



## EX80-SERIES Electromagnetic Flow Sensor

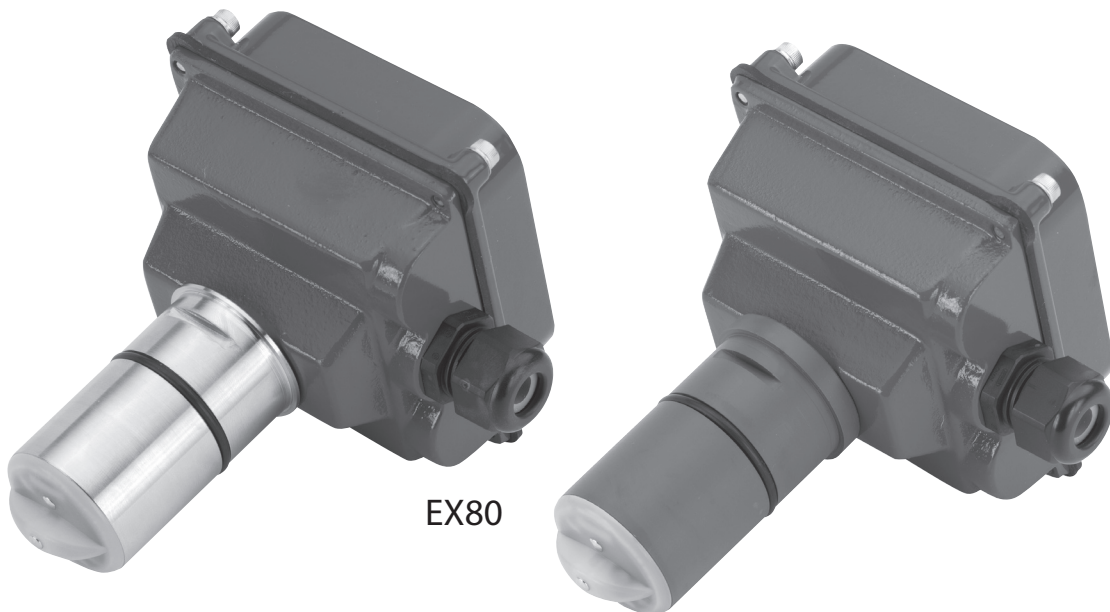


### APPLICATIONS

- Conductive fluids
- Small pipe applications (1-10")
- Industrial processes
- Chemical metering pumps
- Fertigation

### FEATURES

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



EX80

### GENERAL INFORMATION

EX80-Series insertion electromagnetic flowmeters are designed for use with conductive liquids in 1-10" pipe. They are 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. A choice of materials (stainless steel, brass, and PVC) allows the meter to adapt to a range of temperature, pressure, and corrosive environments.

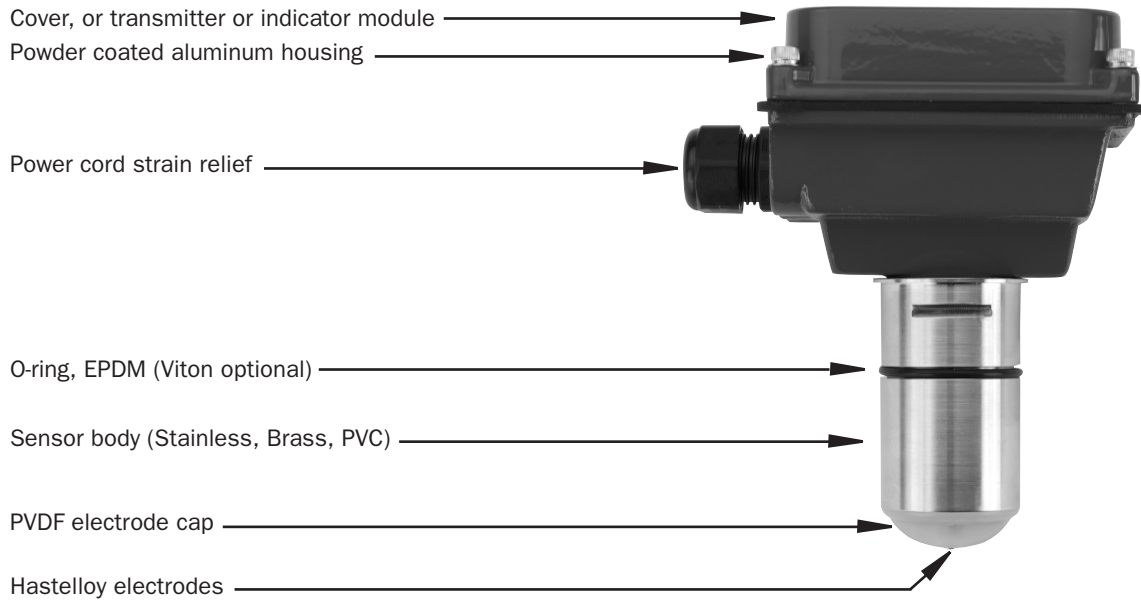
Designed for modularity and versatility, the EX80-Series has a current-sinking pulse output that can be combined with the appropriate transmitter or indicator for the application. For analog output and display of rate and total, an FT420 can be used. For analog only, the AO55 can be mounted

directly onto the meter. The PD10 can be used to divide the pulse for pacing chemical metering pumps. The DL75 (data logger) and FT520 (batching flow processor) are also compatible. If the EX80-Series meter is being used with a programmable controller, the output signal can be fed direct, with no other conditioning required.

The EX80-Series fixed depth insertion meters require special fittings. Factory installation in the fitting ensures correct depth placement in the pipe. The EX80-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.

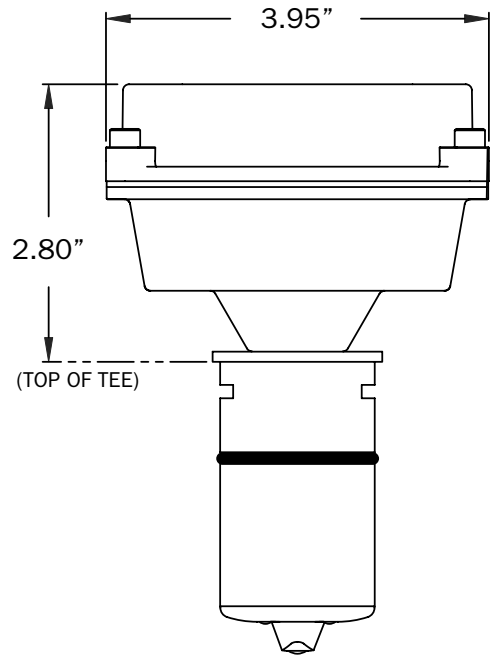
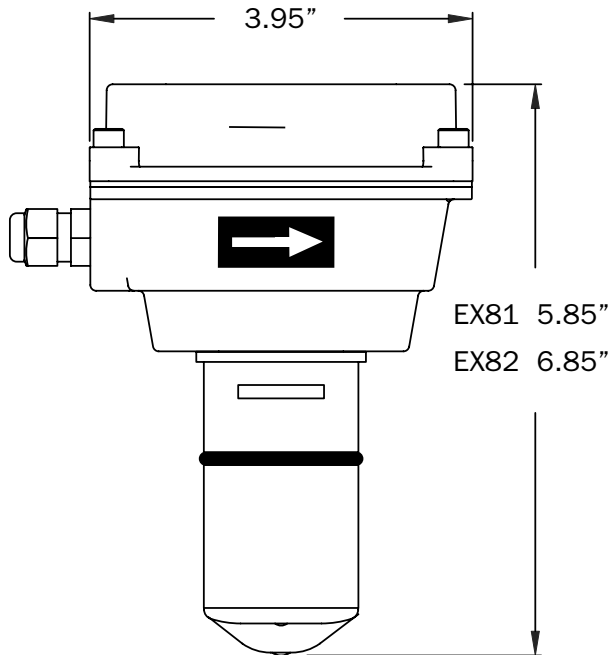
### FEATURES



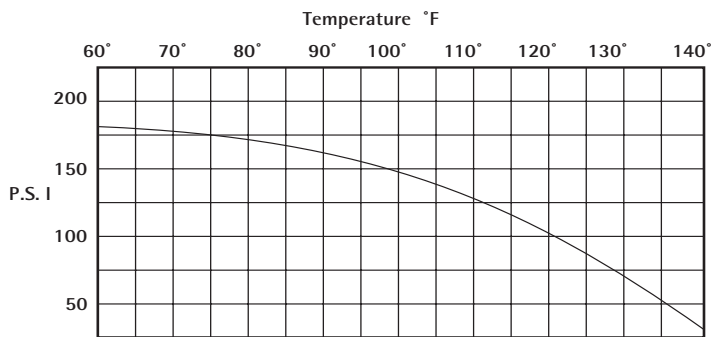
### SPECIFICATIONS

<b>Power</b>	<b>Full Power</b>	12 - 24 Vdc, 250 mA
	<b>Low Power</b>	12 - 24 Vdc, 40 mA
<b>Flow Range</b>		0.28 - 20 ft/sec (0.08 - 6.09 m/sec)
<b>Temperature</b>	<b>Ambient Temp</b>	0° - 180° F (-17° - 82° C)
	<b>Fluid Temp : Brass/SS</b>	32° - 200° F (0° - 93° C)
	<b>Fluid Temp: PVC</b>	32° - 130° F (0° - 55° C) @ 0 psi
<b>Pressure</b>	<b>Brass/SS</b>	200 psi (13.8 bar)
	<b>PVC</b>	150 psi (10 bar) @ 75° F
<b>Minimum Conductivity</b>		20 microSiemens/cm
<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>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

### DIMENSIONS



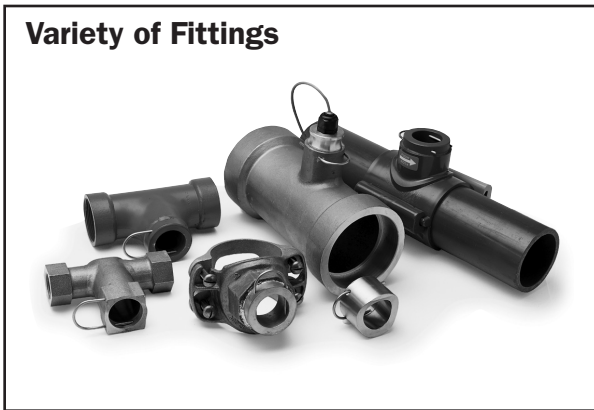
### PVC WORKING PRESSURE VS. TEMPERATURE



### FLOW RANGE (in GPM)

	1"	1-1/2"	2"	3"	4"	6"	8"	10"
<b>Min</b>	.50	1.1	2	4.5	8	18	31	49
<b>Max</b>	50	110	196	440	783	1763	3133	4895

## EX80-COMPATIBLE FITTINGS



	Tee	Saddle	Weld/ Braze	Sweat Tee
<b>Bronze</b>	1-4"	3-4"	3-10"	1-4"
<b>PVC</b>	1-2"	3-8"	x	x
<b>Polypro</b>	x	3-8"	x	x
<b>Stainless Steel</b>	1-2"	x	3-10"	x
<b>Carbon Steel</b>	1-2"	x	3-10"	x
<b>Ductile Iron</b>	x	3-10"	x	x

## HOW TO ORDER

MODEL	MATERIAL	OPTIONS	FITTINGS
1" - 3" pipe = <b>EX81</b> 4" - 10" pipe = <b>EX82</b>	PVC = <b>P</b> Brass = <b>B</b> 316 Stainless = <b>S</b>	Reverse flow output = <b>-15</b> Immersible = <b>-40</b> Low power = <b>-50</b> Viton O-ring = <b>-125</b>	Select from chart above (fitting type, and material)
<b>ACCESSORIES</b> Rate and Total Indicator = <b>FT420</b> Blind 4-20 mA Converter = <b>AO55</b> Data Logger = <b>DL75</b> Pulse Divider = <b>PD10</b> Extra Cable (specify length) = <b>31010</b> Power Converter, Plug-In, 115 Vac, 24 Vdc = <b>PC3</b> Dual Power Supply, 115 Vac, 12/24 Vdc = <b>PC42</b> Solar Panel Kit, 5 Watt = <b>RSP5</b>			

## CONTACT YOUR SUPPLIER