

- Specific for installations with “0 diameters” near curves, fittings etc ...
- Dn 50 ÷ 150 mm
- Accuracy: ± 0.5%
- Sensor and lining in ABS
- Power supply 85 ÷ 265 Vac o 12; 24 Vac/Vdc
- Remote control via Smartphone



SGM LEKTRA presents a new type of electromagnetic flowmeter with plastic sensors: RKMAG. Because of its particular inner shape the mounting of the unit requires no straight pipe lengths before and after the meter. The converter is equipped with a large, bright, removable O-LED display and can mount a pen-drive USB data logger. The configurable outputs can be analogic, pulse and MODBUS RTU and alarm messages are managed by 2 configurable relays. RKMAG is suitable for the use with a wide range of conductive liquids, even chemically aggressive: the electrodes material can be selected according to the chemical properties of the fluid.

TECHNICAL FEATURES

Flow rate range

RKMAG is able to process signals from fluids with flow rates of up to 10m / s in both directions (bidirectional meter).

Range dimension / lining material

ABS DN50 ÷ DN150

Sensor material

ABS

Housing material

epoxy painted aluminium

Electrodes material

SS316L - Hastelloy C - Titanium - Tantalum - Platinum

Measure range

<3m³/h ÷ >600m³/h

Accuracy

±0,5% standard; ±0,2% optional

Repeatability

±0,1%

Fluid conductivity

>5µS/cm.

Power supply

85÷265Vac, 24Vac/dc, 12Vdc.

Consumption

6W, max. 8W.

Ambient Temperature Limits

Remote version operating temperature: ABS -20 ÷ +120°C
Compact version operating temperature: ABS -20 ÷ +75°C
Storage temperature: -40÷85°C

Communication protocol

Modbus RTU or Bluetooth App Android (opt.) or Hart (opt.)

Data Logger

Internal data logger to USB pen drive for flow measurements and analog inputs storing;
the measurement storage interval can be set from 15 to 3600 seconds

Output

4÷20mA: 0÷500Ω
Frequency output: 0,1÷10000 Hz
Pulse output: 24Vdc galvanically isolated or open collector galvanically isolated 24V 20mA (opt)
Alarm output: 2 relays, 3A 230Vac N.O.

Input signals

RKMAG has 2 active analog inputs at 24Vdc for 2-wire transmitters connection (eg. Temperature or pressure) and 1 digital input for an external contact connection for the integrated batch function restart and for partial totalizer management.

Reverse Flow

Allows measure and totalization of reverse flow.

Output Testing

Relays output: Transmitter can switch relays at testing value.
Current Source: Transmitter can be commanded to supply a specified test current between 4.0 and 20.0 mA.
Frequency Source: Transmitter can be commanded to supply a specified test frequency between 1 ÷ 10000 Hz.

Low Flow Cutoff

Adjustable. Below selected value, instantaneous flow and outputs are driven to the zero flow rate signal level.

Humidity Limits

0-100% RH to 150 °F (65 °C), not condensing.

Damping

Adjustable between 1 and 99 seconds.

Compact version IP rating

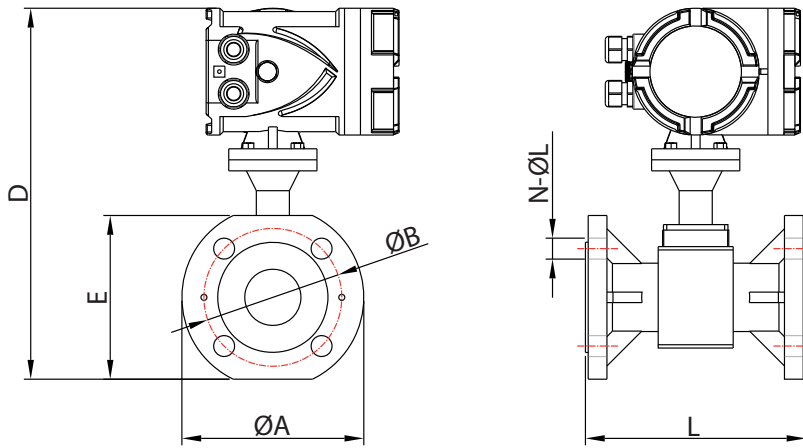
IP67

Remote version IP rating

sensor IP67 / IP68 (by request) - converter IP67

Anti-condensation filter

Anti-condensation filter installed on converter



DN (mm)	L (mm)	ØA (mm)	ØB (mm)	E (mm)	D (mm)	N-ØL (mm)
50	200	165	125	150	340	4-Ø18
80	200	200	160	185	370	8-Ø18
100	250	220	180	205	385	8-Ø18
150	300	285	240	285	500	8-Ø22

Rkmag Electromagnetic flowmeter

Zero diameter mounting.
 For conductive fluids. With sensor body in ABS
 Medium ambient temperature range: $-20^{\circ} \div +75^{\circ}\text{C}$
 IP67 electronic housing with anticondensation filter
 2 alarm relays (min/max)

Version	
B	Remote - acc. 0,2% - std cable length 5m - Data logger - n.2 4÷20mA input
C	Remote - acc. 0,5% - std cable length 5m - Data logger - n.2 4÷20mA input
L	Compact - acc. 0,2% - max temperature of the fluid 100°C - Data logger - n.2 4÷20mA input
N	Compact - acc. 0,5% - max temperature of the fluid 100°C - Data logger - n.2 4÷20mA input
DN flange / Max. pressure / Lining (temperature range of the fluid)	
0050E4	DN50 / 1.6MPa / ABS ($-20^{\circ} \div +120^{\circ}\text{C}$); range $3 \div 66\text{m}^3/\text{h}$; standard UNI 1092-1
0080E4	DN80 / 1.6MPa / ABS ($-20^{\circ} \div +120^{\circ}\text{C}$); range $8,9 \div 180\text{m}^3/\text{h}$; standard UNI 1092-1
0100E4	DN100 / 1.6MPa / ABS ($-20^{\circ} \div +120^{\circ}\text{C}$); range $11 \div 282\text{m}^3/\text{h}$; standard UNI 1092-1
0150E4	DN150 / 1.6MPa / ABS ($-20^{\circ} \div +120^{\circ}\text{C}$); range $30 \div 600\text{m}^3/\text{h}$; standard UNI 1092-1
Process connection	
B	DIN (UNI 1092-1) flange
Electrodes material	
1	SS316L Stainless steel
3	Hastelloy C
4	Titanium
5	Tantalum
6	Platinum
Power supply	
A	85÷265Vac
B	24Vdc / 24Vac
D	12Vdc
Accessories	
0	None
Output	
A	4÷20mA with galvanic separation + pulse
B	4÷20mA with galvanic separation + pulse + MODBUS RTU + BLUETOOTH
C	>PENDING< 4÷20mA with galvanic separation + pulse + HART
E	4÷20mA with galvanic separation + pulse + MODBUS RTU
Pipe protection degree	
1	IP67
2	IP68 - only for remote version