

FLS M9.20

BATTERY POWERED FLOW MONITOR



The new M9.20 is a smart battery powered flow monitor designed to convert the frequency signal of FLS sensors into a flow rate. M9.20 is equipped by a long life lithium battery which powers the sensor also. A wide 4" display is used to show measured values clearly. A first procedure will grant a easy set up of main parameters. A flow rate reference can be used for a recalibration or a alignment through a intuitive "in-line calibration". A safe icon alerts when it's time to replace battery and instrument stores all main parameters automatically. A customizable string allows to tailor easily the view level. M9.20 is equipped with a USB port which allows an easy update of the software by the end users.

APPLICATIONS

- Remote distribution system
- Mobile monitoring system
- Irrigation & Fertigation
- groundwater remediation
- swimming pool & SPA
- Liquid delivery system

MAIN FEATURES

- Wide display
- long-lasting battery
- installation flexibility
- Multilanguage menu
- No data loss at battery replacement
- USB port for software updating



TECHNICAL DATA

General

- Associated flow sensor: FLS Coil effect with frequency output and FLS Reed effect
- Materials:
 - Case: ABS
 - Display window: PC
 - Panel & Wall gasket: silicone rubber
 - Keypad: 5-button silicone rubber
- Display
 - transfective technology
 - Update rate: 1 second
 - Enclosure: IP65 front
- Flow input Range (frequency): 0.5 to 500 Hz
- Flow input accuracy: 0,5%

Electrical

- Supply Voltage: 3.6 volt Lithium Thionylchloride Battery, size C, 8.5 AHr 3
- Max Power Consumption: <400μA
- Battery life: nominal 5 years
- FLS Coil effect flow Sensor power:
 - 3.6 Volts

Environmental

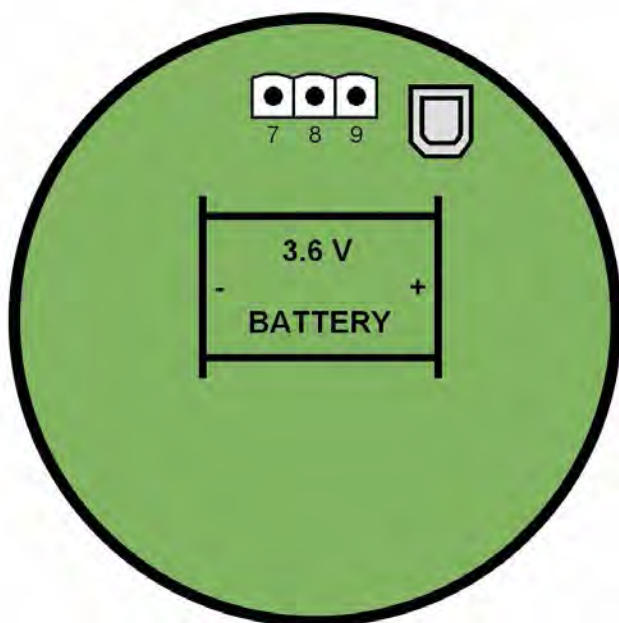
- Operating temperature: -5 to +60°C (+23 to +140°F)
- Storage temperature: -10 to +80°C (+14 to +176 °F)
- Relative humidity: 0 to 95% not condensing

Standards & Approvals

- Manufactured under ISO 9001
- Manufactured under ISO 14001
- CE
- RoHS Compliant
- EAC
- FDA on request for paddlewheel in C-PVC/EPDM, PVDF/EPDM, SS316L/EPDM

WIRING CONNECTIONS

Rear Terminal View



9	V+
8	FREQ IN
7	GND

Flow Sensor

ORDERING DATA

M9.20 Battery Powered Flow Monitor						
Part No.	Description /Name	Power supply	Wire power Technology	Sensor Input	Output	Weight (gr.)
M9.20.P1	Panel mount Battery Powered Flow Monitor	Battery Powered	-	Flow (Frequency)	-	500
M9.20.W1	Wall mount Battery Powered Flow Monitor	Battery Powered	-	Flow (Frequency)	-	550

M9.20 Battery Powered Flow Monitor Field Mount								
Part No.	Description / Name	Power supply	Wire power Technology	Sensor Input	Output	Lenght	Main Wetted Materials	Weight (gr.)
M9.20.01	Field mount Battery Powered Flow Monitor	Battery Powered	-	Flow (Frequency)	-	L0	C-PVC/EPDM	550
M9.20.02	Field mount Battery Powered Flow Monitor	Battery Powered	-	Flow (Frequency)	-	L0	C-PVC/FPM	550
M9.20.03	Field mount Battery Powered Flow Monitor	Battery Powered	-	Flow (Frequency)	-	L1	C-PVC/EPDM	550
M9.20.04	Field mount Battery Powered Flow Monitor	Battery Powered	-	Flow (Frequency)	-	L1	C-PVC/FPM	550
M9.20.05	Field mount Battery Powered Flow Monitor	Battery Powered	-	Flow (Frequency)	-	L0	PVDF/EPDM	550
M9.20.06	Field mount Battery Powered Flow Monitor	Battery Powered	-	Flow (Frequency)	-	L0	PVDF/FPM	550
M9.20.07	Field mount Battery Powered Flow Monitor	Battery Powered	-	Flow (Frequency)	-	L1	PVDF/EPDM	550
M9.20.08	Field mount Battery Powered Flow Monitor	Battery Powered	-	Flow (Frequency)	-	L1	PVDF/FPM	550
M9.20.09	Field mount Battery Powered Flow Monitor	Battery Powered	-	Flow (Frequency)	-	L0	SS316L/EPDM	600
M9.20.10	Field mount Battery Powered Flow Monitor	Battery Powered	-	Flow (Frequency)	-	L0	SS316L/FPM	600
M9.20.11	Field mount Battery Powered Flow Monitor	Battery Powered	-	Flow (Frequency)	-	L1	SS316L/EPDM	600
M9.20.12	Field mount Battery Powered Flow Monitor	Battery Powered	-	Flow (Frequency)	-	L1	SS316L/FPM	600