

M921 Electromagnetic Flowmeter



- **Durable** aluminium housing
- **Quick** installation, **simple** configuration
- Graphic display with backlight, 6-key keyboard

- **Flow measurement:** actual, minimum, maximum
- **Volume measurement:** total, positive, negative, daily, auxiliary
- **Datalogger** with memory for ca. 900000 records.

- **Inputs/outputs:** USB/RS232, RS485, 4-20mA current loop, Frequency, Pulse, Status (relay), PLC digital input

Flow overview

FLOW	
ACTUAL	98.7654m3/h
MINIMUM	12.3421m3/h
MAXIMUM	43.2121m3/h
MEDIAN 1h	22.231

Volume overview

VOLUME	
TOTAL	201
POSITIVE	1234.5678l
NEGATIVE	4321l
AUX	5678l
DAY	8765l

M921 Electromagnetic flowmeter is a device designed to measure, indicate and store flow and passed through volume data of conductive liquids. Flow meter records both positive and negative flow. As there are neither moving nor mechanical parts in the flow profile the device can be applied to measure extremely polluted liquids containing even solid pollution. The only limitation is that the device can be used solely with conductive liquids.

Connection to and from inputs and outputs are provided via pluggable terminal blocks to ensure easy installation. Inputs and outputs are protected from common cases of misuse (overcurrent, overvoltage, ESD) ensuring high device reliability.

M921 flowmeter is ideal for applications in chemical, pharmaceutical or food industry. Providing wide range of outputs, the flowmeter can be used in other areas such as paper, water, waste-water processing, and etc.

Technical data

Nominal size	DN15 to DN800	
Nominal pressure	PN10 to PN40	
Flow range	0.03 to 12 m/s (0.01 to 6000 l/s)	
Accuracy	<ul style="list-style-type: none"> • 0.25 % (0.5 to 12 m/s) of reading value • 0.003 m/s (0.03 to 0.5 m/s) 	
Maximum media temperature	80°C (176°F) for rubber liner 150°C (302°F) for PTFE liner in remote version	
Medium minimum electrical conductivity	≥ 5 µS / cm	
Ambient temperature	-20 to 70 °C (-4 to 140 °F)	
Excitation coils temperature	-20 to 150 °C (-4 to 302 °F)	
Power supply (nominal range, range, flowmeter version)	<ul style="list-style-type: none"> • 85 V to 264 V AC (47-65 Hz) • 12 V DC (9 V to 18 V DC) • 24 V DC (18 V to 36 V DC) • 48 V DC (36 V to 75 V DC) 	<ul style="list-style-type: none"> • M921-Vxx0x • M921-Vxx1x • M921-Vxx2x • M921-Vxx3x
Power consumption	12 VA	
Liner	<ul style="list-style-type: none"> • hard rubber • PTFE 	
Electrodes	<ul style="list-style-type: none"> • CrNi stainless steel 1.4571 • Hastelloy C276 • Tantalum 	
Measuring tube	Stainless steel 1.4201, dimensions according to DIN 17457	
Flange	Carbon steel 1.0402 or higher Dimensions according to DIN2501 (=EN1092=BS 4504), ANSI B16.5, JIS B2220, Sanitary DIN11851, flangeless wafer style	
Protection category	<ul style="list-style-type: none"> • Compact version: IP67 • Remote version: sensor IP68, converter IP65 (optionally IP67) 	
Outputs	<ul style="list-style-type: none"> • Frequency 0 to 12 kHz with programmable flowrate and function • Pulse 0 to 200 Hz with programmable volume, function and pulse width • Status (relay) output 110V/1A/30W with programmable function • Current loop 4 to 20 mA with programmable flowrate and function, error/alarm function. 	
Input	PLC digital input with programmable function	
Communication	USB/RS232, RS485 (Modbus)	
Displayed values	<ul style="list-style-type: none"> • Flowrate (m³/h, l/s, US.Gal/min, Imperial.Gal/min, user) • Volume (m³, l, US.Gal, Imperial.Gal, user) • Positive, total, negative and auxiliary (clearable), daily volume 	
Control	<ul style="list-style-type: none"> • Keyboard with 6 buttons • USB/RS232 and RS485 	
Other features	<ul style="list-style-type: none"> • Test of: excitation coils, electronic unit • Diagnostic of internal temperature and power supply voltages • Real time clock with maintenance-free backup power source • Empty pipe indication • Datalogger 900000 records (programmable sample rate) • Registration of min. and max. flowrate including date and time • Additional wall mounting options (DIN rails, bolted in) 	