

# Magnetostrictive Level Transmitters



**Brand:** Kenco Engineering

## Short Description

The in-tank liquid level transmitter is a continuous multi-functional Magnetostrictive transmitter that provides product level, interface level, and temperature to the user via Analog (4-20mA) with HART®, Modbus RTU (Remote Terminal Unit) or DDA (Direct Digital Access). Magnetostrictive technology is one of the most accurate and repeatable level technologies available to date. Once the transmitter is installed and calibrated, there is no requirement for scheduled maintenance or recalibration.

## Description

The principles of magnetostriction are used to create a reliable position measurement system for use in industrial environments. Inside the sensor, a torsional strain pulse is induced in a specially designed magnetostrictive waveguide by the momentary interaction of two magnetic fields. One field comes from a magnet located inside a float, which moves up and down the outside of the transducer tube. The other field is generated from a current pulse which is applied to the waveguide. The interaction between these two magnetic fields produces a strain pulse which travels at sonic speed along the sensor waveguide until the pulse is detected at the head of the transducer. The position of the moving float magnet is precisely determined by measuring the elapsed time between the application of the current pulse and the arrival of the strain pulse. As a result, a reliable position measurement system is created that is capable of providing an accurate and repeatable measurement. Simultaneous Measurement of Multiple Process Conditions:  
-Product Level -Interface Level -Temperature -Volume No Scheduled Maintenance or Recalibration Field Repairable Inherent Accuracy  $\pm 0.039''$  ( $\pm 1$  mm) 200 Point Strap Table API Temperature Corrected Volumes Integral Display Password Protected Data Entry Hazardous Area Certified Intrinsically Safe

