

...flow measurement
& control...

arkon
flow systems



MAG 910

ELECTROMAGNETIC FLOWMETER

Main Features:

- ↳ Range of diameter 10 to 800 mm
- ↳ Compact and remote version with protection IP67, optionally IP68
- ↳ Mounting of electronic unit in two directions
- ↳ Power supply voltage 95 to 250V AC or 24V AC/DC, 50/60 Hz
- ↳ Non-touch basic manual control with magnetic pointer
- ↳ Programmable datalogger as standard
- ↳ Remote control RS-485
- ↳ Dosing feature with several type of digital/analogue outputs
- ↳ Pipe and electronic self diagnostics

Application:

- ↳ Water and Wastewater Measurement
- ↳ Chemical industry (acids, alkaline solutions)

Pipe dimensions	
Inner size DN [mm]	Length L [mm]
10 - 100	200
125 - 150	300
200 - 250	400
300 - 500	500
600	600
700	700
800	800

Technical data

Nominal size	DN10 to DN800
Nominal pressure	PN10 to PN25 (depending on diameter)
Flow range	0.1 to 10 m/s (0.02 to 5000 l/s)
Accuracy	0.5% (0.5 to 10 m/s) of reading value 1% (0.1 to 0.5 m/s) of reading value
Maximum medium temperature	70°C (154°F) for rubber liner 130°C (200°F) for PTFE liner in remote version
Ambient temperature	-20 to 70°C (-4 to 154°F)
Power supply	• 115/230V AC (+10%, -15%) • 24V DC/50/60Hz as option
Power consumption	10 VA
Liner	• hard rubber • PTFE
Electrodes	• CrNi (stainless) steel 1.4571 • Hastelloy C276
Measuring tube	Stainless steel 1.4201, dimensions according to DIN 17457
Flange	Steel 1.0402 or higher Dimensions according to DIN 2501 (BS 4504), ANSI B16.5
Protection category	IP67, optionally IP68
Outputs	• Frequency 0 to 12 kHz with programmable flowrate and function • Pulse 0 to 50 Hz with programmable volume, function and pulse width • Relay contacts 100V/0.5A with programmable function • Current loop 4 to 20 mA with programmable flowrate and function
Input	Digital input with programmable function
Communication	RS485, RS232
Displayed values	• Flowrate (m ³ /h, l/s, US.Gal/min, user) • Volume (m ³ , l, US.Gal, user) • Positive, total, negative and auxiliary (clearable, daily) volume
Control	• Keyboard • Magnetic pointer • RS232 and RS485
Low-flow cutoff	Programmable value
Time constant	Settable in range 1 to 20 s
Other features	• Test of excitation coils, status of pipe line and electronic unit • Diagnostic of internal temperature and power supply voltages • Real time circuit for datalogging • Datalogger memory up to 1000 values (programmable sample rate) • Registration of min. and max. flowrate including date and time
Conformity requirements	• LVD (safety) according to EN 61010-1, EN61010-1/A2 • PED according to directive 97/23/EC • EMC according to EN 61000 part 3-2, 3-3, EN 61000 4-3, 4-4, 4-5, 4-6, 4-8, 4-11, EN 61000 part 6-2, EN 50081-1

Inductive flowmeter MAG 910 is an instrument designed for measuring and indicating flow and total volume of conductive liquids. The flowmeter MAG 910 records both positive and negative flows. As there are no moving parts in the flow profile the device can be used to measure extremely dirty liquids containing solids. The flowmeter is for use with conductive liquids only.

Range of applications. The inductive flowmeter MAG 910 has been designed for use in all process industries including chemical, water and wastewater.

Features. The inductive flowmeter MAG 910 is a highly accurate and stable device. The construction of the MAG 910 indicator uses components with a long-term time and temperature stability. Configuration data is backed up and can be recovered after a power failure. The back-up structure enables data recovery in case of a partial loss of data (as a result of e.g. high level electrostatic discharge or noisy power supplies). Internal CPU provides all functions usually built in electronic flowmeters, incl. low flow rate correction, frequency response setting, bandwidth of sensitivity setting at low flow rates, etc.

Inputs / Outputs. Flowmeter MAG 910 is equipped with six isolated outputs and one isolated input as standard. Digital outputs (frequency, pulse and relays) and input are user configurable. Current output 4-20 mA can be used as passive or active type. RS232 and RS485 outputs are available for communication.

