FLOWX3 F3.00 Brass Body Paddlewheel Flow Sensors

The FLS range of flow sensor is now available also with brass body.
The simple and reliable paddlewheel flow sensor FLOWX3 F3.00 is available also in brass, joining a proven technology with a high chemical and mechanical resistance to provide lasting performances. This sensor has been specially designed to be used with critical temperature and pressure working rates. As the all range those new sensors with brass body are equipped with an ECTFE (Halar®) rotor, ceramic shaft and bearings (Al_2O_3).
The standard version produces a square wave output with frequency proportional to the flow velocity and other versions are available with 4-20 mA (F3.30.H) output or with adjustable alarm (F3.15.H).

Technical Data

General (for both F3.00.H and F3.00.C)
Pipe Size Range: DN15 to DN600
Flow Rate Range: 0,5 to 25 ft/s (0.15 to 8 m/s)
Linearity: ± 0.75 % of full scale
Enclosure: IP68 or IP65

Specific for F3.00.H
Supply voltage: 5 to 24 VDC regulated
Output Signal:
- Square wave
- Output type: transistor NPN open collector
- Output current: 10 mA max.

Cable lenght: 26,4 ft standard, 990 ft Max.

Specific for F3.00.C (for battery powered monitor)
Supply voltage: 3 to 5 VDC regulated, or 3.6 Volt lithium battery
Supply Current: < 10 μA
Output Signal:
- Square wave
- Min. input impedance: 100 KΩ

Cable lenght: 26,4 ft standard, 52,8 ft Max.

Specific for F3.30.H
Supply voltage: 12 to 24 VDC regulated
Output Signal: 4-20 mA, adjustable
Max load impedance: 800 Ω @ 24 VDC, 300 Ω @ 12 VDC
Enclosure: IP65
Operating temperature: 0 to 60°C (32 to 140°F)
Housing material: PVC

Specific for F3.15.H
Supply voltage: 12 to 24 VDC regulated
Output Signal:
- Square wave
- Output type: transistor NPN open collector
- Output current: 10 mA max.

Relay Output: mechanical SPDT contact, 3 A @ 30 VDC, 3 A @ 250VCA resistive load
Flow trip point: 0,5 to 3 ft/s (0.15 to 1 m/s) freely adjustable
Local status indicator: GREEN Led = Flow, RED Led = No Flow
Enclosure: IP65
Operating temperature: 0 to 60°C (32 to 140°F)
Housing material: PVC

Standards & Approvals
Manufactured under ISO 9001
CE Conformity

Interface Module Sensor - PLC

F.IMSP1 has been designed to allow the connection of FLOWX3 Flow Sensors to any kind of PLC digital input (NPN o PNP) and to protect sensors from every electromagnetical or supply noises.
The compact and lightweight plastic housing is for DIN Rail mounting.

Technical Data

Supply voltage: 12 - 24 VDC
Supply current: I_{Alim} = 11 mA @ I_{Out} = 0
Output Signal: Square wave
Output Type: Push – Pull (for NPN & PNP inputs)
Output current: I_{Out} Max < 20 mA
Installation: vertical on DIN Rail

Standards & Approvals
Manufactured under ISO 9001
CE Conformity

New FLOWX3 F9.03 Flow Monitor and Transmitter with double INPUT/OUTPUT

The new F9.03 Flow Monitor and Transmitter has been designed to collect at the same time the output signal from 2 Flowx3 Flow Sensors and to convert it in a double display indication and in two 4-20mA output signals.
This new instrument guarantees a flexibility higher than other Flowx3 monitors, reducing even further the Total Cost of Ownership (TCO).
Flowx3 F9.03 is thus the best cost effective solution for several industrial applications.

Main features

- 2 permanent and 2 resettable totalizers
- 2 current outputs associable to flow 1, flow 2 or Delta flow
- 2 relay outputs associable to flow 1, flow 2 or Delta flow and selectable as MIN, MAX or PULSE
- 1 O.C. transistor output associable flow 1, flow 2 or Delta flow and selectable as MIN, MAX or FREQ.
- Output simulation for system testing
- Self explaining calibration menus
- Auto-calibration

Technical Data

General

Associated flow sensors:
– FLS FlowX3 Hall effect with frequency output
Materials:
– Case: PC
– Panel gasket: Neoprene
– Wall and Field gasket: EPDM
– Keypad: 5 button silicone rubber
Display:
– 3 line LCD: 2 x 12 alphanumeric lines + 1 icon line
– Update rate: 1 second
– Contrast: 5 user adjustable with 5 levels
Enclosure: IP65 front

Electrical

Supply voltage: 12 to 24 VDC ± 10% regulated
Sensor input (Frequency):
– Sensor power: 3.8 VDC @ < 20 mA
– Range: 0.5 ÷ 1000 Hz
– Optically isolated from current loop
– Short circuit protected
Current output:
– 4-20 mA, isolated, fully adjustable and reversible
– max loop impedance: 150Ω @ 12 VDC, 330Ω @ 18 VDC, 600Ω @ 24 VDC
Open Collector output:
– User Selectable as MIN alarm, MAX alarm, Pulse Out, Freq. Out, Off.
– Optically isolated, 50 mA Max sink, 24VDC Max pull-up voltage
– Max pulse/min: 300
– Hysteresis: users selectable
Relay Output:
– User selectable as MIN alarm, MAX alarm, Pulse Out, Off.
– Mechanical SPDT contact
– Max voltage rating: 3A @ 30 VDC, 3A @ 250 VCA resistive load
– Max pulse/min: 300
– Hysteresis: users selectable

Environmental

Operating temperature: -10 to +70°C (14 to 158°F)
Storage temperature: -15 to +80°C (5 to 176°F)
Relative humidity: 0 to 95% non condensing

Standards & Approvals

Manufactured under ISO 9001
CE Conformity

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