

# F126 -EG

## Safe area / Intrinsically safe - Flow Computer for gas

with temperature and pressure compensation for corrected volume



#### **Features**

- Calculates compensated flow rate, total and accumulated total.
- Displays actual line pressure and temperature.
- Analog output signal reflecting the corrected flow rate
- Displays total and flow rate simultaneously and additional accumulated total.
- Flow rate: seven 8mm (0.31") digits.
- Total resettable: seven 17mm (0.67") digits.
- Accumulated total not resettable: eleven 8mm (0.31") digits.
- Temperature: six 17mm (0.67") digits.
- Pressure: six 17mm (0.67") digits.
- Engineering units for flow rate, total, temperature and pressure on the display.
- LED backlight.
- 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).
- Various <u>accessories</u> are available for this product.

## **Product description**

The F126-EG flow computer has been developed to calculate corrected gas volume at normal conditions. The corrected volumetric flow is calculated by measuring the uncorrected volumetric flow, actual line temperature and pressure which are processed with the equations stored in the flow computer. A compressibility factor can be set to approach a real gas behavior. The reference conditions can be defined as desired (e.g. 15°C or 60°F and 1.013 bar).

The display shows the compensated flow rate, total, accumulated total and the actual line temperature and pressure. On-screen engineering units like Nm³ 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**

- Flow measurement in applications where nett gas flow calculation at base conditions is desired without the influence of thermal product expansion and pressure.
- 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.

#### **Temperature Inputs**

• PT100 - 2 or 3 wire PRTD sensor.

#### **Pressure Inputs**

• (0)4 - 20mA.

#### **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**

• <u>Function:</u> 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.

• <u>Type</u>: One passive NPN transistor, active PNP transistor or isolated electro-mechanical relay.

#### **Alarm outputs**

• None.

#### **Analog outputs**

- <u>Function:</u> Re-transmitting the compensated flow rate the output can be scaled to any range (e.g. 200 L/min to 1200 L/min).
- <u>Type:</u> One passive isolated, floating or loop powered 4 - 20mA output or one active (0)4 -20mA or 0 - 10V DC output.

#### **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

• <u>IECEx:</u>

Gas: Ex ia IIC/IIB T4 Ga Dust: Ex ia IIIC  $T_{200}$  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

- <u>Function</u>: All process data and settings can be read and modified through the communication link.
- Protocol: Modbus 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.