

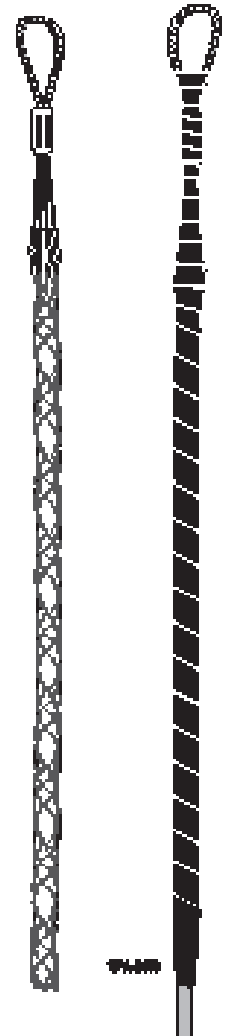


- Visit <http://www.corning.com/cablesystems/videos> for additional information and videos
- Visit www.corning.com/cablesystems/safety for full safety precautions

 **CAUTION:** Recommend the use of safety glasses (spectacles) conforming to ANSI Z87, for eye protection from accidental injury when handling chemicals, cables, or working with fiber. Pieces of glass fiber are very sharp and have the potential to damage the eye.

 **CAUTION:** The wearing of cut-resistant safety gloves to protect your hands from accidental injury when using sharp-bladed tools and armored cable is strongly recommended. Use extreme care when working with severed armor. There will be a sharp edge where the armor is cut. To minimize the chance of injury from the cut armor, cover the exposed edge with a wrap of electrical tape. To minimize the chance of injury from sharp-bladed tools, always cut away from yourself and others. Dispose of used blades and armor scrap properly.




Grip Sizes

Cable Diameter Range in inches	Cable Diameter Range in mm	Corning Part Number	Mesh Length in inches (mm)
0.10 – 0.22	3 – 6	033-29-1193	10 (254)
0.21 – 0.35	5 – 9	033-29-1194	14 (356)
0.32 – 0.48	8 – 12	033-29-1195	19 (483)
0.42 – 0.61	11 – 15	033-29-1196	21 (533)
0.53 – 0.74	13 – 19	033-29-1197	23 (584)
0.64 – 0.87	16 – 22	033-29-1198	25 (635)
0.75 – 1.00	19 – 25	033-29-1199	28 (711)

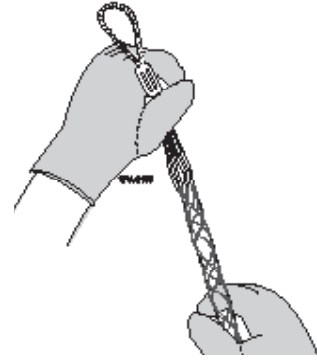
Tools Required

- Side cutters (diagonal cutting pliers)
- Measuring tape
- Utility knife with hook blade or rotary cable stripper (p/n 3204004-01)
- Cable knife
- Scissors
- Gloves
- Vinyl tape
- Friction tape
- Swivel, ball-bearing type
- Screwdriver or hex wrench (for swivel install)

 **CAUTION:** Fiber optic cable is sensitive to excessive pulling, bending, and crushing forces. Consult the cable specification sheet for the cable you are installing. Do not bend the cable more sharply than the minimum recommended bend radius. Do not apply more pulling force to the cable than specified. Do not crush the cable or allow it to kink. Doing so may cause damage that can alter the transmission characteristics of the cable; the cable may have to be replaced.

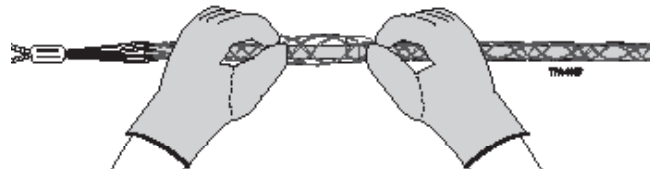
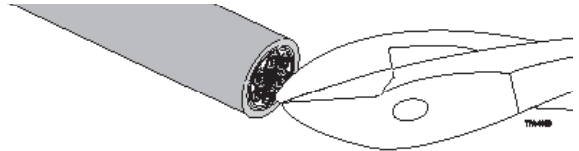
Grip Preparation

- Step 1:** Select a grip according to the outer diameter of the cable.
- Step 2:** Inspect grip for damage (broken wires, bulges due to stress, rust, etc.).
- Step 3:** Grasp the pulling eye in one hand and smooth out the mesh with the other hand, tightening the wires.

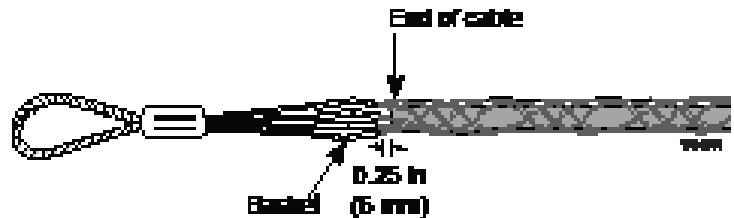


Grip Installation

- Step 1:** Trim the end of the cable with side cutters to remove any protruding tubes, yarn, strength members, or armor.
- Step 2:** Use a pumping action to “walk” the grip over the jacket by bringing your hands together and then relaxing them.
- Step 3:** Stop when the cable is about ¼ inch from the start of the basket for all cables except:
- Multifiber tight-buffered cable
 - ALTOS® Ribbon
 - Any cable with interlocking armor

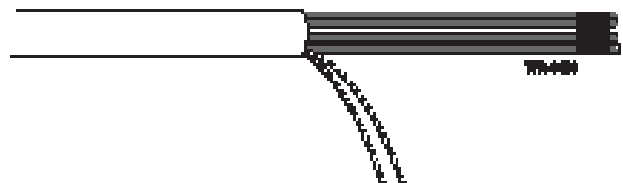


- Step 4:** Continue to “Taping Grip” section.



Multifiber Tight-buffered Cable

- Step 1:** Mark the cable at half the length of the mesh area of the grip.
- Step 2:** Continue to “walk” the cable through the grip until the mark is at least 3 in (7.5 cm) past the end of the wire mesh.
- Step 3:** Remove the jacket/sheath up to the mark according to the procedures for the type of cable you are installing.
- Step 4:** For non-unitized cables, first remove 6 in (15 cm) of jacket and then tape the cable components together with vinyl tape. Then remove the remaining jacket.

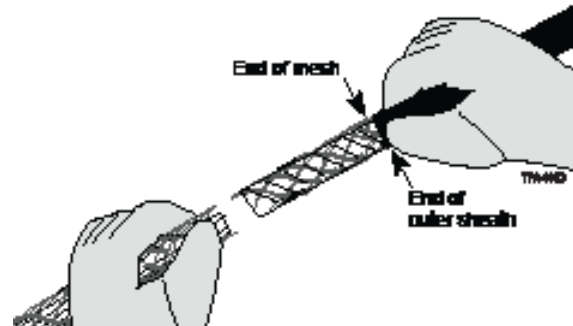
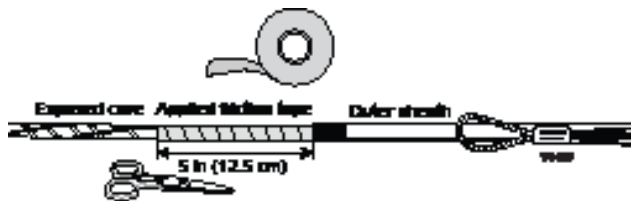
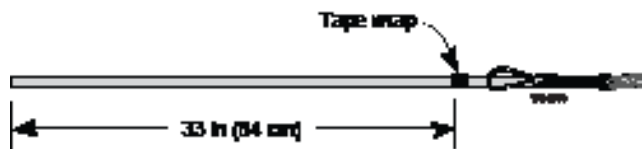
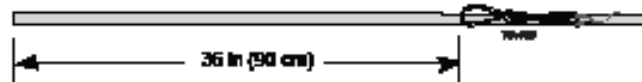


- Step 5:** Wrap one layer of friction tape over the entire length of exposed cable core starting at the end of the outer jacket. **DO NOT USE VINYL TAPE HERE.**
- Step 6:** “Walk” the grip over the friction tape-covered cable core.
- Step 7:** Continue to “Taping Grip” section.



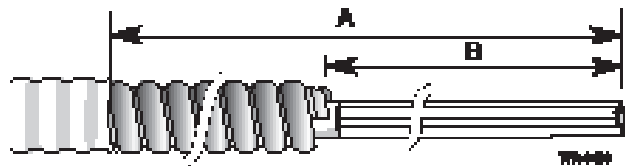
ALTOS® Ribbon

- Step 1:** Continue to “walk” the cable through the grip until 36 in (90 cm) is exposed.
- Step 2:** Mark the cable 33 in (84 cm) from the end with a piece of tape.
- Step 3:** Remove the sheath up to the tape mark according to the procedures for this type of cable.
- Step 4:** Starting at the end of the sheath, wrap one layer of friction tape around the core for a distance of 5 in (12.5 cm). **DO NOT USE VINYL TAPE HERE.**
- Step 5:** “Walk” the grip back over the cable core so that the grip butts up against, but not over, the outer sheath.
- Step 6:** Continue to “Taping Grip” section.

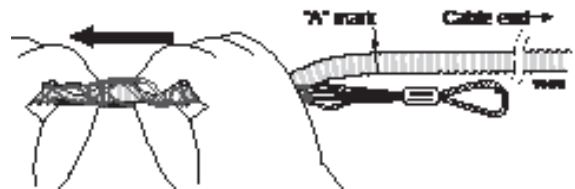


Interlocking Armor Cable

Mesh Length in inches (mm)	A inches (mm)	B inches (mm)
10 (254)		
14 (356)		
19 (483)		
21 (533)	23 (48)	16 (40)
23 (584)		
25 (635)		
28 (711)		

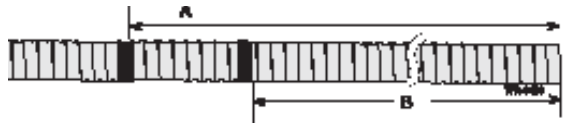


Step 1: Continue to “walk” the cable through the grip until enough cable is exposed past the end of the wire mesh to mark A plus an additional 3 in (7.5 cm).



Step 2: Measure and mark A and B with a wrap of vinyl tape.

Step 3: Remove the jacket/sheath up to mark B according to the procedures for the type of cable you are installing to expose the cable core.



Step 4: Place a wrap of vinyl tape around the end of the cable core during the jacket/sheath removal process to secure the aramid yarns and other components of the cable core.

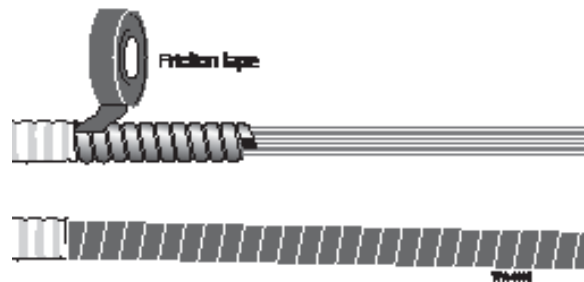


Step 5: On loose tube cable, evenly distribute the yarn around the cable core. Place one wrap of vinyl tape midway down the exposed cable core to secure the yarn.



Step 6: Remove the jacket/sheath from the interlocking armor back to mark A.

Step 7: Place a wrap of friction tape over the exposed armor and over the entire length of the exposed cable core. For loose tube cable, stop the wrap 5 in (12.5 cm) past the interlocking armor.



DO NOT WRAP FRICTION TAPE ON THE OUTER JACKET / SHEATH – DOING SO COULD PREVENT THE GRIP FROM SLIDING FORWARD OVER THE CABLE.



Step 8: “Walk” the grip back over the cable core so that the end of the cable core is inside the grip’s basket.



Step 9: Continue to “Taping Grip” section.

Taping Grip

Step 1: Smooth the mesh back over the cable, moving from the pulling eye to the cable jacket. Tug on the grip slightly to tighten.



Step 2: Starting at least 1 in (2.5 cm) below the mesh on the cable jacket, wrap vinyl tape TIGHTLY to the top of the grip. The mesh's imprint should show clearly through the tape.



Swivel install

Connect the pulling eye to the appropriate ball-bearing swivel and pulling tape or line. The grip installation is now ready for the cable pull.



Grip Removal

- Step 1:** Cut the cable 36 in (91 cm) behind the grip.
- Step 2:** Place a protective cap (or wraps of tape) over the end of the cable to prevent water and/or dirt intrusion.
- Step 3:** Store the cable slack in coils so that it is protected from damage.
- Step 4:** Unwrap the vinyl tape covering the grip (do not cut with a knife as it may damage the wire mesh).
- Step 5:** "Walk" the pulling grip off of the piece of cable to use again.

Corning Optical Communications LLC • PO Box 489 • Hickory, NC 28603-0489 USA
800-743-2675 • FAX: 828-325-5060 • International: +1-828-901-5000 • www.corning.com/opcomm

Corning Optical Communications reserves the right to improve, enhance, and modify the features and specifications of Corning Optical Communications products without prior notification. A complete listing of the trademarks of Corning Optical Communications is available at www.corning.com/opcomm/trademarks. All other trademarks are the properties of their respective owners. Corning Optical Communications is ISO 9001 certified. © 2009, 2010, 2015 Corning Optical Communications. All rights reserved.
