



Badger Meter

Industrial Flow Computer

Model FC-5000 Flow Monitor

DESCRIPTION

The Badger Meter® FC-5000 is a microprocessor-driven flow computer designed for flow monitoring. The FC-5000 flow computer is compatible with the complete line of Badger Meter industrial flow meters, creating a solution to totalize and indicate fluid flows. Many years of experience in the industrial market has allowed Badger Meter to incorporate features indispensable in control operations.

Features	Benefits
Large, backlit graphical display	Easy viewing
Integrated softkeys and full numerical keypad	Easier navigation and programming
100 point linearization	Higher resolution for improved linearization
Sensor data display screen	View raw and calculated flow data, as well as relay and digital I/O status
Plug-and-play terminals	Easier, user-friendly installation
User-programmable relay configuration	Enable flow and totalization alarms to trigger high, low and outside of range
User-programmable scaled outputs	Transmit flow or totalization data via dedicated output channels
Robust enclosure, keypad and mechanical relays	Application ruggedness

OPERATION

Input signal—in the form of sine waves or pulses from open collector transistors or dry contact closures—can be scaled to any unit of measure for totalization and instantaneous rate of flow indication. Linearized volumetric flow rate and totalization examples of flow parameters that can be viewed on the panel display or through Modbus communications.

Units configured with temperature sensor inputs can compensate for changes in fluid viscosity when process temperature varies. The expansion and contraction of the flow meter housing is also compensated for, due to thermal effects, by means of proven Roshko/Strouhal algorithms.

Dedicated analog or frequency output channels provide scaled outputs that are assignable to parameters such as flow rate, total and temperature. Additionally, a user defined smoothing function can be applied for improved stability of the flow readings.

FLEXIBILITY

- Non-volatile memory preserves all configured settings and totalization values during power failure
- Low voltage AC/DC power
- Default sets all functions to factory-programmed values
- Ability to restore to factory programmed settings

ACCESSORIES

- 110...230V AC line power adapters
- NEMA-4X enclosure (for wall-mount applications)
- PC programming interface / USB cable

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VIEWING CAPABILITIES

Quickly toggle views on the Home screen to switch from or to:

- FLOW RATE CH 1 (Figure 1)
- FLOW TOTAL CH 1 (Figure 1)
- FLOW RATE CH 1 + FLOW TOTAL CH 1 (Dual Display) (Figure 2)

The Sensor Inputs option P2 also allows for a second flow sensor, indicated by rate/total CH2:

- FLOW RATE CH2
- FLOW TOTAL CH2
- FLOW RATE CH2 + FLOW TOTAL CH2 (Dual Display)

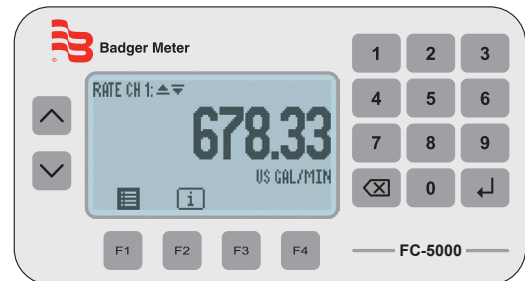


Figure 1: Single display

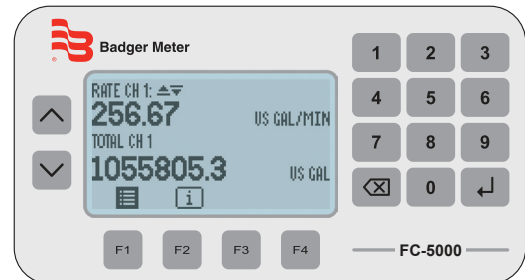


Figure 2: Dual display

