

Operating Data Installation Maintenance Instructions

For Level Sensor Tape Level Non-Powered Quick Install

Operation:

The unit simply screws into and most drums, tanks or vessels for easy local level indication. A tape with strong magnet is inserted into the tube. A magnet equipped float slides on the probe and follows the liquid level inside the tank.

To check the level:

- Pull the tape so it passes the coupled position
- Lower the tape until you feel the coupling going down
- The measurement will be close to the distance between the float and bottom of probe

If the tape does not go down – pull it further above the float position and let it go back down past the float “at speed” This is necessary as the two magnets will couple if the tape is inserted slow. A bit of speed is necessary to get past the float.

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1. Note

Please read and take note of these operating instructions before unpacking and commissioning. The instruments may only be used, maintained and installed by qualified personal familiar with the operating instructions and the applicable health and safety requirements.

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3. Specific Applications

The Level Control Gauge has been designed for use in rugged level monitoring applications and pump control for liquids

The probe part of the gauge can be manufactured from most non-magnetic materials including plastics. The floats can be either stainless, buna or engineered plastics.

4. Operating Principles

A NEO magnet is attached to a tape measure. As the tape is lifted the magnets couple and you will feel resistance. This is the float level inside the tank. A reading is observed on the way down, see below.

5. Instrument Instructions

The instruments are thoroughly inspected by the factory prior to shipment and sent in perfect working condition. Should any damage to the device be visible, we recommend a thorough inspection of the delivery packing. In case of damage please inform your parcel service/forwarding agent immediately, since they are responsible for damages incurred during transit.

Scope of delivery:

- Level Sensor per Purchase Order
- Operation Manual

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6. Mechanical Installation

Must be installed to local piping and plumbing codes. Ensure that the bottom of the probe does not come in contact the tank bottom, as the probe will easily bend.

Use a wrench on the larger of the two fittings to install. Do not use any tool or clamp on the actual probe tube.

Compression Fitting: Must be installed by qualified technician with experience in correct torque of compression fitting type nut

Stand-Offs: many types are available. Some come with a simple collar on top and bottom threaded to 10/32 at three points. Remove the setscrew. Select 3 machine screws to thread into the holes, long enough to keep the 1/2" probe approximately centered of the pipe it is sliding into. Use a thread lock and do not over tighten. Too much thread in pressure can puncture the tube.

6a: Bracket Installation

Usually walls requiring a bracket are not perfectly flat. The level switch can take some flex, but excessive bending is not good. The internal harness is isolated from the tube (somewhat) and can flex a bit.

Do not over tighten the nuts on the stem. Double nut (supplied) the "U" bolts to prevent loosening.

7. Technical Specifications

Preliminary Technical Data Sheet

Instrument Type	Dip Tape Level Switch
Model	316 Stainless Steel
Housing Size	Custom
Housing Material	316 Stainless Steel
Float	316 SS electro polished finish
Flag Display	N/A
Temperature	-20 to 300 Deg. F
Reed **	N/A
Top Fitting	Custom
Bottom Flange	N/A
Reed position	N/A
Ruler	N/A
Liquid Indication	N/A
No Liquid Indication	N/A
** SPDT Reed (Large Size)	N/A

Adjustments

Dip Tapes are not adjustable.

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8. Set Up

IMPORTANT INFORMATION

The unit is rugged - but will bend if handled with force

9. Troubleshooting

Are the magnets in place or is the tape sticking?

10. Maintenance

The Dip Tape requires no special maintenance other than making sure sludge or debris to not enter the gauge. If the application is dirty – wipe the unit down on a regular schedule to prevent buildup on the probe interfering with float movement.

There are no user serviceable parts inside the Level Sensor. If repair is required, please contact your local distributor to return for repair.