

KEP One Minute Training

529K SERIES

September 99

What Is It?

The 529K is a 5 digit analog ratemeter/totalizer. A typical analog signal would be 0-20mA, 4-20mA, 0-10V or 2-10V. These signals are given off by various flow meters and sensors and can be put directly into the 529K.

The 529K can be used as a totalizer or a ratemeter or as both at the same time. For instance, you might want to see both your total gallons produced along with the rate at which you are producing (per second, minute, or hour). It is scaled by assigning a high and low number to the analogous high and low input. Let's say that the sensor gives off an output of 4mA (milliamps) when it measures 0 gallons and 20mA when it measures 10 gallons. Through the front keyboard, you put '0' for 4mA and '10' for 20mA and you have completed scaling the unit.

The 529K has a view button on the front, which allows the user to toggle between Total, Rate, Valley and Peak displays. The display span of the 529K is -19999 to 99999. When the display values for lowest and highest input signal are defined, the system displays a display value corresponding to the analog measurement value.

Technical Data:

Operating voltage 10 to 30 Vdc.

Maximum consumption: 50mA.

Resolution: 14 bits.

Measuring Speed: 1 sec.

Accuracy: 0.03% +/- 1 digit

Protection: NEMA 4X and IP 65 (Front)

Data Retention: EEPROM (1 million cycles or 10 yrs)

Where Is It Used?

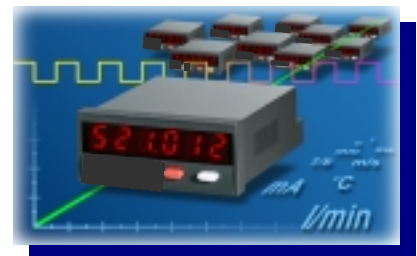
The 529K can be used in any simple rate meter or totalizing applications where there is an analog signal to monitor or display.

Tank Level:

A customer of KEP's installs tanks to hold liquids for a manufacturer that needs to store these liquids in a central location that is close but off-site from the main manufacturing building. A typical farm might have 10-15 tanks and these need to be monitored. A simple level sensor gives off a 4-20mA signal that is analogous to the level inside the tank. The 529K then takes that signal and integrates it into a level measurement for the equipment operators to view so they know when to refill the tank.

Flow Applications:

During flow processes, 3 variables are often monitored: flow rate, pressure, and temperature. These variables can be transmitted to separate 529K's to locally display these values.



Typical Applications:

Pressure Monitoring

Temperature Monitoring

Rate Meter and/or Totalizer

Level Monitoring