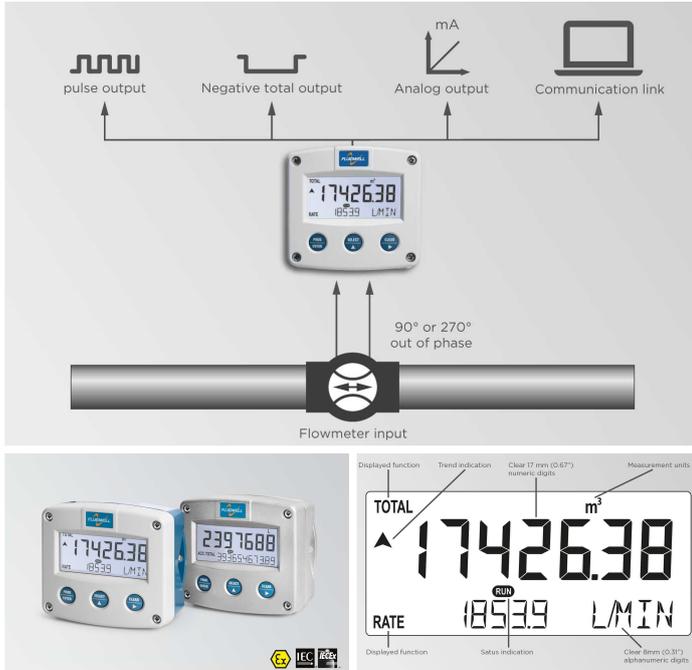


F115 Intrinsically Safe - Bi-directional Flow rate Indicator / Totalizer

with analog, pulse signal and flow direction outputs



Features

- Quadrature input to detect the direction of flow.
- Displays positive and negative flow rate to indicate the flow direction.
- Total and accumulated total count up and down according to the flow direction.
- Analog and pulse outputs.
- Displays total and flow rate simultaneously.
- 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.
- 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 F115 has been developed for applications where the direction of flow is an issue. It is required to offer two pulse signals from the flowmeter which are 90° or 270° degrees out of phase. In case of a reverse flow, the flow rate will be displayed as a negative value, the totalizers will count down and a switch output will be set. The pulse and analog outputs do reflect both flow directions. On-screen engineering units are easily configured from a comprehensive selection.

Advantages

- Robust aluminum or stainless steel 316L field enclosure (IP66, 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

- Bi-directional flow measurement applications can be found by loading and unloading of ships where one bi-directional flowmeter is used.
- Another application is the correction for back-flow due to shocks in a pipeline caused by piston pumps or valve behavior.
- 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.

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: Scaled pulse output according to the bi-directional accumulated total (e.g. a pulse every 3.25 gallons).
Max. frequency: 500Hz.
Adjustable pulse length from 0.001 sec. to 9.999 seconds. The directional switch output is switched as soon as the pulse output reflects a "negative" quantity.
- Type: Two passive NPN transistors, active PNP transistors or isolated electro-mechanical relays.

Alarm outputs

- None.

Analog outputs

- Function: Re-transmitting the positive and/or negative flow rate - the output can be scaled to any range (e.g. +40 L/min to +600 L/min and -40 L/min to -600 L/min or positive flow rates only). The 4mA / 0V equals the minimum (zero) flow rate, it can NOT equal a negative flow rate value.
- Type: 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 T100 °C Da
- IECEX:
Gas: Ex ia IIC/IIB T4 Ga
Dust: Ex ia IIIC T100 °C Da

Explosion Proof

- ATEX:
Gas: II 2 G / Ex d IIB T5 Gb
Dust: II 2 D / Ex t IIIB T100°C Db

Communication

- Function: All process data and settings can be read and modified through the communication link.
- Protocol: Modbus ASCII / RTU.
- Interface: RS232 / RS485 2-wire or 4-wire / TTL.
- HART communication is available with the F018 & E018 Flow rate Monitor / Totalizers.



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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.