M9.07

Dual parameter conductivity and flow monitor and transmitter

aliaxis

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The FLS M9.07 dual-parameter monitor and transmitter is a device that combines conductivity and flow measurements. A 4" wide full graphic display shows measured values clearly together with a lot of other useful information. Moreover, due to a multicolour display plus a powerful backlight, measurement status can be determined easily from afar too. A tutorial software guarantees a mistake-proof and fast set up of every parameter. Various types of calibration can be performed as needed for both measurements. The 4-20 mA output dedicated to each measurement allows you to send the values to a remote external device. Appropriate combination of digital outputs allows customised setups for any process to be controlled. The USB port on the back allows you to update the software with a wide range of customisation services as standard and on-demand.

DUAL PARAMETER CONDUCTIVITY AND FLOW MONITOR AND TRANSMITTER

APPLICATIONS

- Water treatment and regeneration
- Industrial wastewater treatment and recovery
- Softening
- Filtration systems
- Desalination
- Production of demineralised water
- Reverse osmosis
- cooling monitoring
- Processing and manufacturing industry
- Chemical production

MAIN CHARACTERISTICS

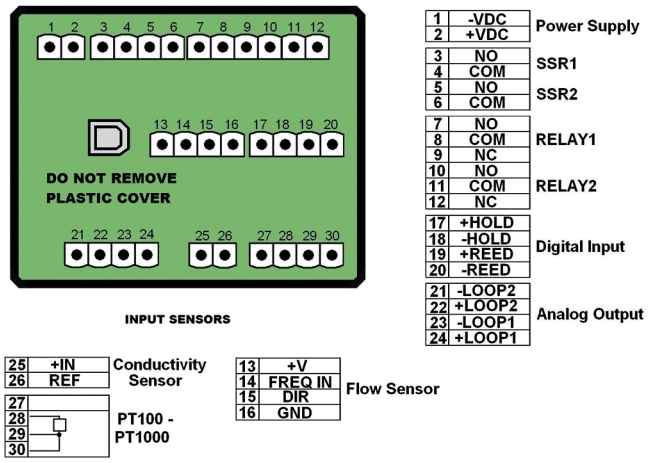
- Large graphic display
- Colour backlighting
- On-line help
- Simultaneous measurement of conductivity, temperature and flow
- Simple, user-friendly and error-proof calibration software
- Mechanical relay and solid state relay for external alarms and for the control of external devices
- Multilingual menu
- USB port for software upgrade

TECHNICAL DATA	
General information	**Compatible sensors**: F6.60 conductivity/temperature sensors and Hall-effect flow sensors with frequency output or electromagnetic flow sensors
	Materials: – Case: ABS – Display: PC – Panel and wall gasket: silicone rubber – 5-button keyboard: silicone rubber
	Display: – LCD full graphic – Backlight version: 3 - colours – Backlighting activation: user adjustable with 5 levels of timing – Update rate: 1 second – Protection class: IP65 front
	Conductivity input range: 0.055÷200000 µS/cm (according to the applied cell constant)
	Conductivity measurement accuracy: ±2.0% of reading value
	Temperature input range: –50÷150°C (–58÷302°F) (with Pt100-Pt1000)
	Temperature measurement resolution: 0.1°C/°F (Pt1000); 0.5°C/°F (Pt100)
	Flow input range (frequency): 0÷1500Hz
	Flow input accuracy (frequency): 0.5%

Electrical data	**Supply voltage:** from 12 to 24 VDC ±10% regulated
	Max electrical consumption: < 300 mA
	FLS Hall effect flow sensor power supply: – 5 VDC at < 20 mA – Optically isolated from current loop – Short circuit protected
	2 current output: – 4-20 mA,isolated, fully adjustable and reversible – Max loop impedance: 800 Ω @ 24 VDC - 250 Ω @ 12 VDC
	2 solid state relay outputs: – User selectable as MIN alarm, MAX alarm, pulse output, window alarm, off – (conductivity) User selectable as ON-OFF, proportional frequency output, timed pulses, off – Optically isolated, 50 mA max sink, 24 VDC max pull-up voltage – Max pulse/min: 300 – Hysteresis: user selectable
	2 relay output: – User selectable as MIN alarm, MAX alarm, pulse output, window alarm, off – (conductivity) User selectable as ON-OFF, proportional frequency output, timed pulses, off – Mechanical Single Pole Double Throw (SPDT) contact – Expected mechanical life (min. operations): 10^7 – Expected electrical life (min. operations): 10^5 switching N.A./N.C. capacity 5 A/240 VAC – Max pulse/min: 60 – Hysteresis: user selectable
Environmental data	**Operating temperature:** from –10°C to 70°C (from 14°F to 158°F)
	Storage temperature: from -30°C to +80°C (from -22°F to +176°F)
	Relative humidity: from 0 to 95% not condensing
Standards & Approvals	Manufactured under ISO 9001 Manufactured under ISO 14001 CE RoHS Compliance EAC

ELECTRICAL CONNECTIONS

Rear view of electrical connections



PRODUCT CODES

M9.07.P1 - M9.07.WX

Dual parameter conductivity and Flow Monitor and Transmitter

Code	Mounting	Power supply	wires power Technology	Sensor Input	Output	Weight (gr.)
M9.07.P1	Panel	12 - 24 VDC	3/4 wires	Conductivity temperature Flow (Frequency)	2*(4-20mA) 2*(S.S.R.) 2* (mech. relay)	550
M9.07.W1	Wall	12 - 24 VDC	3/4 wires	Conductivity temperature Flow (Frequency)	2*(4-20mA) 2*(S.S.R.) 2* (mech. relay)	650
M9.07.W2	Wall	110 - 230 VAC	3/4 wires	Conductivity temperature Flow (Frequency)	2*(4-20mA) 2*(S.S.R.) 2* (mech. relay)	750

S.S.R: solid state relay / mech relay.: mechanical relay