



## APLISENS - PEM-1000 SERIES FLOW METER

Electromagnetic (Magflow)

PEMDN0050PN16.1

- 0,085..28,274,3 m<sup>3</sup>/h
- 3/8" up to 40" pipe size
- 1,6 MPa
- Acids, alkalis, paints, pastes, water etc
- 4-20mA or Pulse/frequency



### Product description

The Aplisens PEM-1000 'Mag flow meter' is a very robust flowmeter for a wide range of applications at a competitive price.

The magnetic flowmeter is for bidirectional measurement of liquids with a minimum conductivity 5 $\mu$ S/cm such as acid/alkalis, paints, pastes and water/wastewater.

The PEM-1000 is available in two versions, one with a direct mounted display/sensor and the other with a separate display/sensor. The pipe size starts at 3/8" (DN10) which gives 1m<sup>3</sup>/h all the way up to 40" (DN1000) which offers 8000m<sup>3</sup>/h with a total of twenty one different pipe size/m<sup>3</sup>/h options inbetween. There is a choice of lining from soft or hard rubber to teflon and a choice of electrode materials which are 316Ti, Platinum Hastelloy, Tantalum and Titanium.

Application examples:

- Utility, water and wastewater processing

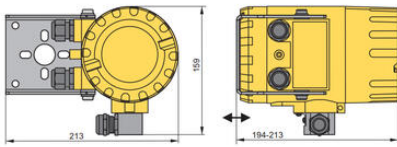
Please refer to the datasheet further down the page under Downloads.

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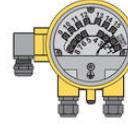
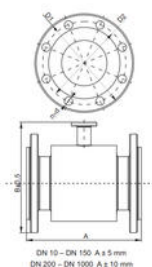
### Specifications

<b>IP Class</b>	IP67
<b>Operating Voltage AC Max</b>	260
<b>Operating Voltage AC Min</b>	90
<b>Temperature ambient from</b>	-20
<b>Temperature ambient to</b>	60
<b>Temperature range of media from</b>	-25
<b>Temperature range of media to</b>	130
<b>Trykmodstand max</b>	16
<b>Weight</b>	3,5

Dimensions of control unit



Dimensions [mm]							Weight
DN	PN	A	B	D1	D2	φ	
10		153	80	80	14	4	2,5
15	15	155	85	85	14	4	2,5
20	20	160	90	90	14	4	3
25	25	165	95	95	14	4	3,5
32	32	182	100	100	18	4	6
40	40	188	110	110	18	4	6
50	50	191	120	120	18	4	7
65	65	209	140	140	18	4	8,5
80	80	224	160	160	18	4	10
100	100	245	200	180	18	4	12
125	125	276	230	210	18	4	15
150	150	305	260	240	22	4	20
200	200	375	320	290	22	4	25
250	250	420	350	320	22	4	30
300	300	442	360	330	26	4	35
400	400	470	400	370	26	4	45
450	450	475	400	370	26	4	45
500	500	487	400	370	26	4	45
600	600	500	400	370	26	4	50
800	800	527	400	370	26	4	55
1000	1000	550	400	370	26	4	60



	Terminal	Description
Power supply	1	90...260V AC
	2	0V
Binary output 1	3	reverse polarity protection, galvanic insulation, galvanic
	4	galvanic
Pulse/frequency output	5	reverse polarity protection, galvanic insulation, galvanic
	6	galvanic
Current output 4-20 mA	7	CT
	8	active
	9	passive (optional)
Communication	10	RS 485 A
	11	RS 485 B
	12	DIN 435
Binary input (passive)	13	reverse polarity protection, galvanic insulation, galvanic
	14	galvanic
Binary output 2	15	reverse polarity protection, galvanic insulation, galvanic

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Flow value table in [m³/h]					
DN	v=0.3m/s	v=0.5m/s	v=0.7m/s	v=1.0m/s	v=1.5m/s
10	0.005	0.008	0.014	0.021	0.032
15	0.011	0.016	0.026	0.038	0.057
20	0.016	0.024	0.039	0.058	0.087
25	0.022	0.033	0.052	0.077	0.116
32	0.029	0.043	0.066	0.097	0.146
40	0.037	0.054	0.083	0.122	0.184
50	0.047	0.069	0.106	0.155	0.232
65	0.061	0.090	0.138	0.202	0.301
80	0.078	0.115	0.174	0.257	0.381
100	0.101	0.148	0.221	0.328	0.488
125	0.128	0.187	0.278	0.414	0.613
150	0.161	0.235	0.351	0.514	0.764
200	0.212	0.311	0.461	0.674	1.000
250	0.271	0.396	0.571	0.844	1.250
300	0.338	0.491	0.701	1.024	1.500
400	0.441	0.631	0.901	1.304	1.900
450	0.501	0.711	1.021	1.464	2.100
500	0.561	0.791	1.141	1.624	2.300
600	0.711	0.991	1.411	2.024	2.800
800	0.911	1.291	1.841	2.664	3.500
1000	1.161	1.641	2.361	3.414	4.300

Standard Series		
DN	Standard flow rate [m³/h]	Flow rate range [m³/h]
10	0.01	0.01 - 0.7
15	0.01	0.01 - 0.8
20	0.01	0.01 - 0.8
25	0.01	0.01 - 0.8
32	0.01	0.01 - 0.8
40	0.01	0.01 - 0.8
50	0.01	0.01 - 0.8
65	0.01	0.01 - 0.8
80	0.01	0.01 - 0.8
100	0.01	0.01 - 0.8
125	0.01	0.01 - 0.8
150	0.01	0.01 - 0.8
200	0.01	0.01 - 0.8
250	0.01	0.01 - 0.8
300	0.01	0.01 - 0.8
400	0.01	0.01 - 0.8
450	0.01	0.01 - 0.8
500	0.01	0.01 - 0.8
600	0.01	0.01 - 0.8
800	0.01	0.01 - 0.8
1000	0.01	0.01 - 0.8

Optimal flow speed v=0.3m/s