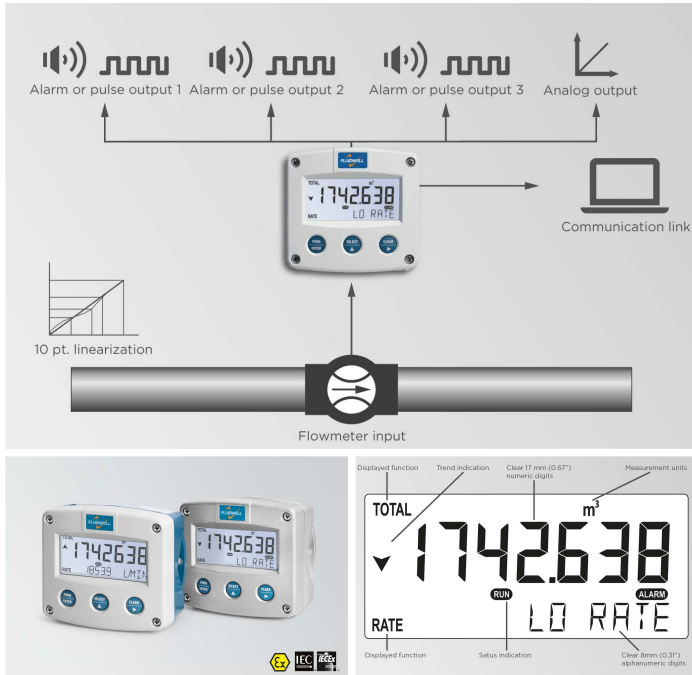


# F118 Safe area / Intrinsically safe - Flow rate Monitor / Totalizer

with linearization, high / low alarms, analog and pulse outputs



## Features

- Ten point linearization of the flow curve - with interpolation.
- Flow rate monitoring: two alarm values can be set: low and high flow rate alarm.
- Alarm values can be changed by the operator or they can be password protected.
- Analog and pulse outputs.
- The display shows linearized flow rate, total, accumulated total, alarm values, alarm messages and status.
- Flow rate: seven 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 three configurable alarm or scaled pulse outputs.
- Displays clear alarm messages.
- 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 F118 is a versatile flow rate indicator / transmitter and totalizer with the ability to precisely linearize the flowmeter signal. In addition to the average K-Factor or Span, ten linearization points can be entered with their frequencies or values. The unit will interpolate between these points, greatly enhancing accuracy in any flow range, even for very low frequency applications. Moreover, a continuous flow rate monitoring feature is available with high and low flow rate alarm values and up to three alarm outputs.

Flow rate and total are transmitted with an analog and scaled pulse output. 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 with mechanic flowmeters where a precise calculation over the full measurement range and continuous flow rate monitoring 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.

### 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 linearized 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, active PNP transistors or isolated electro-mechanical relays.

#### Alarm outputs

- Function: Configurable alarm outputs for low, high or both combined flow rate alarms.
- Type: Up to three passive NPN transistors, active PNP transistors or isolated electro-mechanical relays.

#### Analog outputs

- Function: Re-transmitting the linearized flow rate - the output can be scaled to any range

### 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.

(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.

- 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.