Sheath Removal Instructions for Dielectric Mini C2™ Cable

Contents **Section**

1. Scope

1.1 This document describes the sheath removal instructions and fiber access procedure for Mini C2™ cable containing dielectric strength members. The practice is intended for use by cable splicers and technicians familiar with handling optical fiber cable. This procedure does not include instructions for closure assembly or fiber splicing.

1.2 Dielectric Mini C2 cable contains a single gel-filled buffer tube and is availble with a maximum of 12 fibers. The buffer tube is wrapped with dielectric strength members and is covered with a water blocking tape. A corrugated steel armor is applied over the water blocking tape and the cable is completed with an outer polyethylene jacket. Two rip cords are provided under the armor layer to facilitate removal of the armor and access to the buffer tube.

1.3 Dielectric Mini C2 cable is available with either a 300 lb or 600 lb tensile load rating.

2. Cable Handling Precautions

2.1 Dielectric Mini C2 cable is intended for use in distribution and drop cable applications and is suitable for underground, direct buried, and lashed aerial installations. During installation, care should be taken to avoid bending the cable below its minimum bend diameter or loading it above the maximum rated cable load.

2.2 Table 1 summarizes the maximum rated cable loads for both short term (during installation) and long term (residual) conditions.

Table 1 – Maximum Rated Cable Loads

Cable Code	Maximum Short Term Load (Installation)	Maximum Long Term Load (Residual Tension)
AT-3BEQ2DT-nnn	600 lb	200 lb
AT-3BEQ3DT-nnn	300 lb	100 lb

2.3 Cable minimum bend diameters are specified for both dynamic (during installation) and static (installed) conditions as summarized in Table 2. The minimum recommended storage coil diameters are also listed in Table 2.

Table 2 – Minimum Bend Diameters

Cable Code	Dynamic Condition (During Installation)	Static Condition (Installed)	Storage Coil
AT-3BEQ2DT-nnn	15 in.	8 in.	12 in.
AT-3BEQ3DT-nnn	13 in.	7 in.	12 in.

3. Tools and Materials

3.1 The following tools and materials are recommended for sheath removal and fiber access.

- Tape measure
- Tape or marker to mark the cable jacket
- Sheath knife or utility knife
- Diagonal cutters
- Needle nose pliers
- Aramid shears or scissors
- Buffer tube ring-cutter
- Gel remover/cleaner and lint-free wipes

4. End Prep Sheath Removal

4.1 Consult the closure instructions to determine the recommended cable prep length. Measure and mark the cable as required.

4.2 Ring cut the outer jacket and score the underlying armor about 3" (75 mm) from the end of the cable (Figure 1).

Figure 1 – Ring cut the cable.

4.3 Flex the cable at the ring cut to completely separate the jacket and armor. Pull the 3" (75 mm) length of outer jacket and armor off the end of the cable to expose the rip cords (Figure 2).

Figure 2 – Remove the 3" length of outer jacket and armor.

4.4 Ring cut the outer jacket and score the underlying armor at the marked cable prep length.

4.5 Locate an armor ripcord at the end of the cable. Cut a notch in the jacket and armor next to the ripcord. Wrap the end of a ripcord around the plier jaws and pull the ripcord down the length of the cable to the ring cut (Figure 3). Note: rounded corners on the needle nose pliers will prevent the pliers from cutting the ripcord.

Figure 3 – Pull the rip cord through the armor and outer jacket.

4.6 Locate the second ripcord (approximately 180° from the first one) and repeat the previous step to separate the cable jacket into two longitudinal sections (Figure 4).

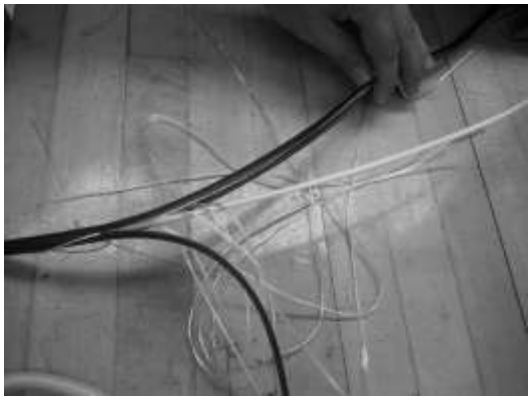

Figure 4 – Separate the cable jacket into two sections.

4.7 Cut and remove the two sections of the cable sheath to expose the cable core (Figure 5). Cut and remove the rip cords and water blocking tape.

Figure 5 – Cut and remove the two sections of cable jacket.

4.8 Consult the closure instructions for the strength member length that is required for closure assembly. Trim the strength members as required (Figure 6)

Figure 6 – Trim the strength members as required.

4.9 Consult the closure instructions for the length of buffer tube required for closure assembly. Measure and ring cut the buffer tube as required (Figure 7). Gently flex the tube at the score location to separate and remove the buffer tube.

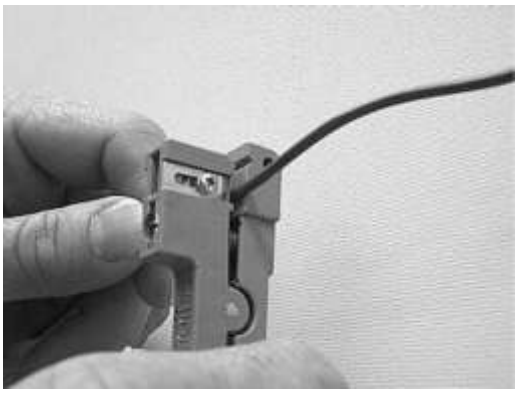

Figure 7 – Ring cut the buffer tube.

4.10 Clean the optical fibers using the gel cleaner and lint-free wipes. Begin near the buffer tube and work towards the fiber ends.

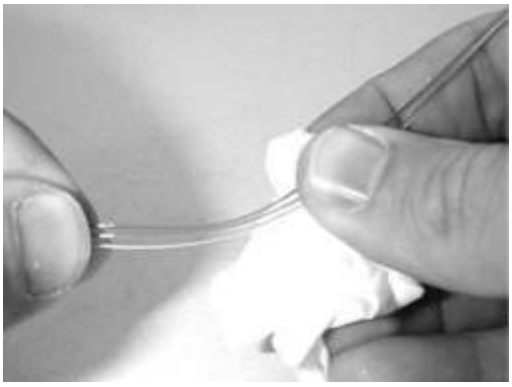

Figure 8 – Clean the optical fibers.

4.11 Fasten and clamp the cable in the closure. Route the buffer tubes to the splice trays and organize the slack fiber as specified by the closure instructions.

4.12 Prepare and splice the fibers as required. Complete the closure assembly as specified by the closure instructions.

For additional information please contact your sales representative. You can also visit our website at www.ofsoptics.com or call 1-888-FIBER-HELP (1-888-342-3743) from inside the USA or 1-770-798-5555 from outside the USA.

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