AG90-SERIES

ELECTROMAGNETIC INSERTION FLOW METER





APPLICATIONS Irrigation Agricultural automation Reuse/Reclaim water Surface water Fertigation/Chemigation Well usage monitoring Propeller meter replacement

Features

- Direct replacement for propeller meter
- No bearings to rebuild
- Less pipe obstruction
- No moving parts
- Durable
- Easy to install
- No routine maintenance
- Pulse Output Standard
- 4 year battery life

The AG90-series battery powered, insertion electromagnetic flow meter is designed for use with conductive fluids in 4"–12" pipe. The AG90's stainless steel body allows the meter to operate in a wide range of temperatures, pressure, and corrosive or dirty environments.

The AG90 is highly suitable for difficult applications. With no moving parts, over-run conditions will not degrade the life of the AG90. It is resistant to wear from debris found in surface or ground water and there are no bearings to wear out or propellers to damage.

Rate and total units can be set via the front panel touch key pad by the user. Bidirectional flow is standard with totals available in forward, reverse, net, batch forward and batch reverse.

The AG90 is battery powered and an output cable is available for transmitting the pulse signal to remote devices. The AG90 includes a Seametrics saddle which has been designed to accommodate a wide range of pipe sizes and types while ensuring correct placement in the pipe. In addition, an optional internal data logger allows local storage of flow history.

Contact Your Supplier





AG90-SERIES ELECTROMAGNETIC INSERTION FLOW SENSOR



Specifications*

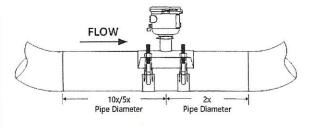
Pipe Size		4" to 12"						
Materials	Sensor Body	316 SS						
	Electrodes	Hastelloy						
	Housing	Powder-coated diecast aluminum						
	Electrode Cap	PVDF (Kynar®)						
	O-Ring	EPDM						
Temperature	Ambient Temperature	0° to 160° F (-17° to 72° C)						
	Fluid Temp.	32° to 200° F (0° to 93° C)						
Pressure		200 psi (14 bar)						
Flow Rate	4	0.5 - 4.5 m/sec (1.64 - 14.8 ft/sec) (Low flow cutoff .15 m/sec; .49 ft/sec)						
Calibration Accuracy	0.5 - 4.5 m/s (1.64-14.76 ft/sec)	+/- 2% of reading						
	0.3 - 0.5 m/sec (0.98 - 1.64 ft/sec)	+/- (2% of reading + 0.25% of full scale)						
Display	Туре	128x64 dot-matrix LCD						
	Digits	5 Digit Rate		8 Digit Total				
	Units	Rate Volume Units	Rate Time Units	Total Volume Units				
	Please Note: All meters are factory set for gallons per minute (GPM) rate and acre foot total. If other units are required, they can be set in the field.	Gallons Liters Barrels (42 gallons) Cubic Feet Cubic Meters Million Gallons ¹ Mega Liters ¹ Imperial Gallons Million Imperial Gallons ¹	Second Minute Hour Day	Gallons Gallons x 10 Gallons x 100 Gallons x 1000 Million Gallons Liters Kilo Liters Mega Liters Barrels (42 gallons) Cubic Meters	Cubic Meters x 1000 Cubic Feet Cubic Feet x 1000 Million Cubic Feet Imperial Gallons Imperial Gallons x 1000 Million Imperial Gallons Acre Inch Acre Foot Fluid Ounce			
	Bidirectional	Forward Total, Reverse Total, Net Total, Batch Forward, Batch Reverse						
Power One lithium 7.2V 'D' size battery pack, replaceable.								
Scaled Pulse	Signal	Current sinking pulse, isolated, 36 Vdc at 10 mA max						
Output	Pulse Rates	User-scalable from 0.1 to 99,999.9 volume units/pulse. Pulse width varies with output frequency, 150 pulses/sec max						
Cable	Optional Output Cable	20ft (6m) standard length polyurethane jacketed cable—for power and outputs. (Lengths up to 200' (60 m) available.)						
Conductivity		>20 microSiemens/cm						
Empty Pipe De	etection	Hardware/software, conductivity	y-based					
Regulatory		C € (EN 61326) Pending						
Environmenta	l.	IP67	1.6					

^{*} Specifications subject to change. Please consult our website for the most current data (seametrics.com).

Rate Time Unit is available in Day only.

Flow Range*

Nominal Pipe Size	4"	6"	8"	10"	12"
Low Flow Cutoff GPM	19.3	43.11	77.1	120.5	173.5
Low Flow Cutoff LPS	1.22	2.72	4.86	7.6	10.95
Min GPM	64.3	144.6	257	401.6	578.3
Min LPS	4.1	9.1	16.2	25.3	36.5
Max GPM	578	1301	2313	3614	5204
Max LPS	36.5	82.1	145.9	228	328.3

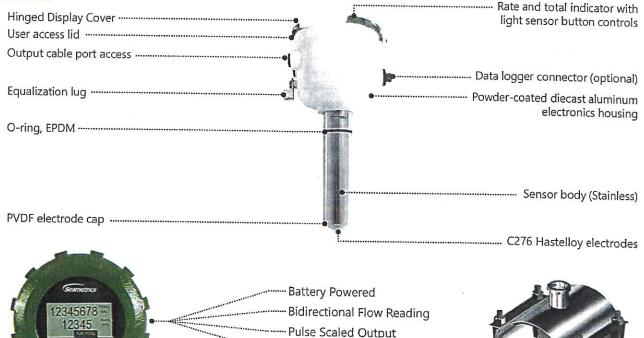


Minimum straight pipe selected during setup

Kynar is a registered trademark of Arkema, Inc.







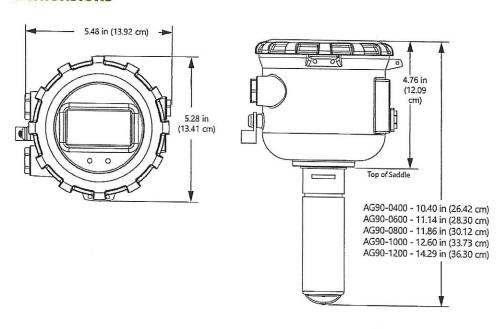
·Built-in Data Logger (Optional)

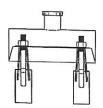
Quickly and easily change Total Volume Units, Flow Rate Units, Pulse Output Scaling, and many other settings using the two light sensor button controls on the display panel.



Saddle Included

Dimensions



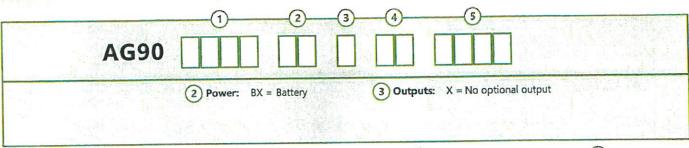


Each saddle has a range of actual pipe size O.D. that it will work with. When you order your meter, you will specify the nominal pipe size and the saddle provided will work with the following actual pipe O.D.

Saddle Size	Range		
4"	4.00"- 4.90"		
6"	6.00"- 6.90"		
8"	8.00" - 9.05"		
10"	10.10" - 11.10"		
12"	12.10" - 13.20"		



How to Order Worksheet



Size	Power	Optional Output (Comes standard with one pulse output)	Options	Output Cable (Must select one)
-0400 4" -0600 6" -0800 8" -1000 10" -1200 12"	-BX	-X (requires single cable for pulse output)	-XX None -01 Data Logger	-0000 No Cable (customer will supply) -006S 6 meter (20 ft) -015S 15 meter (50 ft) -030S 30 meter (100 ft) -045S 45 meter (150 ft) -060S 60 meter (200 ft)

Note: All meters are factory set for gallons per minute (GPM) rate and acre foot total. If other units are required, they can be programmed in the field.

Note2: Saddle included with meter

For chemical or fertilizer injection applications, the injection point must be placed downstream of the meter or far enough upstream for complete mixing to occur before the flow reaches the meter. (See fertigation technical bulletin on Seametrics website, seametrics.com.)



