

**Seametrics EX90-Series Electromagnetic Flow Meters**

EX90-Series insertion flow meters are suitable for installations with a wide range of temperature, pressure, and environments that are corrosive or with debris. EX90 meters are available 4 inch to 12 inch pipe installations, and feature an electrode resistant to fouling. Includes a battery powered programmable controller with display, and output signal to remote devices.

**FEATURES**

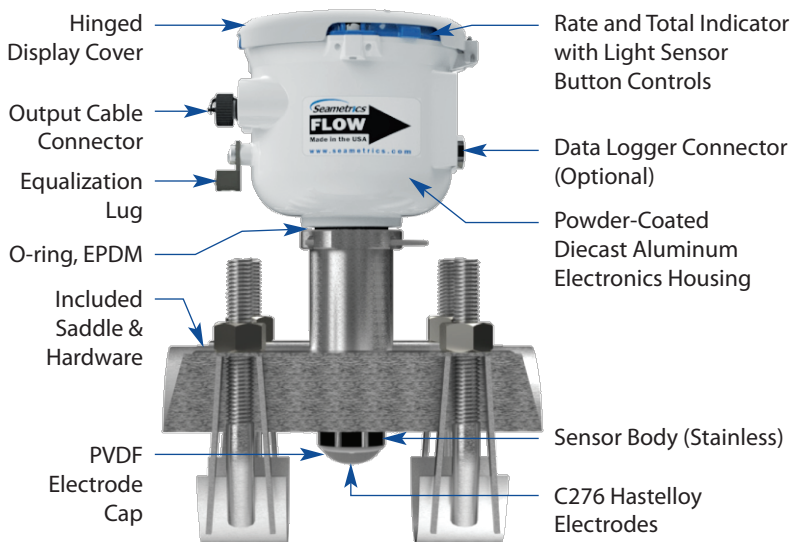
- Easy to install
- Easy to maintain
- No moving parts
- Pulse output standard
- IP67 rated
- Economical and Durable

**APPLICATIONS**

- Remediation
- Municipal water
- Water/Wastewater treatment
- Reuse/Reclaimed water
- Industrial processes
- Cooling towers
- Pump towers
- Dewatering



**COMPONENT FEATURES**



- Battery Powered
- Bidirectional Flow Reading
- Pulse Scaled Output
- 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.

**CALL GEOTECH TODAY (800) 833-7958**

**Geotech Environmental Equipment, Inc.**  
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## Seametrics EX90-Series Electromagnetic Flow Meters

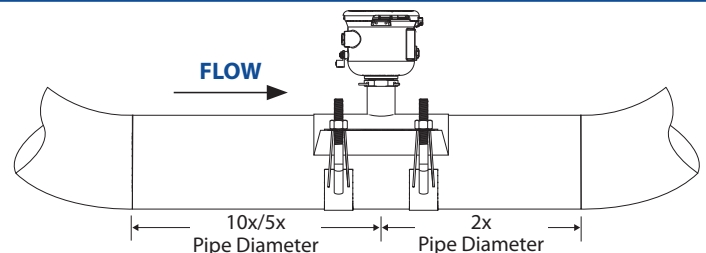
### SPECIFICATIONS\*

<b>Pipe Size</b>	4" to 12"				
<b>Materials</b>	<b>Sensor Body</b>	316 SS			
	<b>Electrodes</b>	Hastelloy			
	<b>Housing</b>	Powder-coated diecast aluminum			
	<b>Electrode Cap</b>	PVDF (Kynar®)			
	<b>O-Ring</b>	EPDM			
<b>Temperature</b>	<b>Operating</b>	10° to 140° F (-12° to 60° C)			
	<b>Storage</b>	-40° to 158°F (-40° to 70°C)			
	<b>Fluid Temp.</b>	32° to 200°F (0° to 93°C)			
<b>Pressure</b>	200 psi (14 bar)				
<b>Flow Rate</b>	0.5-4.5 m/sec. (1.64-14.8 ft./sec.) (Low flow cutoff .15 m/sec.; .49 ft./sec.)				
<b>Calibration Accuracy</b>	<b>0.5-4.5 m/s</b> (1.64-14.76 ft./sec.)	±2% of reading			
	<b>0.3-0.5 m/sec</b> (0.98-1.64 ft./sec.)	±(2% of reading + 0.25% of full scale)			
<b>Display</b>	<b>Type</b>	128 x 64 dot-matrix LCD			
	<b>Digits</b>	5 Digit Rate	8 Digit Total		
	<b>Units</b>	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 <sup>1</sup> Mega Liters <sup>1</sup> Imperial Gallons Million Imperial Gallons <sup>1</sup>	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
	<b>Bidirectional</b>	Forward Total, Reverse Total, Net Total, Batch Forward, Batch Reverse			
<b>Power</b>	One lithium 7.2 V 'D' size battery pack, replaceable.				
<b>Scaled Pulse Output</b>	<b>Signal</b>	Current sinking pulse, isolated, 36 VDC at 10 mA max.			
	<b>Pulse Rates</b>	User-scalable from 0.1 to 99,999.9 volume units/pulse. Pulse width varies with output frequency, 150 pulses/sec max.			
<b>Cable</b>	<b>Optional Output Cable</b>	20 ft. (6 m) standard length polyurethane jacketed cable — for power and outputs (Lengths up to 200'/60 m available).			
<b>Conductivity</b>	>20 microSiemens/cm				
<b>Empty Pipe Detection</b>	Hardware/software, conductivity-based				
<b>Regulatory</b>	Certified to NSF/ANSI standard 61 and NSF 372 (stainless only with EPDM o-ring. Viton pending).				
<b>Environmental</b>	IP67				

<sup>1</sup> Rate Time Unit is available in Day only.  
Kynar is a registered trademark of Arkema, Inc.

### 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

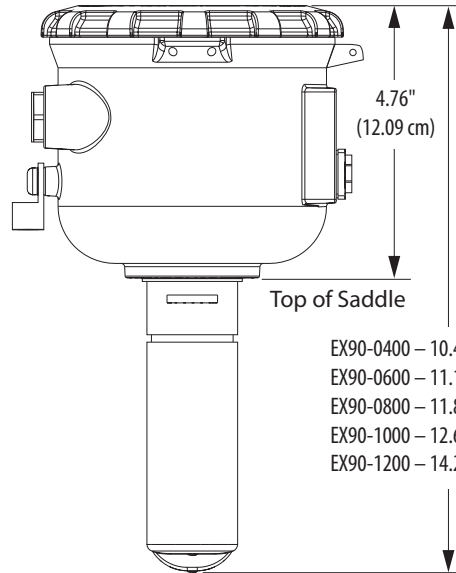
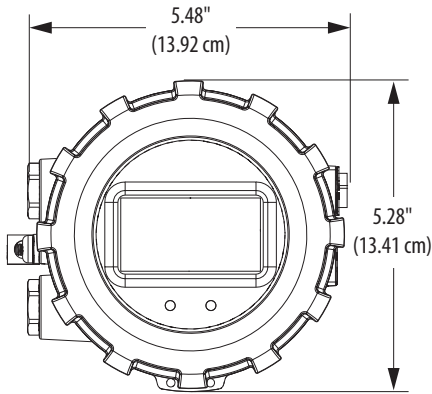


Upstream straight pipe is selected during initial setup. Upstream options are 5X or 10X the diameter and are based on the amount of straight pipe available in either new or propeller meter replacement installation. Downstream straight pipe requirement is 2X the diameter. See programming setup for details.

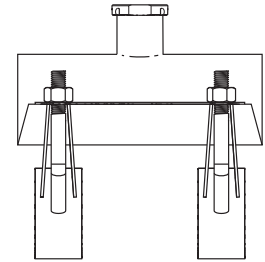
\*Specifications subject to change.

## Seametrics EX90-Series Electromagnetic Flow Meters

### DIMENSIONS



- EX90-0400 – 10.40" (26.42 cm)
- EX90-0600 – 11.14" (28.30 cm)
- EX90-0800 – 11.86" (30.12 cm)
- EX90-1000 – 12.60" (33.73 cm)
- EX90-1200 – 14.29" (36.30 cm)



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"	10.00"-11.10"
12"	12.10"-13.20"

Consult Geotech if your OD does not match.

### HOW TO ORDER WORKSHEET

EX90 ① ② ③ ④ ⑤

② Power: BX = Battery      ③ Outputs: X = No optional output

① Size	② Power	③ Optional Output (Comes standard with one pulse output)	④ Options	⑤ Power/Output Cable (Must select one)
-0400 4"	-BX	-X (requires single cable for pulse output)	-XX None	-0000 No Cable (customer will supply)
-0600 6"			-01 Data Logger	-0064 6 meter (20 ft.)
-0800 8"				-0154 15 meter (50 ft.)
-1000 10"				-0304 30 meter (100 ft.)
-1200 12"				-0454 45 meter (150 ft.)
				-0604 60 meter (200 ft.)

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

**Note 2:** Saddle included with meter.

**Note 3:** The EX90 can be externally powered by connecting DC power with the power/output cable. Batteries then serve as backup power.

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)