

# FLS M9.50

## BATCH CONTROLLER



The new FLS M9.50 is an electronic device dedicated to accurately batching or blending of different liquids. A 4" wide full graphic display shows measured values clearly and a lot of other useful information. Moreover, thanks to a multicolor display plus a powerful backlight, batching status can be determined easily from afar also. A tutorial software guarantees a mistake-proof and fast set up of every settings. Few advanced options are available to increase precision as well as timing of batch. Possibility of setting different volumes (up to 10 batches) correlated to specific calibration factors maximizes system flexibility guaranteeing highest level of accuracy. A proper package of outputs grants to control and to monitor the batching system remotely. The USB port on the rear part allows the upgrade of software offering a wide range of customization services both standard and on request.

### APPLICATIONS

- Batch processes
- Chemical additions
- Filling processes
- Blending applications
- Dosing system
- Bottling processes

### MAIN FEATURES

- Wide full graphic display
- Multicolor backlight visualization
- Help on board
- External start, stop and resume
- Intuitive batch volumes setting
- Two stage shutdown control
- Overrun compensation and alarm
- Missing signal alarm
- USB port for software upgrading



# TECHNICAL DATA

## General

- Associated sensors: FLS hall effect flow sensors with frequency output or FLS F6.60 Flow sensor magmeters
- Materials:
  - case: ABS
  - display window: PC
  - panel & wall gasket: silicone rubber
  - keypad: 5-button silicone rubber
- Display:
  - LC full graphic display
  - backlight version: 3-colours
  - backlight activation: User adjustable with 5 levels of timing
  - update rate: 1 second
  - enclosure: IP65 front
  - Flow input range (frequency): 0÷1500Hz
  - Flow input accuracy (frequency): 0,5%

- Expected mechanical life (min. operations): 10<sup>7</sup>
- Expected electrical life (min. operations): 10<sup>5</sup> N.O./N.C.switching capacity 5A/240VAC
- Max pulse/min: 60
- Hysteresis: User selectable
- User selectable as:
  - OUT1 - Option: Two-stage shutdown, overrun or missing signal alarm
  - OUT2 - Batch: Batch in progress indication

## Electrical

- Supply Voltage: 12 to 24 VDC ± 10% regulated
- Max Power Consumption: <300mA
- FLS hall effect flow Sensor power:
  - 5 VDC @ < 20 mA
  - Optically isolated from current loop
  - Short circuit protected
- 2\*Solid State Relay output:
  - Optically isolated, 50 mA MAX sink, 24 VDC MAX pull-up voltage
  - Max pulse/min: 300
  - Hysteresis: user selectable
  - User selectable as: Two-stage shutdown, overrun or missing signal alarm
- 2\*Relay output:
  - Mechanical SPDT contact

## Environmental

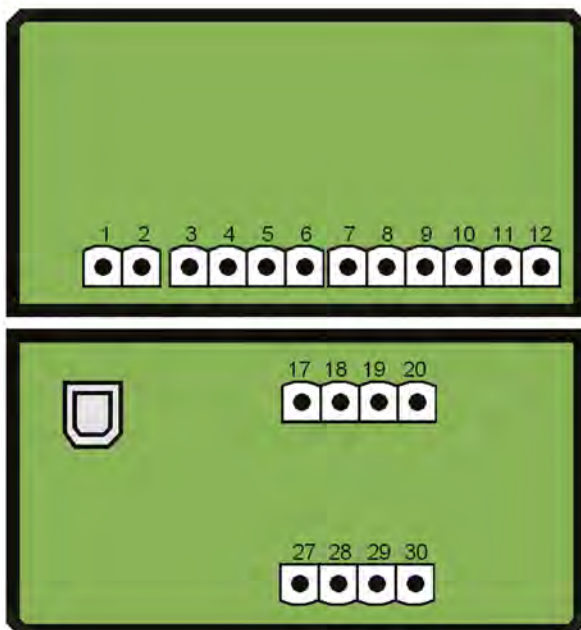
- Operating temperature: -10 to +70°C (+14 to +158° F)
- Storage temperature: -30 to +80°C (-22 to +176° F)
- Relative humidity: 0 to 95% not condensing

## Standards & Approvals

- Manufactured under ISO 9001
- Manufactured under ISO 14001
- CE
- RoHS Compliant
- EAC

# WIRING CONNECTIONS

Rear Terminal View



1	-VDC	Power Supply
2	+VDC	
3	NO	SSR2
4	COM	
5	NO	SSR1
6	COM	
7	NO	RELAY1
8	COM	
9	NC	RELAY2
10	NO	
11	COM	
12	NC	
17	GND	Remote control
18	RESUME	
19	START	
20	STOP	
27	+V	Flow Sensor
28	FREQ IN	
29		
30	GND	

## ORDERING DATA

M9.50 Batch Controller						
Controller Part No.	Description /Name	Power supply	Wire power Technology	Sensor Input	Output	Weight (gr.)
M9.50.P1	Panel mount Batch controller	12 - 24 VDC	-	Flow (Frequency)	2*(S.S.R.), 2*(mech. relay)	550
M9.50.W1	Wall mount Batch controller	12 - 24 VDC	-	Flow (Frequency)	2*(S.S.R.), 2*(mech. relay)	650
M9.50.W2	Wall mount Batch controller	110 - 230 VAC	-	Flow (Frequency)	2*(S.S.R.), 2*(mech. relay)	750