



## RBKMAG Electromagnetic flowmeter

Specific for installations with “0 diameters” near curves, fittings etc ...

Dn 50 ÷ 800 mm

Accuracy:  $\pm 0.2\% \pm 0.5\%$

ABS sensor and lining

Battery powered, 6 years battery life; 12÷24Vdc

Battery-powered RBKmag flowmeters do not require external power supply, therefore they are a valid alternative to conventional mechanical measuring systems and in isolated applications without power supply.

RBKmag thanks to the particular internal geometry is less influenced by the proximity of disturbing elements such as fittings, curves etc. and can therefore be installed at “ZERO DIAMETERS”. The RBKmag meter is suitable for use with a wide range of conductive liquids, also chemically aggressive, thanks to the possibility of selecting the most suitable electrode material for the application..

### Technical Feature

#### Flow rate range

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

#### Range dimension / lining material

DN50 ÷ DN800 | RUBBER

#### Sensor material

SS321

#### Electronic housing material

SS316 | ABS

#### Electrodes material

SS316L - Hastelloy C

#### Measure range

$<0.9\text{m}^3/\text{h} \div >9048\text{m}^3/\text{h}$

#### Accuracy

$\pm 0,5\%$  standard;

#### Repeatability

$\pm 0,1\%$

#### Fluid conductivity

$>5\mu\text{S}/\text{cm}$ .

#### Power supply

Battery, 6 years life; 12÷24Vdc

#### Operating temperature Limits

Remote version

-10 ÷ +80°C

Compact version

-10 ÷ +80°C

Storage temperature: -40÷85°C

#### Communication protocol

Modbus RTU

#### Output

Frequency: 0,1÷5000 Hz

Pulse: open collector

#### Reverse Flow

Allows measure and totalization of reverse flow

#### Output test

Frequency output: the transmitter can force the output signal from 0.1 to 5000 Hz to a test value.

#### Startup time

0.5s from zero flow.

#### Cutoff

Adjustable 0.0 ÷ 9.9% of the Qmax. Below the set value the display of the instantaneous flow and the outputs are forced to zero.

#### 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



**Rbkmag** Battery electromagnetic flowmeter

Zero diameter mounting.  
 For conductive fluids. With sensor pipe in SS321  
 External sensor and flanges in carbon steel  
 Medium ambient temperature range: -20° + 50°C  
 Fluid temperature range: -10° + 80°C  
 Calibration via remote control  
 3rd electrode for grounding

Version	
<b>A</b>	Remote - accuracy 0,5% - standard cables 5m (Price on request each additional meter - max 50m)
<b>D</b>	Remote - accuracy 0,5% - with integrated GPRS antenna - standard cables 5m (Price on request each additional meter - max 50m)
<b>G</b>	Remote - accuracy 0,5% - with separate GPRS antenna - standard cables 5m (Price on request each additional meter - max 50m)
<b>H</b>	Compact - accuracy 0,5%
<b>P</b>	Compact - accuracy 0,5% - with integrated GPRS antenna
<b>R</b>	Compact - accuracy 0,5% - with separate GPRS antenna
DN flange / Max. pressure / Lining	
<b>0050E1</b>	DN50 / 1.6MPa / Neoprene - range 1,5 + 35m <sup>3</sup> /h
<b>0065E1</b>	DN65 / 1.6MPa / Neoprene - range 2,4 + 59m <sup>3</sup> /h
<b>0080E1</b>	DN80 / 1.6MPa / Neoprene - range 3,7 + 92m <sup>3</sup> /h
<b>0100E1</b>	DN100 / 1.6MPa / Neoprene - range 6 + 141m <sup>3</sup> /h
<b>0125E1</b>	DN125 / 1.6MPa / Neoprene - range 9 + 220m <sup>3</sup> /h
<b>0150E1</b>	DN150 / 1.6MPa / Neoprene - range 13 + 318m <sup>3</sup> /h
<b>0200E1</b>	DN200 / 1.6MPa / Neoprene - range 23 + 565m <sup>3</sup> /h
<b>0250E1</b>	DN250 / 1.6MPa / Neoprene - range 35 + 833m <sup>3</sup> /h
<b>0300C1</b>	DN300 / 1.0MPa / Neoprene - range 51 + 1272m <sup>3</sup> /h
<b>0300E1</b>	DN300 / 1.6MPa / Neoprene - range 51 + 1272m <sup>3</sup> /h
<b>0350C1</b>	DN350 / 1.0MPa / Neoprene - range 70 + 1731m <sup>3</sup> /h
<b>0350E1</b>	DN350 / 1.6MPa / Neoprene - range 70 + 1731m <sup>3</sup> /h
<b>0400C1</b>	DN400 / 1.0MPa / Neoprene - range 90 + 2262m <sup>3</sup> /h
<b>0400E1</b>	DN400 / 1.6MPa / Neoprene - range 90 + 2262m <sup>3</sup> /h
<b>0450C1</b>	DN450 / 1.0MPa / Neoprene - range 114 + 2863m <sup>3</sup> /h
<b>0450E1</b>	DN450 / 1.6MPa / Neoprene - range 114 + 2863m <sup>3</sup> /h
<b>0500C1</b>	DN500 / 1.0MPa / Neoprene - range 141 + 3534m <sup>3</sup> /h
<b>0500E1</b>	DN500 / 1.6MPa / Neoprene - range 141 + 3534m <sup>3</sup> /h
<b>0600C1</b>	DN600 / 1.0MPa / Neoprene - range 203 + 5089m <sup>3</sup> /h
<b>0600E1</b>	DN600 / 1.6MPa / Neoprene - range 203 + 5089m <sup>3</sup> /h
<b>0700C1</b>	DN700 / 1.0MPa / Neoprene - range 277 + 6927m <sup>3</sup> /h
<b>0700E1</b>	DN700 / 1.6MPa / Neoprene - range 277 + 6927m <sup>3</sup> /h
<b>0800C1</b>	DN800 / 1.0MPa / Neoprene - range 362 + 9048m <sup>3</sup> /h
<b>0800E1</b>	DN800 / 1.6MPa / Neoprene - range 362 + 9048m <sup>3</sup> /h
Process connection	
<b>B</b>	DIN flanges - UNI 1092-1
<b>D</b>	ANSI flanges (price on request)
<b>Z</b>	Special
Electrodes material	
<b>1</b>	SS316L
<b>3</b>	Hastelloy C276
Power supply	
<b>D</b>	Battery - 6 years life
Accessories	
<b>0</b>	None
<b>1</b>	316SS or Hastelloy C grounding rings for plastic pipe installation (prices on MA page)
<b>5</b>	Data logger on SD card
Output	
<b>A</b>	Pulse
<b>E</b>	Pulse + MODBUS (not with GPRS)
<b>F</b>	Analogic (not with GPRS)
<b>G</b>	Analogic + MODBUS (not with GPRS)
<b>N</b>	None
Protection degree	
<b>3</b>	IP68 (compact version - with data logger accessory -> IP67)
<b>4</b>	Converter IP67 / Sensor IP67 (remote version)
<b>5</b>	Converter IP67 / Sensor IP68 (remote version)
<b>6</b>	Converter IP68 (with data logger accessory -> IP67) / Sensor IP68 (remote version)