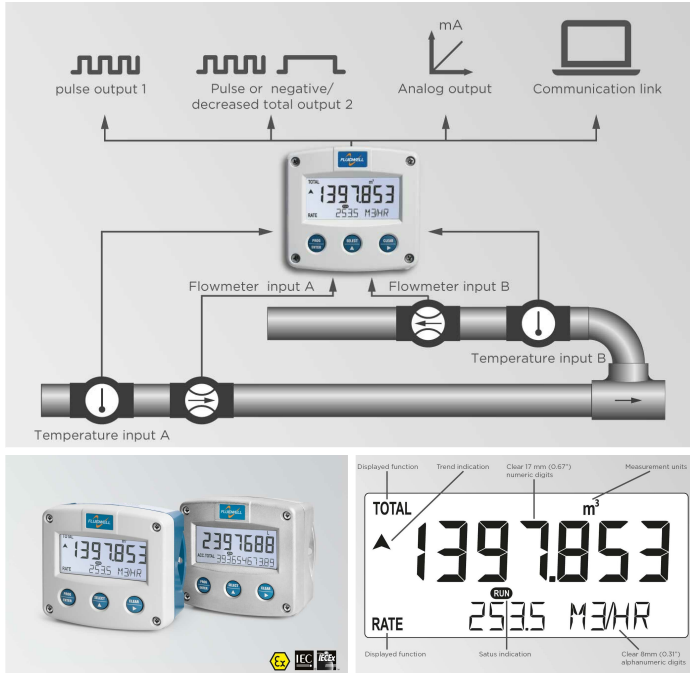


F127 Safe area / Intrinsically safe - Differential Flow Computer for liquids

with temperature compensation for corrected volume



Features

- Displays corrected consumption (flow rate), total and accumulated total.
- Supply line: displays actual temperature and corrected flow rate.
- Return line: displays actual temperature and corrected flow rate.
- Analog output signal reflecting the corrected consumption / flow rate.
- 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.
- Temperature: six 17mm (0.67") digits.
- Engineering units for flow rate, total and temperature 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 [accessories](#) are available for this product.

Product description

The F127 flow computer has been developed to calculate corrected differential liquid volume at normal conditions. This is calculated by measuring the uncorrected volumetric flow and actual line temperature in both the supply and return line. These signals are processed with the thermal expansion coefficient algorithm stored in the flow computer. The reference temperature can be defined as desired (e.g. 15°C, 20°C or 60°F). The usual difficulties encountered in such applications include: pulsating flows, very low consumption readings, vibration and high ambient temperatures. These are all well catered for in the design and operation of the F127.

The display shows the compensated consumption / flow rate, total, accumulated total and actual line temperatures. 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

- Net fuel consumption calculation for diesel engines on board of ships or locomotives, generators or burners, corrected for the influence of thermal product expansion.
- 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, NAMUR, NPN/PNP pulse, Sine wave (coil), active pulse signal.
Different pulse signal types are allowed for input A and B.

Temperature Inputs

- PT100 - 2 or 3 wire PRTD sensor.
- (0)4 - 20mA.

Supply

Power Supply

- Long life Lithium battery.
- 4 - 20mA Output 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: One scaled pulse output according to differential or sum accumulated total (e.g. a pulse every 3.25 gallons) and one configurable pulse, negative or decreasing total output.
Max. frequency: 500Hz.
Adjustable pulse length from 0.001 sec. to 9.999 seconds.
- Type: Two passive NPN transistors, active PNP transistors or isolated electro-mechanical relays.

Alarm outputs

- None.

Analog outputs

- Function: Re-transmitting the compensated differential flow rate (consumption) - the output can be scaled to any range (e.g. 200 L/min to 1200 L/min).
- Type: One passive isolated, floating or loop

Hazardous Area

Intrinsically Safe

- ATEX:
Gas: II 1 G Ex ia IIB/IIC T4 Ga
Dust: II 1 D Ex ia IIIC T₂₀₀ 100 °C Da
- IECEx:
Gas: Ex ia IIC/IIB T4 Ga
Dust: Ex ia IIIC T₂₀₀ 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.

powered 4 - 20mA output or one active (0)4 - 20mA or 0 - 10V DC output.

- Protocol: Modbus RTU.

- Interface: RS232 / RS485 2-wire or 4-wire / TTL.

- HART communication is available with the F018 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.