# Pro-M Flanged magmeter





### **Features**

- Easy setup
- Minimal straight pipe
- High Accuracy
- PTFE Liner for Great Chemical Compatibility
- High Temperature & Pressure
- No moving parts
- Integrated display
- Telemetry ready for wireless meter reading. Solutions available now by our sister company SGNALFIRE

## **Contact Your Supplier**

#### THE RIGHT METER FOR

Industrial Process Water & Wastewater Treatment Municipal Pump skids Pump stations Packaged plants Filtration systems Reclaimed water Hydraulic fracturing

The **Pro-M** is an electromagnetic flow meter with high pressure and temperature ratings. Using Faraday's Law of induction which allows for an unobstructed flow tube, it is available in 1" to 12" pipe sizes from Seametrics. The Pro-M is ideal for high pressure and temperature industrial processes. With minimal straight-pipe requirements, the Pro-M can be used in piping configurations where there is little space between the meter and an elbow.

The Pro-M series meters are rated IP65, which means it is dust tight and protected against heavy seas or powerful jets of water.

The Pro-M measurement is not affected by changes in fluid density, viscosity, temperature, pressure, or conductivity. Due to the unobstructed flow tube, the pressure drop across the Pro-M is negligible.

The Pro-M is equipped with fully digital processing, strong antiinterference ability, reliable measurement, high precision, and a wide flow range.

Both rate and total indication are standard as well as pulse and 4-20mA output. Rate and total units can be set via the front panel by the user. Bidirectional flow reading is standard as well. Additionally, the Pro-M has standard Modbus RTU digital communication signal output and built-in self-test and a self-diagnostic functions.





# **Specifications**

Pipe Sizes		1", 1.5", 2", 3", 4", 6", 8", 10", 12"						
Flanges		ANSI 150# Flange						
Pressure		270 psi (18.62 bar)						
Temperature	Operating	-4°F to 248°F (-20°C to 120°C)						
	Storage	-4°F to 158°F (-20°C to 70°C)						
Accuracy		$\pm$ 0.5% of reading (velocity > 1.97 ft/s or $\pm$ 0.01 ft/s of reading (velocity $\leq$ 1.97 ft/s)						
Low Flow Cutoff		3% of maximum flow rate						
Material Body		304 stainless steel						
	Liner	PTFE (optional: Hard rubber, polyurethane, PFA)						
	<b>Electronics Housing</b>	Sheet Steel, Polyurethane Coated						
	Electrodes	316 stainless steel (optional titanium, tantalum, Hastelloy C, Platinum-Iridium)						
Display	Туре	Aluminum converter Housing, Alpha Numeric 3-line LCD digital display with four push buttons for full fie configuration						
	Digits	5 Digit Rate		9 Digit Total				
	Units	Rate Volume Units	Rate Time Units	Total Volume Units				
	Please Note: All Pro-M meters are factory set for US GPM rate and USG total. If other units are required, they can be set in the field	US Gallons UK Gallons Liters Cubic Meters	Second Minute Hour	US Gallons UK Gallons Liters Cubic Meters				
	Bidirectional	Flow Velocity, Percentage, Forward Flow, Reverse Flow, Net total						
Alarms		FQH (High Flov	v Alarm), FQL (Low Flow Alarm), FG	SP (Empty Pipe), SYS (General Alarm Status)				
Power	DC Power	20-36Vdc, 650r	nA minimum					
Output	4-20mA Current Loop	Isolated, passive, 24Vdc, 650 Ω maximum current loop						
	Modbus RTU	Isolated, asynchronous serial RS485, Modbus® RTU protocol						
	Two Alarms	Alarm outputs for lower and higher limits Max voltage 36V Max Current 250mA						
	Pulse/Frequency	Current Sinking - Digital Pulse 1 – 100 Pulses/sec Photoelectric Isolate > 1000V 1 to 500 hz.						
Conductivity		≥ 20 µS/cm						
Empty Pipe Detection		Hardware/software, conductivity-based						
Environmental		IP65						

Modbus<sup>®</sup> is a registered trademark of Schneider Electric.

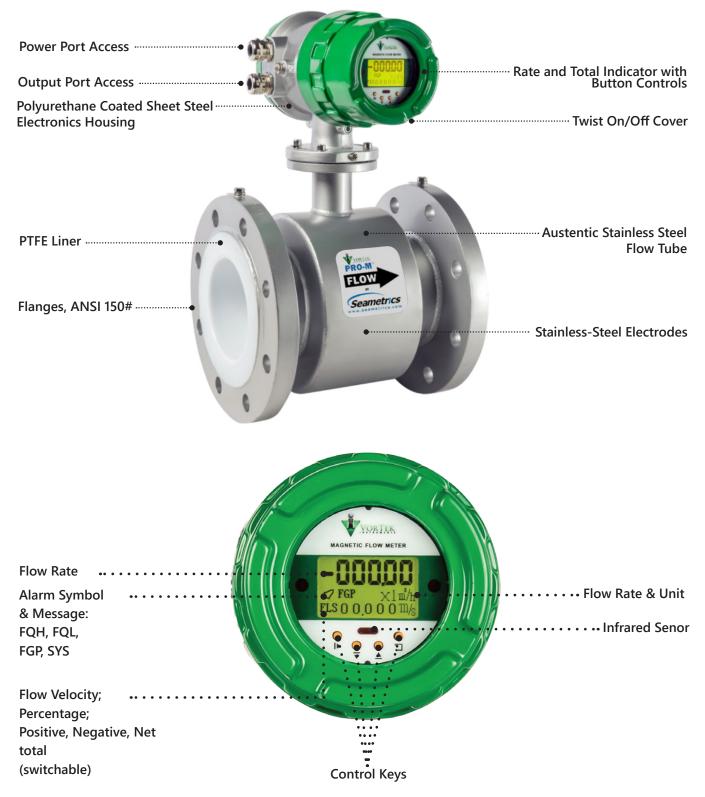
\* Specifications subject to change. Please consult our website for the most current data (www.seametrics.com).

#### **Flow Rate**

Nominal Pipe Size (Inches)	1″	1.5″	2″	3″	4″	6″	8″	10″	12″
GPM Min	2.2	4.4	8.8	22	36	88	150	234	335
GPM Мах	79	198	312	796	1,246	2,800	4,979	7,779	11,205
M3/Hr Min	.5	1	2	5	8	20	34	53	76
M3/Hr Max	18	45	71	181	283	636	1,131	1,767	2,545

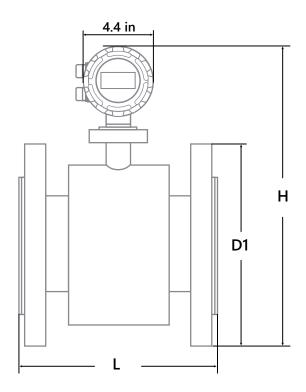


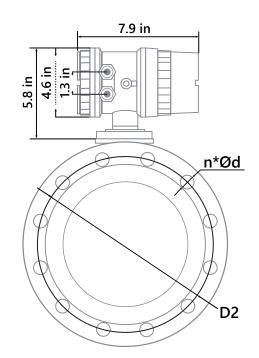
#### **Features**





## Dimensions





Pro-M	L		н		D1		D2		Bolt Holes	Shipping Weight	
Meter Size	inch	mm	inch	mm	inch	mm	inch	mm	#	lbs	Kg
1″	7.9	200	12.6	320	4.3	108	3.1	79.25	4	18	8
1.5″	7.9	200	14.0	355	5.0	127	3.9	98.6	4	22	10
2″	7.9	200	14.6	370	6	152.4	4.8	120.7	4	29	13
3″	9.8	250	16.0	405	7.5	190.5	6	152.4	4	33	15
4″	9.8	250	16.7	425	9	228.6	7.5	190.5	8	44	20
6″	11.8	300	19.3	490	11	279.4	9.5	241.3	8	84	38
8″	13.8	350	22.2	565	13.5	342.9	11.8	298.5	8	105	48
10″	17.7	450	23.6	600	16	406.4	14.3	362	12	154	70
12″	19.7	500	25.6	650	19	482.6	17	431.8	12	243	110
Flanges St	Standard ANSI 150 lb. drilling									Cable 1 lb.	