

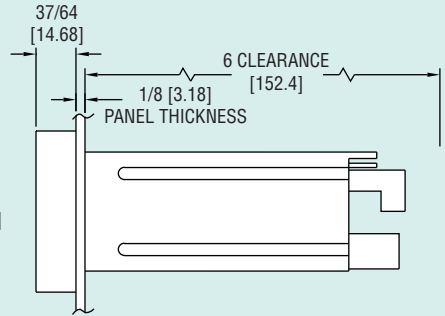
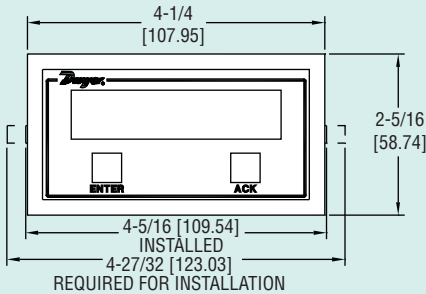


Series
FIV
&
FIP

Analog or Pulse Input Flow Indicator

Flow Rate and Totalization

Flow



The **FIV Series** are flow rate/totalizer/batch controllers ideal for almost any flow application involving an analog signal. The **FIP Series** are flow rate/totalizer/batch controllers ideal for almost any flow application involving a pulse signal. They display both flow rate and total on an easy to read 7 segment LED display that provides up to 4-1/2 digits of rate display and 6 digits of total display. The analog input meters accept all the standard process signals. The pulse input meters accept pulse, open collector, TTL or square wave inputs. The meters also provide a loop power supply to drive the sensor. For applications requiring more than just a display of rate or total, these meters can be equipped with two relays and a 4-20 mA retransmission output. The relays can be used for alarming based on the flow rate or for simple batch controlling based on the flow total. The relays can also be used for applications beyond flow. For instance, they can be programmed for alternation making these products ideal for pump-control applications.

FEATURES

- FIV: 4-20 mA, 1-5 V, 0-5 V, or 0-10 V field selectable inputs
- FIP: Pulse, open collector, NPN, PNP, TTL, switch, or square wave inputs
- Full 6 digit display for total, 4-1/2 digit + extra zero for process/rate
- Display in engineering units; rate per second, minute, hour, or day
- Scale without a calibrator
- 11-point calibration for non-linear inputs
- FIV: Automatic square root and programmable exponent for weirs and flumes
- FIP: K-factor, internal, or external calibration
- Low-flow cutoff
- NEMA 4X, front panel
- 24 VDC isolated power supply standard
- Quick preset change feature for batch control
- FIV: Pump alternation control feature
- FIP: Quick preset change feature for batch control
- 2 relays and 4-20 mA output options

SPECIFICATIONS

Inputs: FIV: (Field Selectable) Analog: 4-20 mA, 0-20 mA, 0-5 V, 1-5 V, 0-10 V, 1-10 V. FIP: (Field Selectable) Pulse: Pulse or Square Wave 0-5 V or 0-12 V @ 30 kHz max.; TTL; Open Collector 4.7 K Ω pull-up to 12 V @ 30 kHz; Switch Contact 4.7 K Ω pull-up to 12 V @ 40 Hz.

Display: 6 digit, 7 segment 0.56" (14.2 mm) high;
Rate: -19,999(0) to 29,999(0) with selectable extra zero;
Total: 0 to 999,999; automatic lead zero blanking.

Accuracy: $\pm 0.1\%$ F.S., ± 0.004 mA.

Supply Voltage: 115 or 230 VAC $\pm 10\%$, 50/60 Hz.

Power Consumption: 12 VA.

Enclosure: 1/8 DIN, high impact plastic.

Operating Temperature: 32 to 140°F (0 to 60°C).

Alarm Points: 0 or 2.

Alarm Output Relay Ratings: 2 SPDT (form C), rated 2A @ 30 VDC or 2A @ 250 VAC resistive, 1/14 hp @ 125/250 VAC for inductive.

Alarm Point Deadband: 0 to 100% of full scale, user selectable.

Isolation: FIV: 500 VDC or peak AC, input-to-output or input/output-to-power line. FIP: 1500 VAC.

Loop Power Supply: Isolated 24 VDC $\pm 5\%$ @ 20 mA, regulated. Maximum loop resistance is 1200 Ω .

Weight: 16 oz (454 g).

Front Panel Rating: NEMA 4X, Panel gasket provided.

Model	Input	Output 1	Output 2	Power
FIV-1100	Analog	None	None	115 VAC
FIV-1110	Analog	2 Relays	None	115 VAC
FIV-1111	Analog	2 Relays	(1) 4-20 mA	115 VAC
FIV-1200	Analog	None	None	230 VAC
FIV-1210	Analog	2 Relays	None	230 VAC
FIV-1211	Analog	2 Relays	(1) 4-20 mA	230 VAC
FIP-2100	Pulse	None	None	115 VAC
FIP-2110	Pulse	2 Relays	None	115 VAC
FIP-2111	Pulse	2 Relays	(1) 4-20 mA	115 VAC
FIP-2200	Pulse	None	None	230 VAC
FIP-2210	Pulse	2 Relays	None	230 VAC
FIP-2211	Pulse	2 Relays	(1) 4-20 mA	230 VAC