READ THIS FIRST

Installation and Startup Guide

"L3" Pressure & Level Transmitter

Version 1.0 Document 10021

ANDERSON-NEGELE

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PRODUCT DESCRIPTION

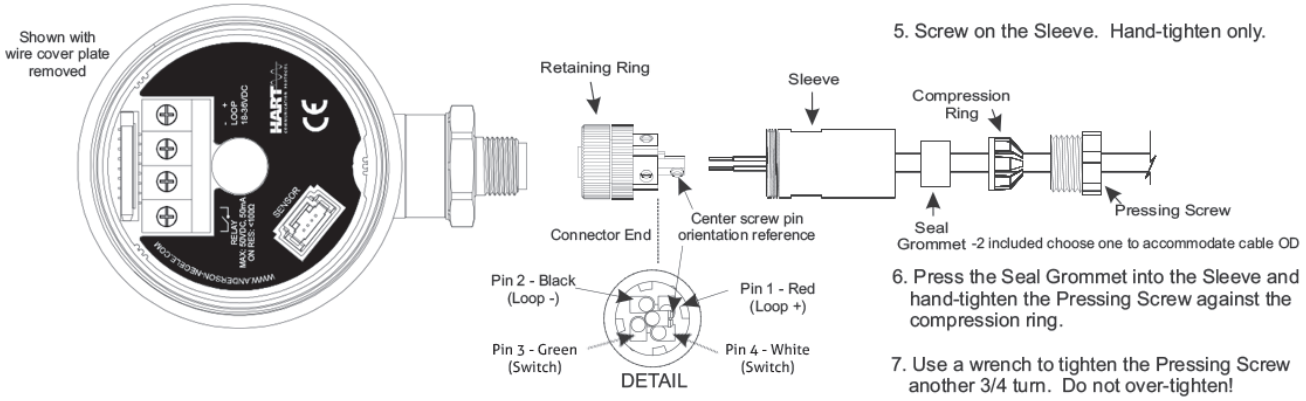
The Anderson-Negele L3 Pressure and Level Transmitter has been designed to measure process pressure or hydrostatic level in sanitary process applications. The state-of-the-art temperature compensation reduces errors associated with process temperature changes with improved zero stability reduces sensor interaction. The graphical user interface makes set-up and programming easy by directly aligning to the Hart DD menu structure. The field repairable and reconfigurable design allows the user to change the display orientation, add a remote cable, or replace a component in the field without impact to accuracy.

SENSOR WIRING

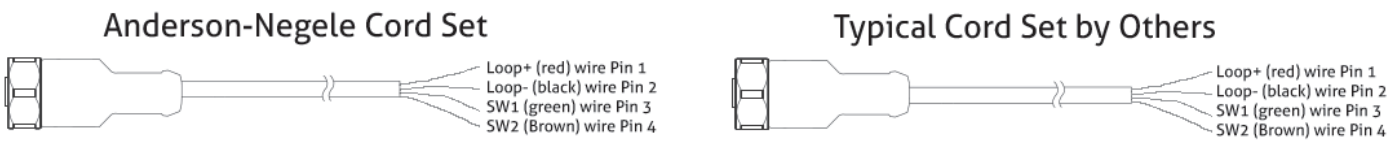
To facilitate electrical connections the L3 transmitter will be provided with either a 5 pin M12 quick disconnect receptacle, a M16 thread cable gland, or a ½" NPTF threaded adaptor. Shielded cable is recommended. See manual for additional detail.
Field wireable connectors or molded cordsets are available as accessories from Anderson-Negele.

FIELD WIREABLE CONNECTOR ASSEMBLY - ORDERED AS ACCESSORY

1. Insert cable through Pressing Screw, Compression Ring, Seal Grommet, and Sleeve as shown below.
2. Strip back 1-1/4" of outer sheathing, cut off any excess wires, shield and ground. Strip off 1/4" insulation from remaining two wires. It is not necessary or recommended
3. Orient Connector end so that center pin connecting screw is horizontal facing right (see detail).
4. Wire LOOP+ (red) wire to top-right terminal, and LOOP- (black) wire to top-left terminal. No connection is made to the center and bottom terminals.
5. Screw on the Sleeve. Hand-tighten only.
6. Press the Seal Grommet into the Sleeve and hand-tighten the Pressing Screw against the compression ring.
7. Use a wrench to tighten the Pressing Screw another 3/4 turn. Do not over-tighten!



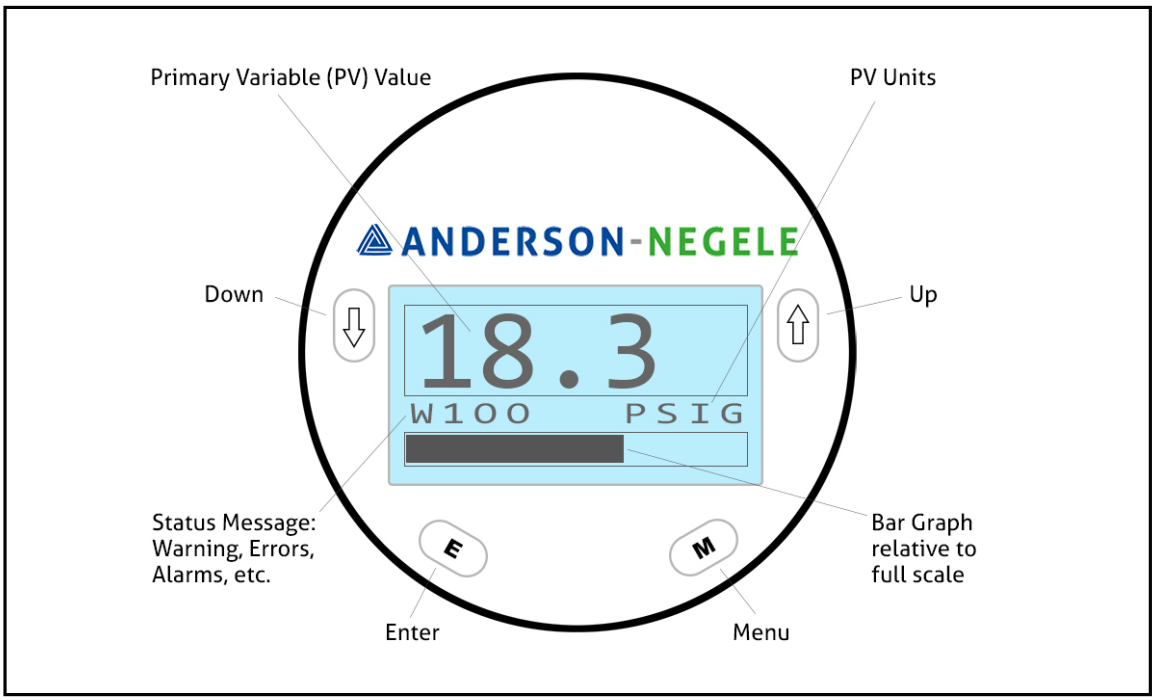
MOLDED CORD SETS

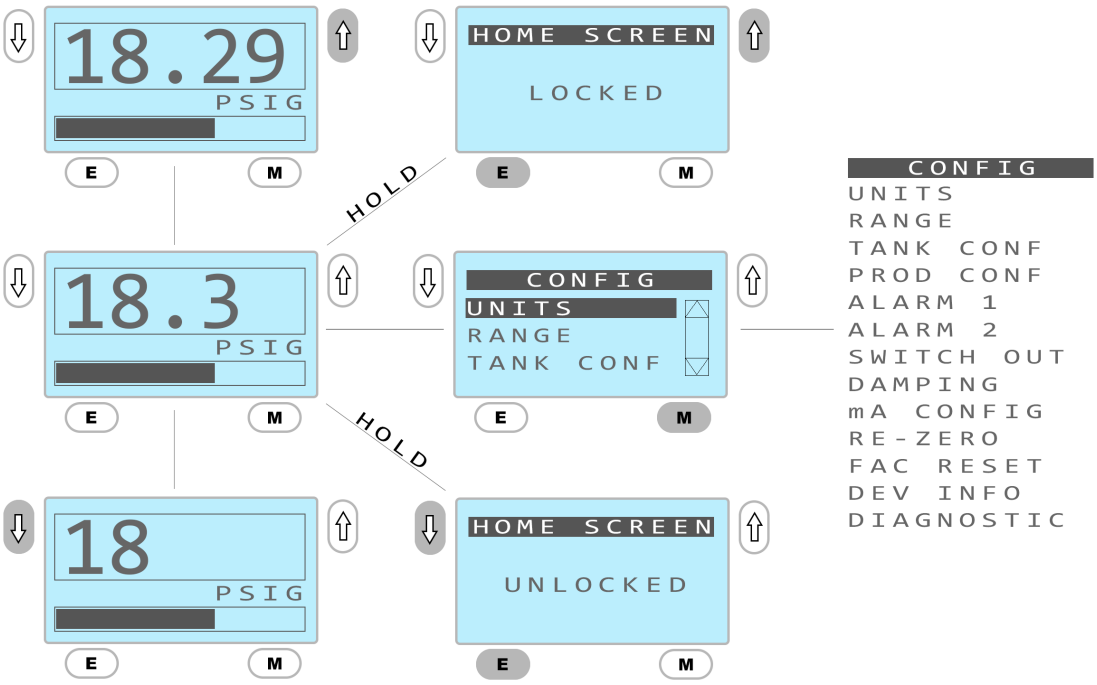


USER INTERFACE GUIDE

The L3 transmitter may be configured via the onboard 4 button display or through Hart communication. This section will describe configuration through the onboard display.

Configuration menus are shown graphically in the manual along with the resulting actions from pressing any of the buttons.



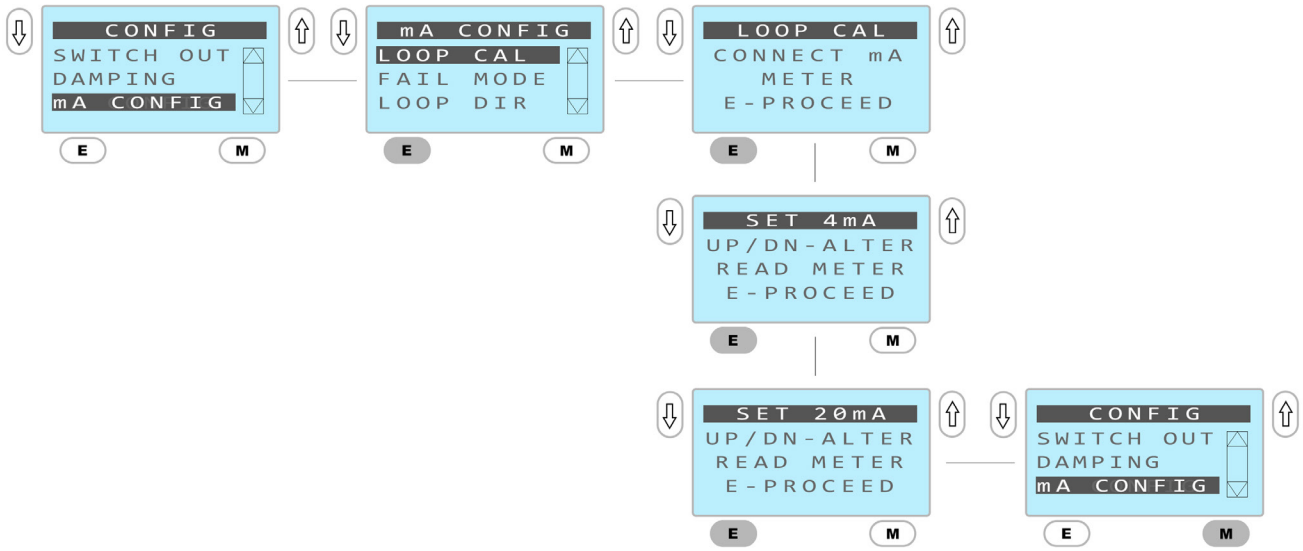


If a status message is present the following additional actions may be taken:
Pressing “E” will temporarily display an explanation of the numerical status message
Pressing and holding the down arrow will clear the warning message.

mA Calibration

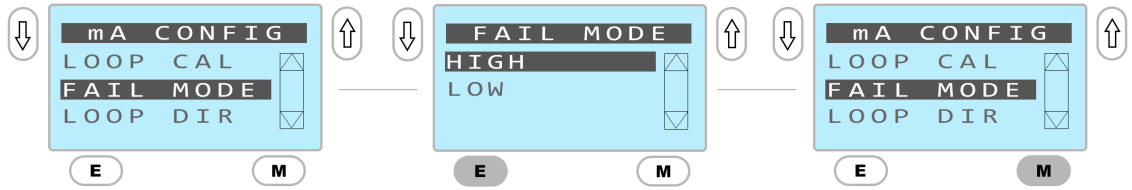
When a transmitter is added to a system for the first time a mA calibration should be performed to ensure the sensor's 4mA and 20mA points align with the control system in which it is installed. Because input cards are variable this will provide the best results and avoid programming an offset in the PLC.

The mA calibration requires the device to be installed in a control loop where the mA value may be read by observed by the operator and the display may also be accessed.



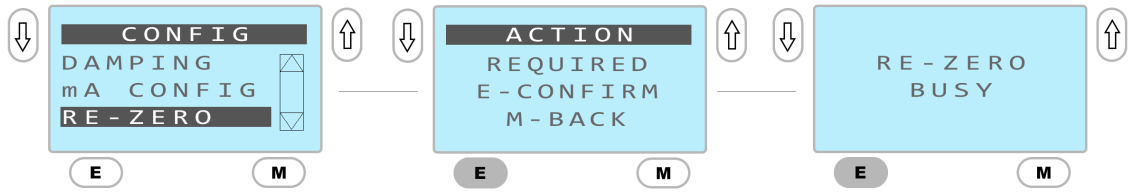
Failure Mode Selection

The L3 may be set to fail low (3.8mA output) or fail high (20.2mA output) when a valid process variable cannot be output.

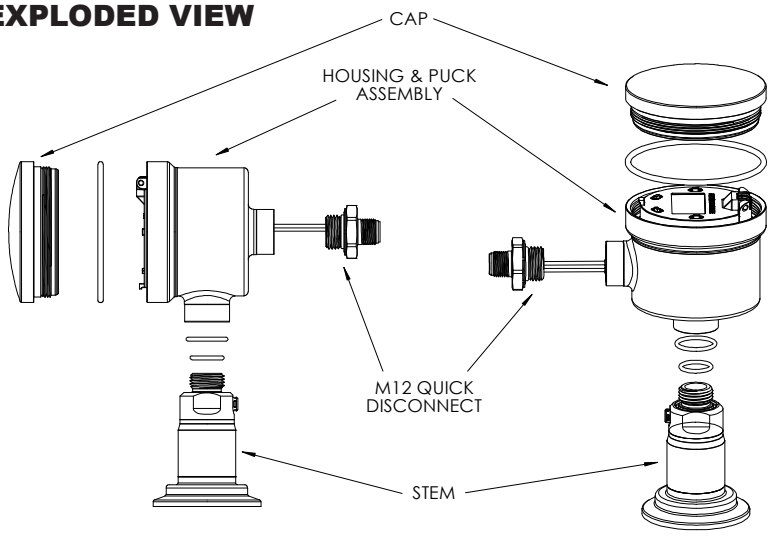


Re-zero

The L3 transmitter is sensitive to both orientation and clamping forces during installation. It is important to re-zero the sensor after it has been installed. Additionally, if the diaphragm is dented or goes through a period of stress such as being steamed for the first time, it is important to zero the sensor.



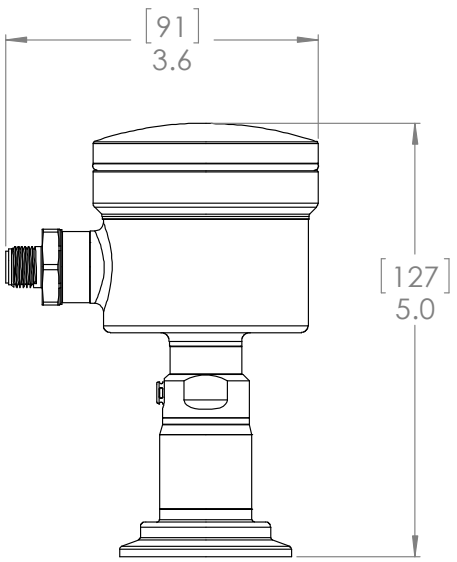
EXPLODED VIEW



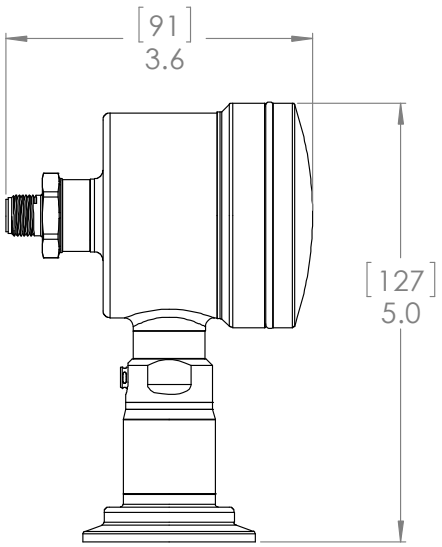
ACCESSORIES

Cord Sets	
Shielded Molded w/25' cable	42117H0025
Shielded Molded w/50' cable	42117H0050
Shielded Molded w/100' cable	42117H0100
Clear Cap w/gaskets	56328P0001
Stainless Steel Cap w/gaskets	56329P0001
M12 Quick Disconnect Receptacle	SP56726A0004
Cord Grip	SP5633100000
1/2" NPTF adaptor	SP5633200000
Seal Kit (6) gaskets	5633000001
Field Wireable Connector-Straight	42119B0000
Field Wireable Connector-90°	42119A0000
5' Remote Kit	SP73228A0005
10' Remote Kit	SP73228A0010
25' Remote Kit	SP73228A0025

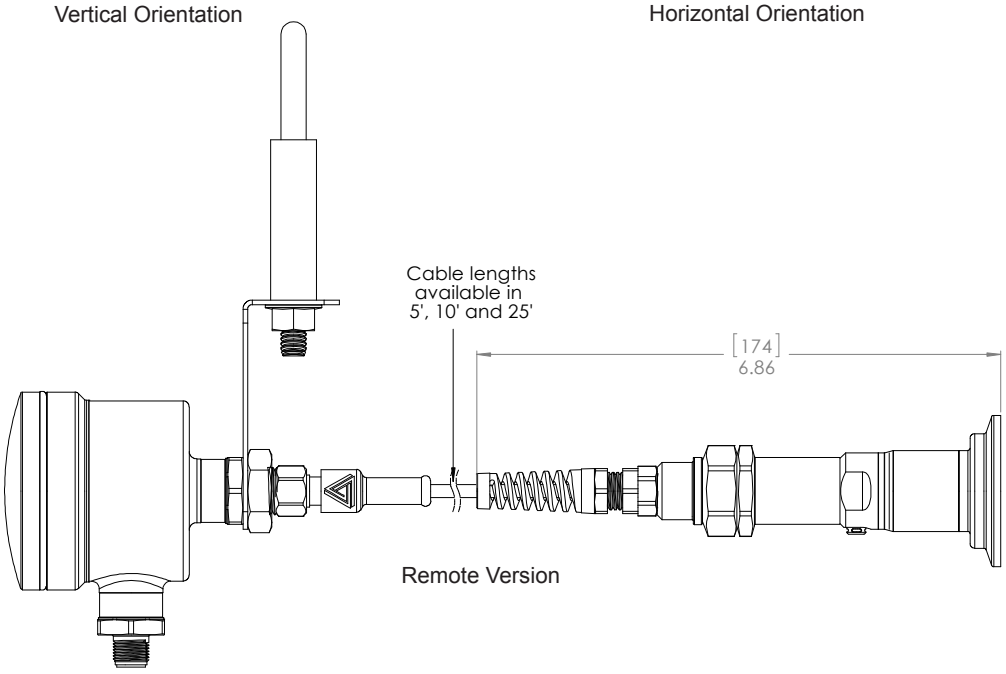
DIMENSIONAL DRAWINGS



Vertical Orientation



Horizontal Orientation



Remote Version