

# Instruction Sheet P/N 305C Tefzel EndCap



Commercial & Industrial UL 515 Type A,B,C,D  
Ordinary Locations – 75C wet, 150C Dry LR102162-2  
On metal and nonmetallic pipe and vessels – 3A, 3B, 3C  
In metal and nonmetallic pipe and vessels – 4A, 4B, 5A, 5B  
wet location industrial MAX 25 AMPS

Package to include:

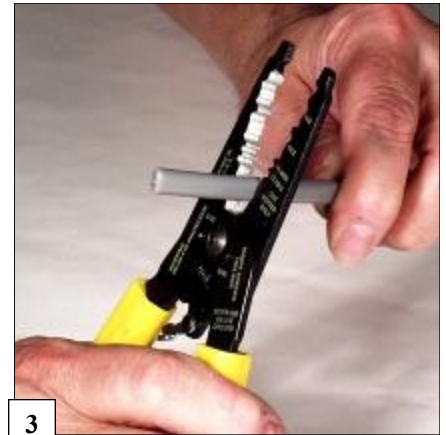
1 each Tefzel End Cap and 1 each Heat Shrink Braid Guard



1



2



3

1. Tools needed - High temperature hot air heat gun, sharp clean wire cutting tool, 25 psig shop air supply, 206C or 207C pressure connector.
2. Cut heat trace to desired length. If your heater has an over jacket, with a sharp blade carefully remove 6" of TFE over jacket from end to be sealed. Take care not to cut or damage the braid during this operation.
3. Move the braid so that it does not interfere and cut heat trace 3" back at a 45° angle with using a sharp wire cutting tool. Inspect cut to insure that the carrier wires do not make contact. If they do, perform step 3 again

4. Place Tefzel End Cap over wire end to be sealed, hold metal braid away from operation, and heat with high temperature hot air heat gun (part # 907). Do not use open flame. As End Cap is heated it will turn transparent and wire color will show though clearly. Continue to move heat around the End Cap until all sides are uniform and cable coating begins to ooze out from open end of End Cap. Allow End Cap to cool before step 5.



4

5. End Cap integrity test should now be done by pressurizing opposite end of heat trace with 25 psig air supply using pressure connector 206C or 207C. Now submerging Tefzel End assembly in clean water. If no bubbles are present cap has been installed correctly. If bubbles are present repeat steps 2 through 5.
6. Slip the metal braid back over End Cap so it extends about 1". Fold the excess braid back so when the braid guard is attached it will hold the braid in place at the end of the wire.
7. Place the braid guard over the end cap and metal braid. Heat shrink to braid guard until it firmly holds the braid in place.



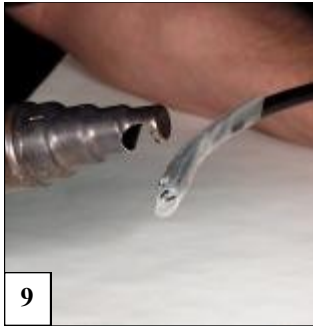
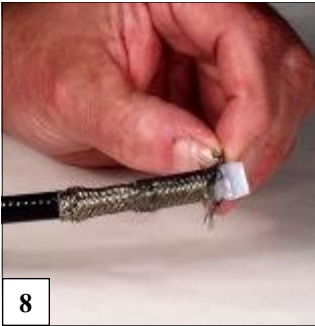
5



5



5



8. An insulation resistance test is recommended between the 2 buss wires and the braid. Test with 500 VDC megger minimum acceptable reading should be 20 megohms per circuit tested. Do not use a megger with an excess of 2500 VDC. If test fails check for faulty end cap installation or any heating cable damage.

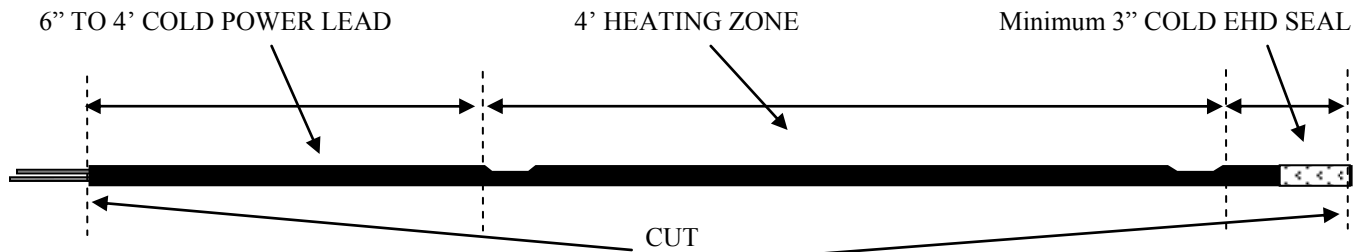
Pressure connector placement for Drain, Waste and Vent applications not subject to back pressure may be placed over outer jacket or metal braid.  
**Refer to 206C & 207C installation instruction**

Pressure connector placement for pressurized lines subject to pressure. Over jacket should be removed so it will not touch the rubber sealing grommet.  
**Refer to 206C & 207C installation instruction**

9. When wire passes electrical test it may then be installed. Take care not to damage End Cap during installation.
10. After installation check for a leak at wire termination point beyond pressure fitting # 206C or 207C) and replace End Cap if a leak is found allowing water to drip from inside of the wire.
11. If problem cannot be corrected do not use or connect wire to voltage.

Arctic Trace® heating cables are constructed with multiple heating zones of various lengths depending on the voltage and watt per foot output. During assembly when a heating zone is cut, that length of heat cable becomes a cold lead and will not have a heating output. When making power connection or terminating the end of the heating cable care should be taken to assure the heating part of the cable contacts the process area to be heated. Heating zone spacing can be identified by a slight depression on the heating cables edge.

### EXAMPLE



### CAUTION

This product must only be installed by a qualified electrician, who fully understands electrical equipment placement, and must never under any circumstance be placed in service without the use of an adequate ground fault circuit interrupter to protect personnel from shock or injury.

After this equipment has been placed in service it must be tested to ensure all wiring and safety devices are working.

All National, State, and Local Electrical Codes must be followed.

If this product is not installed properly fire, death, or injury may result.