



# ACT-PAK®

## 100 Series

ACT-PAK® (Automatic Control Translator Package) is a line of electronic instruments for recording, totalizing, and actuating controls based on meter throughput. The ACT-PAK instrument accepts pulses or contact closures from the metering device and provides a variety of outputs displaying consumption, rate of flow data, process control and data transmission.

### FEATURES

- Two enclosure options: Standard, a free standing or panel mountable package that meets NEMA 1 requirements and NEMA 4X, a wall-mountable fiberglass enclosure.
- Standard secure totalizer zero reset circuit.
- Multiple optional outputs.

### Specifications

Enclosure Type	NEMA1	NEMA 4X
Length	6.35"	5.9"
Height	3.0"	5.9"
Width	5.3"	3.8"
Weight	2.4 lbs.	2.5 lbs.

### Front Panel Indicators

- INPUT PULSE INDICATOR:** A red LED that blinks on and off to display each pulse received from the meter.
- POWER INDICATOR:** A red LED located below the input pulse indicator, indicating the instruments power supply is functional.
- TOTALIZER/FLOW RATE INDICATOR:** Displays both the total consumed and flow rate on an eight-digit, transmissive red LCD backlight 0.46" display. (For outdoor or high ambient light conditions a reflective readout is available). A single display indicates the flow rate designated by an R. A blank on the display indicates the total consumed and a b indicates the total consumed on a resettable totalizer. The various parameters can be toggled with the front panel SELECT switch or set to automatically scroll. The number of active digits depends on the parameters of the input signal.

### Standard Outputs

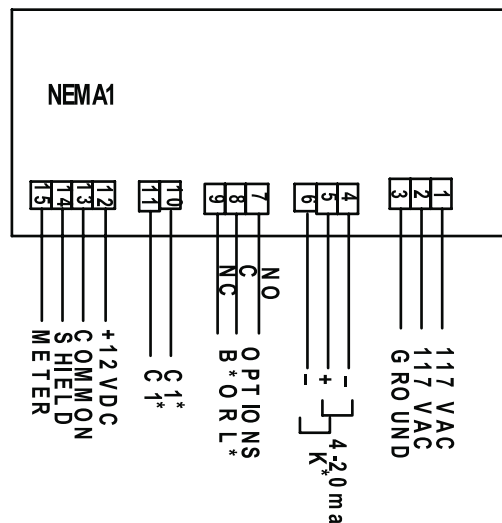
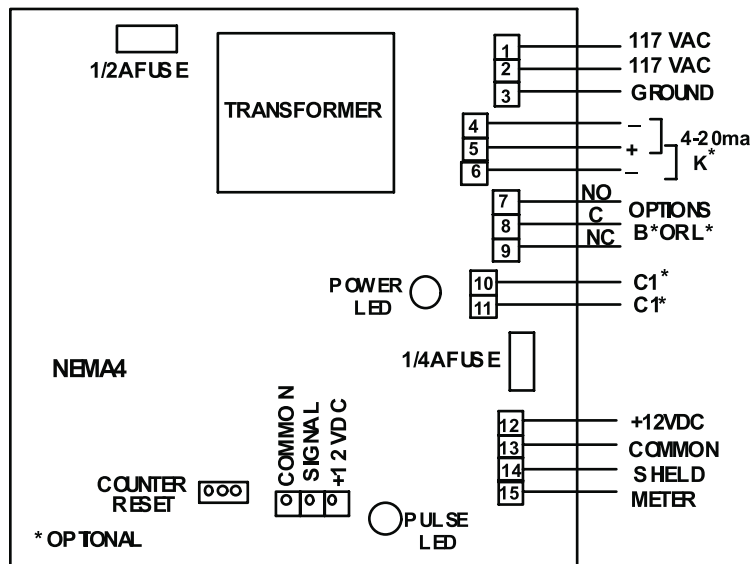
All instruments are supplied with a 4-20 mA DC output proportional to the flow rate through the metering device. This signal has the capability of driving external equipment with an impedance from 0 to 500 ohms without recalibration.

### Optional Outputs

A number of options are available. The options Bb and L are both field programmable.

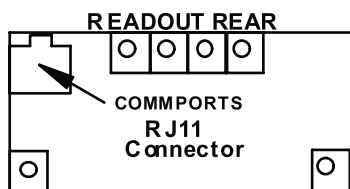
### Available Models

- 100D: Totalizer and Digital Flow Rate Indicator w/4-20MA.
- 100DN: Same as 100D in a NEMA 4X enclosure.
- 104N: Blank Front Panel in a NEMA 4X enclosure.



## Terminals

Terminal Number	15	14	13	12
Function	Input Signal	Shield	Ground	+12VDC
Switch Inputs (Belden 8760)	White	Bare (Shield)	Black	No Connection
Solid State Inputs (Belden 8770)	White	Bare (Shield)	Black	Red



## Optional Outputs

Option A	Dual 4-20 mA Output Signal: Two (2) 20 mA output signals proportional to the flow through the metering device. With the standard 4-20 mA output this option provides for a total of (3) 4-20 mA signals. If isolation between devices is necessary an analog isolator is required.
Option Bb	Totalized Contact Output: A SPDT contact closure rated 5 amps, resistive 30 VDC or 250 VAC. The value of the pulse and the pulse duration may be changed in the field.
Option B	Totalized Contact Output: The same specifications as option Bb. The value of the pulse and the pulse duration are not field programmable.
Option C1	Keying Output: A SPST mercury-wetted contact closure (bounce free, rated 1 amp 24 VDC or 0.1 amps at 117 VAC, all resistive. The output is synchronous with the input signal to the instrument. Used to retransmit meter pulses to other instruments or equipment.
Option D	Scaled Output: A mercury wetted SPST contact closure with a preset output frequency proportional to flow rate through the meter. Typically specified as a number of pulses at a maximum flow rate. Example: 60 ppm at 1500 GPM. Contact ratings are the same C1.
Option I	Input Compensator: An input signal multiplier used when totalized quantities are smaller than standard increments are specified. Not required with option Bb.
Option L	Flow Alarm: A SPDT contact closure that is activated when the flow rate exceeds or falls below a preset flow rate. The switching point may be changed in the field by changing the program. Contact ratings are the same as Option B.
Option P	Panel Mounting: Instrument is supplied with the hardware necessary for panel mounting.

