

EP4200 Series

Electronic Prover Rate/Totalizer

Description

The EP4200 combines the features of a Rate/Totalizer with electronics that can filter out unwanted fluctuations in the flow rate by scaling and averaging incoming signals. The EP4200 delivers consistent flow rate readings, so that systems with pulsating or erratic flows can be controlled. Flow Technology flowmeters and the EP4200 provide a control feedback system for pulsating flow devices, such as plunger and diaphragm metering pumps.

Traditional electronic averaging cannot disregard false signals and are slow to react to sudden changes. However, the Electronic Prover package in the EP4200 analyzes each incoming pulse to determine if it is within an acceptable range of input. This allows it to ignore random pulses and react quickly to significant changes in the flow rate. Scaled 4–20 mA output of the flow rate reading from the EP4200 can be sent to PLCs or other devices that control the system.

Features

- Filters out unwanted signal fluctuations
- Display Total, Rate, or Grand Total
- Two presets
- Up to 8 KHz pulse input frequency
- 16-point linearization
- Security lockout
- 2-way RS232/422 serial communication available
- Scalable 4–20 mA output of rate
- NEMA 4X front panel



EP4200

Electronic Prover Rate/Totalizer

Specifications

Display	8-digit, 0.55" high, 15-segment LED
Input Power	110 VAC ±15% or 12–27 VDC 220 VAC ±15% or 12–27 VDC
Maximum Current	250 mA DC or 3.2 VA at rated AC voltage
Output Power (AC-Powered Units only)	
Standard	+12 VDC at 100 mA. Separate isolated 12 VDC at 100 mA to allow ±12 VDC or ±24 VDC regulated ±5% worst case
Optional	+5 VDC at 100 mA
Memory	EEPROM stores data if power is lost
Temperature	
Operating	+32° F to +130° F (0° C to +54° C)
Storage	-40° F to +200° F (-40° C to +93° C)
Pulse Input (3A, Standard)	High impedance pulse input. Open or 0–1 VDC (low), 3–30 VDC (high), 10 K impedance, 8 KHz max. input speed (min. on/off 25 µsec)

Model Numbering System



Basic Model No.

Operating Voltage

A = 110 VAC ±15%, 12–27 VDC *
 B = 220 VAC ±15%, 12–27 VDC

Control Inputs

3A = Standard High Impedance Pulse
 3–30 VDC, 8 KHz Max.*

Control Outputs

2 = Two SPDT Relays, 10 A *

Input Speed

(Dipswitch Selectable)
 C = 0–400 CPS (Control Input 3A) *

Option Numbers

(List only the options selected)

Additional Options

(Choose all that are required)
 4 = 16-Point Linearization *
 5V = +5 VDC Output Power

Output Signal

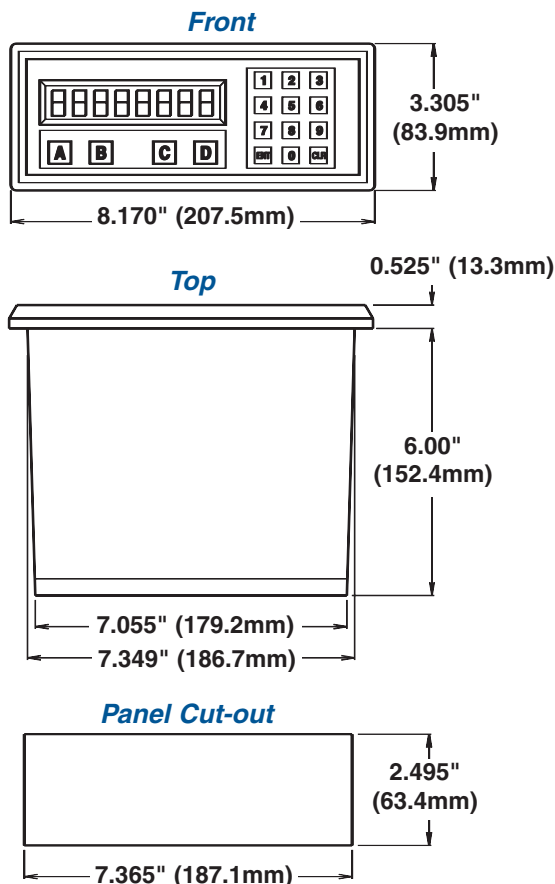
3 = 4–20 mA *

Serial Interface

(Choose only one)
 1 = RS232
 2 = RS422

* Standard Configuration

Dimensions



Specifications (cont'd)

Reset

Front Push Button "CLR" resets displayed number and control output
 Remote 3–30 VDC positive edge resets batch counter and control output
 Impedance 10 K to ground (-DC)
 Minimum Pulse 5 msec

Analog Output

A 4–20 mA signal that corresponds to the rate readout

Factored Output

One pulse out for each factored count. User-selectable output speed.

Control Outputs

Standard Two SPDT Relay version
 10 A, 120/240 VAC or 28 VDC

Communications

RS232 and RS422 Serial, Optional

Enclosures

Refer to individual product sheets, available from Flow Technology.

Specifications are for reference only and are subject to change without notice.

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