RCMAG

Electromagnetic flowmeter for heavy-duty applications with suspended solids

For heavy-duty applications with suspended solids
Dn from 10 to 2000 mm
Measurement accuracy: ± 0.5%
Neoprene / PTFE coatings
Power supply 85+250Vac; 11÷13Vdc; 20+36Vdc/Vac

The RCmag product line adapts to multiple applications in the “industrial process” field for heavy-duty applications such as the paper industry or biogas sewage “. Various materials for lining are available as well as electrodes made of tantalum, hastelloy c, titanium.

Technical Feature

Flow rate range
Bidirectional on fluids with speeds up to 10m / s
Range dimension / lining material
PTFE DN10 ÷ DN500 / RUBBER DN65 ÷ DN2000
Sensor pipe material
SS321
Housing material
epoxy painted aluminium
Electrodes material
SS316L - Hastelloy C - Titanium - Tantalum - Platinum
Measure range
<0,1m3/h ÷ >110000m3/h
Accuracy
±0,5%
Repeatability
±0,1%
Fluid conductivity
>20 µS/cm.

Power supply
85 ÷ 250Vac; 20 ÷ 36 Vac/Vdc; 11 ÷ 13Vdc
Communication protocol
Modbus RTU
Operating temp. limits sensor
Remote version
RUBBER -10 ÷ +80°C; PTFE -40 ÷ +150°C
Compact version
RUBBER -10 ÷ +80°C; PTFE -40 ÷ +100°C
Storage temperature: -40÷85°C
Operating temp. limits converter
-20 ÷ 60°C
Output
Impulsive: open collector
Analog: 4÷20mA

Reverse Flow
Allows measure and totalization of reverse flow.
Low Flow Cutoff
Adjustable. Below selected value, instantaneous flow and outputs are driven to the zero flow rate signal level.
Humidity Limits
 95%
Damping
Adjustable between 1 and 99 seconds.
Compact version IP rating
IP65
Remote version IP rating
sensor IP67 / IP68 (by request) - converter IP65

RCMAG Electromagnetic flowmeter

For heavy-duty applications with suspended solids.
With sensor pipe in SS321
External sensor and flanges in carbon steel
Ambient temperature range: -10° ÷ 60°C
Fluid temperature range: -10° ÷ 80°C (with Neoprene lining)
-40° ÷ 150°C (with PTFE lining)
IP65 electronic housing - 3rd electrode for grounding

	Version	
	S	Remote - accuracy 0,5% - std cable length 5m (over 5m eur 7,80/m)
	V	Compact - accuracy 0,5%
	Z	Special

	DN flange / Max. pressure / Lining	
	0010B2	DN10 / 4.0MPa / PTFE - range 0,14 ÷ 2,9m3/h - only 2 electrodes
	0015B2	DN15 / 4.0MPa / PTFE - range 0,3 ÷ 6m3/h
	0020B2	DN20 / 4.0MPa / PTFE - range 0,5 ÷ 12m3/h
	0025B2	DN25 / 4.0MPa / PTFE - range 0,6 ÷ 18m3/h
	0032B2	DN32 / 4.0MPa / PTFE - range 1 ÷ 30m3/h
	0040B2	DN40 / 4.0MPa / PTFE - range 1,8 ÷ 42m3/h
	0050B2	DN50 / 4.0MPa / PTFE - range 3 ÷ 66m3/h
	0065B1	DN65 / 4.0MPa / Neoprene - range 5,8 ÷ 120m3/h
	0065B2	DN65 / 4.0MPa / PTFE - range 5,8 ÷ 120m3/h
	0080B1	DN80 / 4.0MPa / Neoprene - range 8,9 ÷ 180m3/h
	0080B2	DN80 / 4.0MPa / PTFE - range 8,9 ÷ 180m3/h
	0100B1	DN100 / 4.0MPa / Neoprene - range 11 ÷ 282m3/h
	0100B2	DN100 / 4.0MPa / PTFE - range 11 ÷ 282m3/h
	0100E1	DN100 / 1.6MPa / Neoprene - range 11 ÷ 282m3/h
	0100E2	DN100 / 1.6MPa / PTFE - range 11 ÷ 282m3/h
	0125B1	DN125 / 4.0MPa / Neoprene - range 20 ÷ 450m3/h
	0125B2	DN125 / 4.0MPa / PTFE - range 20 ÷ 450m3/h
	0125E1	DN125 / 1.6MPa / Neoprene - range 20 ÷ 450m3/h
	0125E2	DN125 / 1.6MPa / PTFE - range 20 ÷ 450m3/h
	0150B1	DN150 / 4.0MPa / Neoprene - range 30 ÷ 600m3/h
	0150B2	DN150 / 4.0MPa / PTFE - range 30 ÷ 600m3/h
	0150E1	DN150 / 1.6MPa / Neoprene - range 30 ÷ 600m3/h
	0150E2	DN150 / 1.6MPa / PTFE - range 30 ÷ 600m3/h
	0200C1	DN200 / 1.0MPa / Neoprene - range 50 ÷ 1100m3/h
	0200C2	DN200 / 1.0MPa / PTFE - range 50 ÷ 1100m3/h
	0200E1	DN200 / 1.6MPa / Neoprene - range 50 ÷ 1100m3/h
	0200E2	DN200 / 1.6MPa / PTFE - range 50 ÷ 1100m3/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
0900C1	DN900 / 1.0MPa / Neoprene - range 1200 ÷ 22500m3/h
0900E1	DN900 / 1.6MPa / Neoprene - range 1200 ÷ 22500m3/h
1000C1	DN1000 / 1.0MPa / Neoprene - range 1450 ÷ 28000m3/h
1000E1	DN1000 / 1.6MPa / Neoprene - range 1450 ÷ 28000m3/h
1200D1	DN1200 / 0,6MPa / Neoprene - range 2000 ÷ 40000m3/h
1400D1	DN1400 / 0,6MPa / Neoprene - range 2800 ÷ 55000m3/h
1600D1	DN1600 / 0,6MPa / Neoprene - range 3650 ÷ 65000m3/h

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	
A	85÷250Vac
C	20÷36 Vac/Vdc
D	11÷13Vdc
Z	Special

Accessories	
0	None
1	316SS or Hastelloy C grounding rings for plastic pipe installation (prices on MA page)
2	Protective rings against inner lining abrasion (price on request)

Output	
E	4÷20mA with galvanic separation + pulse + MODBUS RTU

Pipe protection degree	
1	IP67
2	IP68 - only for remote version