S-104-696
Indoor/Outdoor Riser Trunks	National Electric Code (NEC), OFNR, OFCR, CSA FT-4, ICEA S-104-696

Trunk Performance	
Waterproof Grip	300 lbs
Mesh Pulling Grip (Pigtail End)	300 lbs (Indoor Cables)/600 lbs (Indoor/Outdoor Cables)
Protective Grip	No pulling capability

Transmission Performance	Transmission Performance					
Fiber Type*	Multimode	Single-Mode				
Fiber Core Diameter (μm)†	50	8.2				
Fiber Category [‡]	OM4	OS2				
Fiber Code	Q	G				
Wavelengths (nm)	850/1300	1310/1383/1550				
Maximum Attenuation (dB/km)	3.0/1.0	0.4/0.4/0.3				
Minimum Overfilled Launch (OFL) Bandwidth (MHz·km)	3,500/500	-				
Minimum Effective Modal Bandwidth (EMB) (MHz·km)	4,700/-	-				
Serial 1 Gigabit Ethernet (m)	1,100/600	5,000/-/-				
Serial 10 Gigabit Ethernet (m)	550/-	10,000/-/40,000				
Induced Attenuation at 7.5 mm Radius dB	< 0.2 (2 turns, 850 nm)	-				

*Single-mode (OS2) fiber is ITU-T G.652.D compliant. [†]50 μm multimode fiber (OM4) meets 0.75 ns optical skew when used in all Corning Plug & Play[™]/EDGE[™] systems solutions. [‡]OM4 multimode fiber minimum effective modal bandwidth assumes 1.0 dB maximum total connector/splice loss.

Optical Performance – Multimode					
Connector Polish End Face Reflectance Maximum Insertion Loss Operation					
MTP [®] Trunks	PC	Flat	≤ -20 dB	≤ 0.35 dB*	-10°C to 60°C

Optical Performance – Single-Mode					
	Connector Polish	End Face	Reflectance	Maximum Insertion Loss	Operation
MTP Trunks	APC	Angled	≤ -65 dB	≤ 0.75 dB*	-10°C to 60°C

*Note: IL in preconnectorized products is measured in the factory through two mated pairs.

EDGE[™] Indoor Ribbon Trunk Routable Subunit Overview

EDGE[™] indoor ribbon trunks are preterminated cables with MTP[®] connectors. These assemblies are usually blunt on one end for easy splicing access. Our indoor ribbon trunks are available in fiber counts up to 864 F to provide the density needed for today's data center. These trunks offer additional structured cabling options for the backbone of the passive network infrastructure when field splicing is necessary.

Refer to AEN160 and AEN161 for furcation and application guidance, respectively.

Preterminated MTPs

Results in quicker deployment and better performance while reducing risks associated with field installation, rework, or high insertion loss. Also provides the flexibility to migrate to parallel optics, clearing the path to 40G/100G/400G.

Reduced Cable Pathways

With fiber counts ranging from 12 to 864 F, deploying a single high-fiber-count trunk can provide pathway savings of 25%-70% compared to deploying multiple cables, which is important when passing through a conduit.

Bend-Improved Fiber

Allows tighter cable bends for slack storage and routing, with less risk of downtime due to pinched or bent cables.

Reduced Installation Time

Deploying a single high-fiber-count trunk can reduce installation time and cost by up to 50% when compared to deploying multiple cables in lower fiber counts. In addition, pigtail configurations come with a mesh pulling grip preinstalled from the factory.

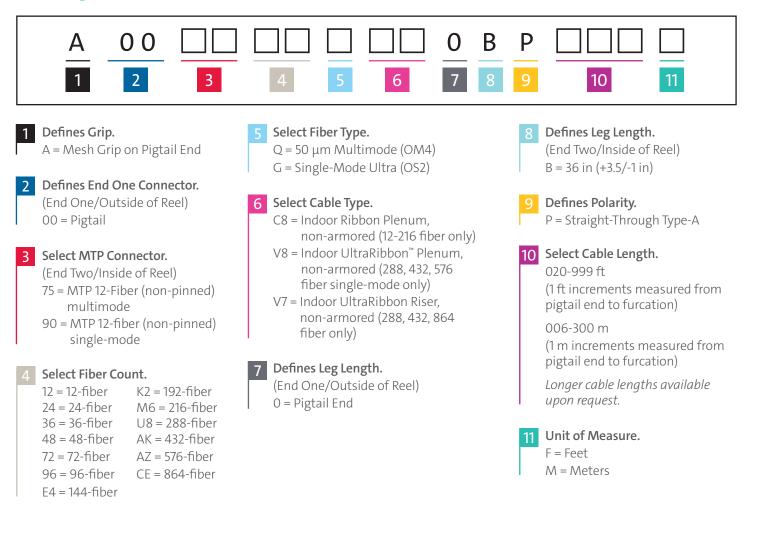
Mechanical Characteristics						
Fiber Count	Normal Outer Diameter	Grip Type for Connector End*	Grip Outer Diameter		Minimum Bend Radius Installation	Minimum Bend Radius Operation
Indoor Ribbor	ת/UltraRibbon™ Trunk	s — Plenum, Non-Arma	pred			
12	9.7 mm (0.38 in)	N/A	N/A	99 kg/km (66 lb/1,000 ft)	146 mm (5.7 in)	97 mm (3.8 in)
24	9.7 mm (0.38 in)	N/A	N/A	99 kg/km (66 lb/1,000 ft)	146 mm (5.7 in)	97 mm (3.8 in)
36	9.7 mm (0.38 in)	N/A	N/A	99 kg/km (66 lb/1,000 ft)	146 mm (5.7 in)	97 mm (3.8 in)
48	9.7 mm (0.38 in)	N/A	N/A	99 kg/km (66 lb/1,000 ft)	146 mm (5.7 in)	97 mm (3.8 in)
72	12.4 mm (0.49 in)	N/A	N/A	156 kg/km (105 lb/1,000 ft)	186 mm (7.3 in)	124 mm (4.9 in)
96	12.4 mm (0.49 in)	N/A	N/A	156 kg/km (105 lb/1,000 ft)	186 mm (7.3 in)	124 mm (4.9 in)
144	15.5 mm (0.61 in)	N/A	N/A	220 kg/km (148 lb/1,000 ft)	233 mm (9.2 in)	155 mm (6.1 in)
192	15.5 mm (0.61 in)	Protective	63.5 mm (2.5 in)	220 kg/km (148 lb/1,000 ft)	233 mm (9.2 in)	155 mm (6.1 in)
216	15.5 mm (0.61 in)	Protective	63.5 mm (2.5 in)	220 kg/km (148 lb/1,000 ft)	233 mm (9.2 in)	155 mm (6.1 in)
288	19.8 mm (0.78 in)	Protective	63.5 mm (2.5 in)	343.44 kg/km (231 lb/1,000 ft)	297 mm (11.7 in)	198 mm (7.8 in)
432	19.8 mm (0.78 in)	Protective	101.6 mm (4 in)	359 kg/km (241 lb/1,000 ft)	297 mm (11.7 in)	198 mm (7.8 in)
576	24.0 mm (0.94 in)	Protective	101.6 mm (4 in)	513.2 kg/km (344 lb/1,000 ft)	360 mm (14.2 in)	240 mm (9.4 in)
Indoor Ribbor	n/UltraRibbon Trunks	– Riser, Non-Armored				
288	20.1 mm (0.79 in)	Protective	63.5 mm (2.5 in)	309 kg/km (207 lb/1,000 ft)	302 mm (11.9 in)	201 mm (7.9 in)
432	21.5 mm (0.85 in)	Protective	101.6 mm (4 in)	351 kg/km (235 lb/1,000 ft)	323 mm (12.7 in)	215 mm (8.5 in)
864	32.9 mm (1.3 in)	Protective	101.6 mm (4 in)	881 kg/km (581 lb/1,000 ft)	493.5 mm (19.4 in)	254 mm (10 in)
Indoor with Routable Subunit Riser/LSZH," Non-Armored						
288	13.6 mm (0.53 in)	Protective	63.5 mm (2.5 in)	197.7 kg/km (132 lb/1,000 ft)	204 mm (8.0 in)	170 mm (6.7 in)

*All pigtails ship with a mesh pulling grip on the pigtail end.

EDGE[™] Indoor Ribbon Trunks: Riser and Plenum

EDGE[™] indoor ribbon trunks provide the backbone of the structured cabling solution. With MTP[®] connectors on one end, these trunks are designed to interface with EDGE solutions or Plug & Play[™] universal systems modules. Blunt cable on the other end allows for easy field-splicing access. Available in riser or plenum ratings, these trunks can accommodate various data center environments. They are shipped with a mesh pulling grip on the pigtail end (all fiber counts) and a protective cover on the MTP connectors (192 F and greater).

Refer to AEN160 and AEN161 for furcation and application guidance, respectively.



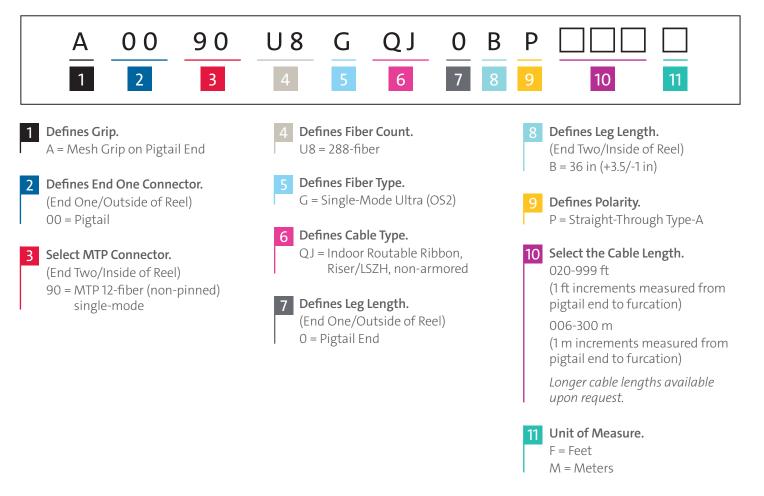
EDGE[™] Indoor Ribbon Trunks: Riser/LSZH[™] with Routable Subunits

EDGE[™] indoor ribbon trunks with routable subunits provide the backbone of the structured cabling solution while reducing time required to prepare and furcate the cable for field splicing. With MTP° connectors on one end, these trunks are designed to interface with EDGE solutions or Plug & Play[™] universal systems modules. Blunt cable with routable subunits on the other end decreases installation time by reducing the labor needed to furcate and prepare the cable for splicing. These trunks are dual-rated riser/LSZH[™] for global use. They are shipped with a mesh pulling grip on the pigtail end and a protective cover on the MTP connectors.

Refer to AEN160 and AEN161 for furcation and application guidance, respectively.



EDGE Indoor Ribbon Trunk | Photo REN7454



Indoor/Outdoor Trunks Overview

EDGE[™] indoor/outdoor trunks are indoor/outdoor cables preterminated with MTP[®] connectors. Available in fiber counts up to 864 F, indoor/outdoor trunks provide the density needed for today's data center. These trunks can support outdoor (between building) installations and below-grade cable runs where indoor/outdoor ratings are necessary. Conduit spaces are more common for indoor/outdoor environments, and the space savings achieved through utilizing higher fiber counts reduces the amount of conduit required. This delivers an overall savings from both reduced material and installation costs. EDGE indoor/outdoor trunks are available in loose-tube or ribbon cable construction, plenum or riser-rated cable, and armored or non-armored design.

Refer to AEN160 and AEN161 for furcation and application guidance, respectively.

Indoor/Outdoor Rating

Enables deployment between buildings, below grade, and within conduits while allowing for transition to indoor environments.

Preterminated MTPs

Results in quicker deployment and better performance while reducing risks associated with field installation, rework, or high insertion loss. Also provides the flexibility to migrate to parallel optics, clearing the path to 40G/100G/400G.

Reduced Cable Pathways

With fiber counts ranging from 12 to 864 fibers, deploying a single high fiber count trunk can provide pathway savings of 25%-70% compared to deploying multiple cables, which is important when passing through a conduit.

Bend-Improved Fiber

Allows tighter cable bends for slack storage and routing, with less risk of downtime due to pinched or bent cables.

Reduced Install Time

Deploying a single high-fiber-count trunk can reduce installation time and cost by up to 50% when compared to deploying multiple cables in lower fiber counts. In addition, pigtail configurations come with a mesh pulling grip preinstalled from the factory.

Water-Resistant Pulling Grips

Provides additional protection to preterminated MTP connectors when deploying below grade or within conduit where standing water or moisture may be present. Applicable for loose tube trunks 144 F and below only.

mechanical	Characteristics					
	Normal Outer Diameter	Grip Type for Connector End*	Grip Outer Diameter	Cable Weight	Minimum Bend Radius Installation	Minimum Bend Radius Operatio
Indoor/Outdo	or FREEDM [®] Loose Tube	e Trunks – Riser, Non-Ar	mored			
12	12.9 mm (0.51 in)	Pulling	63.5 mm (2.5 in)	145 kg/km (98 lb/1,000 ft)	194 mm (7.6 in)	129 mm (5.1 in)
24	12.9 mm (0.51 in)	Pulling	63.5 mm (2.5 in)	145 kg/km (98 lb/1,000 ft)	194 mm (7.6 in)	129 mm (5.1 in)
36	12.9 mm (0.51 in)	Pulling	63.5 mm (2.5 in)	145 kg/km (98 lb/1,000 ft)	194 mm (7.6 in)	129 mm (5.1 in)
18	12.9 mm (0.51 in)	Pulling	63.5 mm (2.5 in)	145 kg/km (98 lb/1,000 ft)	194 mm (7.6 in)	129 mm (5.1 in)
72	12.9 mm (0.51 in)	Pulling	63.5 mm (2.5 in)	145 kg/km (98 lb/1,000 ft)	194 mm (7.6 in)	129 mm (5.1 in)
96	13.8 mm (0.54 in)	Pulling	63.5 mm (2.5 in)	161 kg/km (108 lb/1,000 ft)	207 mm (8.1 in)	138 mm (5.4 in)
44	17.7 mm (0.7 in)	Pulling	63.5 mm (2.5 in)	251 kg/km (168 lb/1,000 ft)	266 mm (10.5 in)	177 mm (7.0 in)
288*	19.8 mm (0.78 in)	Protective	63.5 mm (2.5 in)	283 kg/km (190 lb/1,000 ft)	297 mm (11.7 in)	198 mm (7.8 in)
ndoor/Outdo	or FREEDM Loose Tube	Trunks – Plenum, Non-A	Armored			
2	11.8 mm (0.46 in)	Pulling	63.5 mm (2.5 in)	143 kg/km (96 lb/1,000 ft)	177 mm (6.97 in)	118 mm (4.65 in)
24	11.8 mm (0.46 in)	Pulling	63.5 mm (2.5 in)	143 kg/km (96 lb/1,000 ft)	177 mm (6.97 in)	118 mm (4.65 in)
86	11.8 mm (0.46 in)	Pulling	63.5 mm (2.5 in)	143 kg/km (96 lb/1,000 ft)	177 mm (6.97 in)	118 mm (4.65 in)
18	11.8 mm (0.46 in)	Pulling	63.5 mm (2.5 in)	143 kg/km (96 lb/1,000 ft)	177 mm (6.97 in)	118 mm (4.65 in)
2	11.8 mm (0.46 in)	Pulling	63.5 mm (2.5 in)	143 kg/km (96 lb/1,000 ft)	177 mm (6.97 in)	118 mm (4.65 in)
ndoor/Outdo	or FREEDM Loose Tube	0				
2	19.9 mm (0.78 in)	Pulling	63.5 mm (2.5 in)	306 kg/km (206 lb/1,000 ft)	299 mm (11.8 in)	199 mm (7.8 in)
4	19.9 mm (0.78 in)	Pulling	63.5 mm (2.5 in)	306 kg/km (206 lb/1,000 ft)	299 mm (11.8 in)	199 mm (7.8 in)
6	19.9 mm (0.78 in)	Pulling	63.5 mm (2.5 in)	306 kg/km (206 lb/1,000 ft)	299 mm (11.8 in)	199 mm (7.8 in)
.8	19.9 mm (0.78 in)	Pulling	63.5 mm (2.5 in)	306 kg/km (206 lb/1,000 ft)	299 mm (11.8 in)	199 mm (7.8 in)
2	19.9 mm (0.78 in)	Pulling	63.5 mm (2.5 in)	306 kg/km (206 lb/1,000 ft)	299 mm (11.8 in)	199 mm (7.8 in)
06	20.6 mm (0.81 in)	Pulling	63.5 mm (2.5 in)	367 kg/km (247 lb/1,000 ft)	309 mm (12.2 in)	206 mm (8.1 in)
44	25.5 mm (1.0 in)	Pulling	63.5 mm (2.5 in)	502 kg/km (337 lb/1,000 ft)	383 mm (15.1 in)	255 mm (10.0 in)
.88	28.3 mm (1.11 in)	Protective	63.5 mm (2.5 in)	562 kg/km (337 lb/1,000 ft)	425 mm (16.7 in)	283 mm (11.1 in)
	or FREEDM Loose Tube			6, (***, ***)		
2	18.8 mm (0.74 in)	Pulling	63.5 mm (2.5 in)	284 kg/km (191 lb/1,000 ft)	282 mm (11.1 in)	188 mm (7.4 in)
24	18.8 mm (0.74 in)	Pulling	63.5 mm (2.5 in)	284 kg/km (191 lb/1,000 ft)	282 mm (11.1 in)	188 mm (7.4 in)
36	18.8 mm (0.74 in)	Pulling	63.5 mm (2.5 in)	284 kg/km (191 lb/1,000 ft)	282 mm (11.1 in)	188 mm (7.4 in)
18	18.8 mm (0.74 in)	Pulling	63.5 mm (2.5 in)	284 kg/km (191 lb/1,000 ft)	282 mm (11.1 in)	188 mm (7.4 in)
2	18.8 mm (0.74 in)	Pulling	63.5 mm (2.5 in)	284 kg/km (191 lb/1,000 ft)	282 mm (11.1 in)	188 mm (7.4 in)
	or FREEDM Ribbon/Ultr					
2	12.0 mm (0.47 in)	Protective	63.5 mm (2.5 in)	141 kg/km (94 lb/1,000 ft)	180 mm (7.1 in)	120 mm (4.7 in)
2	12.0 mm (0.47 in)	Protective	63.5 mm (2.5 in)	141 kg/km (94 lb/1,000 ft)	180 mm (7.1 in)	120 mm (4.7 in)
6	12.0 mm (0.47 in)	Protective	63.5 mm (2.5 in)	141 kg/km (94 lb/1,000 ft)	180 mm (7.1 in)	120 mm (4.7 in)
18	12.0 mm (0.47 in)	Protective	63.5 mm (2.5 in)	141 kg/km (94 lb/1,000 ft)	180 mm (7.1 in)	120 mm (4.7 in)
2	12.7 mm (0.50 in)	Protective	63.5 mm (2.5 in)	157 kg/km (105 lb/1,000 ft)	191 mm (7.5 in)	120 mm (4.7 m) 127 mm (5.0 in)
96	12.7 mm (0.50 in)	Protective	63.5 mm (2.5 in)	157 kg/km (105 lb/1,000 ft)	191 mm (7.5 in)	127 mm (5.0 in)
44	13.6 mm (0.54 in)	Protective	63.5 mm (2.5 in)	175 kg/km (118 lb/1,000 ft)	204 mm (8.0 in)	136 mm (5.4 in)
44 92	17.6 mm (0.69 in)	Protective	63.5 mm (2.5 in)	286 kg/km (192 lb/1,000 ft)	264 mm (10.4 in)	176 mm (6.9 in)
	17.6 mm (0.69 in)	Protective	63.5 mm (2.5 in)	286 kg/km (192 lb/1,000 ft)	264 mm (10.4 in)	176 mm (6.9 in)
.16 .88	21.3 mm (0.84 in)	Protective	63.5 mm (2.5 in) 63.5 mm (2.5 in)	338 kg/km (227 lb/1,000 ft)	319.5 mm (12.6 in)	213 mm (8.4 in)
				-		
32	22.7 mm (0.89 in)	Protective	101.6 mm (4 in)	380.13 kg/km (255 lb/1,000 ft)	340.5 mm (13.4 in)	227 mm (8.9 in)
576	25.4 mm (1.0 in)	Protective	101.6 mm (4 in)	476 kg/km (319 lb/1,000 ft)	381 mm (15 in)	254 mm (10 in)
364	25.4 mm (1.0 in)	Protective	101.6 mm (4 in)	577 kg/km (387 lb/1,000 ft)	381 mm (15 in)	254 mm (10 in)
	or FREEDM UltraRibbon					201 (22-22)
132	29.1 mm (1.15 in)	Protective	101.6 mm (4 in)	605.8 kg/km (406 lb/1,000 ft)	436.5 mm (17.2 in)	291 mm (11.5 in)
576	32.9 mm (1.3 in)	Protective	101.6 mm (4 in)	871 kg/km (584 lb/1,000 ft)	493.5 mm (19.4 in)	254 mm (10.0 in)
364	32.9 mm (1.3 in)	Protective	101.6 mm (4 in)	881 kg/km (581 lb/1,000 ft)	493.5 mm (19.4 in)	254 mm (10.0 in)

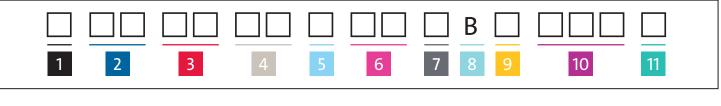
*All pigtails ship with a mesh pulling grip on the pigtail end.

EDGE[™] Indoor/Outdoor Loose Tube Trunks: Riser and Plenum

EDGE[™] indoor/outdoor loose tube trunks combine Corning's FREEDM[®] indoor/outdoor-rated cable with factory-terminated MTP[®] connectors. These trunks are available in riser and plenum options as well as armored and non-armored options. Riser trunks are available up to 288 F and plenum trunks are available up to 72 F. These trunks are shipped with a water-resistant pulling grip up to 144 F.

Refer to AEN160 and AEN161 for furcation and application guidance, respectively.

Ordering Information



1 Select Grip.

- W = Water-Resistant Grip on One End (12-144 F only)
- Y = Water-Resistant Grip on Both Ends (12-144 Fonly)
- A = Protective Grip on One End (288 F only)

Select MTP Connector.

(End One/Outside of Reel)

- 00 = Pigtail (only available with P = straight-throughpolarity)
- 75 = MTP 12-fiber (non-pinned) multimode
- 90 = MTP 12-fiber (non-pinned) single-mode

Select MTP Connector.

- (End Two/Inside of Reel)
- 75 = MTP 12-fiber (non-pinned) multimode
- 90 = MTP 12-fiber (non-pinned) single-mode

Select Fiber Count.

12 = 12-fiber 24 = 24-fiber 36 = 36-fiber

96 = 96-fiber E4 = 144-fiber 48 = 48-fiber U8 = 288-fiber

72 = 72-fiber

5 Select Fiber Type.

 $Q = 50 \ \mu m \ Multimode \ (OM4)$ G = Single-Mode Ultra (OS2)

6 Select Cable Type.

- UF = Indoor/Outdoor Loose Tube, Riser, non-armored
- AF = Indoor/Outdoor Loose Tube, Riser, armored
- WP = Indoor/Outdoor Loose Tube, Plenum. non-armored (12-72 fiber only)
- WA = Indoor/Outdoor Loose Tube, Plenum, armored (12-72 fiber only)

Select Leg Length.

(End One/Outside of Reel) 0 = Pigtail B = 36 in (+3.5/-1 in)

Defines Leg Length.

(End Two/Inside of Reel)

B = 36 in (+3.5/-1 in)



U = Universal Type-B

P = Straight-Through Type-A

10 Select Cable Length.

020-999 ft (1 ft increments measured from furcation to furcation or from furcation to pigtail end)

006-300 m

(1 m increments measured from furcation to furcation or from furcation to pigtail end)

Longer cable lengths available upon request.

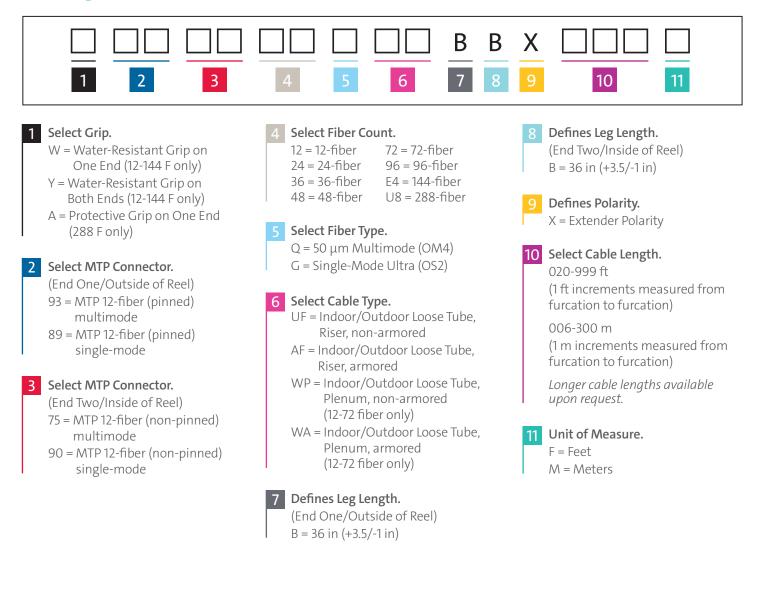
Unit of Measure. 11

F = Feet M = Meters

EDGE[™] Indoor/Outdoor Loose Tube Extender Trunks: Riser and Plenum

EDGE[™] indoor/outdoor loose tube extender trunks combine Corning's FREEDM[®] indoor/outdoor-rated cable with factoryterminated MTP[®] connectors. Available in riser and plenum options as well as armored and non-armored options, these trunks come pinned to non-pinned with TIA-568 Type-A (straight-through) polarity to provide additional backbone distance. Riser trunks are available up to 288-fiber and plenum trunks are available up to 72-fiber. These trunks are shipped with a water-resistant pulling grip that can support up to 144 fibers.

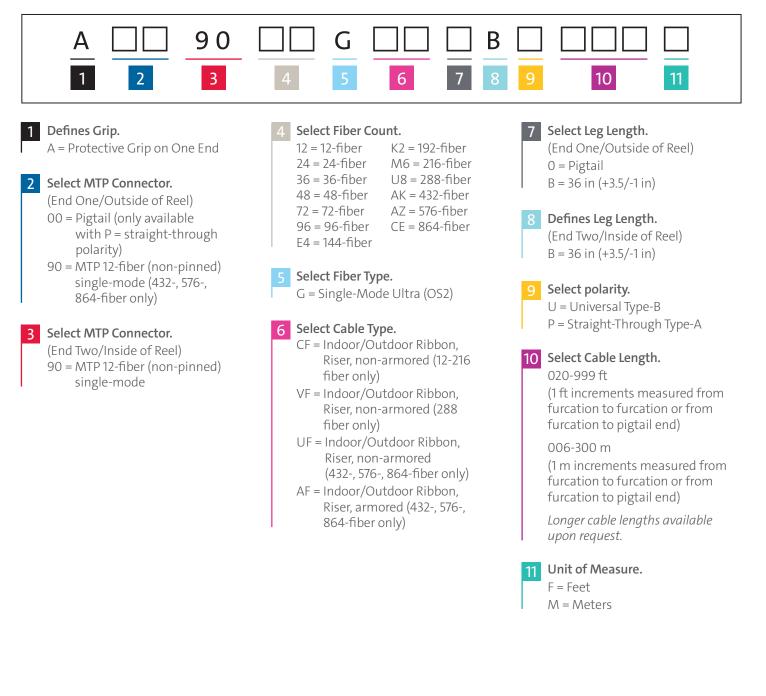
Refer to AEN160 and AEN161 for furcation and application guidance, respectively.



EDGE[™] Indoor/Outdoor Ribbon Trunks: Riser

EDGE[™] indoor/outdoor ribbon trunks combine Corning's FREEDM[®] indoor/outdoor-rated ribbon cable with factory-terminated MTP[®] connectors. These trunks are available in armored and non-armored options. In the pigtail configuration, these trunks are shipped with a mesh pulling grip on the pigtail end and a protective cover on the MTP connectors.

Refer to AEN160 and AEN161 for furcation and application guidance, respectively.



CORNING

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