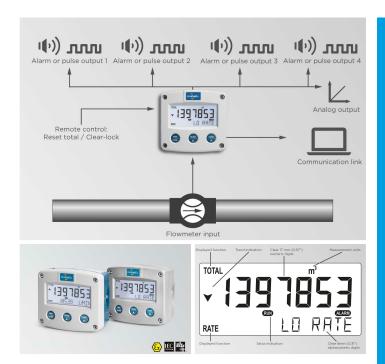


# **F113**

# Safe area / Intrinsically safe - Flow rate Monitor / Totalizer

with high / low alarms, analog and pulse outputs



#### **Features**

- Flow rate monitoring: four alarm values can be set: low-low, low, high and high-high flow rate alarm.
- Alarm values can be changed by the operator or they can be password protected.
- Alarm ignore function allows an incorrect flow rate for a certain period of time.
- Analog and pulse outputs.
- Displays total and flow rate simultaneously and additional accumulated total.
- Large digit selection for flow rate or total.
- Flow rate: seven 17mm (0.67") or 8mm (0.31") digits.
- Total resettable: seven 17mm (0.67") digits.
- Accumulated total not resettable: eleven 8mm (0.31") digits.
- Separate engineering units for flow rate and total on the display.
- Up to four configurable alarm or scaled pulse outputs.
- Displays clear alarm messages.
- Red flashing LED backlight in case of a flow rate alarm; intensity adjustable.
- Intrinsically safe according ATEX and IECEx.
- GRP, Aluminum or high grade stainless steel enclosure.
- Auto backup of settings and running totals in EEPROM memory.
- Ambient temperature: -40°C to +80°C (-40°F to 176°F).
- Remote control input to reset total or to lock the "clear total" button.
- Various <u>accessories</u> are available for this product.

# **Product description**

The F113 is a versatile flow rate indicator / transmitter and totalizer with continuous flow rate monitoring feature. It has two low flow rate and two high flow rate alarm values. If desired, an alarm ignore function can be set up to allow for an incorrect flow rate for a certain period of time. Up to five outputs are available to transmit flow rate, alarm conditions and accumulated total.

The display shows flow rate, total, accumulated total, alarm values, alarm messages and status. On-screen engineering units are easily configured from a comprehensive selection.

## Advantages

- Robust aluminum or stainless steel 316L field enclosure (IP65, IP67 / NEMA Type4X) . It is so rugged, a truck can even stand on it!
- Intrinsically Safe available ATEX and IECEx approval for gas and dust applications.
- Familiar easy operation with the Fluidwell "Know one, know them all" configuration structure, saving time, cost and aggravation.
- Very diverse mounting possibilities: walls, pipes, panels or directly onto outdoor sensors.

## **Applications**

- Liquid flow measurement where continuous flow rate monitoring is important.
- If re-transmission of the flow rate and/or totalizer functions or serial communication is required.
- The F-Series is your first and best choice for field mount indicators in safe and hazardous area applications. Especially in harsh weather conditions like rain, snow, sandy deserts, salty atmospheres and temperatures between -40°C up to +80°C (-40°F up to 176°F).

# **Product specifications**

### Signal Inputs

#### **Flowmeter Inputs**

- Pulse type inputs: Reed-switch, open collector, NAMUR, NPN/PNP pulse, Sine wave (coil), active pulse signal.
- (0)4 20mA.

#### **Status Inputs**

• Remote control: external reset for clearing total or to disable manual clearing by the keypad.

# Supply

#### **Power Supply**

- Long life Lithium battery.
- 4 20mA Loop-powered.
- 8 24V AC/DC.
- 115 230V AC.
- Basic: 8 30V DC.

#### Sensor Supply

• 3.2, 8.2, 12, 24V DC.

### **Signal Outputs**

#### **Pulse outputs**

• Function: Scaled pulse output according to accumulated total (e.g. a pulse every 3.25 gallons).

Max. frequency: 500Hz.

Adjustable pulse length from 0.001 sec. to

9.999 seconds.

• Type: Up to three passive NPN transistors or active PNP transistors or up to four isolated electro-mechanical relays.

#### Alarm outputs

- Function: Configurable alarm outputs for lowlow, low, high, high-high or all combined flow rate alarms.
- <u>Type:</u> Up to three passive NPN transistors or active PNP transistors or up to four isolated electro-mechanical relays.

#### **Analog outputs**

• Function: Re-transmitting the flow rate - the

#### **Hazardous Area**

#### **Intrinsically Safe**

ATEX:

Gas: II 1 G Ex ia IIB/IIC T4 Ga Dust: II 1 D Ex ia IIIC T<sub>200</sub> 100 °C Da

• IECEx:

Gas: Ex ia IIC/IIB T4 Ga Dust: Ex ia IIIC T<sub>200</sub> 100 °C Da

#### **Explosion Proof**

• ATEX/IECEx:

Gas: II 2 G Ex db IIB+H2 T5 Gb Dust: II 2 D Ex tb IIIC T80°C Db

#### Communication

• Function: All process data and settings can be read and modified through the communication link.

- output can be scaled to any range (e.g. 200 L/min to 1200 L/min).
- Type: One passive isolated, floating or loop powered 4 - 20mA output or one active (0)4 -20mA or 0 - 10V DC output.
- <u>Protocol:</u> Modbus ASCII / RTU.
- Interface: RS232 / RS485 2-wire or 4-wire / TTL.
- HART communication is available with the <u>F018</u> Flow rate Monitor / Totalizer.



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We're happy to answer any questions about our products and services.

Just send us an email or give us a call.