

Pushlok<sup>™</sup> hardened connector technology is the key component enabling smaller terminals and drops for FTTx networks than ever before. Designed for use in nearly every access network environment, the terminal is small enough to be placed in existing handholes or pedestals where space is paramount, on building façades, or in aerial networks (pole- or strand-mount). Improved aesthetics improve end-user adoption for façade applications.

There are two styles of terminals designed to meet various space and density requirements: terminals with one row of adapter ports and terminals with two rows of adapter ports. For terminals with one row of adapter ports, the ports are aligned in a single row with the input stub on the left and 2-, 4-, 6- or 8-distribution ports on the right. For terminals with two rows of ports, the input stub is on the front left of the terminal and there are 6-, 8-, 12- or 16-distribution ports. Each port's corresponding release button is actuated to remove the dust cap or drop. When installing drops, the keyed ports provide an audible and physical positive feedback minimizing technician variation and potential damage due to mishandling.

Features	Benefits
Pushlok cable assembly connector ports for customer drop terminations	Lower installation cost and increase speed of connection
Standard and integrated splitter terminal options	Solution supports various architecture types
Durability	45 kg cable tensile strength
Available stubbed or preterminated with OptiTip* multifiber technology	Compatible with existing FlexNAP <sup>™</sup> installations
Small-form-factor optimizes space in pedestals/handholes	Lower profile overall with drop entry ports on bottom
Ultrasonically welded housing	Eliminates water ingress potential and prevents unwanted entry in the field
Factory-terminated polished connectors	Eliminates loss associated with excess fusion splices

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Mechanical Specifications		
Terminal Type	Dimensions (L x W x H)	Weight
2-Distribution Port Terminal (One Row of 4 Ports, 2 Filled)	15.4 x 8.4 x 3.0 cm (6.06 x 3.29 x 1.18 in)	0.195 kg (0.43 lb)
4-Distribution Port Terminal (One Row of 4 Ports)	15.4 x 8.4 x 3.0 cm (6.06 x 3.29 x 1.18 in)	0.195 kg (0.43 lb)
6-Distribution Port Terminal (One Row of 8 Ports, 2 Filled)	15.4 x 13.4 x 3.0 cm (6.06 x 5.29 x 1.18 in)	0.390 kg (0.86 lb)
6-Distribution Port Terminal (Two Rows of 4 Ports, 2 Filled)	15.4 x 8.4 x 5.8 cm (6.06 x 3.29 x 2.30 in)	0.400 kg (0.88 lb)
8-Distribution Port Terminal (One Row of 8 Ports)	15.4 x 13.4 x 3.0 cm (6.06 x 5.29 x 1.18 in)	0.390 kg (0.86 lb)
8-Distribution Port Terminal (Two Rows of 4 Ports)	15.4 x 8.4 x 5.8 cm (6.06 x 3.29 x 2.30 in)	0.400 kg (0.88 lb)
12-Distribution Port Terminal (Two Rows of 8 Ports, 4 Filled)	15.4 x 13.4 x 5.8 cm (6.06 x 5.29 x 2.30 in)	0.600 kg (1.32 lb)
16-Distribution Port Terminal (Two Rows of 8 Ports)	15.4 x 13.4 x 5.8 cm (6.06 x 5.29 x 2.30 in)	0.600 kg (1.32 lb)

Optical Specifications				
Connector Type	Fiber Type	Insertion Loss, Maximum	Insertion Loss, Typical	Reflectance, Maximum
Pushlok™Connector	Single-mode (OS2)	0.50 dB	0.15 dB	-0.65 dB
OptiTip® Multifiber Connector	Single-mode (OS2)	0.50 dB	0.35 dB	-0.65 dB

Packaging		
Cable Stub Length	Dimensions (L x W x H)	Packaging Method
Cables ≤ 100 m	15.2 x 76.2 x 76.2 cm (6.0 x 30.0 x 30.0 in)	Вох
Cables ≥ 100 m	84.6 x 17.8 x 84.6 cm (33.0 x 7.0 x 33.0 in)	Reel

Terminal Cable Stub Information		
SST Cable Stub		
Application	Corning SST-Drop" cables offer the ease of installation of standard ALTOS" cable in an easy-access, single-tube design. The dielectric version eliminates any bonding and grounding requirements	
Cable Specification Reference Materials	12 F SST Dielectric Cable: Product Specification 012EB4-13122A20	
MiniXtend Cable Stub		
Application	Corning MiniXtend* Cable with Binderless* FastAccess* Technology is an all-dielectric loose tube cable designed for microduct applications. The outer diameter of the 12-72 F cable is 5.4 mm (0.21 in).	
Cable Specification Reference Materials	Family Spec Sheet 0136_NAFTA_AEN	

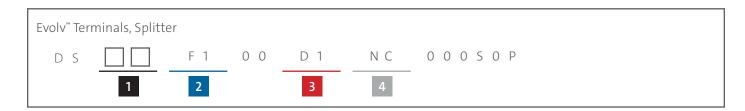
<sup>\*</sup>Corning's proprietary binderless FastAccess technology refers to the combination of a Corning FastAccess technology jacket with an innovative technology used to bind cable construction through the manufacturing process, eliminating the use of binder yarns and waterblocking tapes.

## Evolv<sup>™</sup> Splitter Terminals with Pushlok<sup>™</sup> Technology



### Ordering Information

Splitter Terminals		
Part Number	Product Description	
DSH2F100D1NC000S0P	Evolv" Splitter Terminal with Pushlok" Technology, 2 port, unstubbed, 1x2 splitter	
DSH4F100D1NC000S0P	Evolv Splitter Terminal with Pushlok Technology, 4 port, unstubbed, 1x4 splitter	
DSF8F100D1NC000S0P	Evolv Splitter Terminal with Pushlok Technology, 8 port, unstubbed, 1x8 splitter	
DSF9F100D1NC000S0P	Evolv Splitter Terminal with Pushlok Technology, 8 port, unstubbed, 1x8 splitter, 2 rows of 4 ports	
DSP6F100D1NC000S0P	Evolv Splitter Terminal with Pushlok Technology, 16 port, unstubbed, 1x16 splitter, 2 rows of 8 ports	

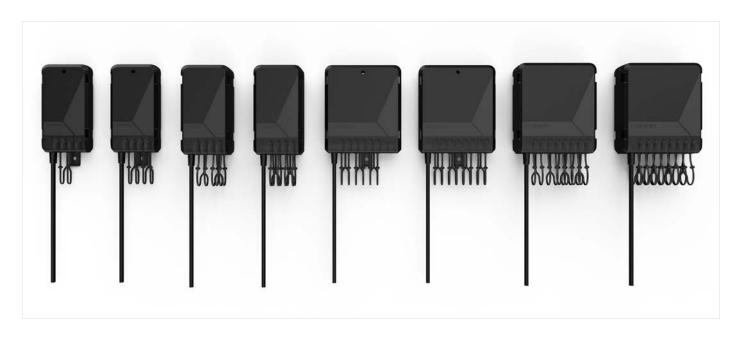


- 1 Select number of Pushlok<sup>™</sup> single-fiber connector ports.

  - F8 = 8
- 2 Connector type.
  - F1 = Single-fiber per port

- Port connector type.
  - D1 = Single-fiber Pushlok SC APC
- 4 Tail connector type.
  - NC = Not connectorized

## Evolv<sup>™</sup> Stubbed Terminals with Pushlok<sup>™</sup> Technology



Standard Stubbed Term	inals - See Additional Configurations on Page 5
Part Number	Product Description
DMA2F1FDD1NC010M0P	Evolv <sup>™</sup> Terminal with Pushlok <sup>™</sup> Technology, 2 port, stubbed, SST dielectric, 10 m
DMA4F1FDD1NC050M0P	Evolv Terminal with Pushlok Technology, 4 port, stubbed, SST dielectric, 50 m
DMA6F1FDD1NC100M0P	Evolv Terminal with Pushlok Technology, 6 port, stubbed, SST dielectric, 100 m
DMA8F1FDD1NC150M0P	Evolv Terminal with Pushlok Technology, 8 port, stubbed, SST dielectric, 150 m
DMB4F1FDD1NC010M0P	Evolv Terminal with Pushlok Technology, 8 port, 2 rows of 4 ports, stubbed, SST dielectric, 10 m
DMB6F1FDD1NC050M0P	Evolv Terminal with Pushlok Technology, 12 port, 2 rows of 8 ports (4 filled), stubbed, SST dielectric, 50 m
DMB8F1FDD1NC030M0P	Evolv Terminal with Pushlok Technology, 16 port, 2 rows of 8 ports, stubbed, SST dielectric, 30 m
DMA2F1MLD1NC010M0P	Evolv Terminal with Pushlok Technology, 2 port, stubbed, MiniXtend*, 10 m
DMA4F1MLD1NC050M0P	Evolv Terminal with Pushlok Technology, 4 port, stubbed, MiniXtend, 50 m
DMA6F1MLD1NC100M0P	Evolv Terminal with Pushlok Technology, 6 port, stubbed, MiniXtend, 100 m
DMB3F1MLD1NC030M0P	Evolv Terminal with Pushlok Technology, 6 port, 2 rows of 4 ports (2 filled), stubbed, MiniXtend, 30 m
DMA8F1MLD1NC150M0P	Evolv Terminal with Pushlok Technology, 8 port, stubbed, MiniXtend, 150 m
DMB4F1MLD1NC010M0P	Evolv Terminal with Pushlok Technology, 8 port, 2 rows of 4 ports, stubbed, MiniXtend, 10 m
DMB6F1MLD1NC050M0P	Evolv Terminal with Pushlok Technology, 12 port, 2 rows of 8 ports (4 filled), stubbed, MiniXtend, 50 m
DMB8F1MLD1NC100M0P	Evolv Terminal with Pushlok Technology, 16 port, 2 rows of 8 ports, stubbed, MiniXtend, 100 m

#### **Ordering Information**



Select number of Pushlok single-fiber connector ports.

A2 = 2 B3 = 6 (2 rows of 4 ports, 2 filled)
A4 = 4 B4 = 8 (2 rows of 4 ports)
A6 = 6 B6 = 12 (2 rows of 8 ports, 4 filled)
A8 = 8 B8 = 16 (2 rows of 8 ports)\*
\*only available with MiniXtend stub;
SST dielectric stub coming soon

2 Connector type.

F1 = Single-fiber per port

3 Select cable type.

FD = SST flat dielectric drop cable

ML = MiniXtend® loose tube cable

4 Port connector type.

D1 = Single-fiber Pushlok SC APC

5 Tail connector type.

NC = Not connectorized

6 Select cable stub length.

5 m increments up to 1,000 m available. See Table A for lengths  $\geq$  1,000 m

7 Unit length.

M = Meters

8 Select packaging.

P = Standard spool — individual packaging

B = Bulk packaging

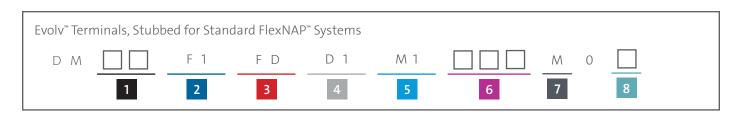
Table A: Alpha codes for lengths ≥ 1,000 m			
A00 = 1,000 B00 = 1,100 C00 = 1,200 D00 = 1,300 E00 = 1,400 F00 = 1,500 G00 = 1,600	H00 = 1,700 J00 = 1,800 K00 = 1,900 L00 = 2,000 M00 = 2,100 N00 = 2,200 O00 = 2,300	P00 = 2,400 Q00 = 2,500 R00 = 2,600 S00 = 2,700 T00 = 2,800 U00 = 2,900 V00 = 3,000	W00 = 3,100 X00 = 3,200 Y00 = 3,300 Z00 = 3,400

## Evolv<sup>™</sup> Stubbed Terminals with Pushlok<sup>™</sup> Technology for FlexNAP<sup>™</sup> Systems



Stubbed Terminals for F	Stubbed Terminals for FlexNAP <sup>™</sup> Systems — See Additional Configurations on Page 7		
Part Number	Product Description		
DFA2F1FDD1M1050M0P	Evolv Terminal with Pushlok Technology, 2 port, preconnectorized OptiTip stub, SST dielectric, 50 m		
DFA4F1FDD1M1100M0P	Evolv Terminal with Pushlok Technology, 4 port, preconnectorized OptiTip stub, SST dielectric, 100 m		
DFA6F1FDD1M1100M0P	Evolv Terminal with Pushlok Technology, 6 port, preconnectorized OptiTip stub, SST dielectric, 100 m		
DFB3F1FDD1NC050M0P	Evolv Terminal with Pushlok Technology, 6 port, 2 rows of 4 ports (2 filled), preconnectorized OptiTip stub, SST dielectric, 50 m		
DFA8F1FDD1M1050M0P	Evolv Terminal with Pushlok Technology, 8 port, preconnectorized OptiTip stub, SST dielectric, 50 m		
DFB4F1FDD1M1050M0P	Evolv Terminal with Pushlok Technology, 8 port, 2 rows of 4 ports, preconnectorized OptiTip stub, SST dielectric, 50 m		
DFB6F1FDD1M1100M0P	Evolv Terminal with Pushlok Technology, 12 port, 2 rows of 8 ports (4 filled), preconnectorized OptiTip stub, SST dielectric, 100 m		

#### **Ordering Information**



1 Select number of Pushlok<sup>™</sup> single-fiber connector ports.

A2 = 2 B3 = 6 (2 rows of 4 ports, 2 filled) A4 = 4 B4 = 8 (2 rows of 4 ports) A6 = 6 B6 = 12 (2 rows of 8 ports, 4 filled) A8 = 8

2 Connector type.

F1 = Single-fiber per port

3 Cable type.

FD = SST flat dielectric drop cable

4 Port connector type.

D1 = Single-fiber Pushlok SC APC

5 Tail connector type.

M1 = OptiTip\* connector

6 Select cable stub length.

5 m increments up to 1,000 m available. See Table A for lengths  $\geq$  1,000 m

7 Unit length.

M = Meters

8 Select packaging.

P = Standard spool — individual packaging

B = Bulk packaging

Table A: Alpha co	odes for lengths ≥ 1,	000 m	
A00 = 1,000 B00 = 1,100 C00 = 1,200 D00 = 1,300 E00 = 1,400 F00 = 1,500 G00 = 1,600	H00 = 1,700 J00 = 1,800 K00 = 1,900 L00 = 2,000 M00 = 2,100 N00 = 2,200 O00 = 2,300	P00 = 2,400 Q00 = 2,500 R00 = 2,600 S00 = 2,700 T00 = 2,800 U00 = 2,900 V00 = 3,000	W00 = 3,100 X00 = 3,200 Y00 = 3,300 Z00 = 3,400





1x2 Optical Tap Terminal, 90/10 Power Split

1x4 Optical Tap Terminal, 90/10 Power Split

1x8 Optical Tap Terminal, 90/10 Power Split

Optical distributed taps, known also as uneven-split or asymmetric terminals, are most appropriate for short length, dense environments or rural FTTx applications where lean distribution runs are desired. Each run supports 32 or 64 subscriber ONTs with cascaded multiport terminals utilizing preconnectorized single-fiber assemblies in the distribution. The fully preconnectorized system reduces installation costs while increasing the speed of deployment.

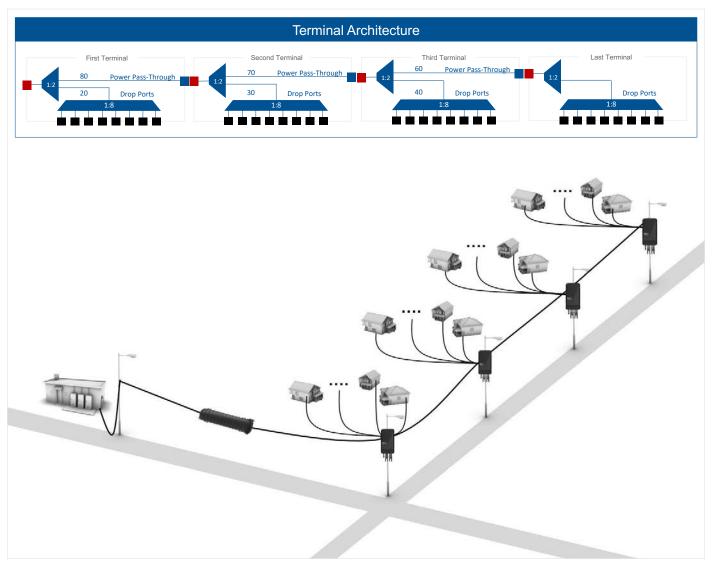
This solution is comprised of an array of power-split ratios to customize each run for optimal signal reach. Tap splits of 90/10, 85/15, 80/20, 70/30, and 60/40 split ratios can be cascaded, or daisy-chained, to accommodate a wide variety of deployment scenarios.

Each multiport terminal includes the uneven, asymmetric splitter, a standard 1x2, 1x4, or 1x8 splitter to support customer connections, as well as a pass-through port feeding subsequent terminals in the run in a single form factor. The number of terminals in an individual run and the variation of multiport terminals used is dependent upon the distances between terminals and subscribers to maintain an acceptable link loss budget. By limiting the number of terminal options and utilizing preconnectorized Pushlok<sup>®</sup> drop cables, FTTx designs and material inventories can be simplified.

Features	Benefits
Pushlok Connector Ports for Drop Termination	Lower installation cost and increased speed of interconnection
Stubless Multiport Terminal System	Reduces distribution cable fiber count; allows full plug-and-play distribution deployment, without requiring splicing
Full Preconnectorized Single-Fiber Architecture	A cost-effective solution that diverts a portion of power to support a typical run of 32 to 64 ONTs
Factory-Installed and Tested Connectors	Connector design provides stability, reliability, and durability
Supports Various Power Split Ratios	Solutions available to accommodate numerous combinations of power split ratio designs
Rapid Repair/Restoration	Damaged single-fiber preconnectorized drops can be repaired quickly with low-skill technicians to restore subscriber services
Dual-Ended ROC™ Drop Cable Assembly	ROC drop assemblies terminated with Pushlok connectors on both ends provide quick and efficient connectivity between terminals

The optical distributed tap architecture leverages a cascaded network of uneven-split, or asymmetric split, multiport terminals to ensure sufficient signal reaches subscribers along the route. As the first terminal is closest to the signal source (OLT), a lower amount of signal is needed to feed the subscribers served from the 1x2, 1x4, or 1x8 splitter.

In many cases, the first multiport terminal will utilize a 90/10 power split where the 10% feeds the subscriber ports and the 90% passes on to feed subsequent terminals downstream. Subsequent terminals in the chain either maintain a similar uneven-split ratio or a higher ratio of local power depending upon the distances between terminals and the total link budget. In higher density environments with short distances between terminals, operators may serve more than the standard 32 or 64 subscribers. However, in low-density rural runs spanning long distances, operators may serve fewer subscribers per route as this is heavily dependent upon the link budget.



Optical Tap Network Architecture Example Illustration (8-Port Evolv Terminals shown)

Mechanical Specifications	
Application	Aerial, duct, direct-buried
Dimensions (L x W x H)	2-Port Evolv" Terminal: 15.4 x 8.4 x 3.0 cm (6.06 x 3.29 x 1.18 in) 4-Port Evolv Terminal: 15.4 x 13.4 x 3.0 cm (6.06 x 5.29 x 1.18 in) 8-Port Evolv Terminal: 15.4 x 8.4 x 5.8 cm (6.06 x 3.29 x 2.30 in)
Weight	2-Port Evolv Terminal: 0.195 kg (0.43 lb) 4-Port Evolv Terminal: 0.390 kg (0.86 lb) 8-Port Evolv Terminal: 0.400 kg (0.88 lb)
Packaging	Individual packaging
Termination	Pushlok" connector assemblies
Axial Pull, Plug to Adapter	23 kg
Axial Pull, Plug to Cable	45 kg in axial pull with load applied to the dust cap
Cold Mate/Demate	-20°C mechanical testing

2-Port Evolv Terminal Optical Specifications			
Splitter Type	Insertion Loss, Max	Insertion Loss, Typical	Reflectance, Typical
Pass-Through Port (90)	1.20 dB	1.00 dB	-55 dB
Drop Port (10)	15.40 dB	14.50 dB	-55 dB
Pass-Through Port (85)	1.50 dB	1.20 dB	-55 dB
Drop Port (15)	13.20 dB	12.60 dB	-55 dB
Pass-Through Port (80)	1.80 dB	1.40 dB	-55 dB
Drop Port (20)	11.80 dB	11.20 dB	-55 dB
Pass-Through Port (70)	2.40 dB	2.00 dB	-55 dB
Drop Port (30)	10.00 dB	9.40 dB	-55 dB
Pass-Through Port (60)	3.10 dB	2.80 dB	-55 dB
Drop Port (40)	8.70 dB	8.00 dB	-55 dB

4-Port Evolv Terminal Optical Specifications			
Splitter Type	Insertion Loss, Max	Insertion Loss, Typical	Reflectance, Typical
Pass-Through Port (90)	1.20 dB	1.00 dB	-55 dB
Drop Port (10)	19.30 dB	17.20 dB	-55 dB
Pass-Through Port (85)	1.50 dB	1.20 dB	-55 dB
Drop Port (15)	17.00 dB	15.50 dB	-55 dB
Pass-Through Port (80)	1.80 dB	1.40 dB	-55 dB
Drop Port (20)	16.00 dB	14.50 dB	-55 dB
Pass-Through Port (70)	2.40 dB	2.00 dB	-55 dB
Drop Port (30)	13.60 dB	12.20 dB	-55 dB
Pass-Through Port (60)	3.10 dB	2.80 dB	-55 dB
Drop Port (40)	12.30 dB	11.00 dB	-55 dB

8-Port Multiport Optical Specifications			
Splitter Type	Insertion Loss, Max	Insertion Loss, Typical	Reflectance, Typical
Pass-Through Port (90)	1.20 dB	1.00 dB	-55 dB
Drop Port (10)	21.74 dB	20.420 dB	-55 dB
Pass-Through Port (85)	1.50 dB	1.20 dB	-55 dB
Drop Port (15)	20.98 dB	18.60 dB	-55 dB
Pass-Through Port (80)	1.80 dB	1.40 dB	-55 dB
Drop Port (20)	18.45 dB	17.50 dB	-55 dB
Pass-Through Port (70)	2.40 dB	2.00 dB	-55 dB
Drop Port (30)	16.71 dB	15.40 dB	-55 dB
Pass-Through Port (60)	3.10 dB	2.80 dB	-55 dB
Drop Port (40)	15.52 dB	14.20 dB	-55 dB

Environmental Characteristics	
Characteristics Temperature Rating	-40°C to 85°C (-40°F to 185°F)
RoHS	Free of hazardous substances according to RoHS 2011/65/EU

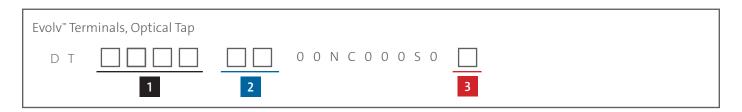
Standards	
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Product Design	
Red Connector Port	Input Connector Port
Blue Connector Port	Cascade/Next Hop Connector Port



Optical Tap Evolv Terminal Family (8-Port Evolv Terminals shown)

#### Evolv<sup>™</sup> Optical Tap Terminal Ordering Information



Defines number of terminal ports.

A4X2 = 4-port terminal,

2 subscribers

A8X4 = 8-port terminal,

4 subscribers

B4X8 = 8-port terminal,

8 subscribers

Defines connector type.

2 Subscriber Port Terminals

15 = 90/10 Power Split

13 = 85/15 Power Split

11 = 80/20 Power Split

09 = 70/30 Power Split

08 = 60/40 Power Split

04 = 00/00 Power Split

4 Subscriber Port Terminals

17 = 90/10 Power Split

16 = 85/15 Power Split

15 = 80/20 Power Split

12 = 70/30 Power Split

11 = 60/40 Power Split

06 = 00/00 Power Split

#### 8 Subscriber Port Terminals

20 = 90/10 Power Split

18 = 85/15 Power Split

17 = 80/20 Power Split 15 = 70/30 Power Split

08 = 60/40 Power Split

04 = 00/00 Power Split

Select packaging.

P = Standard spool — individual packaging

B = Bulk packaging

Part Number Examples		
Part Number	Product Description	Units per Delivery
DTA4X21500NC000S0P	Optical Tap Evolv Terminal, 90/10 power distribution, 2 port, stubless	1
DTA8X41700NC000S0P	Optical Tap Evolv Terminal, 90/10 power distribution, 4 port, stubless	1
DTB4X82000NC000S0P	Optical Tap Evolv Terminal, 90/10 power distribution, 8 port, stubless	1

### **Evolv**<sup>™</sup> **Terminal Accessories**



Evolv <sup>™</sup> Terminal Brackets		
Part Number	Product Description	
EHC-BKT-Wall	Evolv Wall- and Pole-Mount Terminal Bracket, compatible with 8-, 12-, and 16-port terminals (2 rows of ports)	
EHC-BKT-HH	Evolv Handhole-Mount Terminal Bracket, compatible with all Evolv terminals (2, 4, 6, 8, 12 and 16 port)	
EHC-BKT-Strand	Evolv Strand-Mount Terminal Bracket, compatible with all Evolv terminals (2, 4, 6, 8, 12 and 16 port)	



Evolv Terminal Covers		
Part Number	Product Description	
EHC-CVR-A4-GRAY	Evolv 2- and 4-Port Terminal Cover	
EHC-CVR-A8-GRAY	Evolv 6- and 8-Port Terminal Cover	
EHC-CVR-B4-GRAY	Evolv 6- and 8-Port Terminal Cover, 2 rows of 4 ports	
EHC-CVR-B8-GRAY	Evolv 12- and 16-Port Terminal Cover, 2 rows of 8 ports	

### Evolv<sup>™</sup> Port Cleaner with Pushlok<sup>™</sup> Technology



Accessory Information  Evolv Port Cleaner with Pushlok Technology		
Description	The Evolv port cleaner with Pushlok technology is compatible with both Pushlok and OptiTap* connectors and Evolv terminals and multiports. Single-fiber port cleaner accessories are proven effective for removing the following from connector end faces: skin oil, hand lotion, Arizona road dust, pre- and postmate graphite, salt, isopropyl alcohol residue, and distilled water residue. These cleaners are easy to use and offer over 525 cleanings.	
Standards	Free of hazardous substances according to RoHs 2011/65/EU	

