

Installation Guide

BELDEN

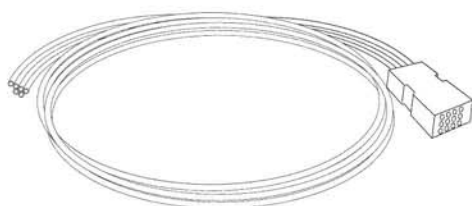
Installing the Fiber Breakout Kit
(6 or 12 tubes) onto loose tube
(campus) cable

Optimax 2

PX101701 Release 02.00

1 of 4 pages

Breakout Kit Components

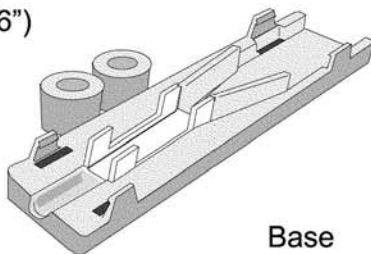


Cover

Terminal Assembly e/w 915 mm (36")
6 or 12 fiber tubes



Alcohol Pad



Base

Standard Tools and Materials

- Electrical or masking tape
- Lint free wipes
- Indelible marker
- Wire stripper
- Gel cleaner
- Needle nose pliers
- Fiber stripper
- Tweezers
- Fiber waste bottle

Special Tools

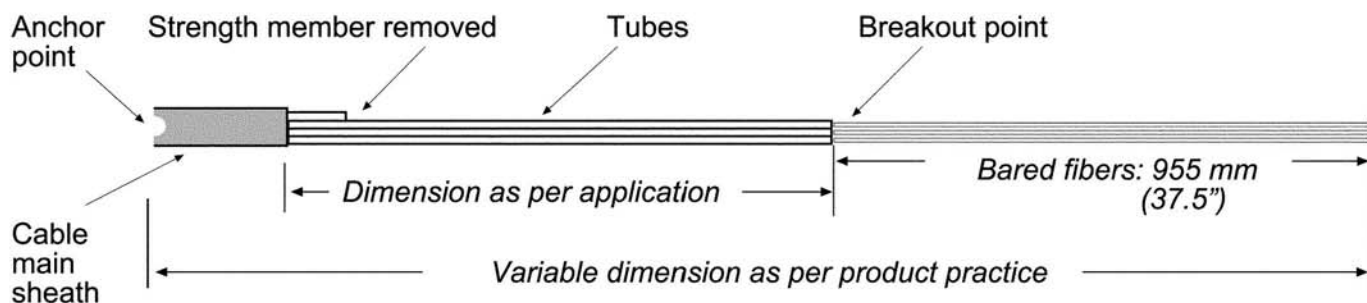
- Fiber cleaver
- Fiber preparation guide (ST/SC)

Safety Precautions

- Wear safety glasses
- Put all fiber scrap in waste bottle
- Do not look into fiber end

Note: Read these instructions carefully before installing a Fiber Breakout Kit.

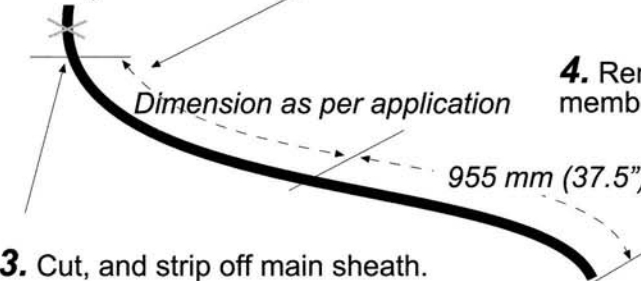
Typical Prepared Cable (loose tube cable), Ready For Breakout Kit Installation



1 Cable Preparation - Loose Tube Cable

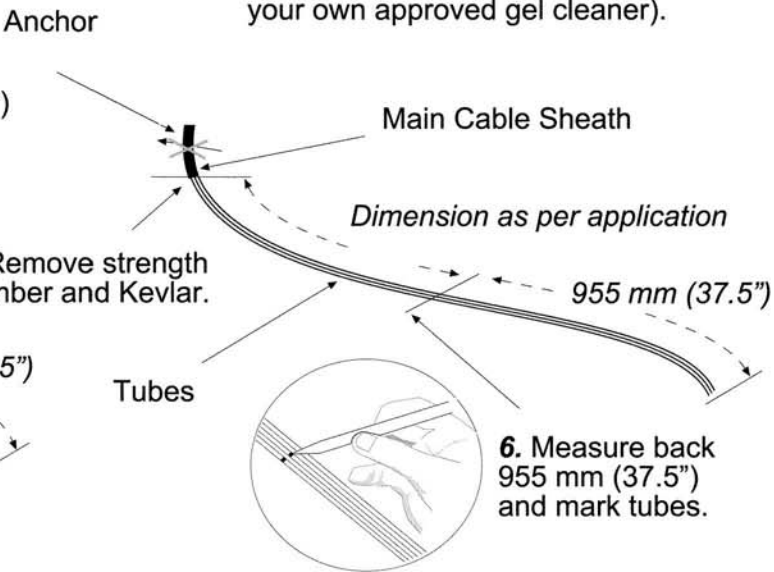
1. Determine cable anchor point (per product practice).

2. Measure back 955 mm (37.5") and add application length.



5. Using *alcohol pads, remove all gel and thoroughly clean tubes (* or use your own approved gel cleaner).

4. Remove strength member and Kevlar.

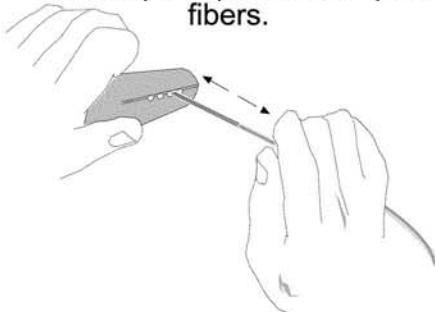


3. Cut, and strip off main sheath.

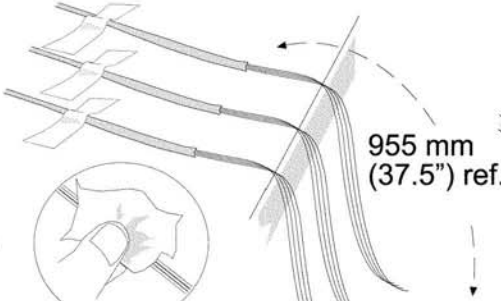
6. Measure back 955 mm (37.5") and mark tubes.

2 Preparing loose Tubes

1. Strip all tubes at the 955 mm (37.5") mark to expose fibers.



2. Tape each tube onto the work surface.

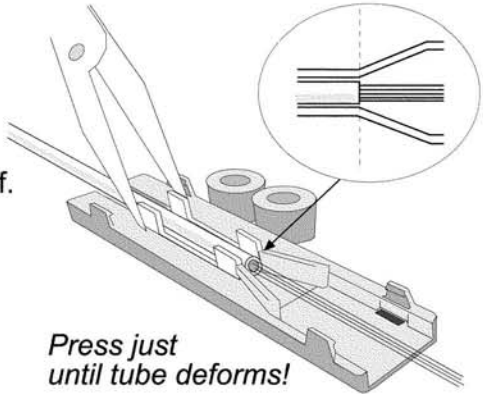


Note: Use a #16 wire stripper for 12-fiber tubes, and a #18 wire stripper for 6-fiber tubes.

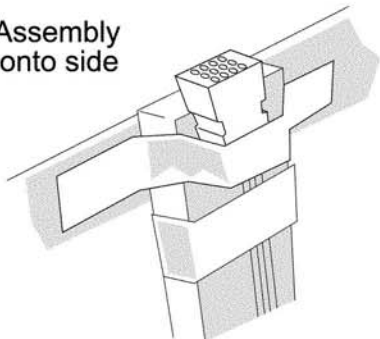
Using alcohol pads, thoroughly clean all the fibers.

3 Fiber Insertion

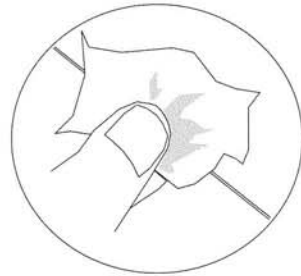
1. Align the tube end with the front tab and crimp tabs.



2. Uncoil Terminal Assembly tubes and tape unit onto side of work area.

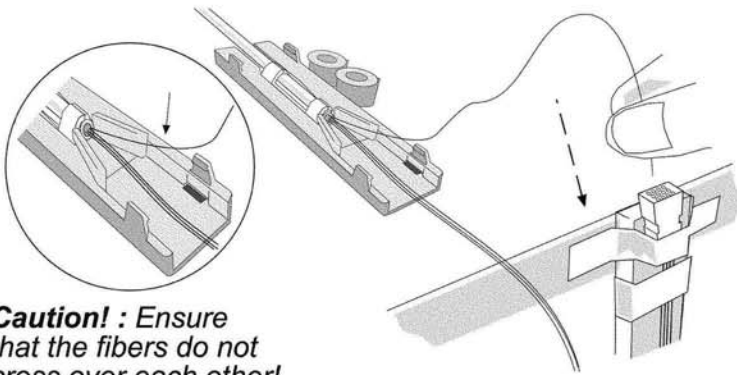


3. Using alcohol and lint free tissues, clean each fiber, **one by one!**



Installer's Tip! : To aid fiber insertion, straighten tubes and tape Terminal Assembly to a one-meter ruler, and tape unit to work area.

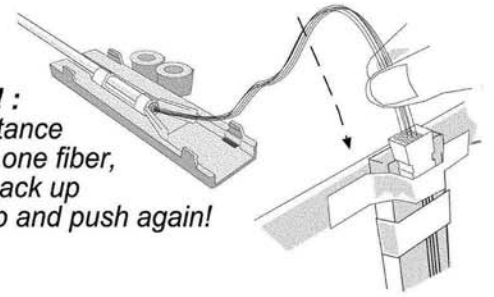
4. Thread each fiber approx. 1.5 cm (1/2") into tube.



Caution! : Ensure that the fibers do not cross over each other!

5. Push the fibers, as a group, into the tubes.

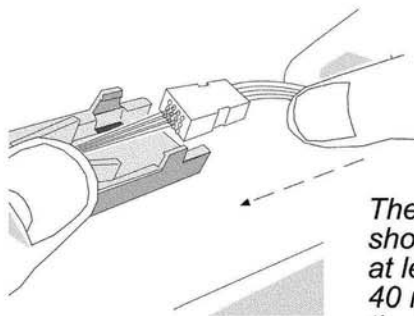
Caution! : If a resistance is felt on one fiber, slightly back up the group and push again!



Alternate method: Push each fiber, one at a time, until fully inserted.

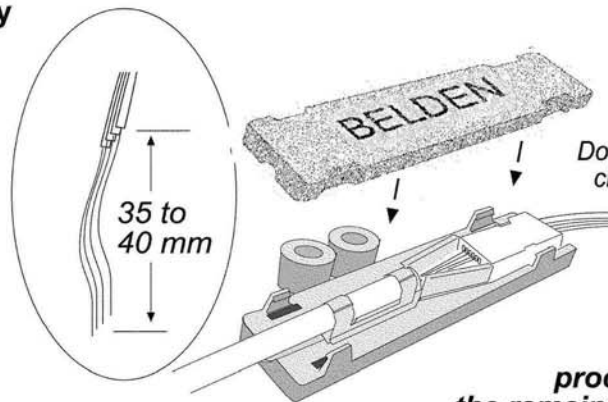
4 Base and Cover Assembly

1. Untape Terminal Assembly and gently slide unit into base.



The bare fibers should extend at least 35 to 40 mm out of the tube ends.

2. Align tabs, and press cover onto base.



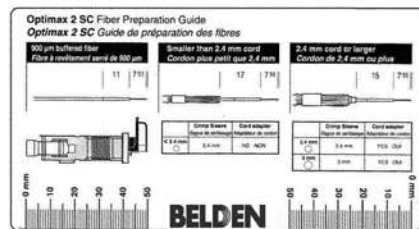
Caution! : Do not remove closed cover!

Repeat procedure for the remaining tubes!

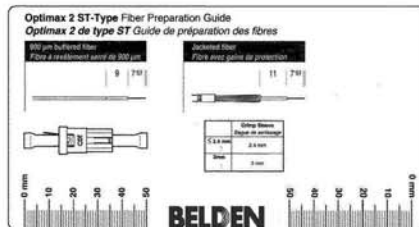
Installing Optimax 2 SC and ST Compatible Optical Fiber Connectors on Loose Tube Cable

Required Tools:

SC Fiber Preparation Guide



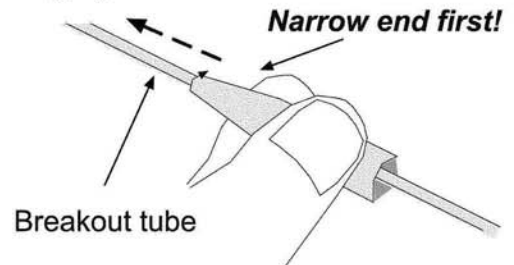
ST Fiber Preparation Guide



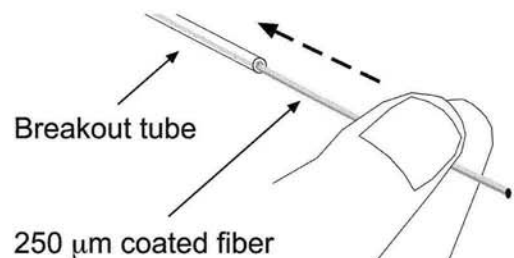
1 Fiber Preparation

1. Check if the 250 micron fiber is extending out at least 35 to 40 mm from the tube. If the extended fiber is short, strip tube to create appropriate length.

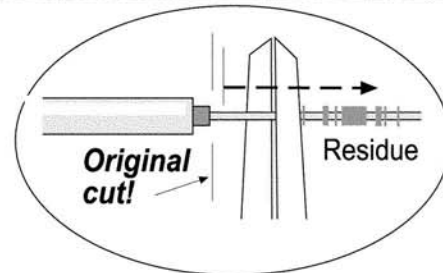
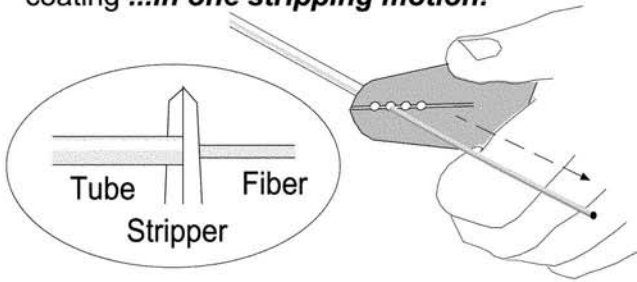
2. Slide connector boot (Boot and rear housing for ST type) onto tube.



3. Push fiber back as far as possible inside the tube.



4. Position fiber stripper against end of tube, and remove coating ...in one stripping motion!



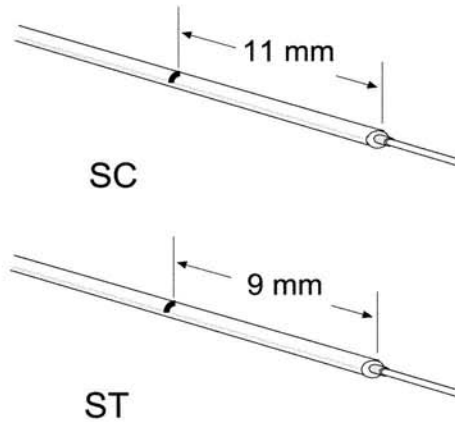
Note: If coating is not completely stripped, remove residue applying one pass...**starting just after original cut!**

5. Carefully, and thoroughly clean the bare fiber.



Use two or three passes!

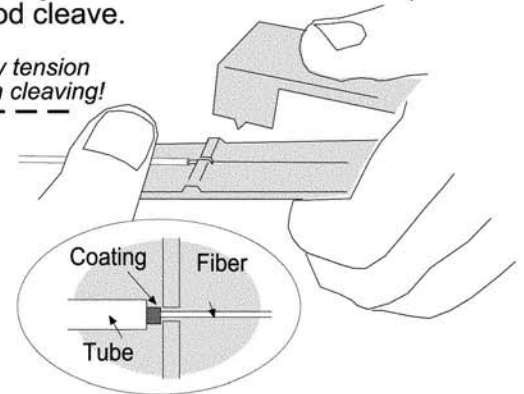
6. From the end of the tube, mark at 11 mm for an SC connector, or at 9 mm for an ST connector.



2 Cleave the fiber.

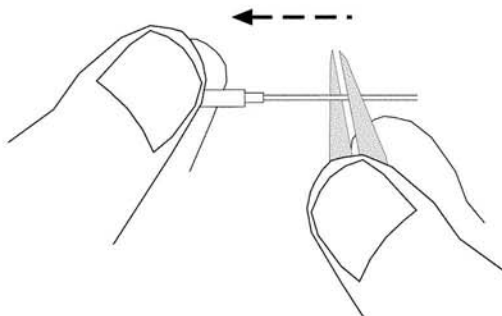
1. Take care to align the coating, and not the tube, with the stop on the cleaver. Keeping a steady tension on the fiber will help obtain a good cleave.

Apply tension when cleaving!



Note: Carefully follow the instructions supplied with your cleaver!

2. Using tweezers, push the fiber back into tube and check that the end of the 250 micron coating extends out of the tube, from 0 to 1 mm. The end of the coating shall not be inside the tube!



3. If one of the dimensions below is not within tolerances, start again at step #1!

Dimensions:			
Mark	Tube	Coating	Fiber
"A"		7+0.5 - 0 mm	-0 to 1 mm
"A" : -SC: 11 mm -ST: 9 mm			

3

Follow the standard 900 micron fiber installation procedure to finish terminating the connector.



For additional technical information on Optimax 2 or our other connecting products, call 1-800-858-7954

This Installation Guide is available in the "Partners Section" of BELDEN's website - www.belden.com

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