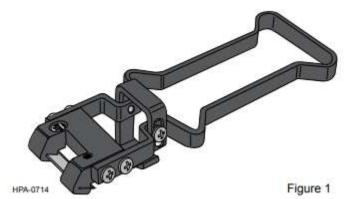
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## **RPX Cable Installation into Fiber Optic Closures**

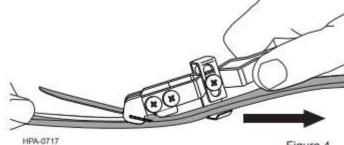
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#### **RPX Cable preparation:**

Based on the rectangular profile of the Corning RPX Gel Free Ribbon Cable there are several considerations that need to be considered when installing it into a fiber optic closure, the first being proper preparation of the cable prior to closure installation. The first thing that should be done is opening the cable with the proper tooling, such as the Corning RPX2-CAT cable access tool. Access the SRP for this tool here: <u>006-120.pdf</u> (corning.com)



If the proper tool is not used when opening the cable, there is potential to damage the ribbons inside. Placing the tool around the RPX cable and running it along the jacket will open the outer jacket and expose the ribbons inside. Adjust the pressure on the handle as you pull the tool along the cable to achieve a smooth, continuous cut.







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Once the ribbons have been exposed, flex the cable back and forth to get access to the ribbons themselves. A small pick can be used as well to get the fibers removed from the cable sheath, being careful not to damage the ribbons. Grasp the ribbons and carefully slide them out of the cable jacket.

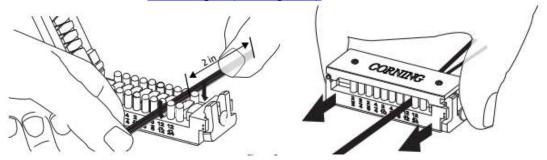


Then trim the cable jacket back, leaving approximately 1-2 inches of jacket remaining.





Next, it is important to separate the 24 fiber ribbons into 12 fiber ribbons using the Corning Ribbon Splitting Tool, RST-000. This will ease the routing of the ribbons inside a closure and allow splicing of the 12 fiber ribbon matrix in the splice trays. Access the SRP for this tool here: <u>004-098.pdf (corning.com)</u>



Separate the 24 fiber ribbons all the way to the the end of the cable jacket. This will now allow the ribbons to easily be routed into a splice closure.



#### **RPX Cable Furcation (Optional):**

Another protection option for the RPX cable is called furcation, or build-up. This is a process by placing another protective material over the ribbons to inhibit the possible damage of the fiber ribbons during closure installation. This is typically done with one of several different materials, or a combination of them. Spiral wrap, solid "kink-resistant" tubing, solid mesh tubing, split mesh tubing, heat shrink, etc. can all be used. The following photos show the implementation using a split mesh tubing and with an internal



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diameter (ID) of  $\frac{1}{4}$ " and heat shrink tube. Open the cable per the process above, split the ribbons and then wrap the ribbons with tape to create a 12 fiber ribbon stack.



Next, slide a piece of 1" pre-shrunk ID heat shrink tubing over the cable jacket. Then slide the split mesh tubing into place and carefully heat the furcation. This creates a very robust and safe solution for keeping the ribbons protected while being routed and spliced inside a closure.



If heat shrink is not a preferred or acceptable method, simple electrical tape could be used instead, resulting in another very safe and robust solution. *Note: Blue electrical tape was used here for clarity purposes.* 





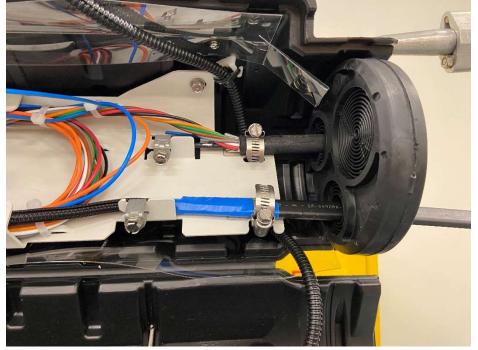
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## **RPX Cable Installation into Fiber Optic Closures:**

#### Corning SLiC Aerial Fiber Closure:

#### Midspan Possible: YES

When installing RPX into the SLiC fiber aerial closure the 24 fiber ribbons should be split into 12 fiber ribbons to ease routing and fusion splicing. Furcation of the cable is optional but suggested. Ensure the RPX comes into the closure in a flat orientation, parallel with the tray frame. This will ensure the maximum amount of pull out strength is achieved with the hose clamp. No other special considerations are required for this closure.



#### Corning SCA Aerial Fiber Closure:

#### Midspan Possible: YES

When installing RPX into the SCA aerial fiber closure the 24 fiber ribbons should be split into 12 fiber ribbons to ease routing and fusion splicing. Furcation of the cable is optional but suggested. Ensure the RPX comes into the closure in a flat orientation, parallel with sealing gasket and strain relief bracket. This will ensure the maximum amount of pull out strength is achieved with the hose clamp. No other special considerations are required for this closure.



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# <u>Corning SCF Fiber Closure:</u> Midspan Possible: YES (express ports only)

When installing RPX into the SCF fiber closure the 24 fiber ribbons should be split into 12 fiber ribbons to ease routing and fusion splicing. Furcation of the cable is optional but suggested. Attach the SCF strain relief bracket to the RPX cable in a flat orientation.





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When wrapping the RPX cable with the closure sealing tape, use the "C" slot on the installation tool. The shorter axis of the RPX should be slightly undersized. The long axis should be slightly oversized. This will ensure proper sealing in the express ports.



Then insert the assembly into the closure base.



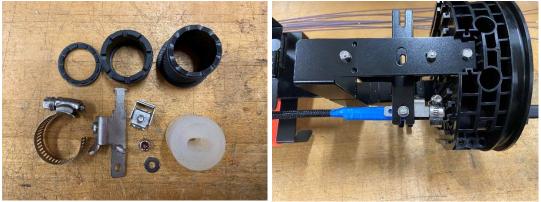
#### Corning SCF Fiber Closure:

Midspan Possible: NO (branch ports – grommet is solid)

When installing RPX into the SCF fiber closure the 24 fiber ribbons should be split into 12 fiber ribbons to ease routing and fusion splicing. Furcation of the cable is optional but suggested. When installing the RPX cable into a branch port on the SCF closure, purchase the proper RPX grommet kit for the size closure being installed (available separately). Ensure when installing the grommet into the closure base the RPX grommet slot aligns in a flat orientation to the base and closure frame. Insert the RPX cable, install the strain relief bracket and attach it to the closure frame. No other special considerations are required for this closure.



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Available RPX grommet kits for SCF Closures:SCF-KT-6CBL-RPXKIT, DROP PORT, SCF6, RPX, 2 PORT SET622406SCF-KT-8CBL-RPXKIT, DROP PORT, SCF8, RPX, 2 PORT SET622407

#### Corning 2178 Fiber Closure:

Midspan Possible: NO (grommet is solid)

When installing RPX cable into the 2178 fiber closure the 24 fiber ribbons should be split into 12 fiber ribbons to ease routing and fusion splicing. Furcation of the cable is optional but suggested. First, break off the front portion of the strength member clamp, as it is not needed. Insert the RPX cable into the 2178 RPX grommet and tighten the hose clamp in a flat orientation with the cable clamp. This will ensure the maximum amount of pull out strength is achieved with the hose clamp. No other special considerations are required for this closure.





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### Corning Fiber Dome Closure (FDC):

Work is ongoing to complete an RPX solution for the entire Fiber Dome product line. More to come. For additional information please contact your sales representative or your Corning Application Engineer.

