

## BFM921 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	
	12.3421m3/h	
Maximum	43.2121m3∕h	
MEDIAN 1h	22,23	

## Volume overview

VOLUME	
TOTAL	201
POSITIVE	1234.5678
NEGATIVE	43211
AUX	56781
DAY	87651

BFBFM921 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.

BFM921 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.

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## 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	• 0.25 % (0.5 to 12 m/s) of reading	value	
	• 0.003 m/s (0.03 to 0.5 m/s)		
Maximum media	80°C (176°F) for rubber liner		
temperature	150°C (302°F) for PTFE liner in remote version		
Medium minimum electrical conductivity	$\geq$ 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	• 85 V to 264 V AC (47-65 Hz)	• BFM921-	
(nominal range, range,	• 12 V DC (9 V to 18 V DC)	Vxx0x	
flowmeter version)	• 24 V DC (18 V to 36 V DC)	BFM921-     Vxx1x	
	• 48 V DC (36 V to 75 V DC)	• BFM921-	
Power consumption	12 VA		
Liner	<ul><li>hard rubber</li><li>PTFE</li></ul>	• BFM921- Vxx3x	
Electrodes	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	Compact version: IP67		
	<ul> <li>Remote version: sensor IP68, converter IP65 (optionally IP67)</li> </ul>		
Outputs	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/30V		
	<ul> <li>Current loop 4 to 20 mA with error/alarm function.</li> </ul>	h programmable flowrate and function,	
lanut		unction	
Input	PLC digital input with programmable function		
	USB/RS232, RS485 (Modbus)		
Displayed values	<ul> <li>Flowrate (m3/h, l/s, US.Gal/min, Imperial.Gal/min, user)</li> <li>Volume (m3, I, US.Gal, Imperial.Gal, user)</li> <li>Positive, total, negative and auxiliary (clearable), daily volume</li> </ul>		
Control	<ul> <li>Positive, total, negative and auxiliary (clearable), daily volume</li> <li>Keyboard with 6 buttons</li> </ul>		
	<ul> <li>VSB/RS232 and RS485</li> </ul>		
Other features	Test of: excitation coils, electronic unit		
	<ul> <li>Diagnostic of internal temperature and power supply voltages</li> </ul>		
	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)	