MAG 910
SPECIFICATION

Remote (R) version

Remote (R) version

Compact (C) version

Transmitter Specification

Mag910

Min. Media electrical conductivity	≥5 µS/cm / ≥20 µS/cm for demineralised water
Flow range	0.1 to 10 m/s
Accuracy	0.5 % (0.5 to 10 m/s) of reading value 1 % (0.1 to 0.5 m/s) of reading value
Power supply	95 to 250 VAC 50/60 Hz (+10%, -15%) 12, 24, 48 V AC/DC
Power consumption	10 VA
Outputs	• Frequency 0 to 12 kHz with programmable flowrate and function • Pulse 0 to 50 Hz with programmable volume, function and pulse width • Relay contacts 100 V / 0.5 A with programmable function • Current 4 to 20 mA with programmable flowrate and function Max 800 Ω
Input	Digital input with programmable function
Communication	RS485, RS232
Displayed values	• Flowrate (m^3/h, l/s, US.Gal/min, user) • Volume (m^3, l, US.Gal, user) • Positive, negative, total volume and auxiliary (clearable, daily) volume
Control	RS485, RS232, Keyboard and Magnetic pointer
Low flow cut-off	Programmable value
Time delay	Programmable value
Electronics Protection	Standard IP67 / Nema 5, (IP68 / Nema 6)
Weight of electronics	3 kg
Dimensions of electronics	181 x 176 mm / 124 x 230 mm
Housing material	Cast Aluminium
Display	LCD Alphanumeric 2 line
Flow Direction	Bi-directional measurement
Other features	Test of excitation coils, status of pipe line and electronic unit
Diagnostics	Diagnostic of internal temperature and power supply voltages
Real time	Real time circuit for datalogging
Datalogger	• Datalogger memory up to 15 000 values (programmable sample rate), • Registration of min. and max. flowrate including date and time
Control principle	Pulsed DC from transmitter
Hazardous Area Approval	Zone 2 planned for 2004
Measurement Filtration	Multi-mode adjustment
Real time	Clock and calender with back up
Cable terminals	2 pieces PG 11

Sensor Specification

Flange	Steel 1.0402 or higher
	Dimensions according to DIN 2501 (BS 4504), ANSI B16.5
Nominal size	10 .. 800 mm
Maximum nominal pressure	1,0 MPa - 2.5 Mpa (10,16,25 bar)
Max. media temperature	70 °C (158 °F) for Hard rubber liner 130 °C (266 °F) for PTFE liner in remote version
Ambient temperature	-20 to 60 °C (-4 to 140 °F)
Sensor Protection	Standard IP67 / Nema 5, (IP68 / Nema 6)
Liner	Hard rubber, PTFE
Electrodes	CrNi steel 1.4571, Tantalum, Hastelloy C276
Measuring tube	Stainless steel 1.4201, dimensions according to DIN 17457
Accessories options	Earthing rings for plastic and lined pipes
Hazardous Area Approval	Zone 2 (planned for 2004)
Coils	Class E
Outer Casing	Carbon steel as standard
External Coating	Lacquered finish (anticorrosive)
Conformity requirements	• LVD (safety) according to EN 61010-1, EN61010-1/A2 • PED according to directive 97/23/EC • EMC according to EN 61000 part 3-2, 3-3, EN 61000 4-3, 4-4, 4-5, 4-6, 4-8, 4-11, EN 61000 part 6-2, EN 50081-1

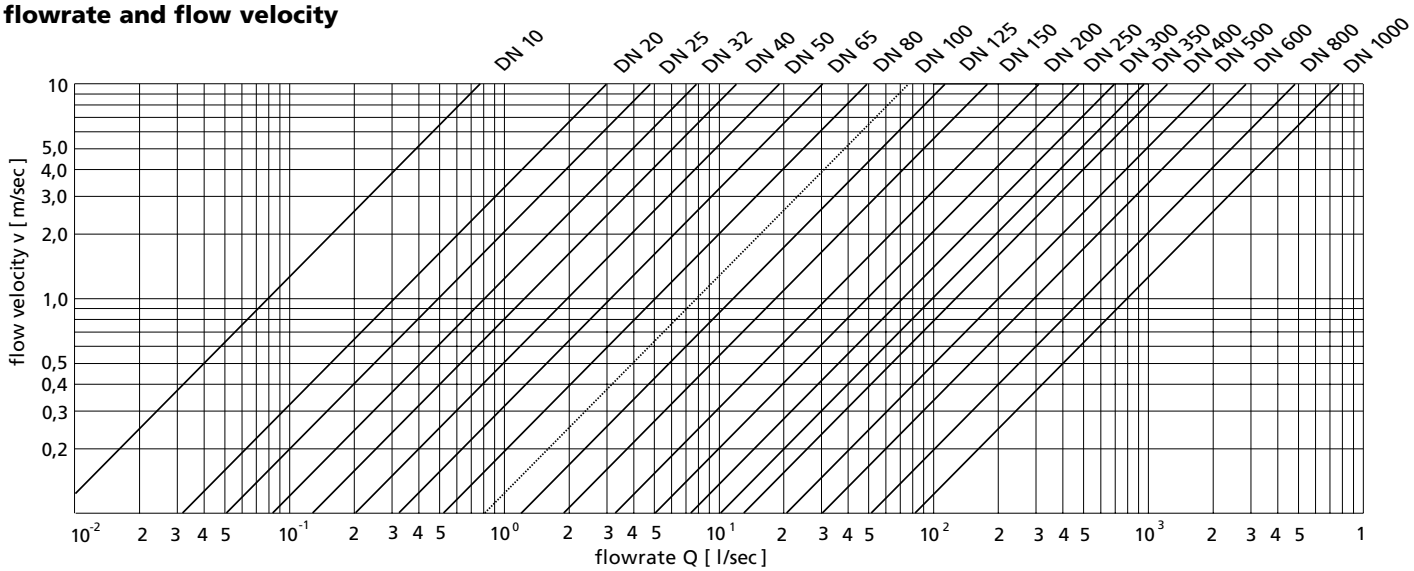
SENSOR SIZING
AND INSTALLATION
HYGIENIC AND WAFER SENSOR SPECIFICATION

Sanitary fittings
DIN 11851 (S)

Wafer (W)

Hygienic Sensor specification	
Fittings	10 mm to 100 mm 1/2 inch to 4 inch
	Sanitary fittings DIN 11 851
Option	DIN Flanges
Flow Tube material	Non Magnetic Stainless Steel
Liner	Extruded White PTFE
Electrodes	Stainless Steel
Outer Casing	Stainless Steel
Protection	Standard IP 67 / Nema 5, (IP 68 / Nema 6)
Max. Temperature, and Pressure	356 °F / 230 psig (150 degC / 16 bar)
Wafer (W)	
DN	Wafer
50 - 100	PN 10, 16

Diagram for size, flowrate and flow velocity



Recommended positions for sensor installation

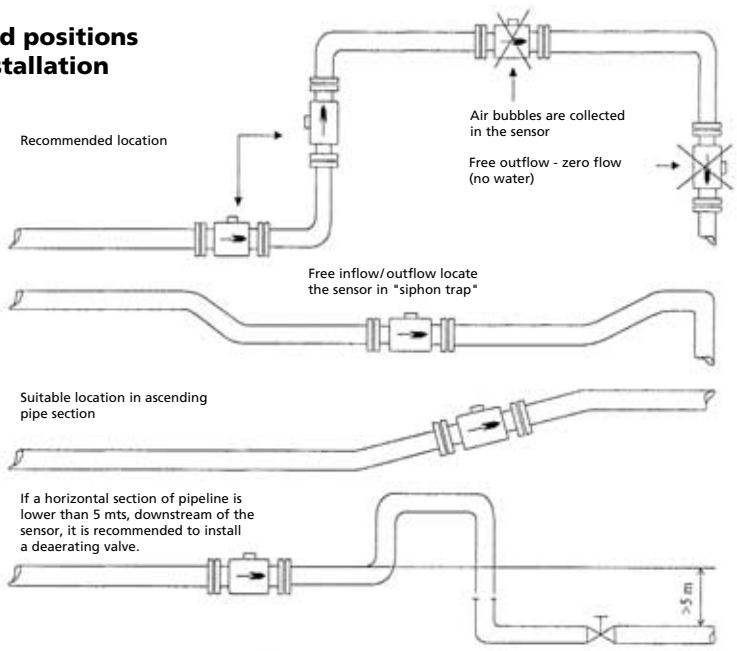


Table for 1 m/s flowrates			
DN	m^3 / h	l / min	l / s
10	0,283	4,712	0,079
20	1,131	18,85	0,314
25	1,767	29,452	0,491
32	2,895	48,255	0,804
40	4,524	75,398	1,257
50	7,069	117,81	1,964
65	11,946	199,1	3,318
80	18,096	301,59	5,027
100	28,274	471,23	7,854
125	44,179	736,31	12,272
150	63,617	1060,3	17,671
200	113,10	1885	31,42
250	176,71	2945,2	49,087
300	254,47	4241,2	70,686
350	346,36	5772,7	96,211
400	452,39	7539,8	125,66
500	706,86	11781	196,35
600	1017,9	16965	282,74
800	1809,6	30159	502,65
1000	2827,4	47124	785,4