

SAFMAG BETA METER ELECTROMAGNETIC FLOWMETER

Industries are increasingly being driven to accurately monitor and control the consumption and disposal of our scarce water resources.

The Safmag β (Beta) Meter is designed for the water, waste water and irrigation industries.

The Safmag β Meter is cost effective easy to use easy to install and provides excellent accuracy and reliable flow measurement in demanding environments. The Safmag β Meter is available with wetted parts to suit all potable water and effluent applications.

The Safmag β Meter delivers exceptional accuracy of $\pm 0.5\%$ uses the long proven **non-intrusive** principle of electro-magnetic induction has no moving parts and introduces zero head loss. Readings are independent of density, temperature, viscosity and pressure. The β signal converter has state-of-the-art electronic components and a high-speed microprocessor for accuracy and reliability.

The Safmag is a South African designed and manufactured flow meter with a long history of delivering accurate and reliable flow measurement with exceptional local product support.

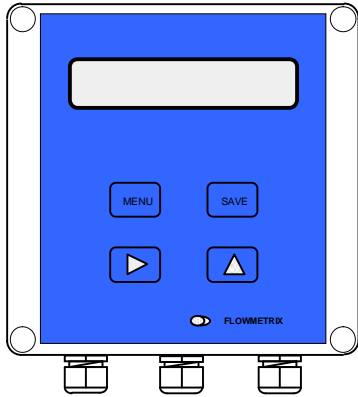
Water & Waste Water are becoming increasingly expensive. When you need to know how much how fast where and when the water went the β Meter is the natural choice. Flow total and flow rate are always available at the converter. Output signals available to remote instrumentation and telemetry include analogue and digital outputs and Modbus RTU RS485.

PRODUCT FEATURES:

Sensor size	DN10..150 W PN 16 IP67, IP68 (optional) DN150..600 MXI PN 10/16 IP67, IP68 (optional)
Transmitter	Beta remote wall mount IP67
Display	Two-line rate and total. Displayed total selectable resettable/grand total
Configuration	Supplied to customers spec or modified on site via easy to use menu structure with touch keypad
Outputs	Isolated open collector pulse x 3 24V auxiliary power supply Isolated active 4-20mA programmable
Communication	Modbus RTU RS485 (optional)
Power supply	80-240Vac 50/60Hz <5VA 12-30Vdc <5W
Accuracy	+/- 0,5% of flow rate >0.5m/s
Repeatability	+/- 0,1% of flow rate >0.5m/s
Range	0.1-10m/s
Calibration	Standard 3-Point calibration certificate
Features	Batching control with OCT output Low Cost Non-intrusive No pressure loss No moving parts No maintenance Active empty pipe detection Integral spike suppression Password and tamper protection Error displays for easy diagnostics Easy to install
Options	GSM telemetry - Installation Kit (Bolt sets & gaskets) - Grounding rings (for lined or non-conductive pipe)
Standards	ISO 6817 First Edition 1992-12-01 Magflow design, CE Certified, IEC 60068-2-6 Vibration, IEC-60068-2-27 Shock



W SENSOR DATA TABLE

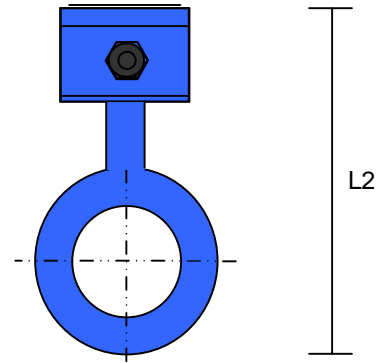
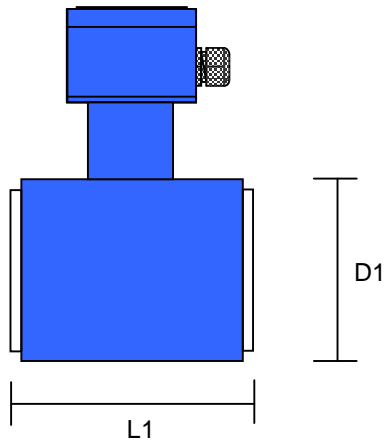


β Signal Converter 125(l) x 125(w) x 75(d)

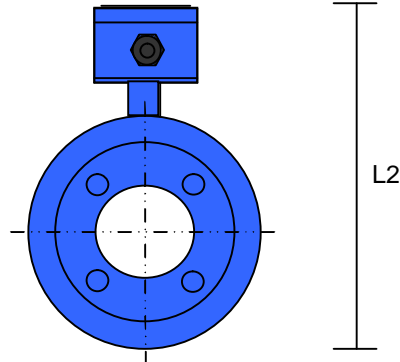
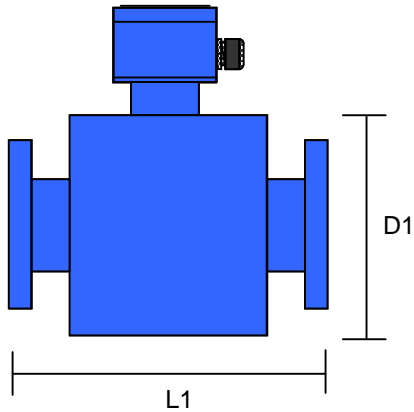
Meter Size, ID (mm)	L1 (mm)	L2 (mm)	D1* (mm)	Mass (Kg)	Operating Flowrate m3/hr	
					Min**	Max
10	80	174	64	1.4	0.14	2.8
15	80	174	64	1.4	0.32	6.4
25	80	174	64	1.4	0.88	17
40	90	195	85	1.9	2.25	45
50	100	212	102	2.5	3.5	70
80	125	237	127	3.5	9	180
100	150	270	160	5.3	14.5	280
150	200	328	218	15	32.5	640

- D1 Fits between flange bolts for SABS 1123 1600, BS4505 PN16, BS10
- T/D, ANSI 150#
- ** Minimum flowrate at which stated best accuracy applies

W SENSOR



MXI SENSOR



MXI SENSOR DATA TABLE

Meter Size, ID mm	L1 mm	L2 mm	D1 mm	Mass kg	Operating Flowrate m3/hr	
					Min**	Max
150	300	355	315	42	32	640
200	350	415	375	60	56	1130
250	450	470	430	80	88	1760
300	500	525	485	100	127	2540
350	550	585	545	140	173	3460

Meter Size, ID (mm)	L1 (mm)	L2 (mm)	D1 (mm)	Mass (Kg)	Operating Flowrate m3/hr	
					Min**	Max
400	600	645	605	190	226	4520
450	650	705	665	220	286	5720
500	700	775	735	280	354	7070
600	800	890	850	420	509	10180

** Minimum flowrate at which stated best accuracy applies

SAFMAG MODEL NO.

SAMPLE CODE SAFMAG 150 D 2 HD SS R 010 W

SIZE

010	10mm	W
015	15mm	W
025	25mm	W
040	40mm	W, MXI
050	50mm	W, MXI
080	80mm	W, MXI
100	100mm	W, MXI
150	150mm	W, MXI
200	200mm	MXI
250	250mm	MXI
300	300mm	MXI
350	350mm	MXI
400	400mm	MXI
450	450mm	MXI
500	500mm	MXI
600	600mm	MXI

SIGNAL CONVERTER

B	BETA Converter
D	DCMPU Converter

SUPPLY VOLTAGE

1	115Vac 50/60Hz
2	230Vac 50/60Hz
3	10-30Vdc
4	80-240Vac 50/60Hz

LINING MATERIAL

PT	PTFE	-10 to 80°C (W)
HD	HDPE	-10 to 60°C (W Sensors)
NR	Natural rubber	-10 to 70°C (MXI Sensors)
DA	Durathane rubber	-10 to 70°C (MXI Sensors)
OTHER	(consult factory)	

ELECTRODE MATERIAL

SS	316 Stainless steel
HC	Hastelloy C
OTHER	(consult factory)

CONVERTER MOUNTING

R	Remote wall mount
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CABLE LENGTH

010	Length in metres (max 100m)
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FLANGE PATTERN

1	SABS 1123 1000/3 - 10 bar (MXI Sensor DN150..600)
2	SABS 1123 1600/3 - 16 bar (MXI Sensor DN150..600)
5	SABS 1123 2500/3 - 25 bar (MXI Sensor DN150..600)
6	SABS 1123 4000/3 - 40 bar (MXI Sensor DN150..600)
W	Wafer format – no flanges, 16 bar maximum (W Sensor DN25..150)
OTHER	Fits between flange bolts for SABS 1123 1600, BS4505 PN16, BS10 T/D, ANSI 150# (consult factory)