



### FEATURES

- No moving parts
- Requires no straight pipe
- Pulse and/or 4-20 mA output
- Chemical and corrosion resistant
- Insensitive to fluid density and fluid viscosity changes

### APPLICATIONS

- Chemical injection
- Corrosive materials
- Low flow applications
- Pulsating flows (e.g., metering pump)



### GENERAL INFORMATION

The **PE102 magmeter** is designed for low-flow chemical injection or difficult-to-meter applications with pulsating metering pumps in 3/4" and 1/2" pipe/tube. (Additional sizes are under development.) The housing is made of sturdy splash-proof HDPE plastic.

With no moving parts, the PE102 can handle fluids containing particulate matter without clogging or jamming, keeping maintenance at a minimum. With no metallic parts (100% PVDF body and PVDF carbon fiber-filled electrodes), the meter is corrosion-resistant and compatible with a wide range of chemicals. Accuracy is maintained with conductive fluids (>20 microSiemens) of varying viscosities and densities.

The PE meter is compact enough to fit most pump/injection systems. With zero straight pipe required after an elbow, it can be easily mounted in tight spaces. The mounting bracket adds stability.

The PE meter has optocoupled current sinking or current sourcing pulse output that can be connected to the SeaMetrics FT420 rate/total display or FT520 batch processor, as well as a 4-20 mA loop for powering analog devices. Outputs and power are provided through a cable with 8-pin female circular connector. Order the required cable/connector separately from SeaMetrics (see How to Order, back page) or from another vendor (one possibility is [www.turck-usa.com](http://www.turck-usa.com), part #RKC 8T-6-S618).

### FEATURES

Sturdy HDPE housing

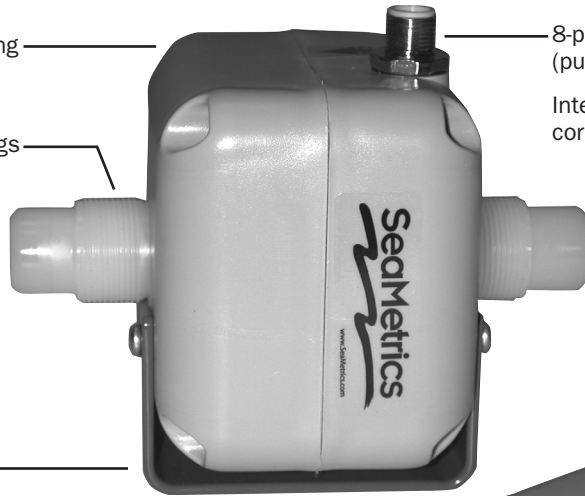
3/4" FlareTek fittings are standard

Mounting bracket

8-pin circular bulkhead connector (purchase 6 meter cable/connector separately)

Internals made of chemical and corrosion-resistant PVDF

Threaded NPT adapters can be purchased separately (available in PVC or PVDF)



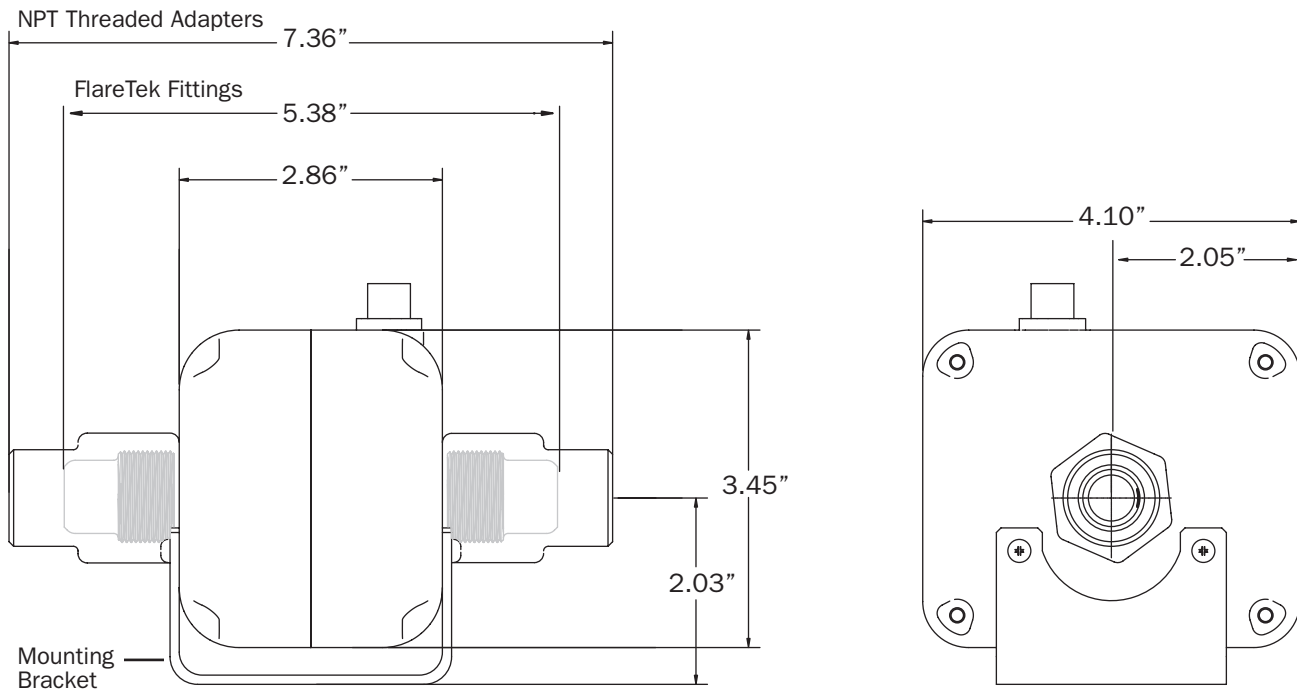
### SPECIFICATIONS \*

|                             |   |                              |
|-----------------------------|---|------------------------------|
| <b>Pipe Size</b>            | 3/4" & 1/2" ** (Additional sizes are under development)   |                              |
| <b>Fittings</b>             | 3/4" FlareTek fittings standard; NPT threaded adapters also available   |                              |
| <b>Materials</b>            | <b>Body</b>   | PVDF                         |
|                             | <b>Electrodes</b>   | PVDF carbon fiber-filled     |
|                             | <b>Ground</b>   | PVDF carbon fiber-filled     |
|                             | <b>Housing</b>  | HDPE                         |
|                             | <b>Fittings (FlareTek)</b>  | PVDF                         |
|                             | <b>Adapters (NPT)</b>   | PVC or PVDF                  |
|                             | <b>O-Rings (for NPT)</b>  | EPDM or Viton                |
| <b>Temperature</b>          | <b>Ambient</b>  | 0° to 130° F (-18° to 54° C) |
|                             | <b>Fluid</b>  | 32° to 200° F (0° to 93° C)  |
| <b>Pressure</b>             | 150 psi   |                              |
| <b>Conductivity</b>         | >20 microSiemens  |                              |
| <b>Flow Range</b>           | 20 GPM Max. (0.2 GPM Cutoff) (Additional flow ranges are under development)   |                              |
| <b>Accuracy</b>             | +/- 1% + 0.005 GPM of reading across rated range  |                              |
| <b>Output Signal</b>        | Optocoupled current sinking or current sourcing pulse output: 30 Vdc, 5 mA max<br>4-20 mA current loop, 500 P/L; 7 Vdc plus load voltage drop min; 50 Vdc max |                              |
| <b>Power</b>                | 10-15 Vdc, 150 mA (linear power supply recommended)   |                              |
| <b>Empty Pipe Detection</b> | Hardware/software, conductivity-based   |                              |
| <b>Environmental</b>        | NEMA 4X standard; IP 66 Splashproof standard  |                              |

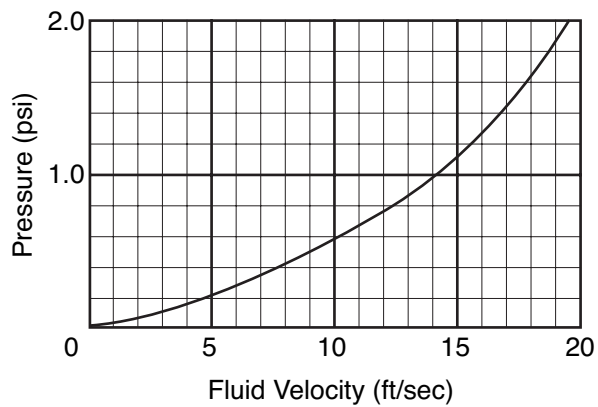
\*Specifications subject to change • Please consult our website for current data ([www.seametrics.com](http://www.seametrics.com)).

\*\*Requires adaptors

## DIMENSIONS



## PRESSURE DROP CURVE



PE102 with 3/4" adapters.  
Actual curve dependant on pipe size/fittings

## HOW TO ORDER

|   |   |   |   |
|---|---|---|---|
| <b>MODEL</b>  | <b>SIZE</b>                                     | <b>CABLE</b>  | <b>FITTINGS</b>   |
| PE102   | 3/4" = -075                                     | Order cable separately from Accessories below or use an outside vendor.       | Meter comes standard with FlareTek fittings. NPT Adapters can be added. See below to choose Accessories <u>required</u> with your fitting choice. |
| PE102   | -075  |   |   |
| <i>Additional sizes under development</i>                         |   |   |   |
| <b>ACCESSORIES</b>  |   |   |   |
| Rate and Total Indicator = <b>FT420</b>                           | <b>Required with FlareTek fittings:</b>         | <b>Required with NPT adapters (must choose adapter PLUS O-ring material):</b> |   |
| Batch Flow Processor = <b>FT520</b>                               | 3/4" FlareTek tubing nut (2 req) = <b>32128</b> | 3/4" MNPT adapter, PVC (2 req) = <b>32050</b>                                 |   |
| 6 meter cable with 8-pin female circular connector = <b>32061</b> | Flare tool, 3/4" fitting = <b>32129</b>         | 3/4" MNPT adapter, PVDF (2 req) = <b>32064</b>                                |   |
|   |   | 1/2" MNPT adapter, PVC (2 req) = <b>32315</b>                                 |   |
|   |   | 1/2" MNPT adapter, PVDF (2 req) = <b>32314</b>                                |   |
|   |   | O-ring, EPDM (2 required) = <b>31462</b>                                      |   |
|   |   | O-ring, Viton (2 required) = <b>32135</b>                                     |   |

## CONTACT YOUR SUPPLIER