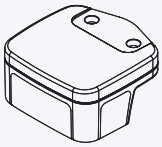
MAG-C

Electromagnetic flow meter

Alternative versions

Separated electronics



M-Bus

mod. MAG-S

Description

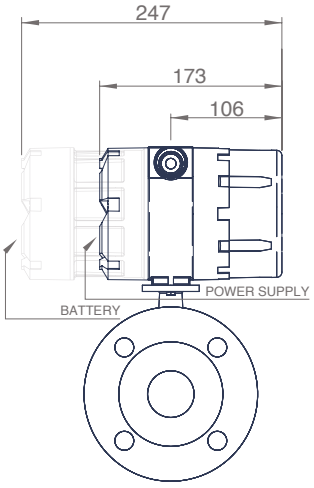
The electro-magnetic flow meter mod. MAG-C has been engineered for measuring the flow and the volume of any liquid that is electrically conductor.

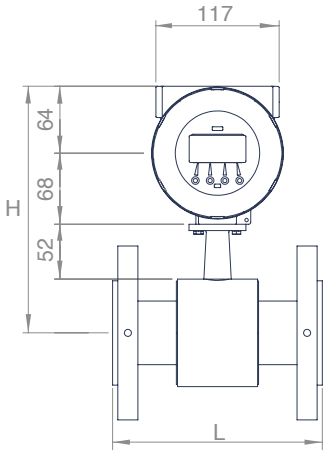
Those flow meters do not have any mechanical moving component, and therefore the liquid do not have any obstacle during its flowing, thus avoiding any potential damage caused by solids contained in the liquid.

The internal part of the measuring pipe is electrically insulated and therefore the liquid to be measured does not have any possibility to be in contact with the material by which the pipe and the flanges are made of.

This allows the possibility of measuring any type of liquid compatible with the internal cladding. The MAG-C meters enjoy a very low pressure of loss and the possibility of mounting in any position.

They are suitable for every sector of the chemical, paper, food industries and water works. Remote reading available through GSM/GPRS interface.





Technical features

Available diameters	DN15 - DN2000
Available pressure	PN10, PN16, PN25, PN40
Available flanges	UNI EN 1092/1 ANSI150 ANSI300 DIN2501 BS45404 AWWA
IP protection	IP68
Max reading error	±0,2% (powered version) ±0,5% (battery version)
Max fluid speed	10 m/s
Electrical conductivity	≥ 5 µS/cm (powered version) ≥ 20 µS/cm (battery version)
Available linings	PTFE EBANITE
Max fluid temperature	MAG-C -40°C /+80°C MAG-S PTFE -40°C /+130°C EBANITE -40°C/+80°C
Pipe material	Stainless steel AISI 304
Flanges material	Carbon steel
Electrodes material	HASTELLOY C
Electrodes number	3 (DN50), 4 (≥DN50)
Available power supply	90 ÷ 264 VAC o 24 VDC
	Interchangeable battery life 3 ÷ 6 years*
Display	LCD graphic 128 × 64 pixels retrofit
Out signals (powered version)	4-20mA, pulse, frequency, MODBUS RTU RS485 (optional: Hart protocol)
Out signals (battery version)	Pulses
External comunication interface	IrDA for PC connection, MODBUS on RS485, (GSM/GPRS)
According to standards	89/336/EEC EN61326-1:2006 2006/95/EC EN ISO 6817

*The battery life strongly depends on the data transmission frequency, set during the configuration process, and on the environmental conditions.

	Speed (m/s)			
	0,1	0,5	5	10
DN (mm)	Flow rates (m3/h)			
15	0,0636	0,318	3,18	6,36
20	0,114	0,564	5,64	11,34
25	0,1766	0,883	8,835	17,671
32	0,28	1,45	14,48	28,95
40	0,46	2,26	22,62	45,24
50	0,7	3,53	35,34	70,69
65	1,2	5,97	59,73	119,46
80	1,8	9,05	90,48	180,96
100	2,82	14,14	141,37	282,74
125	4,42	22,09	220,89	441,79
150	6,36	31,81	318,09	636,17
200	11,3	56,55	565,49	1130,97
250	17,68	88,36	883,57	1767,15
300	25,44	127,23	1272,35	2544,69
350	34,64	173,18	1731,8	3463,61
400	45,24	226,19	2261,95	4523,89
450	57,26	286,28	22862,78	5725,55
500	70,68	353,43	3534,29	7068,58
600	101,78	508,94	5089,38	10178,76
700	138,54	692,72	6927,21	13854,42
800	180,96	904,78	9047,79	18095,57
900	229,02	1145,11	11451,11	22902,21
1000	282,74	1413,72	14137,17	28274,33
1200	407,16	2035,75	20357,52	40715,04
1400	554,18	2770,88	27708,85	55417,69
1600	723,82	3619,11	36191,15	72382,29
1800	817,12	4085,64	40856,41	81712,82
2000	1130,98	5654,87	56548,67	113097,34

The speed values from 0,5 to 5 m/s are preferable

DN	15	20	25	32	40	50	65	80	100	125	150	200	250	300	350	400	450	500	600
L	200	200	200	200	200	200	200	200	250	250	300	350	450	500	550	600	450	500	600
H	223	223	220	225	227	234	240	247	264	277	288	314	343	369	385	405	443	468	525