

Installation and Startup Guide

"L3" Pressure & Level Transmitter

Version 1.0 Document 10021





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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.

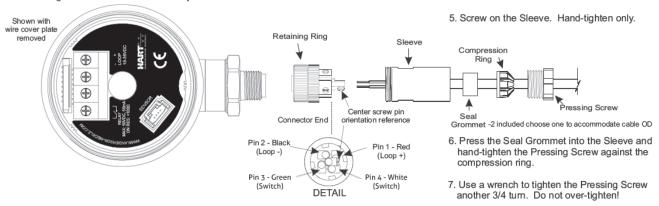
SENSOR WIRING

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

- Insert cable through Pressing Screw, Compression Ring, Seal Grommet, and Sleeve as shown below.
- 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
- Orient Connector end so that center pin connecting screw is horizontal facing right (see detail).
- 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.



MOLDED CORD SETS

Anderson-Negele Cord Set

Loop+ (red) wire Pin 1 Loop- (black) wire Pin 2 SW1 (green) wire Pin 3 SW2 (Brown) wire Pin 4

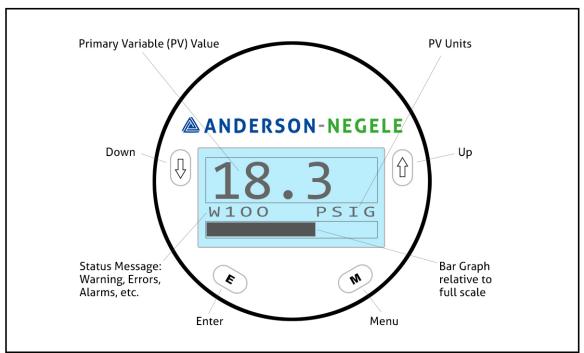
Typical Cord Set by Others

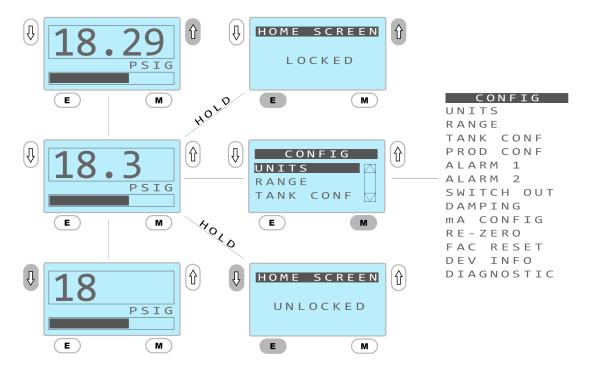


USER INTERFACE GUIDE

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.



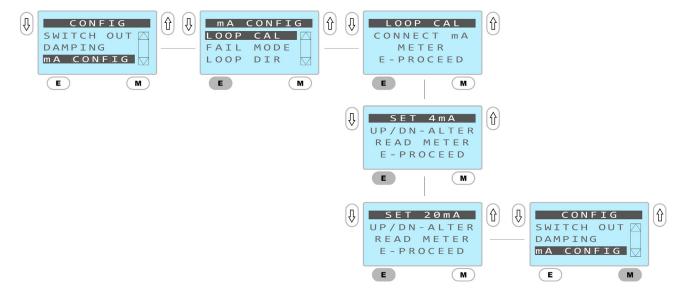


If a status message is present the following additional actions may be taken: Pressing "E" will temporarily display an explanation of the numerical status message Pressing and holding the down arrow will clear the warning message.

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

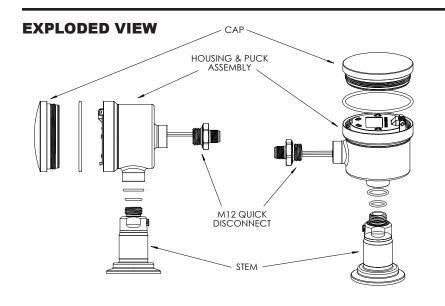
The L3 may be set to fail low (3.8mA output) or fail high (20.2mA output) when a valid process variable cannot be output.



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.





ACCESSORIES

Cord Sets
Shielded Molded w/25' cable
Shielded Molded w/50' cable
Shielded Molded w/100' cable
42117H0050
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

 25' Remote Kit
 SP73228A0025

DIMENSIONAL DRAWINGS

