

## SAFMAG BETA METER INSERTION ELECTROMAGNETIC FLOWMETER

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

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

The Safmag  $\beta$  Meter Insertion meter is cost effective easy to use easy to install and provides good accuracy and reliable flow measurement in demanding environments. The Safmag  $\beta$  Meter is available with wetted parts to suit all potable water and effluent applications.

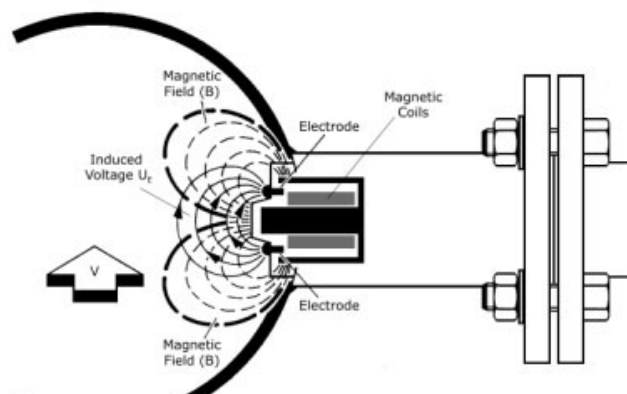
The Safmag  $\beta$  Meter delivers good accuracy of  $\pm 3\%$  uses the long proven principle of electro-magnetic induction has no moving parts and little/no head loss. Readings are independent of density, temperature, viscosity and pressure. The  $\beta$  signal converter has state-of-the-art electronic components and a high-speed microprocessor for accuracy and reliability.

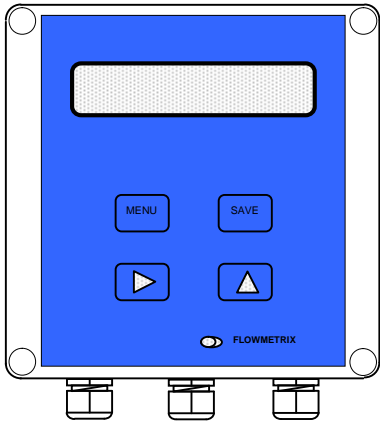
The Safmag is a **South African designed and manufactured** flow meter with a long history of delivering accurate and reliable flow measurement with exceptional local product support.

Water & Waste Water are becoming increasingly expensive. When you need to know how much how fast where and when the water went the  $\beta$  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	DN80..150 W1 PN 16 IP67, IP68 (optional) DN200..600 W2 PN 10/16 IP67, IP68 (optional) DN700..3000 W3 PN 10/16 IP67, IP68 (optional)
Transmitter Display	Beta remote wall mount IP67 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	+/- 3% of flow rate >0.5m/s
Repeatability	+/- 0,5 % 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 (1/8D insertion) Little/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
Standards	ISO 6817 First Edition 1992-12-01 Magflow design, CE Certified, IEC 60068-2-6 Vibration, IEC-60068-2-27 Shock





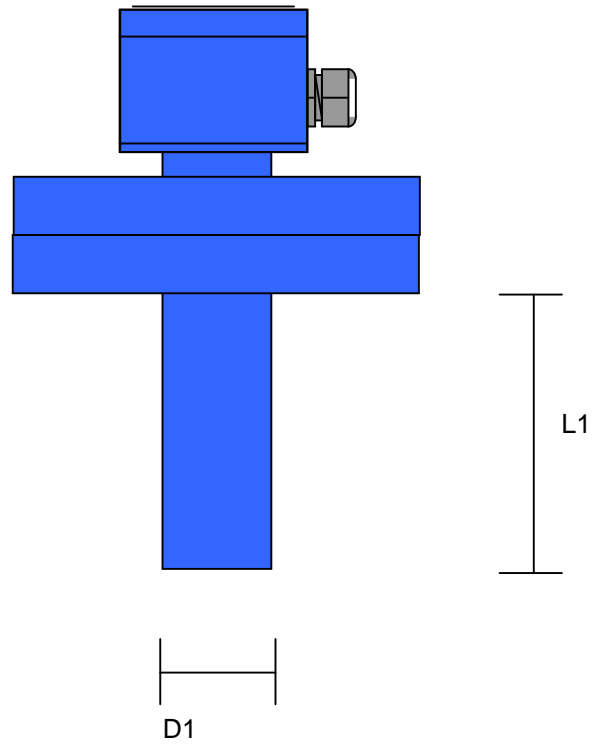
β Signal Converter 125(l) x 125(w) x 75(d)

**INSERTION SENSOR DATA TABLE**

Meter Size, ID (mm)	Model	L1 (mm)	D1* (mm)	Mass (Kg)	Operating Flowrate m/s	
					Min**	Max
80-150	W1	100	40	10	0.5	10
200-600	W2	150	40	14	0.5	10
700-3000	W3	425	40	17	0.5	10

\*\* Minimum flowrate at which stated best accuracy applies

**INSERTION SENSOR**



**SAFMAG MODEL NO.**

SAMPLE	CODE	SAFMAG	W1	B	4	HD	SS	R	010	2
<b>SIZE</b>										
W1	80-150mm	Welded Flanged								
W2	200-600mm	Welded Flanged								
W3	700-3000mm	Welded Flanged								
OTHER	(consult factory)									
<b>SIGNAL CONVERTER</b>										
B	BETA Converter									
G	DCP Converter									
I	BATMAG Converter									
<b>SUPPLY VOLTAGE</b>										
1	115Vac 50/60Hz									
2	230Vac 50/60Hz									
3	10-30Vdc									
4	80-240Vac 50/60Hz									
5	3.6Vdc									
<b>LINING MATERIAL</b>										
HD	HDPE	-10 to 60°C								
PT	PTFE	-10 to 80°C								
OTHER	(consult factory)									
<b>ELECTRODE MATERIAL</b>										
SS	316 Stainless steel									
HC	Hastelloy C									
OTHER	(consult factory)									
<b>CONVERTER MOUNTING</b>										
R	Remote wall mount									
I	Integral mount									
<b>CABLE LENGTH</b>										
010	Length in metres (max 100m)									
<b>FLANGE PATTERN</b>										
1	SABS 1123 1000/3 - 10 bar									
2	SABS 1123 1600/3 - 16 bar									
OTHER	(consult factory)									