



RIGID LEVEL SENSOR INSTALLATION AND HANDLING PROCEDURE

OPERATION MANUAL TLS-LM can be downloaded from the website below.
<http://www.drexelbrook.com/Continuous-Level-Measurement/Index.aspx>

Unpacking the Rigid Level Sensor

IMPORTANT

Be sure to read and understand all of the Installation Instructions before beginning the procedure!

Unpacking

Carefully remove the contents of the shipping carton and check each item against the packing list before destroying any packing materials. If there is any shortage or damage, report to the factory at 1-215-674-1234.

Storage

Tank Level Systems should be stored in their original shipping containers until ready for installation. Damage that occurs in storage is not covered under manufacturer's system warranty.



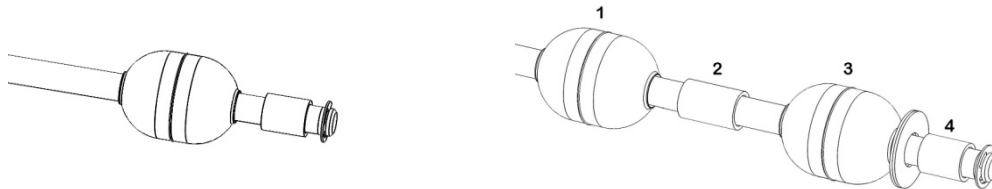
- **CAUTION! DO NOT BEND RIGID LEVEL SENSORS: ANY RESULTING PERMANENT DAMAGE IS CONSIDERED USER DAMAGE, AND IS NOT COVERED UNDER WARRANTY.**
- **LONGER RIGID LEVEL SENSORS NEED TO BE SUPPORTED AT BOTH ENDS WHILE HANDLING.**
- **DO NOT ATTEMPT TO OPEN RIGID LEVEL SENSOR, OR ATTEMPT TO WELD ITS TUBING.**

Level Sensor Assembly (B style)

If required, install the compression fitting and reducer bushing (not shown – user supplied) onto level sensor tubing. Then install floats and spacers on the end of the level sensor as shown.

ONE FLOAT requirement: Install the float, dead band spacer, and retaining fastener ("e-clip").

TWO FLOAT requirement: Install as follows: "Product" float (1), interposing spacer (2), "Interface" float (3), dead band spacer (4), and retaining fastener ("e-clip").

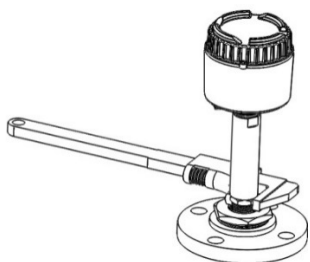


Sensor Installation – Standard Fitting style

NOTE: The Rigid Level sensor in this style requires a minimum tank bottom clearance of 1/2". Tank bottom clearance is defined as the distance from tank bottom surface to the tubing plug on level sensor.

STEP 1: Lower the level sensor tube (with required floats and spacers) through opening on tank flange, and into tank.

STEP 2: Thread and tighten the 3/4"NPT fitting on probe tubing into tank flange.

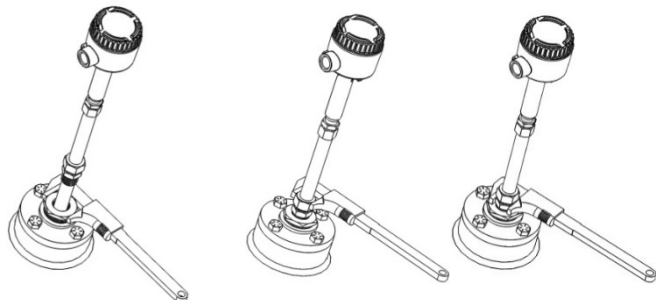


STEP 1: Lower the level sensor tube (with required floats and spacers) through opening on customer tank flange, and into tank.

STEP 2: Thread and tighten user supplied reducer bushing into tank flange.

STEP 3: Thread and tighten lower 3/4"NPT half of compression fitting into reducer bushing on tank flange.

STEP 4: Adjust level sensor to desired tank depth (reference chart below), and hand tighten compression fitting into reducer bushing on tank flange. After hand tightening, turn the fitting 1-1/4 turns. Do not over tighten.



Sensor Installation – Adjustable Compression Fitting style

NOTE: The Rigid Level sensor in this style requires a minimum tank bottom clearance of 1/2". Tank bottom clearance is defined as the distance from tank bottom surface to the bottom of the tube on the level sensor.

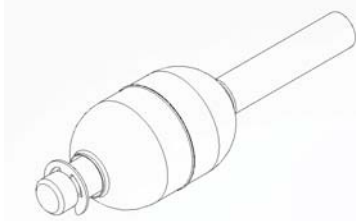
STEP 2

STEP 3

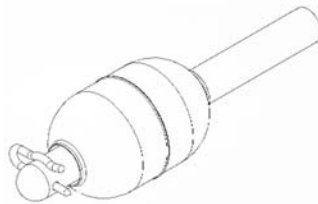
STEP 4

Level Sensor Assembly (F and S style)

FLOAT Installation: Install the float with retaining fastener (“e-clip”) for the “F” style probe and install the float with retaining fastener (“R-clip”) for the “S” style probe as shown.



“F” style probe with (“e-clip”)



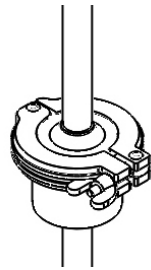
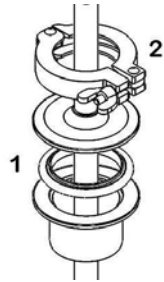
“S” style probe with (“R-clip”)

Sensor Installation – Tri-Clamp Flange style

NOTE: The Rigid Level sensor in this style requires a minimum tank bottom clearance of 3/8". Tank bottom clearance is defined as the distance from tank bottom surface to the bottom of the tube on the level sensor.

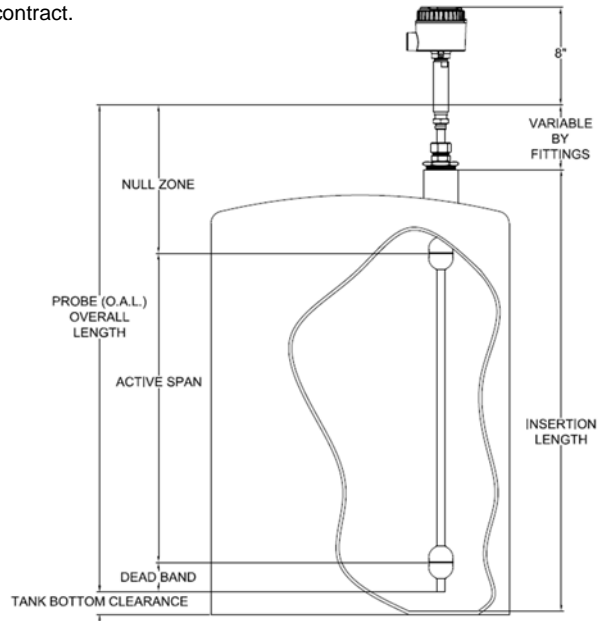
STEP 1: Install O-ring assembly (1).

STEP 2: Mount level sensor with clamp assembly (2) as shown.



COMPLETED ASSEMBLY

NOTE: Extreme temperatures have an effect on level sensor length. In high temperatures, level sensor length will expand. In low temperatures, level sensor length will contract.



MINIMUM TANK BOTTOM CLEARANCES:

“B” style: 1/2”, “F” and “S” style: 3/8”