

## Installing Large Voltage Connectors on the Elster Low Voltage AGInode

Pole top mounting option

### General

The Low Voltage (LV) AGInode pole top mounting option uses insulation-piercing voltage connectors to contact the system voltages. The standard connectors shipped with the LV AGInode are rated for cable sizes #4 AWG through 2/0 (see Figure 1). These cable sizes are commonly used on distribution transformers up to 50 kVA.

The LV AGInode can also be used on transformers larger than 50 kVA by installing large size voltage connectors, which are optionally available.<sup>1</sup> These large voltage connectors fit cable sizes 3/0 through 750 MCM.

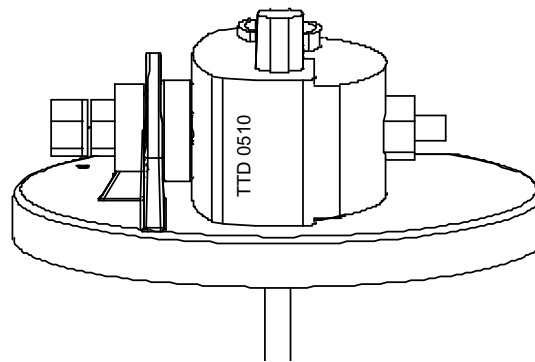


Figure 1. Standard voltage connector

<sup>1</sup> Contact your local Elster representative for ordering information. Use Elster part number 1B12347G01.

## Installing the large voltage connectors

To install the large voltage connectors, use the following procedure:

1. Unscrew and remove the connector mounting bolt. Remove the small voltage connector (two parts) and the voltage mounting spacer. See Figure 2.

Save the small voltage connector and spacer for future use with a possible smaller distribution transformer. These parts are not used with the large voltage connector.

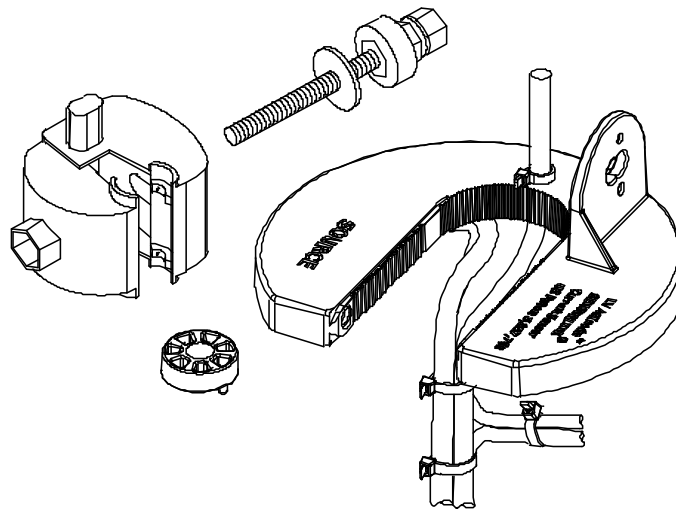


Figure 2.

2. Unscrew the mounting bolt from the new large voltage connector. The connector separates into three parts: bolt, inner jaw, and outer jaw. See Figure 3.

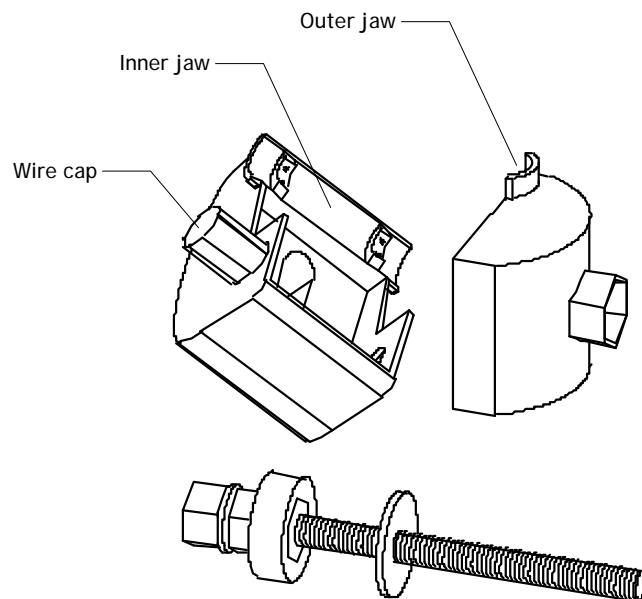


Figure 3.

3. Insert the end of the LV AGInode voltage cable into the bottom of the inner connector jaw (see Figure 4). Be sure to push the voltage cable through the inner jaw and into the wire cap on the top of the jaw. Continue to push until the wire tie on the voltage cable stops on the bottom of the connector jaw.

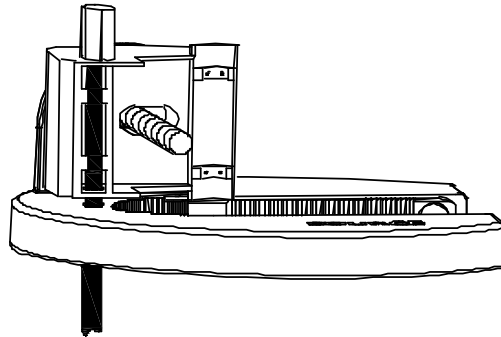


Figure 4.

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<b>NOTICE</b>
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The wire cap on the inner connector jaw and the jaw surfaces may contain a clear grease. Do not remove any clear grease from the cap, inner connector jaw, or jaw surface. The grease is part of the voltage connection weather seal.

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4. Insert the connector bolt through the sensor mounting flange and the inner jaw. To properly align the voltage connector body with the LV AGInode voltage cable, position the bolt in the side of the hole as shown in Figure 5.  
Note that the round spacer is not used with the large connector. Do not re-install the spacer.

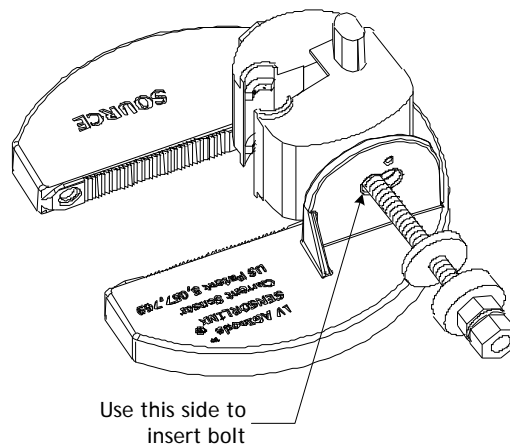


Figure 5.

5. Position the voltage connector outer jaw onto the inner jaw. Screw the connector bolt into the outer jaw until the bolt is finger-tight (see Figure 6 and Figure 7).
6. Repeat the above steps to install the optional large voltage connectors on both sensors of the LV AGInode.

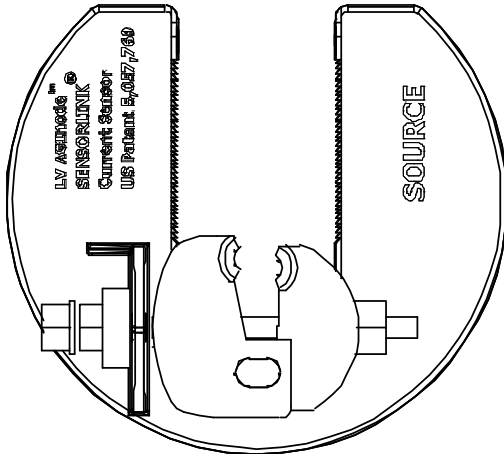


Figure 6.

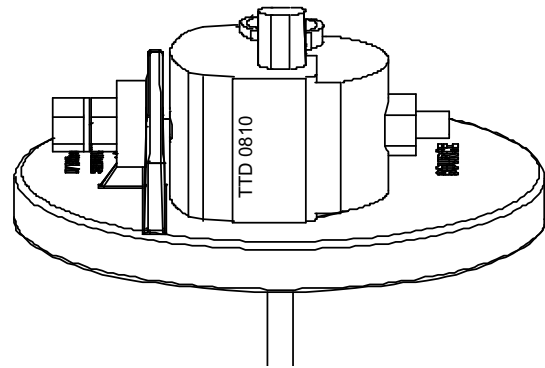


Figure 7.

To complete the installation of the LV AGInode, see the “Low voltage transformer AGInode (pole top)” instructional leaflet (IL42-5005).

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