

MID certified electromagnetic flowmeter

MID certified flow meter**Dn 10 ÷ 250****Accuracy: class II****RUBBER / PTFE lining****Power supply 85 ÷ 265 Vac o 12; 24 Vac/Vdc****Configuration and displaying via O-LED****display**

With MID certification it is suitable for all industrial processes where fiscal and custody transfer are required. It complies to 2014/32/EU directive and to OIML R 49-1/2/3, EN 14154-1/2/3, ISO 4064-1/2/5 standards. Various materials for lining are available, as well as electrodes made of Hastelloy C, tantalum and titanium. The converter can be supplied with most common communication systems such as MODBUS RTU.

TECHNICAL FEATURES**Flow rate range**

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

Range dimension / lining material

PTFE DN10 ÷ DN250 / RUBBER DN10 ÷ DN2500

Sensor material

SS321

Housing material

epoxy painted aluminium

Electrodes material

SS316L - Hastelloy C - Titanium - Tantalum - Platinum

Measure range

$R=Q3/Q1 \leq 200$; $Q2/Q1=1,6$

Accuracy

Class II

Repeatability

$\pm 0,1\%$

Fluid conductivity

$>5\mu S/cm$.

Power supply

85÷265Vac, 24Vac/dc, 12Vdc.

Consumption

6W, max. 8W.

Temperature class

T50

Ambient Temperature Limits

Remote version operating temperature: RUBBER -10 ÷ +80°C;

PTFE -40 ÷ +150°C

Compact version operating temperature: RUBBER -10 ÷ +80°C;

PTFE -40 ÷ +100°C

Storage temperature: -40÷85°C

Communication protocol

Modbus

Data Logger

Internal data logger via USB pen drive for event counter variations

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.

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 and 10000 Hz.

Humidity Limits

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

Damping

Adjustable between 1 and 99 seconds.

Compact version IP rating

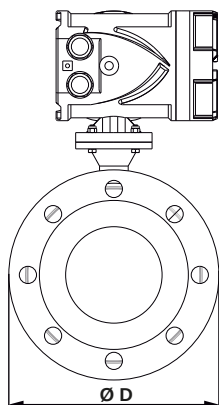
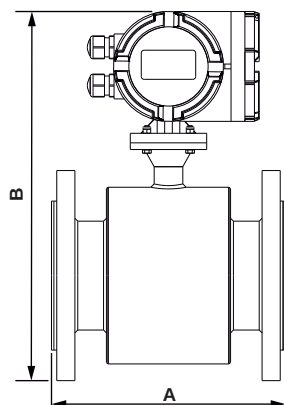
IP67

Remote version IP rating

sensor IP67 / IP68 (by request) - converter IP67

Anti-condensation filter

Anti-condensation filter installed on converter



DN (mm)	A (mm)	PN 16 - PN 40	
		B (mm)	ØD (mm)
10	200	295	90
15		295	95
20		300	105
25		300	115
32		315	140
40		335	150
50		344	165
65		360	185
80		375	200

DN (mm)	A (mm)	PN 10		PN 16		PN 40	
		B (mm)	ØD (mm)	B (mm)	ØD (mm)	B (mm)	ØD (mm)
100	250	-	-	400	220	410	235
125	250	-	-	420	250	435	270
150	300	-	-	460	285	468	300
200	350	520	340	520	340	538	375
250	450	570	395	575	405	598	450

Electromagnetic flowmeter MID

In compliance with directive 2014/32/EU
(standard OIML R 49-1/2/3 - EN 14154-1/2/3 - ISO 4064-1/2/5)
For conductive waters. Sensor pipe in SS321
Medium ambient temperature range: $+5^{\circ} \div +40^{\circ}\text{C}$
IP67 electronic housing with anticondensation filter
2 alarm relays (min/max)

Version	
C	Remote - acc. Class 2 - Temp. Class T50 - cable length 3m - n.2 4+20mA input
N	Compact - acc. Class 2 - Temp. Class T50 - n.2 4+20mA input
DN flange / Max. pressure / Lining (temperature range of the fluid)	
0010E2	DN10 / 1.6MPa / PTFE ($-40^{\circ} \div +150^{\circ}\text{C}$); range 0,0125 ÷ 3,125m ³ /h; standard UNI 1092-1
0015E2	DN15 / 1.6MPa / PTFE ($-40^{\circ} \div +150^{\circ}\text{C}$); range 0,0315 ÷ 7,875m ³ /h; standard UNI 1092-1
0020E2	DN20 / 1.6MPa / PTFE ($-40^{\circ} \div +150^{\circ}\text{C}$); range 0,05 ÷ 12,5m ³ /h; standard UNI 1092-1
0025E2	DN25 / 1.6MPa / PTFE ($-40^{\circ} \div +150^{\circ}\text{C}$); range 0,08 ÷ 20m ³ /h; standard UNI 1092-1
0032E2	DN32 / 1.6MPa / PTFE ($-40^{\circ} \div +150^{\circ}\text{C}$); range 0,125 ÷ 31,25m ³ /h; UNI 1092-1 standard
0040E2	DN40 / 1.6MPa / PTFE ($-40^{\circ} \div +150^{\circ}\text{C}$); range 0,2 ÷ 50m ³ /h; standard UNI 1092-1
0050E2	DN50 / 1.6MPa / PTFE ($-40^{\circ} \div +150^{\circ}\text{C}$); range 3 ÷ 66m ³ /h; standard UNI 1092-1
0065E1	DN65 / 1.6MPa / Neoprene ($-10^{\circ} \div +80^{\circ}\text{C}$); range 0,315 ÷ 78,75m ³ /h; standard UNI 1092-1
0065E2	DN65 / 1.6MPa / PTFE ($-40^{\circ} \div +150^{\circ}\text{C}$); range 0,315 ÷ 78,75m ³ /h; standard UNI 1092-1
0080E1	DN80 / 1.6MPa / Neoprene ($-10^{\circ} \div +80^{\circ}\text{C}$); range 0,8 ÷ 200m ³ /h; standard UNI 1092-1
0080E2	DN80 / 1.6MPa / PTFE ($-40^{\circ} \div +150^{\circ}\text{C}$); range 0,8 ÷ 200m ³ /h; standard UNI 1092-1
0100E1	DN100 / 1.6MPa / Neoprene ($-10^{\circ} \div +80^{\circ}\text{C}$); range 1,25 ÷ 312,5m ³ /h; standard UNI 1092-1
0100E2	DN100 / 1.6MPa / PTFE ($-40^{\circ} \div +150^{\circ}\text{C}$); range 1,25 ÷ 312,5m ³ /h; standard UNI 1092-1
0125E1	DN125 / 1.6MPa / Neoprene ($-10^{\circ} \div +80^{\circ}\text{C}$); range 1,25 ÷ 312,5m ³ /h; standard UNI 1092-1
0125E2	DN125 / 1.6MPa / PTFE ($-40^{\circ} \div +150^{\circ}\text{C}$); range 1,25 ÷ 312,5m ³ /h; standard UNI 1092-1
0150E1	DN150 / 1.6MPa / Neoprene ($-10^{\circ} \div +80^{\circ}\text{C}$); range 2 ÷ 500m ³ /h; standard UNI 1092-1
0150E2	DN150 / 1.6MPa / PTFE ($-40^{\circ} \div +150^{\circ}\text{C}$); range 30 ÷ 600m ³ /h; standard UNI 1092-1
0200E1	DN200 / 1.6MPa / Neoprene ($-10^{\circ} \div +80^{\circ}\text{C}$); range 3,15 ÷ 787,5m ³ /h; standard UNI 1092-1
0200E2	DN200 / 1.6MPa / PTFE ($-40^{\circ} \div +150^{\circ}\text{C}$); range 3,15 ÷ 787,5m ³ /h; standard UNI 1092-1
0250E1	DN250 / 1.6MPa / Neoprene ($-10^{\circ} \div +80^{\circ}\text{C}$); range 3,15 ÷ 787,5m ³ /h; standard UNI 1092-1
0250E2	DN250 / 1.6MPa / PTFE ($-40^{\circ} \div +150^{\circ}\text{C}$); range 3,15 ÷ 787,5m ³ /h; standard UNI 1092-1
Process connection	
B	DIN flange (UNI 1092-1)
D	ANSI flange (price on request)
Z	Special
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
Z	Special
Accessories	
0	None
1	316SS or Hastelloy C grounding rings for plastic pipe installation (price on request)
2	Protective rings against inner lining abrasion (price on request)
3	3rd electrode - price on request
Output	
C	>PENDING< 4+20mA + pulse output + HART - with galvanic separation
E	4+20mA + pulse + MODBUS RTU with galvanic separation
Pipe protection degree	
1	IP67
2	IP68 - only for remote version