

# Pro-M

## FLANGED MAGMETER



**THE RIGHT METER FOR**  
Industrial Process  
Water & Wastewater Treatment  
Municipal  
Pump skids  
Pump stations  
Packaged plants  
Filtration systems  
Reclaimed water  
Hydraulic fracturing

### 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



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 anti-interference 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.

### Contact Your Supplier



## Specifications

<b>Pipe Sizes</b>	1", 1.5", 2", 3", 4", 6", 8", 10", 12"		
<b>Flanges</b>	ANSI 150# Flange		
<b>Pressure</b>	270 psi (18.62 bar)		
<b>Temperature</b>	<b>Operating</b>	-4°F to 248°F (-20°C to 120°C)	
	<b>Storage</b>	-4°F to 158°F (-20°C to 70°C)	
<b>Accuracy</b>	± 0.5% of reading (velocity > 1.97 ft/s or ± 0.01 ft/s of reading (velocity ≤ 1.97 ft/s)		
<b>Low Flow Cutoff</b>	3% of maximum flow rate		
<b>Material</b>	<b>Body</b>	304 stainless steel	
	<b>Liner</b>	PTFE (optional: Hard rubber, polyurethane, PFA)	
	<b>Electronics Housing</b>	Sheet Steel, Polyurethane Coated	
	<b>Electrodes</b>	316 stainless steel (optional titanium, tantalum, Hastelloy C, Platinum-Iridium)	
<b>Display</b>	<b>Type</b>	Aluminum converter Housing, Alpha Numeric 3-line LCD digital display with four push buttons for full field configuration	
	<b>Digits</b>	5 Digit Rate	9 Digit Total
	<b>Units</b>	Rate Volume Units	Rate Time Units
	<i>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</i>	US Gallons UK Gallons Liters Cubic Meters	Second Minute Hour
	<b>Bidirectional</b>	Flow Velocity, Percentage, Forward Flow, Reverse Flow, Net total	
<b>Alarms</b>	FQH (High Flow Alarm), FQL (Low Flow Alarm), FGP (Empty Pipe), SYS (General Alarm Status)		
<b>Power</b>	<b>DC Power</b>	20-36Vdc, 650mA minimum	
<b>Output</b>	<b>4-20mA Current Loop</b>	Isolated, passive, 24Vdc, 650 Ω maximum current loop	
	<b>Modbus RTU</b>	Isolated, asynchronous serial RS485, Modbus® RTU protocol	
	<b>Two Alarms</b>	Alarm outputs for lower and higher limits Max voltage 36V Max Current 250mA	
	<b>Pulse/Frequency</b>	Current Sinking - Digital Pulse 1 – 100 Pulses/sec Photoelectric Isolate > 1000V 1 to 5000 hz.	
<b>Conductivity</b>	≥ 20 μS/cm		
<b>Empty Pipe Detection</b>	Hardware/software, conductivity-based		
<b>Environmental</b>	IP65		

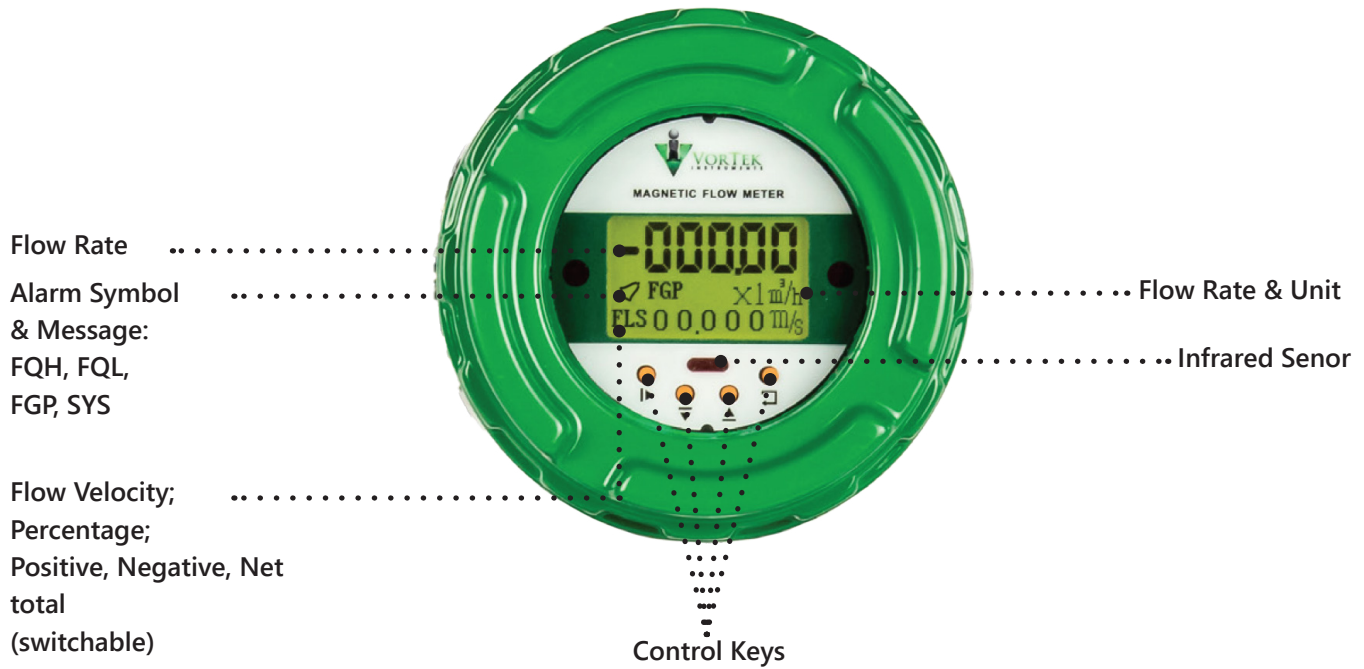
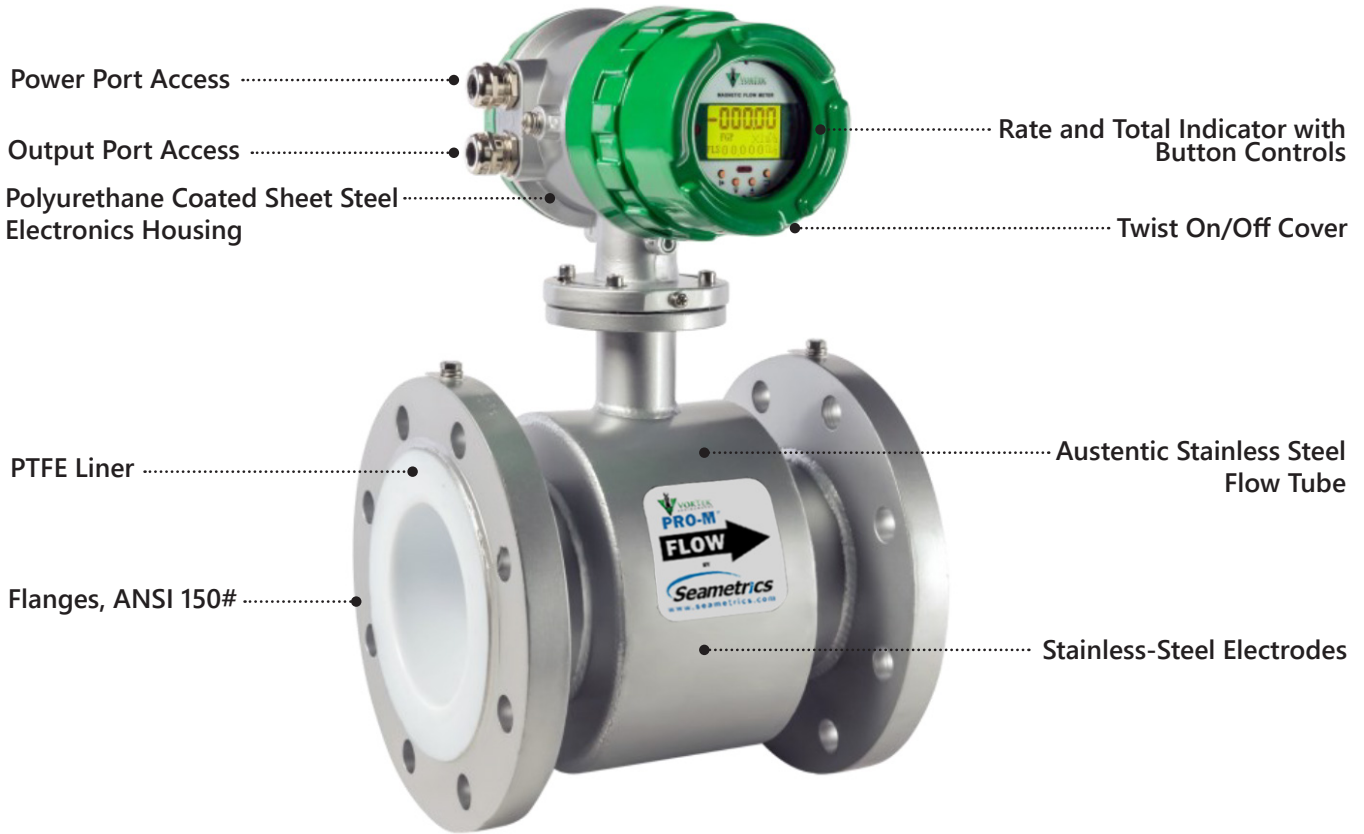
Modbus® is a registered trademark of Schneider Electric.

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

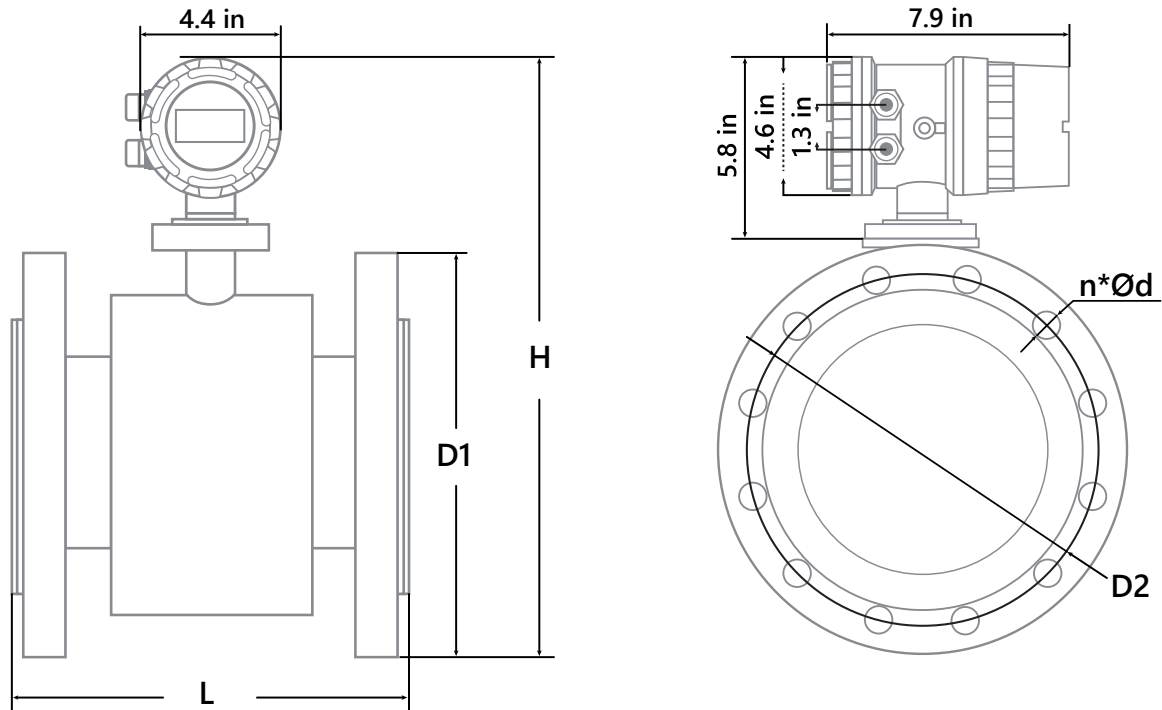
## Flow Rate

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

**Features**



## Dimensions



Pro-M Meter Size	L		H		D1		D2		Bolt Holes #	Shipping Weight		
	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	
<b>Flanges</b>	Standard ANSI 150 lb. drilling										Cable 1 lb.	