



READ THIS FIRST

Installation and Startup Guide

"L3" Pressure & Level Transmitter

Version 1.2 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 IO-Link and Hart 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.

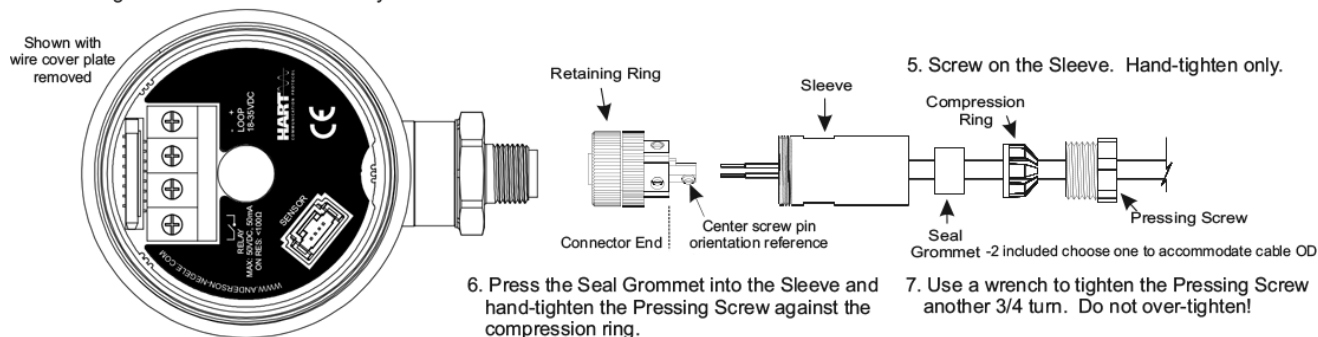
SENSOR WIRING

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 1/2" NPTF threaded adaptor. Shielded cable is recommended for installations using the 4-20mA output. See manual for additional detail.

Field wireable connectors or molded cordsets are available as accessories from Anderson-Negele.

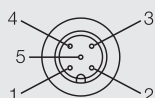
FIELD WIREABLE CONNECTOR ASSEMBLY - ORDERED AS ACCESSORY

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 the cables to the terminals as indicated in the table "Connection M12 plug" below.

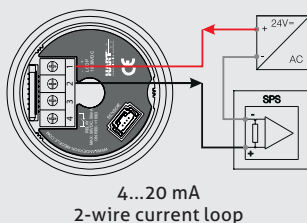


Electrical connection

M12 plug



Cable gland



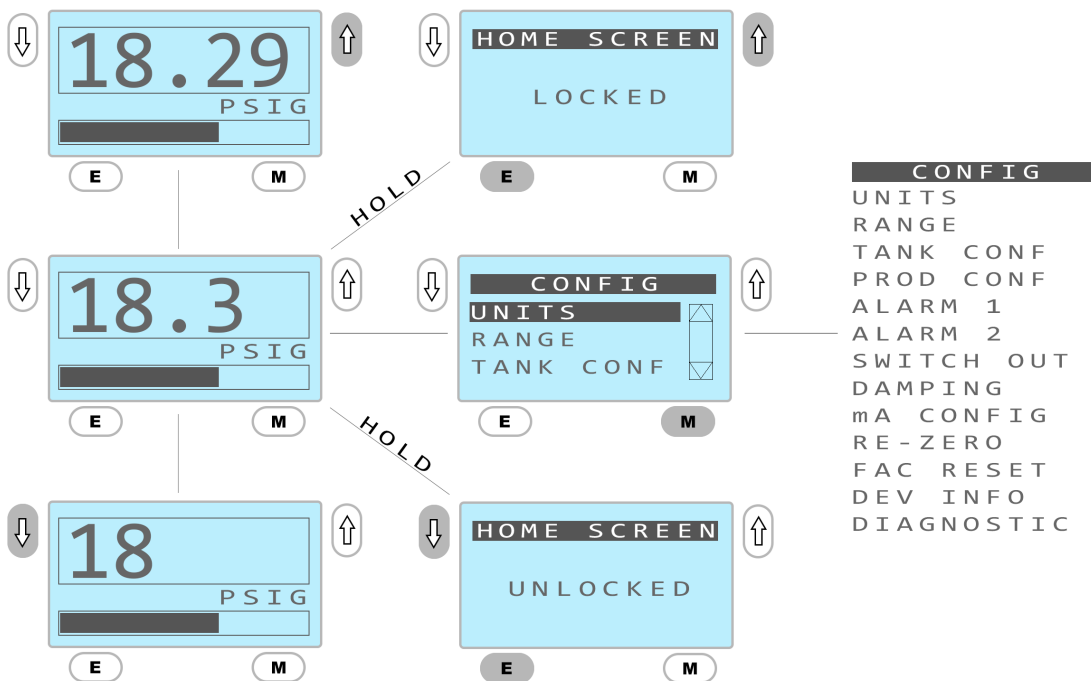
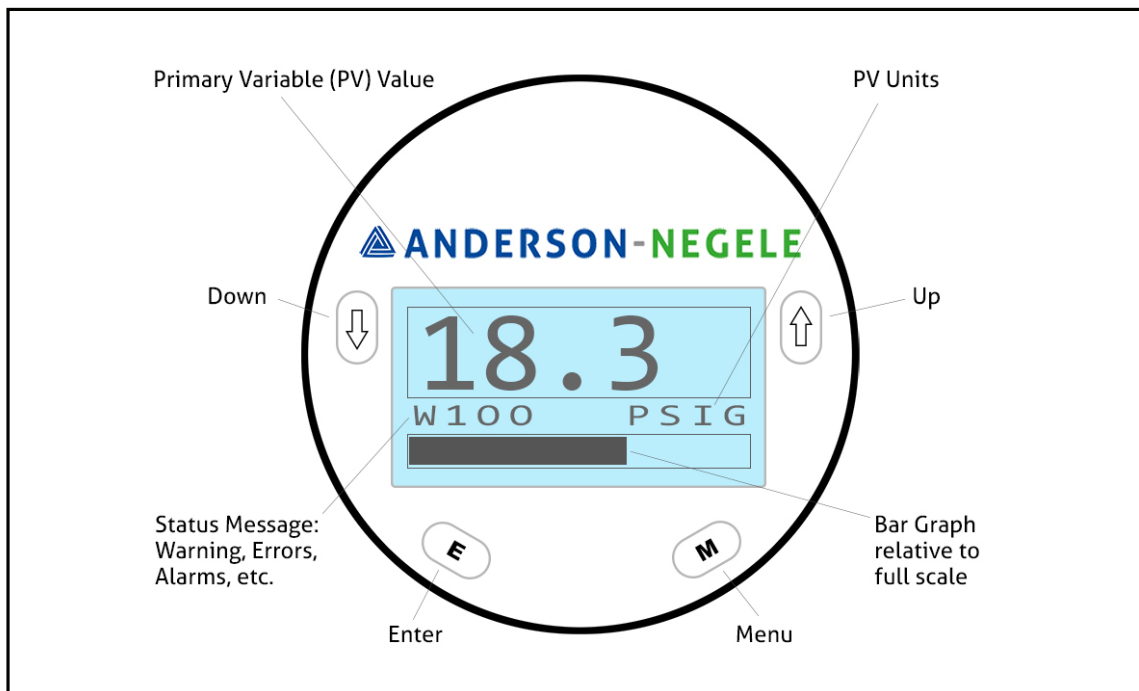
Connection M12 plug

Pin	Output	Type A (analog)	Type A (IO-Link)	Type G (analog and HART)
1: red		+ supply	+ supply	+ supply
2: black		4...20 mA current output	n. c.	- supply 4...20 mA
3: green		- supply	- supply	relay normally open
4: blue		digital output	IO-Link	relay normally open
5:		n. c.	n. c.	n. c.

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.



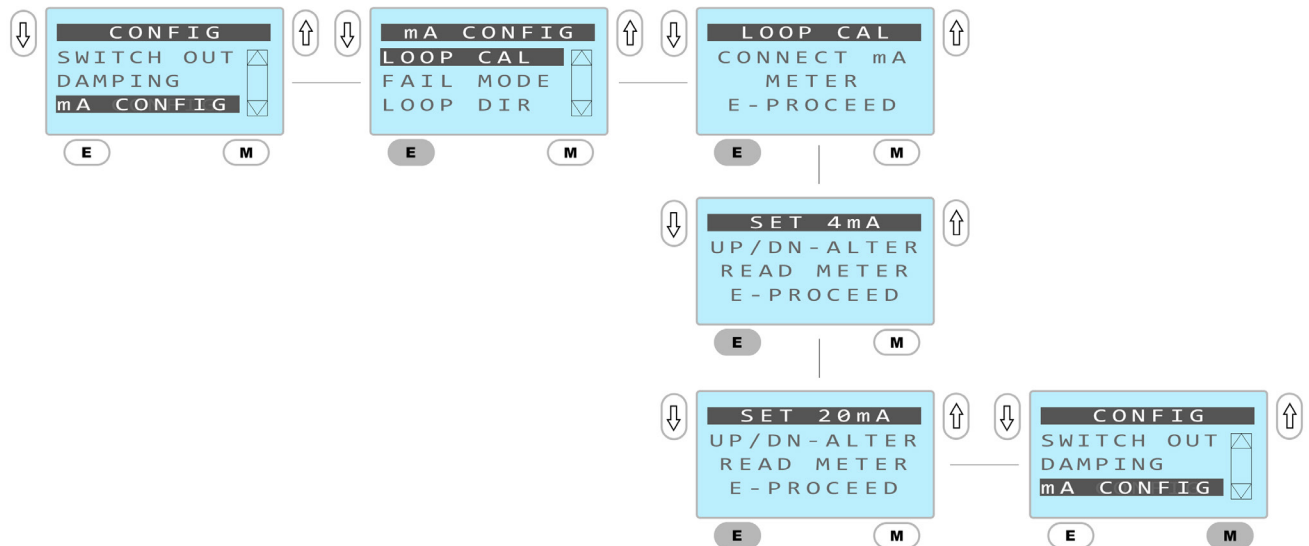
If a status message is present the following additional actions may be taken:

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.



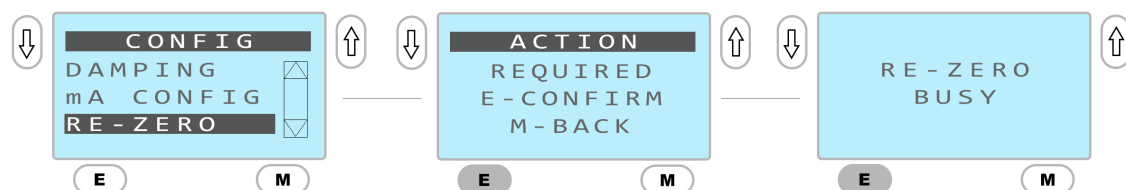
Failure Mode Selection

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.

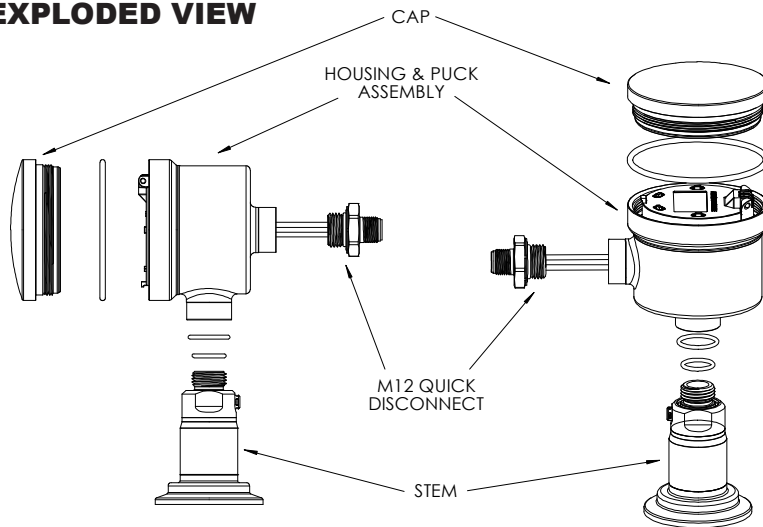


Re-zero

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



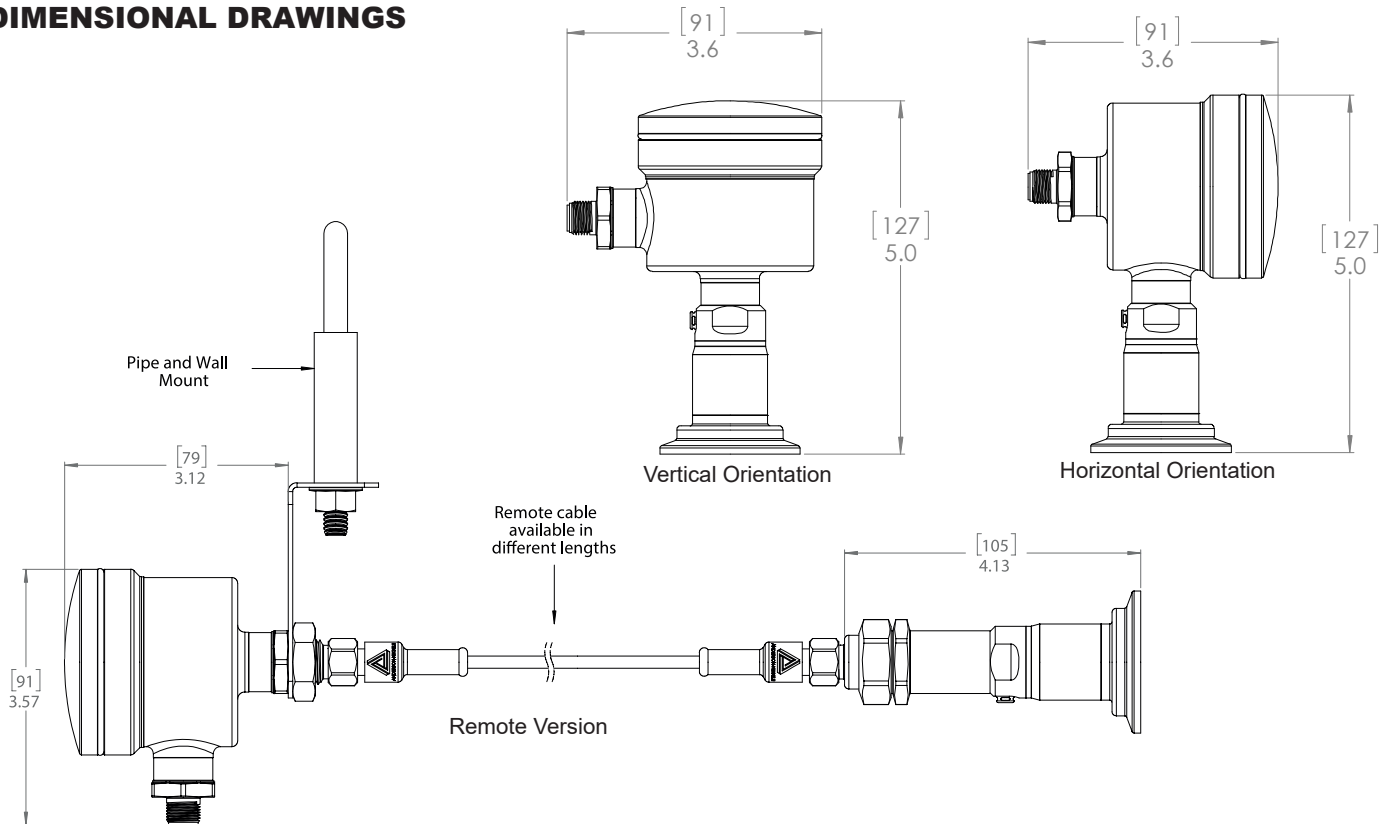
ACCESSORIES

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	73228D0005
10' Remote Kit	73228D0010
15' Remote Kit	73228D0015
20' Remote Kit	73228D0020
25' Remote Kit	73228D0025
50' Remote Kit	73228D0050

DIMENSIONAL DRAWINGS



Warnings



Warning!

This unit accepts DC voltage only, connection to AC voltage can cause failure of the sensor and/or risk of electrocution



Warning!

Do not remove this sensor from the process while it is operating. Removal while the process is operating can contaminate the process and could cause human injury.



Warning!

Before removing for service or calibration, ensure that residual product has been flushed from the line and that internal pressure has returned to atmospheric pressure.