

F114 Safe area / Intrinsically safe - Ratio Monitor / Totalizer

with high / low alarms and analog outputs



Features

- Calculates ratio between flow A and B.
- Displays ratio, flow rate A and B and total A and B.
- Ratio monitoring: two alarm values can be set: low and high ratio alarm.
- Alarm values can be changed by the operator or they can be password protected.
- Six ratio calculation formulas.
- Ratio: seven 17mm (0.67") digits, displayed as 1:__ or percentage.
- Flow rate A and B: seven 17mm (0.67") digits.
- Total A and B - resettable: seven 17mm (0.67") digits.
- Separate engineering units for flow rate and total on the display.
- Up to three configurable alarm 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 F114 flow computer calculates the actual ratio between two separate flows. It has one low ratio and one high ratio alarm value. Special precautions are taken to allow start-up problems and incorrect ratio readings for a certain period of time. Based on the location of the flowmeters, a selection can be made out of six different formulas.

The display shows the ratio, alarm values, flow rate A, total A and flow rate B, total B. On-screen engineering units are easily configured from a comprehensive selection. The ratio can be displayed as 1:__ or as a percentage.

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

- Mixing or blending of two components where continuous ratio displaying, monitoring and totalising is important. For example in construction works, roof or wall isolation, gluing and coating.
- 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

- None.

Alarm outputs

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

Analog outputs

- Function: Re-transmitting the actual ratio, flow rate A or flow rate B - the output can be scaled to any range (e.g. 1:5 to 1:100 or 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.

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.
- 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.