



### APPLICATIONS

- Conductive fluids
- Small pipe applications (1"-12")
- Industrial processes
- Chemical metering pumps
- Fertigation

### FEATURES

- No moving parts
- Economical
- Durable
- Easy to install
- Easy to maintain



### GENERAL INFORMATION

**EX800-Series** insertion electromagnetic flowmeters are designed for use with conductive liquids in 1 to 12" pipe. A choice of materials (stainless steel, brass, and PVC) allows the meter to adapt to a range of temperature, pressure, and corrosive environments.

The EX800 is highly suitable for difficult applications with changing viscosities and pulsating flows, such as air-driven diaphragm pumps. With no moving parts, these meters can be used in "dirty water" applications where debris would foul a mechanical meter. Like all magmeters, when used in chemical injection applications, these meters should be installed upstream of the chemical line (or far enough downstream to allow complete mixing of fluids before the meter).

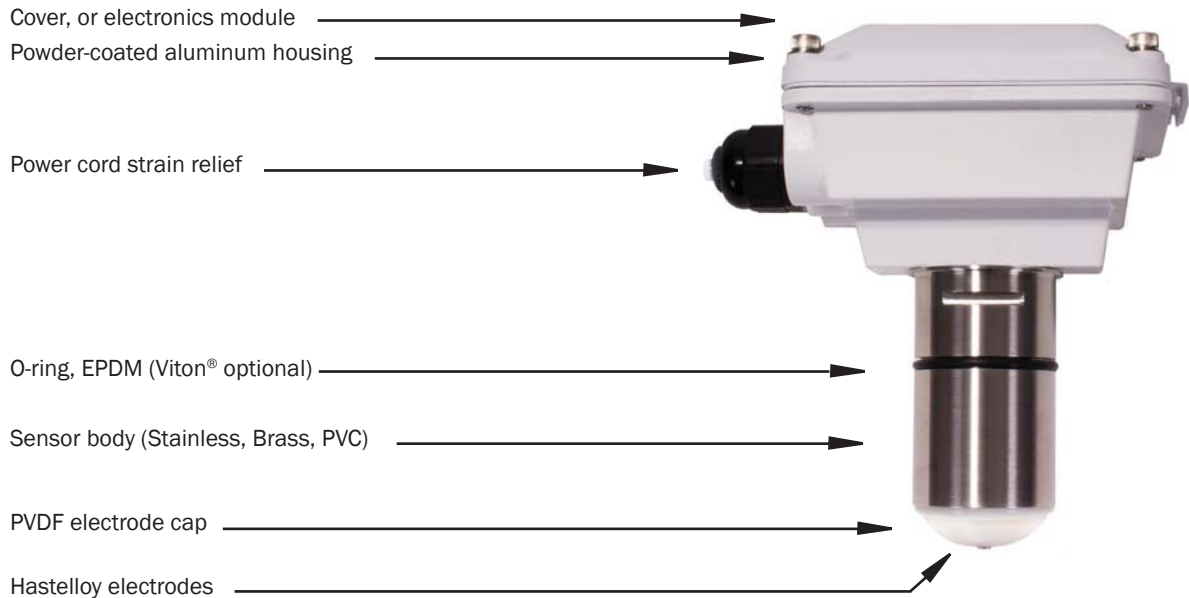
Designed for modularity and versatility, the EX800-Series has a current-sinking pulse output that can be combined with the

appropriate transmitter or indicator for the application. For basic rate/total and pulse output, the FT430 is best. For analog output and display of rate and total, the FT440 can be used. Blind analog output is provided by the A055. The PD10 can be used to divide the pulse for pacing chemical metering pumps. Electronic modules can be wall- or meter- mounted. If the EX800 meter is used with a programmable controller, the output signal can be fed direct, with no other conditioning required.

EX800-Series fixed depth insertion meters require special fittings. Factory installation in the fitting ensures correct depth placement in the pipe. The EX800-Series meter can be ordered in a full power model when a source of electricity is available, or in a low power model that can run on an external battery with solar panel.

Reverse flow output and immersibility are optional.

## FEATURES

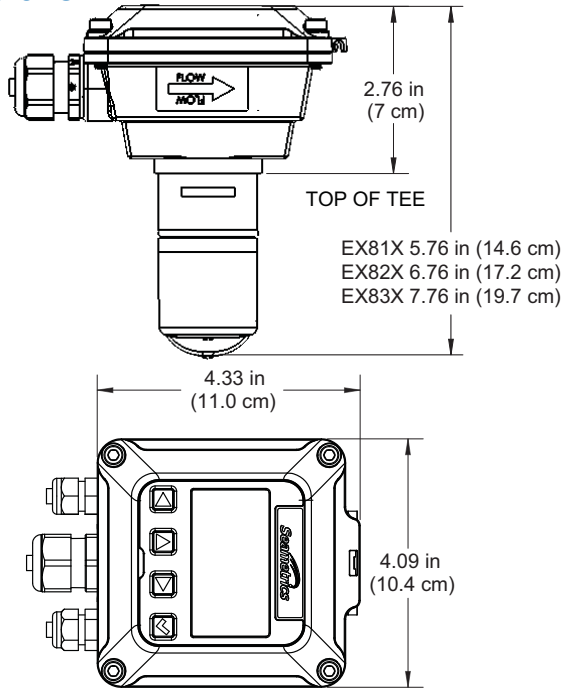


## SPECIFICATIONS\*

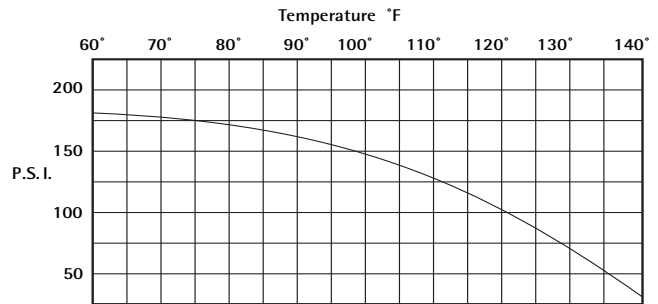
<b>Pipe Size</b>		1" to 12"
<b>Materials</b>	<b>Mechanical</b>	316 SS/Brass/PVC
	<b>Electrodes</b>	Hastelloy
	<b>Housing</b>	Cast powder-coated aluminum
	<b>Electrode Cap</b>	PVDF (Kynar®)
	<b>O-Ring</b>	EPDM standard (Viton® optional)
<b>Power</b>	<b>Full Power</b>	12 - 25 Vdc, 250 mA
	<b>Low Power</b>	12 - 25 Vdc, 40 mA average with 250 mA peaks
<b>Flow Rate</b>		0.28 - 20 ft/sec (0.08 - 6.09 m/sec)
<b>Temperature</b>	<b>Ambient Temp</b>	0° to 160° F (-17° to 72° C)
	<b>Fluid Temp : Brass/SS</b>	32° to 200° F (0° to 93° C)
	<b>Fluid Temp: PVC</b>	32° to 130° F (0° to 55° C) @ 0 psi
<b>Pressure</b>	<b>Brass/SS</b>	200 psi (14 bar)
	<b>PVC</b>	150 psi (10 bar) @ 75° F (24° C)
<b>Minimum Conductivity</b>		20 microSiemens/cm
<b>Calibration Accuracy</b>		+/- 1% of full scale
<b>Output</b>		Square wave pulse, opto isolated, 550 Hz @ 20 ft/sec
<b>Empty Pipe Detection</b>		Software, defaults to zero flow
<b>Regulatory</b>		CE (Standard power only)

\*Specifications subject to change • Please consult our website for current data ([www.seametrics.com](http://www.seametrics.com)).  
Kynar is a registered trademark of Arkema, Inc., Viton is a registered trademark of DuPont Corporation.

## DIMENSIONS



## PRESSURE VS. TEMPERATURE (PVC)



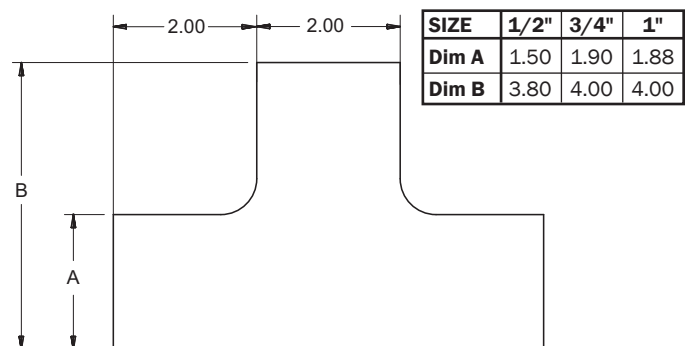
## FLOW RANGE

Nominal Pipe Size	1"	1½"	2"	3"	4"	6"	8"	10"	12"
Min GPM	.69	1.5	2.7	6.2	11	25	43	68	99
Min LPM	2.61	5.68	10.22	23.47	41.64	94.64	162.77	257.41	374.76
Max GPM	49	110	196	440	783	1760	3130	4900	7050
Max LPM	185.49	416.40	741.94	1665.58	2963.98	6662.33	11848.34	18548.52	26687.15

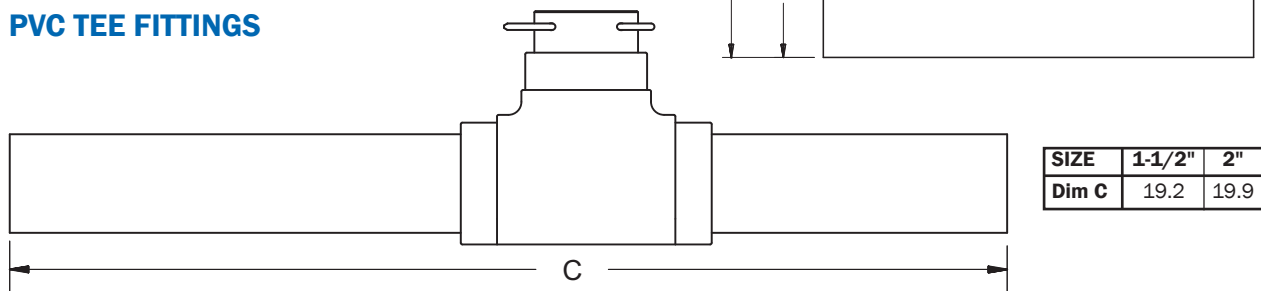
## EX800-COMPATIBLE FITTINGS

	Tee	Saddle	Weld/Braze	Sweat Tee
Bronze	1-4"	3-4"	3-12"	1-4"
PVC	1-2"	3-8"	x	x
Stainless Steel	1-2"	x	3-12"	x
Carbon Steel	1-2"	x	3-12"	x
Ductile Iron	x	3-12"	x	x

## PVC BLOCK TEE FITTING



## PVC TEE FITTINGS



### HOW TO ORDER

Sensor Only	Description	Size	Sensor Material	Options
	Sensor Only.	1" - 3" = <b>EX810</b> 4" - 10" = <b>EX820</b> 12" = <b>EX830</b>	Brass = <b>B</b> 316 Stainless Steel = <b>S</b> PVC = <b>P</b>	Reverse Flow Output = <b>-15</b> *Immersible = <b>-40</b> Low Power Option = <b>-50</b> Viton® O-Ring = <b>-125</b>
A055 Mounted on Sensor	Description	Size	Sensor Material	Options
	Blind 4-20 mA analog transmitter (A055) mounted on the sensor.	1" - 3" = <b>EX812</b> 4" - 10" = <b>EX822</b> 12" = <b>EX832</b>	Brass = <b>B</b> 316 Stainless Steel = <b>S</b> PVC = <b>P</b>	LMI Pump Connector = <b>-06</b> Reverse Flow Output = <b>-15</b> Low Power Option = <b>-50</b> Roytronic® Series-A Pump 5-pin Connector = <b>-106</b> Viton® O-Ring = <b>-125</b>
FT430 Mounted on Sensor	Description	Size	Sensor Material	Options
	Rate & total indicator with pulse, externally powered (FT430) mounted on the sensor.	1" - 3" = <b>EX813</b> 4" - 10" = <b>EX823</b> 12" = <b>EX833</b>	Brass = <b>B</b> 316 Stainless Steel = <b>S</b> PVC = <b>P</b>	Reverse Flow Output = <b>-15</b> Tamper Evident Kit = <b>-32</b> Low Power Option = <b>-50</b> Non-resettable Total = <b>-64</b> Dual Relay Output = <b>-98</b> Viton® O-Ring = <b>-125</b> Hinged Display Cover = <b>-126</b>
FT440 Mounted on Sensor	Description	Size	Sensor Material	Options
	Rate & total indicator with pulse & 4-20 mA output, loop powered (FT440) mounted on the sensor.	1" - 3" = <b>EX815</b> 4" - 10" = <b>EX825</b> 12" = <b>EX835</b>	Brass = <b>B</b> 316 Stainless Steel = <b>S</b> PVC = <b>P</b>	Reverse Flow Output = <b>-15</b> Tamper Evident Kit = <b>-32</b> Low Power Option = <b>-50</b> Non-resettable Total = <b>-64</b> Dual Relay Output = <b>-98</b> Viton® O-Ring = <b>-125</b> Hinged Display Cover = <b>-126</b>
DL76 Mounted on Sensor	Description	Size	Sensor Material	Options
	Data logger (DL76) mounted on the sensor.	1" - 3" = <b>EX816</b> 4" - 10" = <b>EX826</b> 12" = <b>EX836</b>	Brass = <b>B</b> 316 Stainless Steel = <b>S</b> PVC = <b>P</b>	Reverse Flow Output = <b>-15</b> Tamper Evident Kit = <b>-32</b> Low Power Option = <b>-50</b> Viton® O-Ring = <b>-125</b>
FT450 Mounted on Sensor	Description	Size	Sensor Material	Options
	Rate & total indicator with pulse, battery powered (FT450) mounted on the sensor.	1" - 3" = <b>EX817</b> 4" - 10" = <b>EX827</b> 12" = <b>EX837</b>	Brass = <b>B</b> 316 Stainless Steel = <b>S</b> PVC = <b>P</b>	Reverse Flow Output = <b>-15</b> Tamper Evident Kit = <b>-32</b> Low Power Option = <b>-50</b> Non-resettable Total = <b>-64</b> Dual Relay Output = <b>-98</b> Viton® O-Ring = <b>-125</b> Hinged Display Cover = <b>-126</b>
PD10 Mounted on Sensor	Description	Size	Sensor Material	Options
	Pulse Divider (PD10) mounted on the sensor.	1" - 3" = <b>EX818</b> 4" - 10" = <b>EX828</b> 12" = <b>EX838</b>	Brass = <b>B</b> 316 Stainless Steel = <b>S</b> PVC = <b>P</b>	LMI Pump Connector = <b>-06</b> Reverse Flow Output = <b>-15</b> 10 Ft. Cable for LMI Connector = <b>-37</b> Low Power Option = <b>-50</b> Roytronic® Series-A Pump / 5-pin Connector = <b>-106</b> Viton® O-Ring = <b>-125</b>

\* Immersible to maximum of 3 ft (1m), up to 2 weeks  
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### CONTACT YOUR SUPPLIER