



## RBKMAG Electromagnetic flowmeter

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

Dn 40 ÷ 800 mm

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

ABS sensor and lining

Battery powered, 6 years battery life

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<sup>3</sup>/s in both directions (bidirectional meter).

#### Range dimension / lining material

DN40 ÷ DN800 | RUBBER

#### Sensor material

SS321

#### Electronic housing material

SS316 | ABS

#### Electrodes material

SS316L - Hastelloy C

#### Measure range

<0.9m<sup>3</sup>/h ÷ >9048m<sup>3</sup>/h

#### Accuracy

$\pm 0,5\%$  standard;  $\pm 0,2\%$  optional

#### Repeatability

$\pm 0,1\%$

#### Fluid conductivity

>5 $\mu$ S/cm.

#### Power supply

Battery, 6 years life

#### 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  
Calibration via remote control

Version	
<b>A</b>	Remote - accuracy 0,5% - standard cables 5m (over 5m eur 7,00/m - max 50m)
<b>D</b>	Remote - accuracy 0,5% - with integrated GPRS antenna - standard cables 5m (over 5m eur 7,00/m - max 50m)
<b>G</b>	Remote - accuracy 0,5% - with separate GPRS antenna - standard cables 5m (over 5m eur 7,00/m - 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 (temp.of the fluid)	
<b>0040E1</b>	DN40 / 1.6MPa / Rubber (-40° + +80°C); range 0,91+ 22m3/h; standard UNI 1092-1
<b>0050E1</b>	DN50 / 1.6MPa / Rubber (-40° + +80°C); range 1,5+ 35m3/h; standard UNI 1092-1
<b>0065E1</b>	DN65 / 1.6MPa / Rubber (-10° + +80°C); range 2,4 + 59m3/h; standard UNI 1092-1
<b>0080E1</b>	DN80 / 1.6MPa / Rubber (-10° + +80°C); range 3,7 + 92m3/h; standard UNI 1092-1
<b>0100E1</b>	DN100 / 1.6MPa / Rubber (-10° + +80°C); range 6 + 141m3/h; standard UNI 1092-1
<b>0125E1</b>	DN125 / 1.6MPa / Rubber (-10° + +80°C); range 9 + 220m3/h; standard UNI 1092-1
<b>0150E1</b>	DN150 / 1.6MPa / Rubber (-10° + +80°C); range 13 + 318m3/h; standard UNI 1092-1
<b>0200E1</b>	DN200 / 1.6MPa / Rubber (-10° + +80°C); range 23 + 565m3/h; standard UNI 1092-1
<b>0250E1</b>	DN250 / 1.6MPa / Rubber (-10° + +80°C); range 35 + 833m3/h; standard UNI 1092-1
<b>0300C1</b>	DN300 / 1.0MPa / Rubber (-10° + +80°C); range 51 + 1272m3/h; standard UNI 1092-1
<b>0300E1</b>	DN300 / 1.6MPa / Rubber (-10° + +80°C); range 51 + 1272m3/h; standard UNI 1092-1
<b>0350C1</b>	DN350 / 1.0MPa / Rubber (-10° + +80°C); range 70 + 1731m3/h; standard UNI 1092-1
<b>0350E1</b>	DN350 / 1.6MPa / Rubber (-10° + +80°C); range 70 + 1731m3/h; standard UNI 1092-1
<b>0400C1</b>	DN400 / 1.0MPa / Rubber (-10° + +80°C); range 90 + 2262m3/h; standard UNI 1092-1
<b>0400E1</b>	DN400 / 1.6MPa / Rubber (-10° + +80°C); range 90 + 2262m3/h; standard UNI 1092-1
<b>0450C1</b>	DN450 / 1.0MPa / Rubber (-10° + +80°C); range 114 + 2863m3/h; standard UNI 1092-1
<b>0450E1</b>	DN450 / 1.6MPa / Rubber (-10° + +80°C); range 114 + 2863m3/h; standard UNI 1092-1
<b>0500C1</b>	DN500 / 1.0MPa / Rubber (-10° + +80°C); range 141 + 3534m3/h; standard UNI 1092-1
<b>0500E1</b>	DN500 / 1.6MPa / Rubber (-10° + +80°C); range 141 + 3534m3/h; standard UNI 1092-1
<b>0600C1</b>	DN600 / 1.0MPa / Rubber (-10° + +80°C); range 203 + 5089m3/h; standard UNI 1092-1
<b>0600E1</b>	DN600 / 1.6MPa / Rubber (-10° + +80°C); range 203 + 5089m3/h; standard UNI 1092-1
<b>0700C1</b>	DN700 / 1.0MPa / Rubber (-10° + +80°C); range 277 + 6927m3/h; standard UNI 1092-1
<b>0700E1</b>	DN700 / 1.6MPa / Rubber (-10° + +80°C); range 277 + 6927m3/h; standard UNI 1092-1
<b>0800C1</b>	DN800 / 1.0MPa / Rubber (-10° + +80°C); range 362 + 9048m3/h; standard UNI 1092-1
<b>0800E1</b>	DN800 / 1.6MPa / Rubber (-10° + +80°C); range 362 + 9048m3/h; standard UNI 1092-1

  

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>1</b>	316SS or Hastelloy C grounding rings for plastic pipe installation (price on request)
<b>3</b>	3rd electrode for grounding - standard
<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)
<b>4</b>	Converter IP67 / Sensor IP67 (remote version)
<b>5</b>	Converter IP67 / Sensor IP68 (remote versione)
<b>6</b>	Converter IP68 / Sensor IP68 (remote version)