

Electromagnetic Flow Meter



Integral Type

Description

MAGNOS magnetic flow meter, also known as electromagnetic flow meter or mag meter, is widely used because less obstruction, cost-effective and accurate measurement. Electromagnetic flow meter don't have any moving parts to wear down, reducing the need for maintenance or replacement. We offer flowmeters with a range of liners, electrodes, and sizes, which can meet various conductive liquids.

Industries

- Effluent Treatment Plant
- Sewage Treatment Plant Water Supply Scheme
- Steel & Aluminum Industries
- Chemical & Fertilizer Industries
- Dairy Industries
- Sugar Industries
- Textile Processing Industries

Applications

- Raw Water
- Potable water
- Heat Exchanger Industrial
- Cooling water
- Waste water
- Sea Water
- Pulp & Beverages Acidic & Alkaline solution
- Brine Solutions

Features

- No moving parts, no pressure loss.
- Self-diagnosis, empty pipe alarm, exciting alarm, high and low flow alarm.
- Infrared telecontrol keyboard.
- Recording time when power off, record power broken time automatically.
- Dual frequency excitation and stable zero point.
- Precision coil winding technology, makes magnetic field more uniform.
- Built-in reference electrodes, no need to connect ground ring.
- Measure forward and reverse direction flows.
- High accuracy : $\pm 0.5\%$ of reading, $\pm 0.2\%$ optional, velocity >0.5 m/s.

Technical Data

Size	DN3 – DN3000mm (1/8" – 120")
Accuracy	± 0.5% of reading at flow velocity ≥ 0.5m/s ± 0.2% optional at flow velocity ≥ 0.5m/s
Velocity	0.1 – 15m/s
Repeatability	≤ 0.17%
Structure	Compact / remote, cable length 10m standard, 100m max
Conductivity	> 5 µS/cm, demineralized water > 20 µS/cm
Protection Grade	Transmitter : IP65 standard, IP67 optional Sensor : IP65 standard, IP68 (submersible, only available for remote type)
Electrode	SS316L, Hastelloy C, Hastelloy B, Titanium, Tantalum, Platinum-iridium
Power Supply	85-250 VAC (50/60 Hz), 20-36 VDC
Power Consumption	<20W 4-20mA (load resistor 0-750 Ω) Analog Forward & reverse flow output with a frequency range of 1-5000Hz Frequency Two isolated open collector transistor (OCT) outputs for alarm signals
Protocol	Alarm
Display	RS485 Modbus RTU standard, HART, GPRS, PROFIBUS optional
Ambient Temperature	LCD Display, 128X128mm, three lines, 4 buttons
Fluid Temperature	-20°C - 60°C
Liner Material	Compact : -20°C-80°C, remote : -20°C-120°C PTFE (-20°C-150°C, DN15-DN1600) FEP (-20°C-120°C, DN3-DN1800) PFA (-20°C-160°C, DN3-DN800) Polyurethane (-10°C-60°C, DN40-DN1600) Neoprene (-10°C-80°C, DN40-DN3000) Hard Rubber (-10°C-80°C, DN40-DN3000) Ceramic (-20°C-180°C, DN15-DN200)
Flange Standard	DIN, ANSI, JIS
Sensor Material	Measuring tube : SS304 Flange & housing : carbon steel (standard), SS304 / SS316 optional
Transmitter material	Aluminium alloy with epoxy painting
Nominal Pressure	PN10 / PN16 / PN25 / PN40 10K / 20K / 30K 150# / 300# / 600# High pressure 42 Mpa / ANSI 2500# can be customized
Display	Instantaneous flow, total flow, velocity
Function	High and low alarm, empty pipe alarm, empty pipe alarm, self-diagnosis
Totalizer	Three built-in totalizers : forward flow, reverse flow and net flow
Display Unit	L/s, L/m, L/h, m³/s, m³/m, UKG, USG,
Language	English, Chinese.

Flow Range Table

Size		Flow Range & Velocity table							
mm	Inch	0.1m/s	0.2m/s	0.5m/s	1m/s	4m/s	10m/s	12m/s	15m/s
DN15	½"	0.064	0.127	0.318	0.636	2.543	6.359	7.63	9.538
DN20	¾"	0.113	0.226	0.565	1.13	4.522	11.304	13.56	16.956
DN25	1"	0.177	0.353	0.883	1.766	7.065	17.663	21.2	26.494
DN32	1 ¼"	0.289	0.579	1.447	2.894	11.575	28.938	34.73	43.407
DN40	1 ½"	0.452	0.904	2.261	4.522	18.086	45.216	54.26	67.824
DN50	2"	0.707	1.413	3.533	7.065	28.26	70.65	84.78	105.9
DN65	2 ½"	1.19	2.39	5.97	11.94	47.76	119.4	143.3	179.1
DN80	3"	1.81	3.62	9.04	18.09	72.35	180.86	217	271.3
DN100	4"	2.83	5.65	14.13	28.26	113.04	282.6	339.1	423.9
DN125	5"	4.42	8.83	22.08	44.16	176.63	441.56	529.9	662.34
DN150	6"	6.36	12.72	31.79	63.59	254.34	635.85	763	953.78
DN200	8"	11.3	22.61	56.52	113.04	452.16	1130.4	1356	1696
DN250	10"	17.66	35.33	88.31	176.53	706.5	1766.25	2120	2649
DN300	12"	25.43	50.87	127.2	254.34	1017	2543.4	3052	3815
DN350	14"	34.62	69.24	173.1	346.19	1385	3461.85	4154	5193
DN400	16"	45	90	226.1	452	1809	4522	5426	6782
DN450	18"	57	114	286.1	572	2289	5723	6867	8584
DN500	20"	71	141	353.3	707	2826	7065	8478	10598
DN600	24"	102	203	508.7	1017	4069	10174	12208	15260

Dimension

Size	Nominal Pressure (mpa)	Length (mm)	Width (mm)	Height		Weight (kg)
				Integral	Split	
DN 15	1.6	200	95	265	190	10
DN 20	1.6	200	105	275	200	12
DN 25	1.6	200	110	285	210	14
DN 40	1.6	200	150	320	230	16
DN 50	1.6	200	165	335	245	17
DN 65	1.6	200	185	355	265	25
DN 80	1.6	200	200	370	280	29
DN 100	1.6	250	235	390	300	31
DN 125	1.6	250	-	420	330	-
DN 150	1.6	300	300	450	360	41
DN 200	1.6	350	340	505	420	45
DN 250	1.6	400	405	560	480	50
DN 300	1.6	500	460	610	530	60