Evolv® FlexNAP™ System with Multifiber Tethers

CORNING

The Corning FlexNAP™ system provides the most cost-effective method of deploying optical fiber in outside plant distribution networks at speeds significantly faster than traditional field installations. The FlexNAP system utilizes optical fiber cables upon which network access points are preinstalled at customer-specified locations along the length of the cable. The cable and network access points are tested and shipped as a complete distribution cable/terminal system.

Compatible with outside plant distribution applications in both aerial (overlash, dedicated messenger and self-support) and below-ground (direct-buried and duct installations down to 1.25-in duct). The Corning FlexNAP systems can be installed up to five times faster per network access point.

The increased speed of network deployment, along with the reliability of factory testing, offers significant value to the end user in the following key areas: deployment velocity, risk avoidance, workforce efficiency, capital avoidance, and deferment.

Features and Benefits

Factory-installed, sealed splice points (2, 4, 6, 8, or 12 fibers per tether)
Drastically reduces field splicing with a predetermined loss at each waterproof tether attachment point (TAP)

Flexible preterminated access points
Utilizes traditional field-installation techniques for aerial, below-grade, and duct applications

Maximum of two tethers per attachment point
Up to 24 fibers at each designated TAP

Distribution cables available in ALTOS® Loose Tube Gel-Free Cable, ALTOS Figure-8, ALTOS Lite Gel-Free Armored Cable and RPX® Ribbon Cable
Field familiarity with traditional network cable types

Evolv® Terminals may be configured with 2, 4, 6, 8, or 12 Pushlok™ Connectors
Allow multiple configuration variations that are suitable for aerial, below-ground, and duct applications

Standards

Design and Test Criteria   GR-3122, GR-771, GR-3120, GR-3152

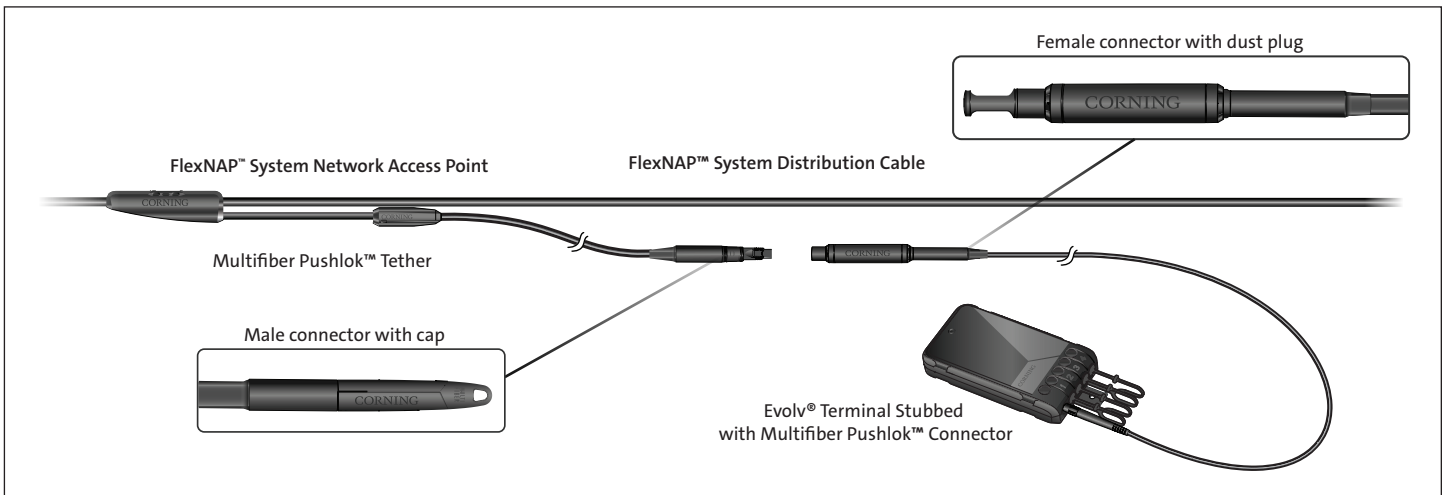Evolv FlexNAP with Multifiber Pushlok Tether
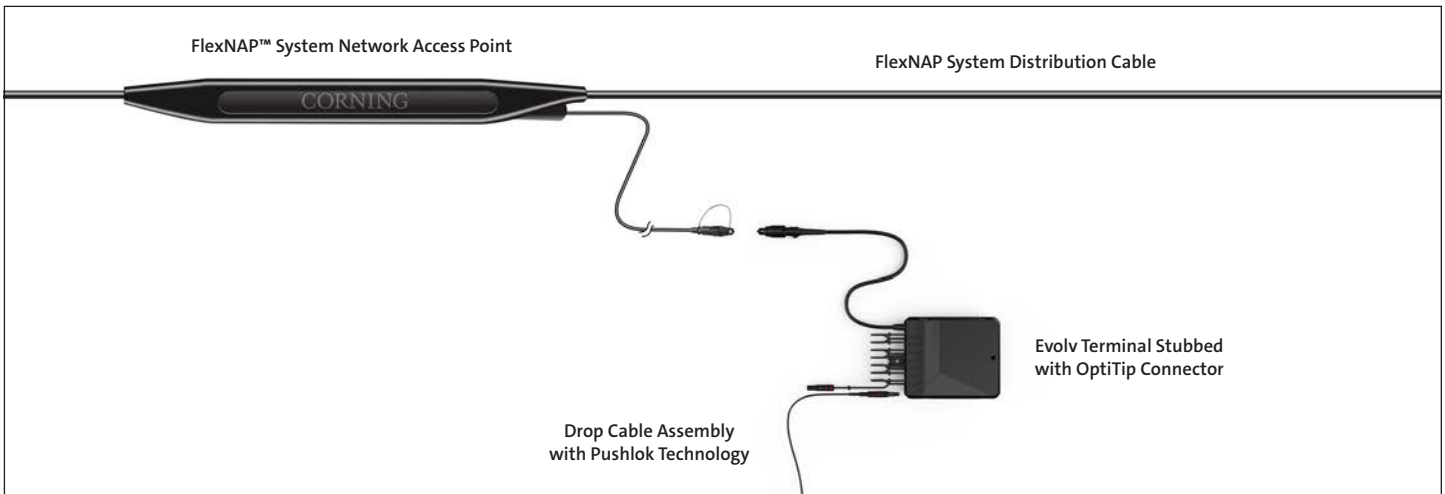

Evolv Stubless Multifiber Terminal

FlexNAP™ System Components

Female connector with dust plug

FlexNAP™ System Network Access Point

FlexNAP™ System Distribution Cable

Multifiber Pushlok™ Tether

Male connector with cap

Evolv® Terminal Stubbed
with Multifiber Pushlok™ Connector

RPX® Ribbon FlexNAP™ System Diagram with Multifiber Pushlok™ Tethers

FlexNAP™ System Network Access Point

FlexNAP System Distribution Cable

**Evolv Terminal Stubbed
with OptiTip Connector**

**Drop Cable Assembly
with Pushlok Technology**

Loose Tube FlexNAP™ System Diagram with OptiTip® Tethers

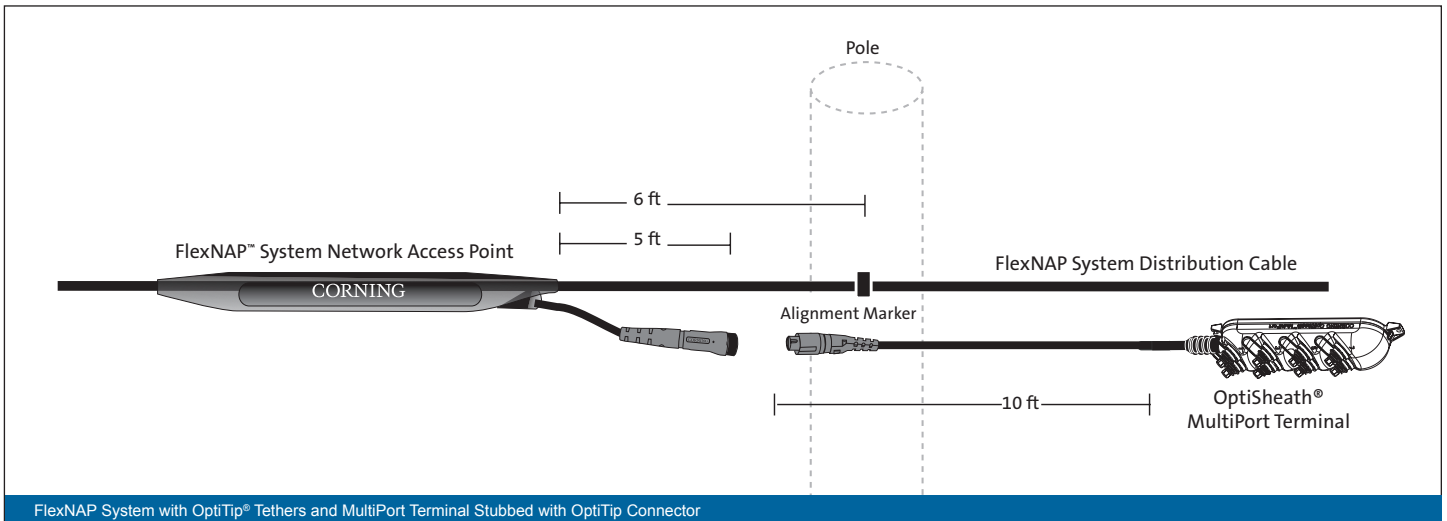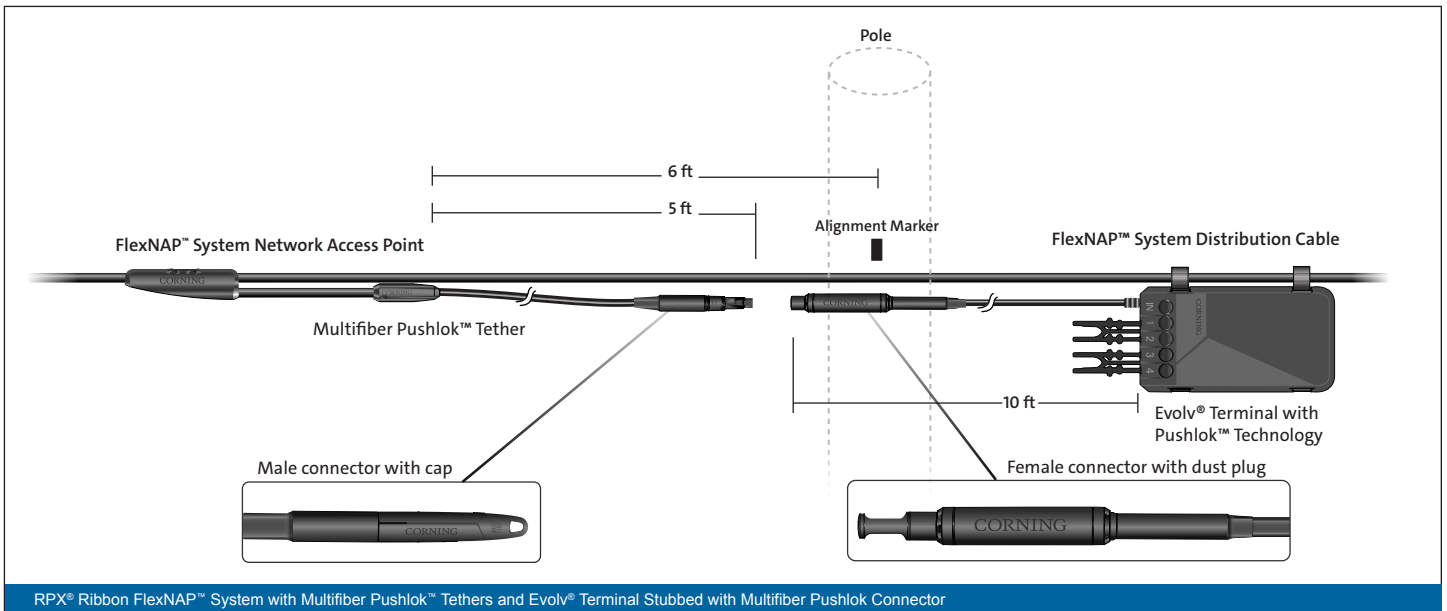A FlexNAP™ System cable consists of four components:

1. FlexNAP system distribution cable
2. FlexNAP system network access points (with multifiber tethers)
3. Evolv Terminal
4. Drop Cable Assembly with Pushlok Technology
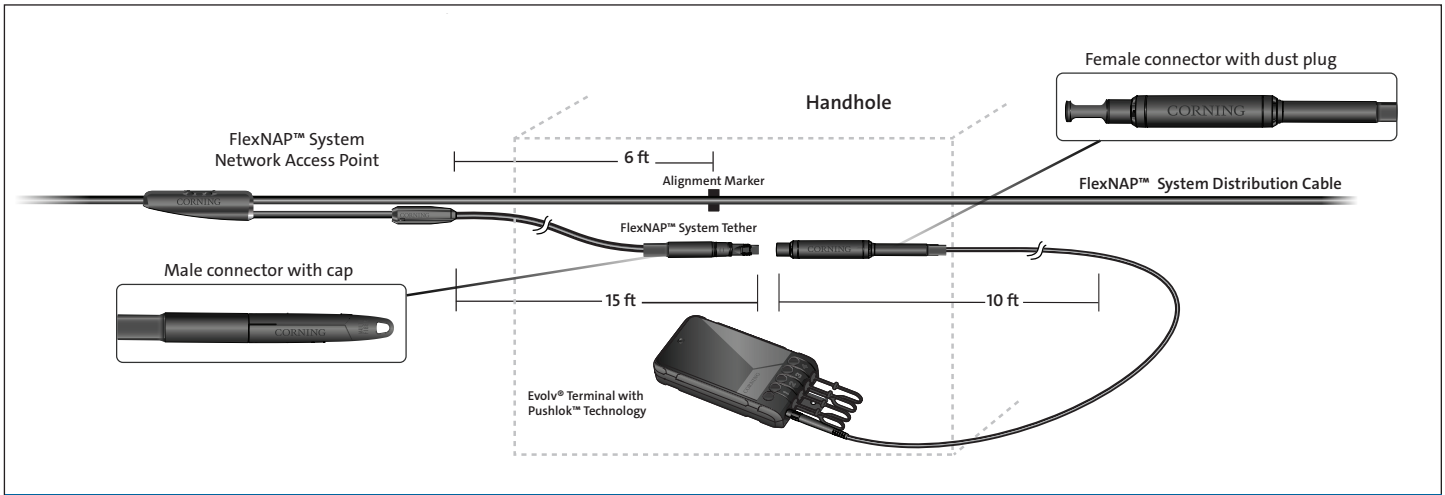
Evolv® FlexNAP™ System with Multifiber Tethers

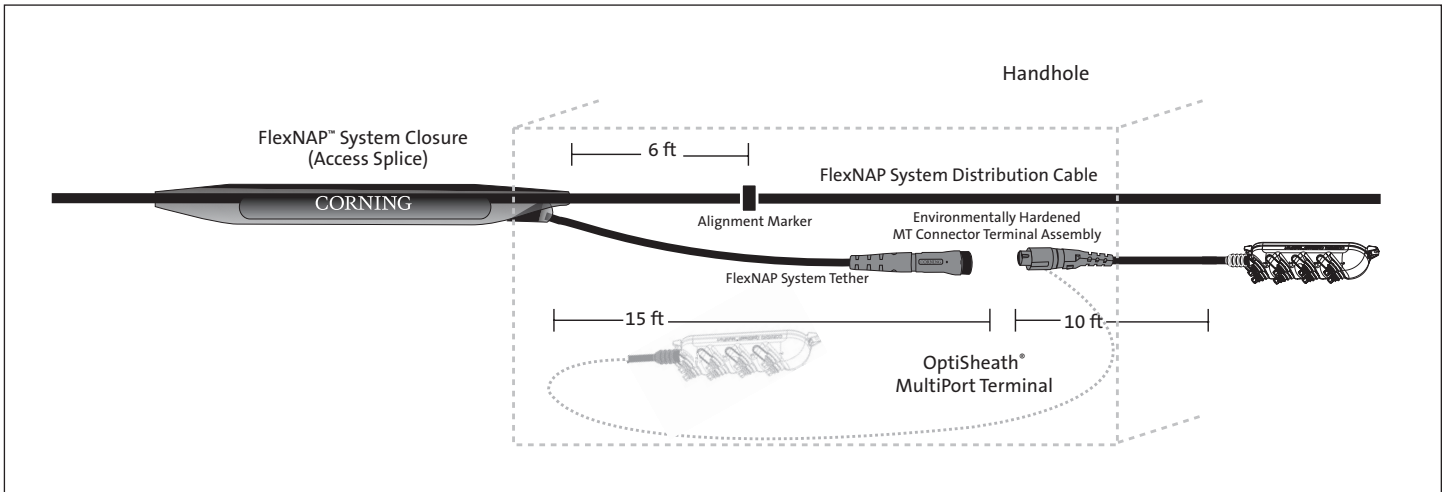CORNING

Sample Design Layouts

Aerial FlexNAP™ Installations

Pole

6 ft

5 ft

Alignment Marker

FlexNAP™ System Network Access Point

FlexNAP™ System Distribution Cable

Multifiber Pushlok™ Tether

Evolv® Terminal with Pushlok™ Technology

10 ft

Male connector with cap

Female connector with dust plug

RPX® Ribbon FlexNAP™ System with Multifiber Pushlok™ Tethers and Evolv® Terminal Stubbed with Multifiber Pushlok Connector

Pole

6 ft

5 ft

FlexNAP™ System Network Access Point

FlexNAP System Distribution Cable

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Alignment Marker

OptiSheath® MultiPort Terminal

10 ft

FlexNAP System with OptiTip® Tethers and MultiPort Terminal Stubbed with OptiTip Connector

Buried/Duct FlexNAP™ Installations

Handhole

Female connector with dust plug

FlexNAP™ System
Network Access Point

6 ft

Alignment Marker

FlexNAP™ System Distribution Cable

FlexNAP™ System Tether

Male connector with cap

15 ft

10 ft

Evolv® Terminal with
Pushlok™ Technology

RPX® Ribbon FlexNAP™ System with Multifiber Pushlok™ Tethers and Evolv® Terminal Stubbed with Multifiber Pushlok Connector
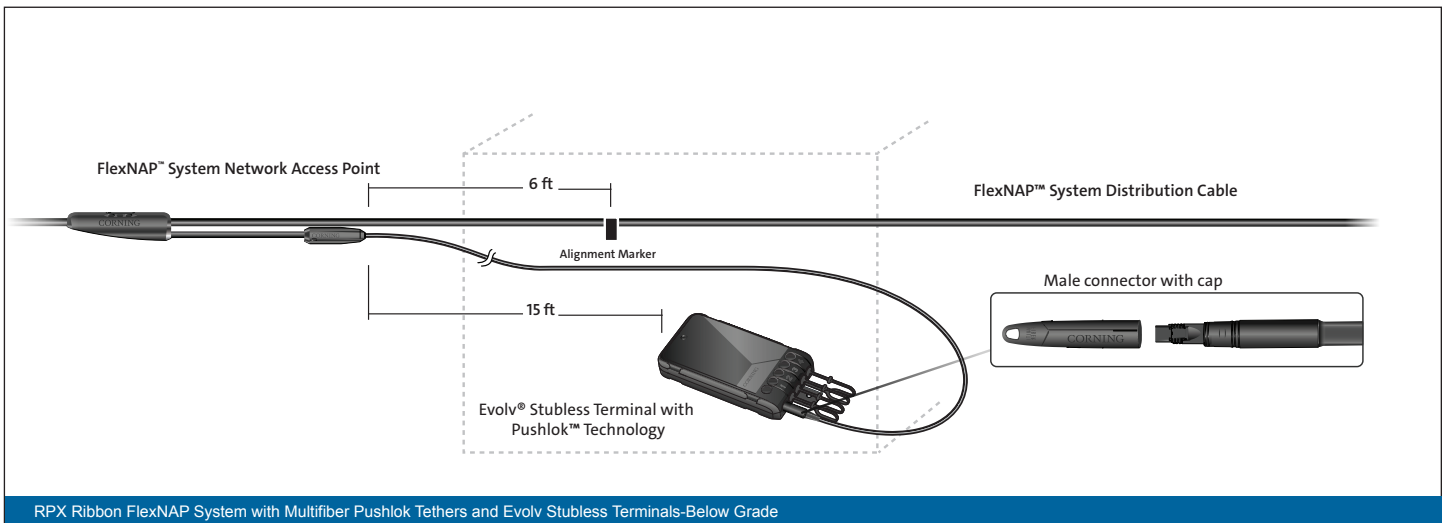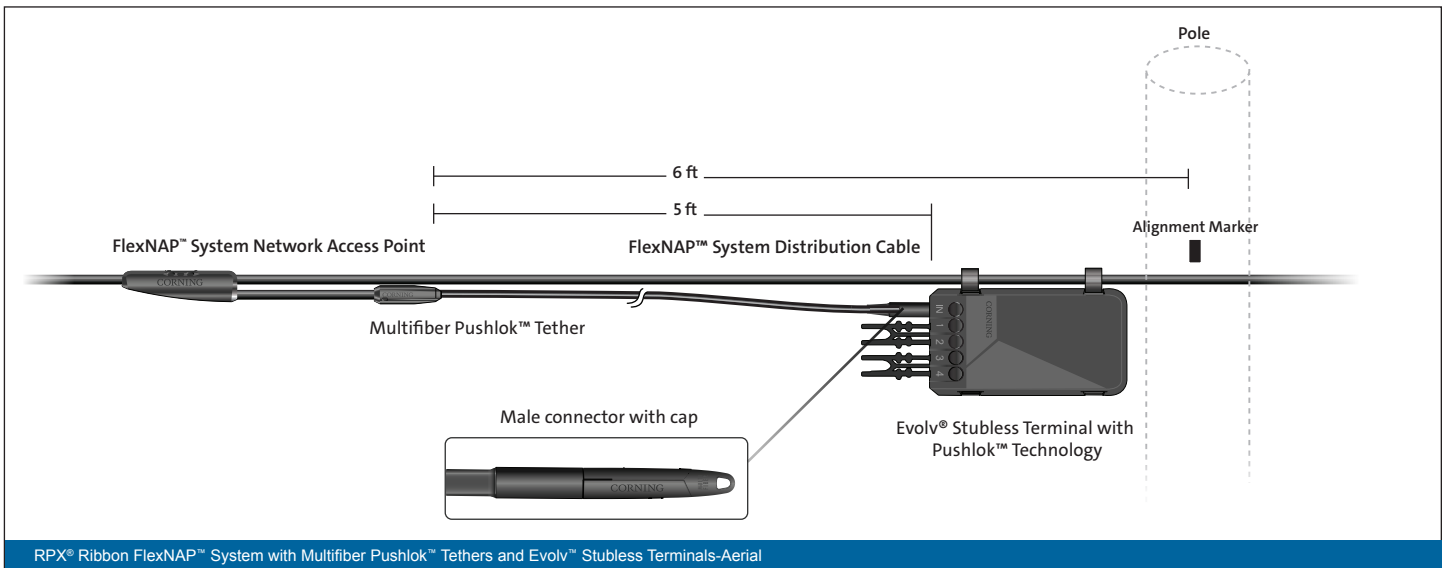

Handhole

FlexNAP™ System Closure
(Access Splice)

6 ft

FlexNAP System Distribution Cable

Alignment Marker

Environmentally Hardened
MT Connector Terminal Assembly

FlexNAP System Tether

15 ft

10 ft

OptiSheath®
MultiPort Terminal

FlexNAP System with OptiTip Tethers and MultiPort Terminal Stubbed with OptiTip Connector

FlexNAP™ Installations with Stubless Multifiber Terminals

Pole

6 ft

5 ft

Alignment Marker

FlexNAP™ System Network Access Point

FlexNAP™ System Distribution Cable

Multifiber Pushlok™ Tether

Male connector with cap

Evolv® Stubless Terminal with Pushlok™ Technology

RPX® Ribbon FlexNAP™ System with Multifiber Pushlok™ Tethers and Evolv™ Stubless Terminals-Aerial

FlexNAP™ System Network Access Point

6 ft

FlexNAP™ System Distribution Cable

Alignment Marker

Male connector with cap

15 ft

Evolv® Stubless Terminal with Pushlok™ Technology

RPX Ribbon FlexNAP System with Multifiber Pushlok Tethers and Evolv Stubless Terminals-Below Grade

Note: Evolv Stubless Multifiber Terminals are compatible only with Multifiber Pushlok tethers, tether extenders, or pigtails

Evolv® FlexNAP™ System with Multifiber Tethers

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FlexNAP™ Cable Specifications

Type	Maximum Distribution Cable Fiber Count	Minimum Duct Size (in)	Maximum Fibers per Access Point	Maximum Tether Assemblies per Access Point	Nominal Overmold Outer Diameter mm (in)	Minimum Bend Radius Loaded cm (in)	Minimum Bend Radius Installed cm (in)	Maximum Tensile Load Short-Term N (lbf)	Maximum Tensile Load Long-Term N (lbf)
FlexNAP™ System – Loose Tube Dielectric									
Low-Profile	≤ 72	1.25	24	2	28 (1.1)	158 (6.2)	105 (4.1)	2,700 (600)	890 (200)
Note: Dual-tether locations will have two individual single-tether access points									
Standard	≤ 72	2	24	2	36 (1.4)	158 (6.2)	105 (4.1)	2,700 (600)	890 (200)
High-Fiber-Count	96	2	24	2	44 (1.7)	183 (7.2)	122 (4.8)	2,700 (600)	890 (200)
	144	2	24	2	44 (1.7)	237 (9.3)	158 (6.2)	2,700 (600)	890 (200)
	216	2	24	2	44 (1.7)	240 (9.4)	160 (6.3)	2,700 (600)	890 (200)
	288	3	24	2	55 (2.2)	273 (10.7)	182 (7.2)	2,700 (600)	890 (200)
	432	3	24	2	65 (2.2)	318 (12.5)	212 (8.3)	2,700 (600)	890 (200)
Note: 288F and 432F cables only allow tethers to be built in the outer layer of buffer tubes.									

Type	Maximum Distribution Cable Fiber Count	Minimum Duct Size (in)	Maximum Fibers per Access Point	Maximum Tether Assemblies per Access Point	Nominal Overmold Outer Diameter mm (in)	Minimum Bend Radius Loaded cm (in)	Minimum Bend Radius Installed cm (in)	Maximum Tensile Load Short-Term N (lbf)	Maximum Tensile Load Long-Term N (lbf)
FlexNAP System – Loose Tube Armored									
Standard	≤ 72	2	24	2	44 (1.7)	182 (7.2)	121 (4.8)	2,700 (600)	890 (200)
High-Fiber-Count	96	3	24	2	50 (2.0)	207 (8.1)	138 (5.4)	2,700 (600)	890 (200)
	144	3	24	2	50 (2.0)	263 (10.4)	175 (6.9)	2,700 (600)	890 (200)
	216	3	24	2	50 (2.0)	266 (10.5)	177 (7.0)	2,700 (600)	890 (200)
	288	3	24	2	55 (2.2)	273 (10.7)	182 (7.2)	2,700 (600)	890 (200)
	432	3	24	2	55 (2.2)	318 (12.5)	212 (8.3)	2,700 (600)	890 (200)
Note: 288F and 432F cables only allow tethers to be built in the outer layer of buffer tubes.									

Type	Maximum Distribution Cable Fiber Count	Minimum Duct Size (in)	Maximum Fibers per Access Point	Maximum Tether Assemblies per Access Point	Nominal Overmold Outer Diameter mm (in)	Minimum Bend Radius Loaded cm (in)	Minimum Bend Radius Installed cm (in)	Maximum Tensile Load Short-Term N (lbf)	Maximum Tensile Load Long-Term N (lbf)
FlexNAP System – Dielectric or Toneable RPX® Ribbon Cables									
24, 48, 72, 96, 144	1.25	24	2	30.7 (1.2)	229 (9.0)	229 (9.0)	2,700 (600)	890 (200)

Note: All cable types allow two or three access points each 3-ft apart resulting in four or six tethers at the same location for a maximum of 72 fibers. This dual or triple tap option eliminates branch splices to mate with preterminated lateral FlexNAP cables or allows for higher count MDU terminal connectivity without splicing.

Evolv® FlexNAP™ System with Multifiber Tethers

**CORNING**

Multifiber Tether Specifications

Tether Application	Tether Length (ft)	Connector Style	Cable Type	Available Fiber Counts	Insertion Loss (dB) Typical	Reflectance (dB) Typical	Polish	Alignment Mechanism
Multifiber Pushlok™ Tether								
Aerial	5	Male Multifiber Pushlok Connector	Dielectric SST-Drop™	2, 4, 6, 8, 12	0.15	≤ -65	8° angle	Stainless steel guide pins
Below Ground/Duct	15	Male Multifiber Pushlok Connector	Dielectric SST-Drop	2, 4, 6, 8, 12	0.15	≤ -65	8° angle	Stainless steel guide pins

Tether Application	Tether Length (ft)	Connector Style	Cable Type	Available Fiber Counts	Max Insertion Loss (dB) Typical	Reflectance (dB) Typical	Polish	Alignment Mechanism
OptiTip® MT Tether								
Aerial	5	OptiTip MT Pinned	SST flat drop	2, 4, 6, 8, 12	0.35	≤ -65	8° angle	Stainless steel guide pins
Below Ground/Duct	15	OptiTip MT Pinned	SST flat drop	2, 4, 6, 8, 12	0.35	≤ -65	8° angle	Stainless steel guide pins

Evolv® FlexNAP™ System with Multifiber Tethers

CORNING

FlexNAP™ Distribution Trunk Cables
Ordering Information

F N A P - C B L - ▢▢▢ E ▢▢

1   **2**   **3**
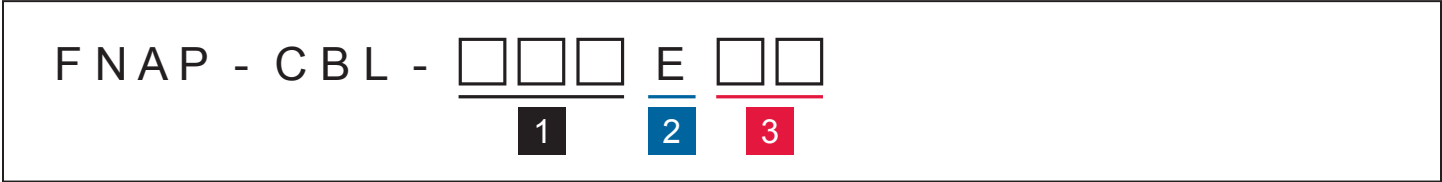
1   **Select fiber count**
012 = 12 fibers
024 = 24 fibers
036 = 36 fibers
048 = 48 fibers
060 = 60 fibers
072 = 72 fibers
096 = 96 fibers
144 = 144 fibers
216 = 216 fibers
288 = 288 fibers
432 = 432 fibers

See Notes 1-4.

2   **Defines fiber type**
E = Single-mode (OS2)

3   **Select cable type**
U4 = ALTOS® loose tube gel-free
UA = Figure-8 loose tube
V4 = RPX® gel-free dielectric
      flat ribbon
UC = ALTOS Lite gel-free armored
V2 = RPX gel-free toneable
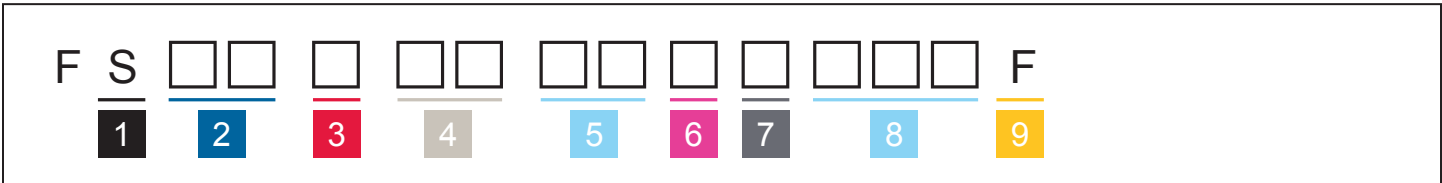   flat ribbon
UF = Loose tube flame retardant

Notes:

1. RPX Cables available in 24-, 48-, 72-, 96-, and 144-fiber counts only.
2. 216 fiber only in ALTOS All-Dielectric Cable, ALTOS Lite Gel-Free Armored Cable and figure-8 cable.
3. 288 and 432 fiber only in ALTOS All-Dielectric Cable and ALTOS Lite Gel-Free Armored Cable.
4. 288 fiber cable allows 168 preconnectorized fibers, 432 fiber cable allows 204 preconnectorized fibers.

First Tether Attachment
Ordering Information

F	S	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	F
1		**2**		**3**		**4**		**5**	**6**	**7**		**8**		**9**

1 Defines fiber type
S = Single-mode (OS2)

2 Select cable type
U4 = ALTOS® loose tube gel-free
UA = Figure-8 loose tube
V4 = RPX® gel-free dielectric
    flat ribbon
UC = ALTOS Lite gel-free armored
V2 = RPX gel-free toneable
    flat ribbon
UF = Loose tube flame retardant

3 Select TAP type
A = Standard overmold for loose tube
C = Slim Loose Tube 1.25-in
    overmold‡ (≤ 72 fiber; U4 cable only)
N = RPX 1.25-in overmold
    (V2 and V4 cable only)

4 Select fiber count
02 = 2 fibers
04 = 4 fibers
06 = 6 fibers
08 = 8 fibers
12 = 12 fibers

5 Select tether type
M2 = OptiTip® MT connector (pinned)
T2 = Multifiber Pushlok™ connector
    (male)

6 Select installation environment
T = Aerial 5 ft standard length
R = Below grade 15 ft standard length

7 Select end cap type
N = No loop back
L = Loop back dust cap†
F = Locatable dust cap*

8 Select tether length in ft
005 = Aerial
015 = Below grade and/or duct

**9 Defines unit of measure for
tether length**
F = Feet

*Locatable dust cap available only on 15-ft below-grade and/or duct tethers.
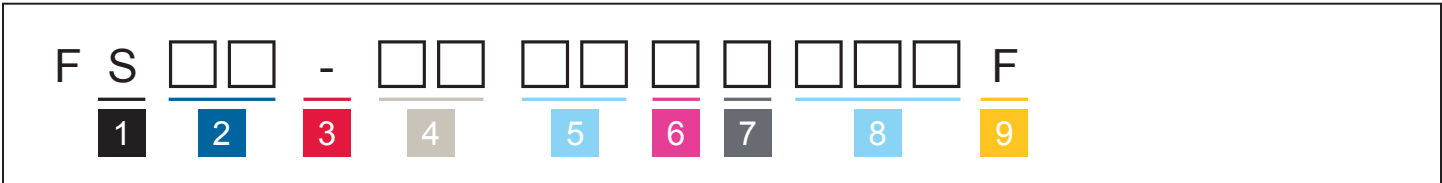†Loop back dust cap available only on OptiTip tethers.
‡Slim overmolds can have only one tether

Evolv® FlexNAP™ System with Multifiber Tethers

CORNING

Second Tether Attachment Ordering Information

```
F  S  □□  -  □□  □□  □  □  □□□  F
1  2       3   4        5   6   7    8     9
```

1 Defines fiber type
S = Single-mode (OS2)

2 Select cable type
U4 = ALTOS® loose tube gel-free
UA = Figure-8 loose tube
V4 = RPX® gel-free dielectric
flat ribbon
UC = ALTOS Lite gel-free armored
V2 = RPX gel-free toneable
flat ribbon
UF = Loose tube flame retardant

3 Defines TAP type
- = Second tether attachment point

4 Select fiber count
02 = 2 fibers
04 = 4 fibers
06 = 6 fibers
08 = 8 fibers
12 = 12 fibers

5 Select tether type
M2 = OptiTip® MT connector (pinned)
T2 = Multifiber Pushlok™ connector
(male)

6 Select installation environment
T = Aerial
R = Below grade

7 Select end cap type
N = No loop back
L = Loop back dust cap*

8 Select tether length in ft
005 = Aerial
015 = Below grade and/or duct

9 Defines unit of measure for tether length
F = Feet

*Loop back dust cap available only on OptiTip tethers.

Evolv® FlexNAP™ System with Multifiber Tethers

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Preterminated Lateral Installation Details

A preterminated lateral is a factory-terminated solution for quick-and-easy connection to a parent FlexNAP™ cable, with the purpose of eliminating a field splice point. This allows passing smaller side streets in a neighborhood of 72 homes or less. The connectivity is achieved by adding one to four non-pinned connectors to the HE/CO/cabinet side of the cable. These mate directly to the parent FlexNAP cable, providing connectivity without a need for tools. Preterminated laterals are available with the fiber counts of 12, 24, 36, 48, 60, or 72 maximum and at least one field-side TAP.

Ordering Information

RTX - ☐☐☐ ☐☐☐ ☐☐

1   **2**   **3**
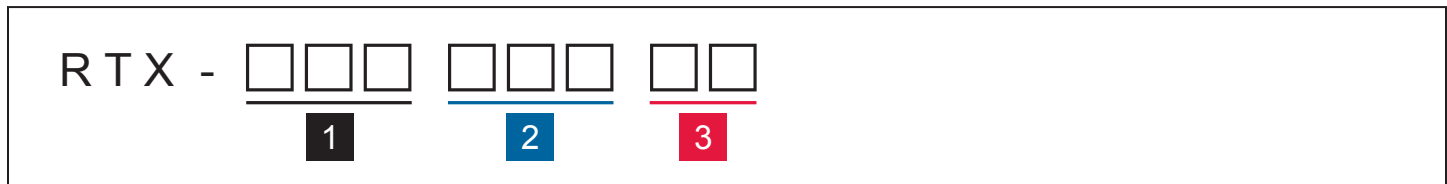
1 **Select fiber count**
012 = 12 fibers (1 tether)
024 = 24 fibers (2 tethers)
036 = 36 fibers (3 tethers)
048 = 48 fibers (4 tethers)
060 = 60 fibers (5 tethers)
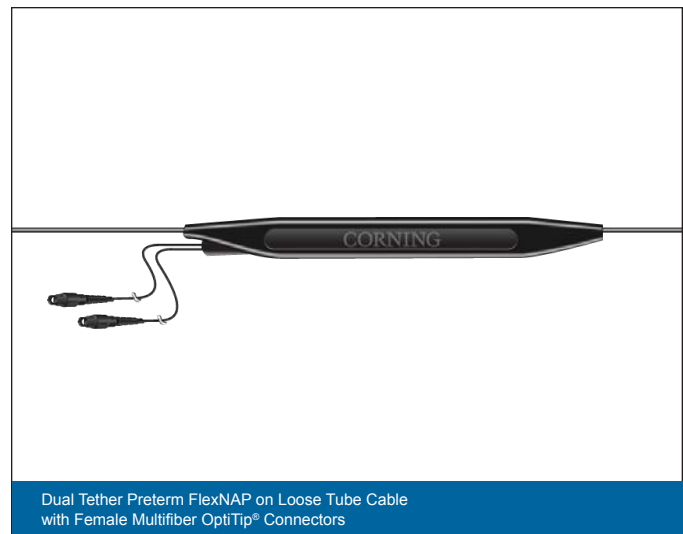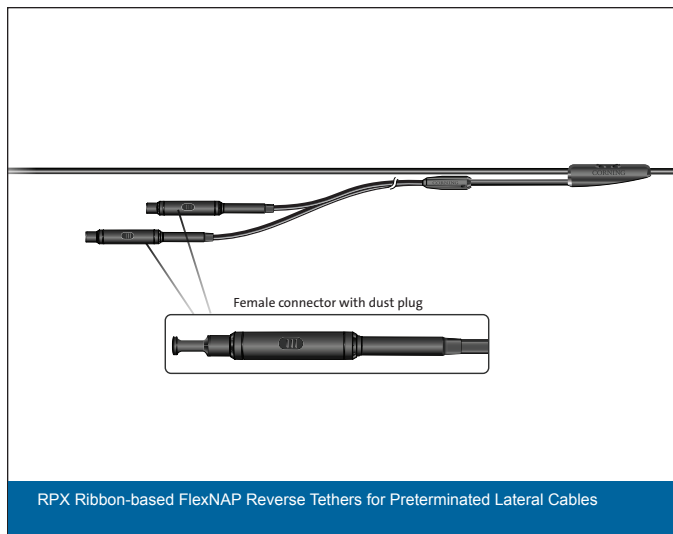072 = 72 fibers (6 tethers)

2 **Select cable type**
EV4 = RPX® cable
EUC = Armored loose tube
EU4 = Dielectric loose tube
EV2 = RPX toneable
EUA = Figure-8 loose tube

3 **Select connector type**
M1 = OptiTip® MT Connector
     (non pinned)
T1 = Multifiber Pushlok™ Connector
     (female)*
See note below.

Note: Female Multifiber Pushlok (T1 code) Connector available in EV4 and EV2.

Female connector with dust plug

RPX Ribbon-based FlexNAP Reverse Tethers for Preterminated Lateral Cables

Dual Tether Preterm FlexNAP on Loose Tube Cable with Female Multifiber OptiTip® Connectors

Evolv® FlexNAP™ System with Multifiber Tethers

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Cable Type with Max Lengths

Cable Type with Maximum Lengths in Feet and Meters			
Cable	Fiber Count	Maximum Length (m)	Maximum Length (ft)
ALTOS® Loose Tube, Gel-Free, Dielectric and Riser Cable	12 to 72 fibers	7,000	23,000
	96 fibers	5,500	18,000
	144 fibers	3,300	10,000
	216 fibers	4,000	13,000
	288 fibers	3,000	10,000
	432 fibers	2,400	8,000
ALTOS Figure-8 Loose Tube	12 to 72 fibers	1,500	4,900
	96 fibers	1,500	4,900
	144 fibers	1,200	4,000
	216 fibers	1,200	4,000
RPX® Toneable and Dielectric	24 fibers	7,000	23,000
	48 fibers	7,000	23,000
	72 fibers	6,500	21,000
	96 fibers	6,500	21,000
	144 fibers	5,500	21,000
ALTOS Loose Tube, Armored, Gel-Free	12 to 72 fibers	4,000	13,000
	96 fibers	3,000	9,600
	144 fibers	2,000	6,500
	216 fibers	2,400	8,000
	288 fibers	2,000	6,500
	432 fibers	1,600	5,200

Evolv® FlexNAP™ System with Multifiber Tethers

Evolv Stubbed Terminals with Pushlok™ Technology for FlexNAP™ Systems
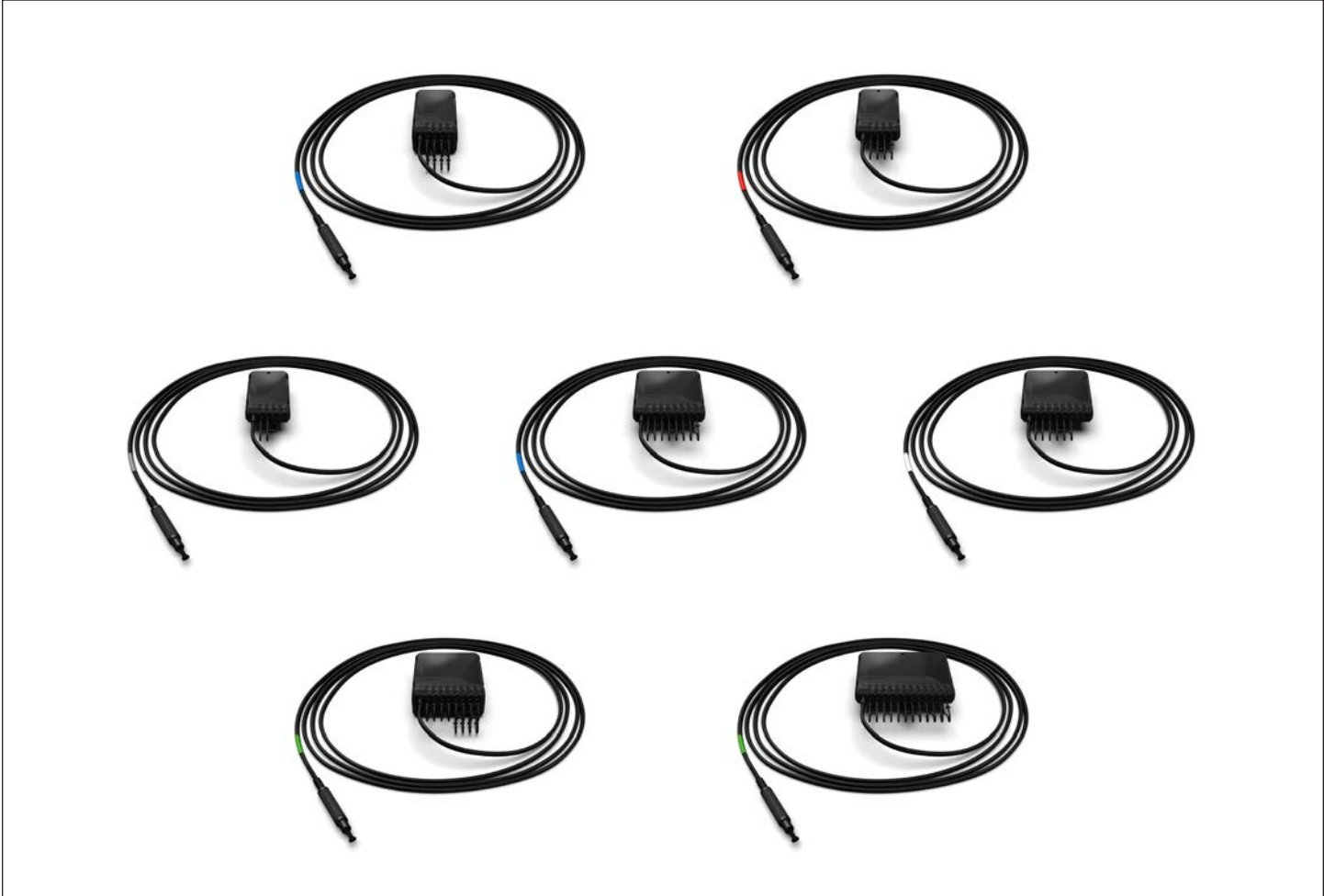


Stubbed Terminals for FlexNAP Systems

Stubbed Terminals for FlexNAP Systems

Part Number	Description
DFA2F1FDD1T1010F0P	Evolv Terminal with Pushlok Technology, 2 port, preconnectorized MF Pushlok stub, SST dielectric, 10 ft
DFA2F1TDD1T1025F0P	Evolv Terminal with Pushlok Technology, 2 port, preconnectorized MF Pushlok stub, SST toneable, 25 ft
DFA4F1FDD1T1010F0P	Evolv Terminal with Pushlok Technology, 4 port, preconnectorized MF Pushlok stub, SST dielectric, 10 ft
DFA4F1TDD1T1025F0P	Evolv Terminal with Pushlok Technology, 4 port, preconnectorized MF Pushlok stub, SST toneable, 25 ft
DFA6F1FDD1T1010F0P	Evolv Terminal with Pushlok Technology, 6 port, preconnectorized MF Pushlok stub, SST dielectric, 10 ft
DFA6F1TDD1T1025F0P	Evolv Terminal with Pushlok Technology, 6 port, preconnectorized MF Pushlok stub, SST toneable, 25 ft
DFA8F1FDD1T1010F0P	Evolv Terminal with Pushlok Technology, 8 port, preconnectorized MF Pushlok stub, SST dielectric, 10 ft
DFA8F1TDD1T1025F0P	Evolv Terminal with Pushlok Technology, 8 port, preconnectorized MF Pushlok stub, SST toneable, 25 ft
DFATF1FDD1T1010F0P	Evolv Terminal with Pushlok Technology, 12 port, preconnectorized MF Pushlok stub, SST dielectric, 10 ft
DFATF1TDD1T1025F0P	Evolv Terminal with Pushlok Technology, 12 port, preconnectorized MF Pushlok stub, SST toneable, 25 ft

Evolv® Stubbed Terminal for FlexNAP™ Systems
Ordering Information
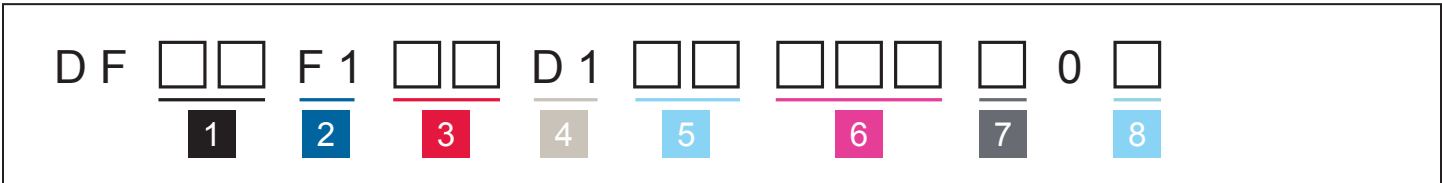
D F ☐☐ F 1 ☐☐ D 1 ☐☐ ☐☐☐ ☐ 0 ☐

1 | **2** | **3** | **4** | **5** | **6** | **7** | **8**

1 Select number of Pushlok™ single-fiber connector ports
A2 = 2 ports
A4 = 4 ports
A6 = 6 ports
A8 = 8 ports
AT = 12 ports
B3 = 6 ports
B4 = 8 ports
B6 = 12 ports

2 Defines output port fiber count
F1 = Single-fiber per port

3 Select cable type
FD = SST flat dielectric drop cable
TD = SST flat toneable drop cable

*The E extended 5-pack configuration is only available in 10-ft increments

4 Defines output connector type
D1 = Single-fiber Pushlok SC APC

5 Select tail connector type
T1 = Multifiber Pushlok Connector (female)
M1 = OptiTip® Connector

6 Select cable stub length
10-ft increments up to 3,400 ft available

See Table A for lengths ≥ 1,000 ft

7 Select unit length
F = Feet
M = Meters

8 Select packaging
P = Standard spool – individual packaging
Z = Reverse spool – individual packaging
E = Reverse spool – 5-pack*
B = Bulk packaging

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

Evolv® Multifiber Stubless Terminals with Pushlok™ Technology for FlexNAP™ Systems

Evolv Stubless Multifiber Terminals

Stubless Terminals for FlexNAP Systems and Multifiber Drop Cable Assemblies	
Part Number	**Description**
DFA2F100D1T3000S0P	Evolv Pushlok 2-Ports, 2 Fibers, Single row of ports, Multifiber Pushlok Stubless Terminal
DFA4F100D1T3000S0P	Evolv Pushlok 4-Ports, 4 Fibers, Single row of ports, Multifiber Pushlok Stubless Terminal
DFA6F100D1T3000S0P	Evolv Pushlok 6-Ports, 6 Fibers, Single row of ports, Multifiber Pushlok Stubless Terminal
DFA8F100D1T3000S0P	Evolv Pushlok 8-Ports, 8 Fibers, Single row of ports, Multifiber Pushlok Stubless Terminal
DFATF100D1T3000S0P	Evolv Pushlok 12-Ports, 12 Fibers, Single row of ports, Multifiber Pushlok Stubless Terminal
DFB3F100D1T3000S0P	Evolv Pushlok 6-Ports, 6 Fibers, Two rows of ports, Multifiber Pushlok Stubless Terminal
DFB4F100D1T3000S0P	Evolv Pushlok 8-Ports, 8 Fibers, Two rows of ports, Multifiber Pushlok Stubless Terminal
DFB6F100D1T3000S0P	Evolv Pushlok 12-Ports, 12 Fibers, Two rows of ports, Multifiber Pushlok Stubless Terminal

Evolv® FlexNAP™ System with Multifiber Tethers

Evolv® Stubless Terminal for FlexNAP™ Systems
Ordering Information

D F ☐☐ F 1 0 0 D 1 T 3 0 0 0 S 0 ☐

1 ☐☐ **2** F1 **3** D1 **4** T3 **5** S **6** ☐

1 **Select number of Pushlok™ single-fiber connector ports**
A2 = 2 ports
A4 = 4 ports
A6 = 6 ports
A8 = 8 ports
AT = 12 ports
B3 = 6 ports (2 rows of 4 ports, 2 filled)
B4 = 8 ports (2 rows of 4 ports)
B6 = 12 ports (2 rows of 8 ports, 4 filled)

2 **Defines output port fiber count**
F1 = Single-fiber per port

3 **Defines output port type**
D1 = Single-fiber Pushlok SC APC

4 **Defines tail connector type**
T3 = Multifiber Pushlok Input Port

5 **Defines terminal**
S = Stubless Terminal

6 **Select packaging**
P = Individual packaging
B = Bulk packaging

Evolv® FlexNAP™ System with Multifiber Tethers

CORNING

Multifiber Pushlok™ Assemblies

The Multifiber Pushlok™ assembly is designed for use in outside plant fiber access networks with the FlexNAP™ system and MDU, LPT and Evolv® terminals. This innovative cable assembly solution provides enhanced design flexibility, increased deployment speed, and reduced installation cost.

The Multifiber Pushlok connector is the key enabler for quick connect of up to 12 fibers at a time. The connector is based on the field-proven MTP® connector technology encapsulated in a hardened package suitable for use in any environment. A Multifiber Pushlok connector (non-pinned) version and a Multifiber Pushlok in-line connector (pinned) version are easily joined to make a watertight terminal or in-line connection. Factory installation and testing ensures reliable, low optical loss on all fibers.

Pushlok assemblies are available with SST-Drop™ Outdoor Cable, FREEDM® Flat Drop Indoor/Outdoor LSZH™ cable, or Evolv Round Cable which allows for easy migration of indoor and outdoor applications. The Pushlok assembly is available with either pinned or non-pinned Multifiber Pushlok connectors to match your network needs.

Features and Benefits

Multifiber Pushlok preterminated cabling solution
Up to 50% faster per system deployment

Factory-tested
Quick, reliable installation

Flexibility for various network designs
Indoor and outdoor application

Multifiber Pushlok Connector
Compatible with FlexNAP system, MDU terminals, Evolv terminals

Robust design keeps connector intact during installation
Integral pulling eye/connector cap designed for 50 lb maximum pulling tension

Standards

Design and Test Criteria   Telcordia GR-3152 RUS
Telcordia GR-1435

Female Multifiber Pushlok Connector

Male Multifiber Pushlok Connector

Evolv® FlexNAP™ System with Multifiber Tethers

Connector Specifications

Multifiber Pushlok™ Connectors

Operation	-40°C to 70°C (-40°F to 158°F)
Length	SST-Drop™ Cable 4.70 in (120 mm) Multifiber Pushlok in-line connector, tip to end of boot; 5.53 in (141 mm) with dust plug installed, Round Cable 7.00 in (178 mm) Multifiber Pushlok in-line connector, tip to end of boot; 7.82 in (199 mm) with dust plug installed, SST Cable 7.00 in (178 mm) Multifiber Pushlok connector, tip to end of boot; 7.74 in (197 mm) with dust cap installed, Round Cable 5.56 in (142 mm) Multifiber Pushlok connector, tip to end of boot; 6.27 in (160 mm) with dust cap
Maximum Outer Diameter	Multifiber Pushlok connector 0.48 in: minimum recommended duct size is 0.75 in
Mateability	Multifiber Pushlok in-line connector 0.69 in: minimum recommended duct size is 1-in pinned alignment, Multifiber Pushlok connector to in-line connector or Multifiber Pushlok connector to terminal point
Qualification	EIA/TIA 568-B.3,GR-3152, IP69K and IP68
Reflectance	Single-mode OS2: ≤ -65 dB
Tensile Strength	50 lb when factory installed on SST-Drop™ or FREEDM® Flat-Drop Cable and 25 lb when installed on Evolv® Multifiber Round Cable
Insertion Loss, Maximum	0.35 dB maximum per fiber
Insertion Loss, Typical	0.15 dB typical per fiber

*Full specifications for environmental hardiness are available upon request: Gen. Spec doc. PGS115(108)

LC and SC Compatible Connectors

Operation	-40°C to 70°C (-40°F to 158°F)
Intermateability	TIA/EIA-568-B.3, FOCIS - TIA/EIA-604-10 (LC), TIA/EIA-604-3 (SC)
Qualification	EIA/TIA 568-B.3
Reflectance	Single-mode OS2: ≤ -55 dB
Insertion Loss, Maximum	0.5 dB maximum per fiber, 0.2 dB typical
Tensile Strength	≤ 0.2 dB change, 15 lb FOTP-6

Evolv® FlexNAP™ System with Multifiber Tethers

Cable Specifications

SST-Drop™ Outdoor Cable	
Installation	-22°F to 158°F (-30°C to 70°C)
Operation	-40°F to 158°F (-40°C to 70°C)
Qualification	GR-20, EIA/TIA 568-B.3, RDUP listed
Weight	20 lbs/1,000 ft (30 kg/km)
Outside Diameter	0.32 in (8.1 mm)
Tensile Strength	300 lbs (1350N)
Compressive Loading	125 lb/in (220N/cm)

Note: Full specifications for environmental hardiness are available upon request: Gen. Spec doc. PGS115(108)

FREEDM® LSZH™ Flat-Drop Indoor/Outdoor Cable	
Installation	-22°F to 158°F (-30°C to 70°C)
Operation	-40°F to 158°F (-40°C to 70°C)
Qualification	GR-20, EIA/TIA 568-B.3, RDUP listed
Weight	20 lbs/1,000 ft (30 kg/km)
Outside Diameter	0.32 in (8.1 mm)
Tensile Strength	300 lbs (1350N)
Compressive Loading	125 lb/in (220N/cm)

Note: Full specifications for environmental hardiness are available upon request: Gen. Spec doc. PGS115(108)

Multifiber Round Cable	
Installation	23°F to 122°F (-5°C to 50°C)
Operation	-13°F to 140°F (-25°C to 60°C)
Qualification	GR-20, EIA/TIA 568-B.3, RDUP listed
Weight	12 lbs/1,000 ft (18 kg/km)
Outside Diameter	0.18 in (4.6 mm)
Tensile Strength	300 lbs (1350N)
Compressive Loading	125 lb/in (220N/cm)

Note: Full specifications for environmental hardiness are available upon request: Gen. Spec doc. PGS115(108)

Evolv® FlexNAP™ System with Multifiber Tethers

Pushlok™ Multifiber Assembly

Pushlok™ Multifiber Assemblies can be configured as jumpers with either male or female multifiber Pushlok connectors on either end or as pigtailed assemblies depending on the application. As an example, male to male Pushlok assemblies can be leveraged when daisy-chaining terminals together.

Pushlok Multifiber Assembly (Male to Male)

Pushlok Multifiber Extender

The Pushlok Multifiber Extender is an outdoor or indoor/outdoor cable factory terminated with a female Pushlok Multifiber Connector on one end and a male Pushlok Multifiber Connector on the other end. Each connector is protected from dust and water ingress by either a dust plug (female) or dust cap (male) with integrated pulling eye.

Pushlok Multifiber Extender

Pushlok Multifiber Harness Assembly

The Pushlok Multifiber Harness Assembly is an outdoor or indoor/outdoor cable factory terminated with a Pushlok Multifiber connector on one end and a furcation and breakout to LC or SC single-fiber connectors or an MTP® multifiber connector on the other end. Single fiber connectors are terminated on 24-in long, 2.0-mm jacketed furcation legs. The MTP connector is terminated on a 24-in long, 2.9-mm round furcation leg.
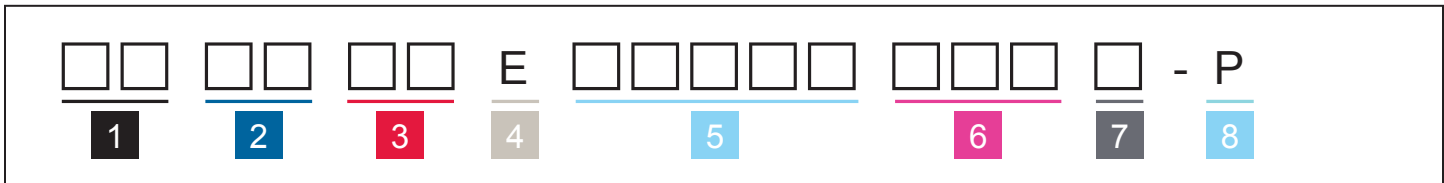

Pushlok Multifiber Harness Assembly (Female Pushlok to LC UPC connectors)

Evolv® FlexNAP™ System with Multifiber Tethers

CORNING

Ordering Information

| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 |

1 Select connector type 1
00 = Stub end
T1 = Multifiber Pushlok™
　　Connector (female)
T2 = Multifiber Pushlok Connector
　　(male)

2 Select connector type 2
T1 = Multifiber Pushlok
　　Connector (female)
T2 = Multifiber Pushlok Connector
　　(male)
M1 = OptiTip®, non-pinned
M2 = OptiTip, pinned
02 = LC UPC
44 = SC APC
58 = SC UPC
90 = MTP®

3 Select fiber count
02 = 2 fibers
04 = 4 fibers
06 = 6 fibers
08 = 8 fibers
12 = 12 fibers

4 Defines fiber type
E = Single-mode

5 Select cable type
B4D1E = SST-Drop™ Dielectric Cable
B1D1E = SST-Drop Toneable Cable
　　　　(single-mode only)
BZD1X = FREEDM® LSZH™
　　　　Flat Drop Cable
B4D3E = Evolv® Multifiber Round
　　　　Cable†

6 Select length
003 = 3 ft*
050 = 50 ft
100 = 100 ft
A00 = 1,000 ft

7 Select unit of measure
F = Feet
M = Meters

8 Defines packaging
P = Individual packaging

Notes:

For lengths greater than 100 ft (30 m), contact Customer Care.
Minimum length is 10 ft (3 m). All other lengths must be ordered in 10 or 25 ft increments.
*3 ft option only available for maintenance extender combining T1/T2 connector code with M1/M2 connector code.
†M1 and M2 connector types are not available with the B4D3E option for Evolv Multifiber Round Cable.

RoHS COMPLIANT