

KEP One Minute Training

MINITROL SERIES

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What Is It?

The Minitrol is actually a series of counters and rate meters that take a pulse input. That pulse input is usually a 4-30 Volt DC pulse given from a sensor like a photo electric sensor, or an encoder. (Note: KEP offers all these sensors in our Industrial Instruments catalog).

The Minitrol can be used as a totalizer or a rate meter or as both at the same time. For instance, you might want to see both your daily production along with the rate at which you are producing (per second, minute, or hour). It can also scale (we have separate K-Factors for each input) the incoming pulses. Let's say that the sensor gives off 1 pulse for every inch of material going by. These pulses can be scaled such that the Minitrol shows a count of 1 for every 12 pulses. In other words, we would increment the total by only one for every 12 pulses that came in ... or ... we would be showing a total of feet while we were being fed inches.

The MRTA3 Minitrol has two inputs (A & B) along with two outputs. This allows for many different scenarios for the setup of this Minitrol. The totalizer can be programmed for input "A" subtract "B", "A" add "B", or "A" and "B" as separate counters. You can display "A" and "B" input totals, the 'net' of the two inputs if you are using that option, or the rate of the "A" input. The two outputs can be set up for the "A" total, "B" total, the 'net', or the Rate of "A". These outputs are N.O. relays, 10 AMPS 120/240 VAC.

Finally, we offer an analog output option, RS-232 or 422 communications, operating voltages of 120, 240, 24VAC, or 12 to 15 VDC.

Where Is It Used?

The various Minitrol models can be used in any simple counting or rate meter applications. It is ideal if the application needs either two inputs or two outputs with scaling.

Cut To Length:

A customer of ours makes a machine that cuts a roll of material / paper into lengths to make sheets. This is a huge roll of those sticky address labels that are cut into sheets so you can use them in your laser printer or typewriter. They used a quadrature encoder (a type of sensor that gives off pulses for forward and backward movement) and hooked it up to our MRTA9 Minitrol to display the count of sheets that were cut but more importantly, the Minitrol's output would control the blade that sheared each sheet at exactly 11 inches. At the same time, they displayed the rate in feet per hour that the machine was cutting the giant roll.



Typical Applications:

Measuring Length

Line Speed indicator with Totalization

Net Part Counter - All Parts - Bad Parts

Batch Indicator

Totalizer

Totalizer and Rate Meter