

### DESCRIPTION

Flo-tech digital displays are designed for use with Flo-tech Activa, Ultima and Classic Flow Meters, but can be used with any frequency or analog output flow meter. The displays are powered by an AC or DC power source, and can be configured with a variety of communication protocols and units of measure. Basic functions include flow, temperature and pressure indication, totalization, alarm processing, and process control.

In addition to flow rate frequency signals derived from meter, the F6600/F6650 models accept inputs from switch contacts and outputs from CMOS or TTL circuits. These displays provide 6 different indications including counter A, counter B, counter C, rate, rate maximum, and rate minimum. Annunciators indicate which variable is being displayed.

### FEATURES

#### F6700/F6750

- AC or DC power
- Five digit rate and total display
- 4...20 mA or 0...10V DC input
- Built-in transmitter power supply
- Three expansion card slots
- NEMA 4X/IP 65 rated enclosure
- CE compliant

#### F6600/F6650

- AC or DC power
- Six digit rate and total display
- Frequency input
- Built-in transmitter power supply
- Three expansion card slots
- NEMA 4X/IP 65 rated enclosure
- CE compliant



### APPLICATIONS

Flo-tech digital displays are suitable for several flow metering applications where remote flow monitoring is required. Typical applications include:

- Hydraulic diagnostics, monitoring and test stands
- Mobile construction and marine equipment
- General industrial processes

### PROGRAMMING

When ordered with a flow meter, flow meter data is configured and programmed at the factory. Replacement units can be programmed in the field via the front panel display, or at the factory if the flow meter serial number is provided.

## OPERATION

Frequency or analog output signals generated from a flow metering device are interpreted by the display, and then calculated to provide a volumetric flow rate based on the flow meter properties. Flow rate units are scaled based on the configuration of the display. For flow sensor arrays that are configured with an additional pressure and/or temperature sensors, the digital displays have available inputs to accept and display these parameters.

Flow rate, pressure and temperature readings can be transmitted through the various communication protocols.

## ADDITIONAL PRODUCTS

Part Number	Description	Use
F6542	Form C relay module	The optional plug-in card requires customer installation and setup. Use this feature with a display that includes a serial communication card (RS-232 or EIA-485).
F5140	K-factor scaler	Must be used with Flo-tech flow meters configured with frequency output and sizes SAE 8, G1/4 or equivalent.

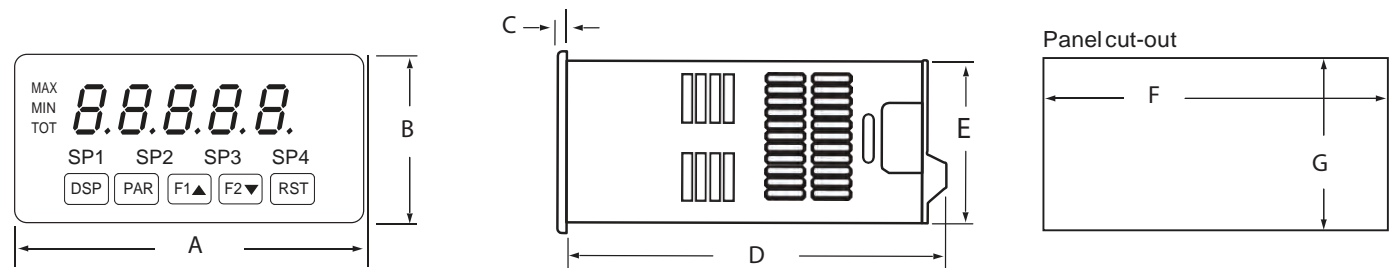
**NOTE:** For additional set point alarm options, consult the factory.

## Expansion Cards

<b>Analog Output</b>	A linear DC output signal card can be set up to provide a 4...20 mA, 0...20 mA or 0...10V DC signals and can be scaled independent of the input range.
<b>Communication</b>	Optional plug-in cards to facilitate digital communications. See <i>"Model Number" on page 4</i> for options.
<b>Setpoint Alarms</b>	Select from dual FORM-C relays (5 Amp), Quad Form-A relays (3 Amp) or either sinking or sourcing quad open collector logic outputs.

**NOTE:** The analog output and communication cards will be installed at the factory at the time of order. They may be installed at a later date if ordered separately. The setpoint alarm cards are available for customer installation and configuration only.

## DIMENSIONS



A*	B*	C	D	E	F	G
3.80 in. (96.5 mm)	1.95 in. (49.5 mm)	0.10 in. (2.5 mm)	4.10 in. (104.1 mm)	1.75 in. (44.5 mm)	3.62 in. (92.0 mm)	1.77 in. (45.0 mm)

\*F6700/F6750 is shown, dimensions are the same for F6600/F6650

## SPECIFICATIONS

### F6700/F6750

<b>Display</b>	5-digit, 0.56 in. sunlight-readable red LED	
<b>Power</b>	AC	85...250V AC, 50/60 Hz, 15 VA
	DC	11...36V DC, 11 W
<b>A/D Converter</b>	16-bit resolution	
<b>A/D Conversion Rate</b>	20 readings/sec	
<b>Display Update Rate</b>	1...20 updates/sec	
<b>Sensor Inputs</b>	4...20 mA or 0...10V DC	
<b>Transmitter Power</b>	24V DC, $\pm 5\%$ , regulated 50 mA max	
<b>Totalizer Time Base</b>	Second, minute, hour or day	
<b>Total</b>	9 digits, display alternates between high order and low order readouts	
<b>Linearization Data Point Pairs</b>	Selectable from 2...16	
<b>Operating Temperature</b>	32...122° F (0...50° C); 32...113° F (0...45° C) with all three plug-in cards installed	

### F6600/F6650

<b>Display</b>	6-digit, 0.56 in. sunlight-readable red LED	
	Rate	5-digit max, $\pm 0.01\%$ accuracy
	Counter	8-digit max, >6 digits alternates between high order and low order
<b>Power</b>	AC	85...250V AC, 50/60 Hz, 18 VA
	DC	11...36V DC, 14 W
<b>Sensor Power</b>	12V DC, $\pm 10\%$ , 100 mA max, short circuit protected	
<b>Inputs</b>	Magnetic pickup	
	Frequency Range	0.01 to 34 K Hz
	Trigger Sensitivity	80 mV p-p
	Over Voltage Protected	$\pm 40$ V peak
<b>Operating Temperature</b>	32...122° F (0...50° C); 32...113° F (0...45° C) with all three plug-in cards installed	

## MODEL NUMBER

### Frequency Input

	[ ]	[ ]	[ ]	[ ]
Frequency Input				
<b>MODEL</b>				
Digital Display with AC Power	F6600			
Digital Display with DC Power	F6650			
<b>OUTPUT</b>				
None			X	
4...20 mA			A	
0...20 mA			B	
0...10V DC			C	
<b>COMMUNICATIONS</b>				
None				X
RS-232				A
EIA-485				B
Modbus				C
Profibus				D
DeviceNet				E
<b>DISPLAY UNITS</b>				
US GPM				G
LPM				L
RPM				R

### Analog Input

	[ ]	[ ]	[ ]	[ ]
Analog Input				
<b>MODEL</b>				
Digital Display with AC Power	F6700			
Digital Display with DC Power	F6750			
<b>OUTPUT</b>				
None			X	
4...20 mA			A	
0...20 mA			B	
0...10V DC			C	
<b>COMMUNICATIONS</b>				
None				X
RS-232				A
EIA-485				B
Modbus				C
Profibus				D
DeviceNet				E
<b>DISPLAY UNITS</b>				
US GPM				G
LPM				L
RPM				R
PSI				P
BAR				B
KG/CM2				K
Mpa				M
°F				F
°C				C