



RBMAG

Electromagnetic flowmeter

Flow measurement for conductive liquids

Measurement range DN10 ÷ 800

Measurement accuracy: $\pm 0.5\%$

GPRS data transmission

Battery powered, 6 years autonomy; 12÷24Vdc

Analog, impulsive and MODBUS RTU outputs

Parameter programming via remote module

IP68 protection

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

Technical Feature

Flow range

Processing of signals from fluids with speeds up to 10m / s in both directions (bidirectional meter)

Lining material / range size

PTFE DN10 -; DN500

RUBBER DN65 -; DN800

Sensor material

SS321

Electronic housing material

SS316 | ABS

Electrodes material

SS316L - Hastelloy C - Titanium - Tantalum - Platinum

Measuring range

$< 0.1 \text{ m}^3 / \text{h} - ; > 18000 \text{ m}^3 / \text{h}$

Accuracy

$\pm 0.5\%$ standard

Repeatability

$\pm 0.1\%$

Fluid conductivity

at least 20 microsiemens / cm

Power supply voltage

Battery, 6 years life; 12÷24Vdc

Sensor tube temperature range

Process temp. Vers. remote: rubber

-10 -; + 80 ° C;

PTFE -40 -; + 150 ° C

Process temp. Vers. compact: rubber

-10 -; + 80 ° C;

PTFE -40 -; + 100 ° C

Storage temperature

-40 -; 85 ° C

Electronic converter temperature range

-20 ° ÷ + 50 ° C

Communication protocol

Modbus (opt.)

Output signals

Impulsive: open collector

Analogue 4 ÷ 20mA

Reverse flow

Instantaneous measurement and totalisation of the reverse flow

Scope cutoff

Adjustable in units of flow measurement. Below the set value, the instantaneous flow is displayed and the outputs are forced to zero.

Relative humidity

$\leq 95\%$ RH

Response time (integration)

Adjustable between 0.1 and 99 seconds

Compact version protection

IP68

Remote version protection

IP67 / IP68 sensor (on request)

IP67 / IP68 converter

**RBMAG**

Battery electromagnetic flowmeter

For conductive fluids. With sensor pipe in SS321

External sensor and flanges in carbon steel

Medium ambient temperature range: $-20^{\circ} \div 50^{\circ}\text{C}$ Fluid temperature range: $-10^{\circ} \div 80^{\circ}\text{C}$ (with Neoprene lining) $-40^{\circ} \div 150^{\circ}\text{C}$ (with PTFE lining - max 100° for compact versions)

3rd electrode for grounding

Version	
A	Remote - accuracy 0,5% - standard cables 5m (over 5m eur 7,80/m - max 50m)
D	Remote - accuracy 0,5% - with integrated GPRS antenna - standard cables 5m (over 5m eur 7,80/m - max 50m)
G	Remote - accuracy 0,5% - with separate GPRS antenna - standard cables 5m (over 5m eur 7,80/m - max 50m)
H	Compact - accuracy 0,5%
P	Compact - accuracy 0,5% - with integrated GPRS antenna
R	Compact - accuracy 0,5% - with separate GPRS antenna
Z	Special

DN flange / Max. pressure / Lining	
0010B2	DN10 / 4.0MPa / PTFE; range $0,14 \div 2,9\text{m}^3/\text{h}$ - 2 electrodes only
0015B2	DN15 / 4.0MPa / PTFE; range $0,3 \div 6\text{m}^3/\text{h}$
0020B2	DN20 / 4.0MPa / PTFE; range $0,5 \div 12\text{m}^3/\text{h}$
0025B2	DN25 / 4.0MPa / PTFE; range $0,6 \div 18\text{m}^3/\text{h}$
0032B2	DN32 / 4.0MPa / PTFE; range $1 \div 30\text{m}^3/\text{h}$
0040B2	DN40 / 4.0MPa / PTFE; range $1,8 \div 42\text{m}^3/\text{h}$
0050B2	DN50 / 4.0MPa / PTFE; range $3 \div 66\text{m}^3/\text{h}$
0065B1	DN65 / 4.0MPa / Neoprene; range $5,8 \div 120\text{m}^3/\text{h}$
0065B2	DN65 / 4.0MPa / PTFE; range $5,8 \div 120\text{m}^3/\text{h}$
0080B1	DN80 / 4.0MPa / Neoprene; range $8,9 \div 180\text{m}^3/\text{h}$
0080B2	DN80 / 4.0MPa / PTFE; range $8,9 \div 180\text{m}^3/\text{h}$
0100B1	DN100 / 4.0MPa / Neoprene; range $11 \div 282\text{m}^3/\text{h}$
0100B2	DN100 / 4.0MPa / PTFE; range $11 \div 282\text{m}^3/\text{h}$
0100E1	DN100 / 1.6MPa / Neoprene; range $11 \div 282\text{m}^3/\text{h}$
0100E2	DN100 / 1.6MPa / PTFE; range $11 \div 282\text{m}^3/\text{h}$
0125B1	DN125 / 4.0MPa / Neoprene; range $20 \div 450\text{m}^3/\text{h}$
0125B2	DN125 / 4.0MPa / PTFE; range $20 \div 450\text{m}^3/\text{h}$
0125E1	DN125 / 1.6MPa / Neoprene; range $20 \div 450\text{m}^3/\text{h}$
0125E2	DN125 / 1.6MPa / PTFE; range $20 \div 450\text{m}^3/\text{h}$
0150B1	DN150 / 4.0MPa / Neoprene; range $30 \div 600\text{m}^3/\text{h}$
0150B2	DN150 / 4.0MPa / PTFE; range $30 \div 600\text{m}^3/\text{h}$
0150E1	DN150 / 1.6MPa / Neoprene; range $30 \div 600\text{m}^3/\text{h}$
0150E2	DN150 / 1.6MPa / PTFE; range $30 \div 600\text{m}^3/\text{h}$
0200C1	DN200 / 1.0MPa / Neoprene; range $50 \div 1100\text{m}^3/\text{h}$
0200C2	DN200 / 1.0MPa / PTFE; range $50 \div 1100\text{m}^3/\text{h}$
0200E1	DN200 / 1.6MPa / Neoprene; range $50 \div 1100\text{m}^3/\text{h}$
0200E2	DN200 / 1.6MPa / PTFE; range $50 \div 1100\text{m}^3/\text{h}$

0250C1	DN250 / 1.0MPa / Neoprene; range 85 ÷ 1700m3/h
0250C2	DN250 / 1.0MPa / PTFE; range 85 ÷ 1700m3/h
0250E1	DN250 / 1.6MPa / Neoprene; range 85 ÷ 1700m3/h
0250E2	DN250 / 1.6MPa / PTFE; range 85 ÷ 1700m3/h
0300C1	DN300 / 1.0MPa / Neoprene; range 110 ÷ 2400m3/h
0300C2	DN300 / 1.0MPa / PTFE; range 110 ÷ 2400m3/h
0300E1	DN300 / 1.6MPa / Neoprene; range 110 ÷ 2400m3/h
0300E2	DN300 / 1.6MPa / PTFE; range 110 ÷ 2400m3/h
0350C1	DN350 / 1.0MPa / Neoprene; range 180 ÷ 3300m3/h
0350C2	DN350 / 1.0MPa / PTFE; range 180 ÷ 3300m3/h
0350E1	DN350 / 1.6MPa / Neoprene; range 180 ÷ 3300m3/h
0350E2	DN350 / 1.6MPa / PTFE; range 180 ÷ 3300m3/h
0400C1	DN400 / 1.0MPa / Neoprene; range 220 ÷ 4200m3/h
0400C2	DN400 / 1.0MPa / PTFE; range 220 ÷ 4200m3/h
0400E1	DN400 / 1.6MPa / Neoprene; range 220 ÷ 4200m3/h
0400E2	DN400 / 1.6MPa / PTFE; range 220 ÷ 4200m3/h
0450C1	DN450 / 1.0MPa / Neoprene; range 270÷ 5400m3/h
0450C2	DN450 / 1.0MPa / PTFE; range 270÷ 5400m3/h
0450E1	DN450 / 1.6MPa / Neoprene; range 270÷ 5400m3/h
0450E2	DN450 / 1.6MPa / PTFE; range 270÷ 5400m3/h
0500C1	DN500 / 1.0MPa / Neoprene; range 320 ÷ 6600m3/h
0500C2	DN500 / 1.0MPa / PTFE; range 320 ÷ 6600m3/h
0500E1	DN500 / 1.6MPa / Neoprene; range 320 ÷ 6600m3/h
0500E2	DN500 / 1.6MPa / PTFE; range 320 ÷ 6600m3/h
0600C1	DN600 / 1.0MPa / Neoprene; range 490 ÷ 9600m3/h
0600E1	DN600 / 1.6MPa / Neoprene - range 490 ÷ 9600m3/h
0700C1	DN700 / 1.0MPa / Neoprene; range 680 ÷ 13500m3/h
0700E1	DN700 / 1.6MPa / Neoprene; range 680 ÷ 13500m3/h
0800C1	DN800 / 1.0MPa / Neoprene; range 900 ÷ 18000m3/h
0800E1	DN800 / 1.6MPa / Neoprene; range 900 ÷ 18000m3/h
9999Z9	Special

Process connection

B	DIN (UNI 1092-1) flange
D	ANSI flange (price on request)
Z	Special

Electrodes material

1	SS316L Stainless steel
3	Hastelloy C276
4	Titanium
5	Tantalum
6	Platinum

Power supply

D	Battery - 6 years life
E	Battery (6 years life) + 12÷24Vdc external supply

Accessories

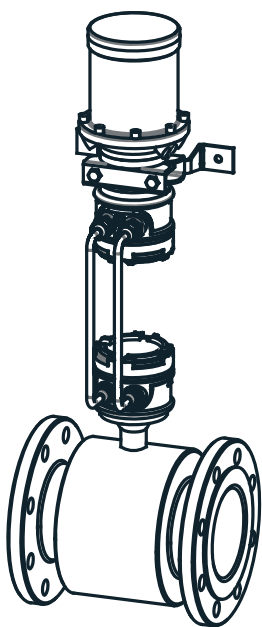
0	None
1	316SS or Hastelloy C grounding rings for plastic pipe installation (price on request)
5	Data logger on SD card

Output

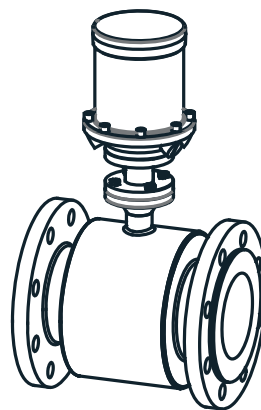
A	Pulse output
E	Pulse output + MODBUS (not with GPRS)
F	Pulse output + 4÷20mA (not with GPRS)
G	Pulse output + 4÷20mA + MODBUS (not with GPRS)

Protection degree

3	IP68 (compact version - with data logger accessory -> IP67)
4	Converter IP67 / Sensor IP67 (remote version)
5	Converter IP67 / Sensor IP68 (remote version)
6	Converter IP68 (with data logger accessory -> IP67) / Sensor IP68 (remote version)



REMOTE VERSION



COMPACT VERSION

