

EX800-SERIES Insertion Electromagnetic Flow Sensor



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" 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 analog output and display of rate and total, an FT420 can be used. Blind analog output is provided by the AO55. The PD10 can be used to divide the pulse for pacing chemical metering pumps and the DL76 (data logger) is also compatible. 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.

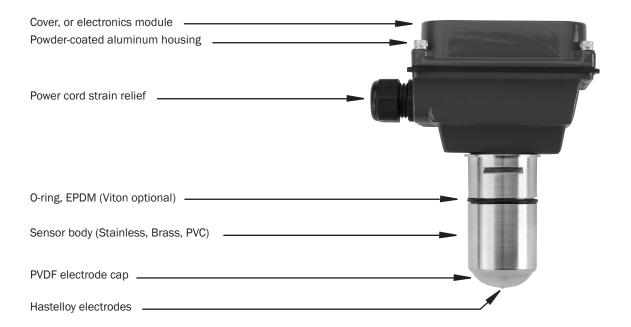
EX800-Series fixed depth insertion meters require special fittings. Factory installation in the fitting ensures correct depth placement in the pipe. The EX800-Series meter can be ordered in a full power model when a source of electricity is available, or in a low power model that can run on an external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

Reverse flow output and immersibility are optional.



EX800-SERIES Insertion Electromagnetic Flow Sensor

FEATURES



SPECIFICATIONS*

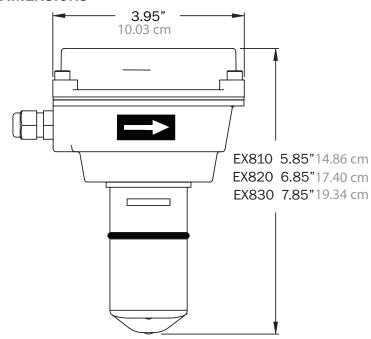
Pipe Size		1" to 12"		
Materials Mechanical Electrodes		316 SS/Brass/PVC Hastelloy		
	Electrode Cap	PVDF (Kynar)		
	0-Ring	EPDM standard (Viton optional)		
Power Full Power		12 - 25 Vdc, 250 mA		
	Low Power	12 - 25 Vdc, 40 mA average with 250 mA peaks		
Flow Rate		0.28 - 20 ft/sec (0.08 - 6.09 m/sec)		
Temperature	Ambient Temp	0° to 160° F (-17° to 72° C)		
	Fluid Temp : Brass/SS	32° to 200° F (0° to 93° C)		
	Fluid Temp: PVC	32° to 130° F (0° to 55° C) @ 0 psi		
Pressure Brass/SS		200 psi (13.8 bar)		
	PVC	150 psi (10 bar) @ 75° F		
Minimum Conductivity		20 microSiemens/cm		
Calibration Accuracy		+/- 1% of full scale		
Output		Square wave pulse, opto isolated, 550 Hz @ 20 ft/sec		
Empty Pipe Detection		Software, defaults to zero flow		

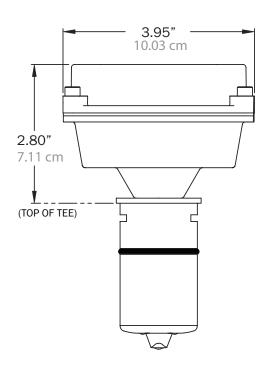
^{*}Specifications subject to change • Please consult our website for current data (www.seametrics.com).



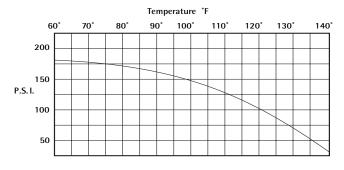
EX800-SERIES Seametrics Insertion Electromagnetic Flow Sensor

DIMENSIONS

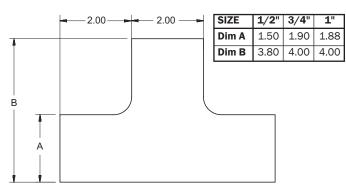


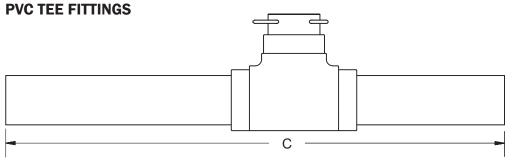


PRESSURE VS. TEMPERATURE (PVC)



PVC BLOCK TEE FITTING





SIZE	1-1/2"	2"	
Dim C	19.2	19.9	

FLOW RANGE

Nominal Pipe Size	1"	1 ½"	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



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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"	х	3-12"	х
Carbon Steel	1-2"	х	3-12"	х
Ductile Iron	х	3-12"	x	x

HOW TO ORDER

		Sensor Only				
Description	Size	Sensor Material	Options			
Sensor Only.	1 ^{1/2} " - 3" = EX810 4" - 8" = EX820 12" = EX830	Brass = B 316 Stainless Steel = S PVC = P	Reverse Flow Output = -15 *Immersibility = -40 Low Power Option = -50 Viton® O-Ring = -125			
FT420 Mounted on Sensor						
Description	Size	Sensor Material	Options			
Rate & total indicator with pulse & 4-20 mA output, externally powered (FT420) mounted on the sensor.	1"" - 3" = EX811 4" - 8" = EX821 12" = EX831	Brass = B 316 Stainless Steel = S PVC = P	Reverse Flow Output = -15 Tamper Evident Kit = -32 "Immersibility = -40 Low Power Option = -50 Mom-resettable Total = -64 Dual Relay Output = -98 Viton® O-Ring = -125 Hinged Display Cover= -126			
A055 Mounted on Sensor						
Description	Size	Sensor Material	Options			
Blind 4-20 mA analog transmitter (A055) mounted on the sensor.	1 ^{1/5} " - 3" = EX812 4" - 8" = EX822 12" = EX832	Brass = B 316 Stainless Steel = S PVC = P	LMI Pump Connector = -06 Reverse Flow Output = -15 *Immersibility = -40 Low Power Option = -50 Roytronics® Series-A Pump 5-pin Connector = -106 Viton® O-Ring = -125			
		DL76 Mounted on Sensor				
Description	Size	Sensor Material	Options			
Data logger (DL76) mounted on the sensor.	1"" - 3" = EX816 4" - 8" = EX826 12" = EX836	Brass = B 316 Stainless Steel = S PVC = P	Reverse Flow Output = -15 Tamper Evident Kit = -32 *Immersibility = -40 Low Power Option = -50 Viton® O-Ring = -125			
PD10 Mounted on Sensor						
Description	Size	Sensor Material	Options			
Pulse Divider (PD10) mounted on the sensor.	1 ¹⁵ " - 3" = EX818 4" - 8" = EX828 12" = EX838	Brass = B 316 Stainless Steel = S PVC = P	LMI Pump Connector = -06 Reverse Flow Output = -15 10 Ft. Cable for LMI Connector = -37 *Immersibility = -40 Low Power Option = -50 Roytronics® Series-A Pump 5-pin Connector = -106 Viton® O-Ring = -125			

^{*}Consult factory for suitable applications

CONTACT YOUR SUPPLIER