



Features

- Low-flow performance and accuracy superior to any mechanical flow sensor
- No moving parts to wear out
- Dedicated fittings for simplicity
- Retainer clip automatically sets correct depth
- Meter extends only about 1/8 of pipe diameter, minimizing potential for clogging with debris
- Easy to install and easy to maintain

Description

EX80 series insertion electromagnetic flow meters 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. Conductivity values of 20 $\mu\text{S}/\text{cm}$ are sufficient to enable the magmeter to operate which makes it suitable for all but the ultrapure environment.

The EX80 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 meters, when used in chemical injection applications, they 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 EX80-Series has a current-sinking pulse output that can be combined with the Shark controller or Shark TX transmitter for the application. When used with the Shark the output signal can be fed direct, with no other conditioning required.

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 low power model that can run on an external battery with solar panel. A hot tap version, reverse flow output and immersibility are all available. Contact Water Analytics for information on these and other options.

Applications

- Waste water flow
- Water Treatment systems
- Irrigation
- Groundwater remediation
- Chemical Mixing
- Process cooling systems
- Neutralization Systems
- Process flow control
- Filtration systems

Model EX80 Series Magmeter Flow Sensors Technical Data

Pipe Size 1 to 12"

Materials
 Shaft/Fitting 316 SS or Brass or PVC
 Electrodes Hastalloy
 Housing Cast powder-coated aluminum
 Electrode Cap PVDF (Kynar)
 O-Ring EPDM (Viton optional)

Power
 Full Power 12 - 25 VDC, 250 mA
 Low Power 12 - 25 VDC, 40 mA average w
 250 mA peaks

Flow Rate 0.28 - 20 ft/sec (0.08 - 6.09 m/ sec)

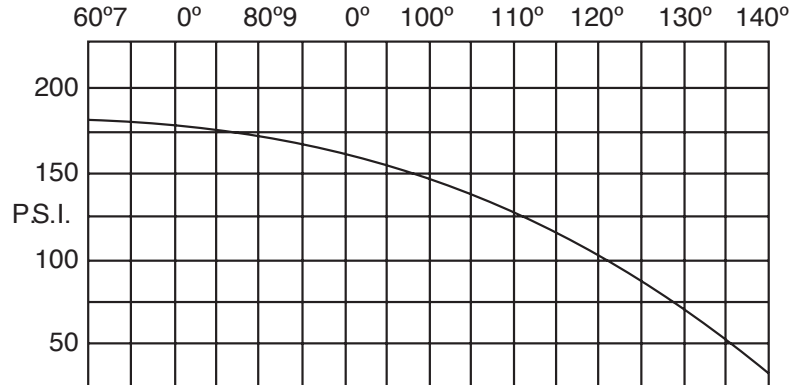
Temperature
 Ambient Temp 0° to 160° F (-17° to 72° C)
 Fixed Temp: 32° to 200° F (0° to 93° C)
 Brass or SS
 Fluid Temp: PVC 32° to 130° F (0° to 55° C) @ 0 psi

Pressure
 Brass / SS 200 psi (13.8 bar)
 PVC 150 psi (10 bar) @ 75° F
 Maximum conductivity 20 µS/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
 Maximum Current 20 mA

Flow Range (GPM)

Nominal Pipe Size	1"	1.5"	2"	3"	4"	6"	8"	10"	12"
Min	0.69	1.5	2.7	6.2	11	25	43	68	99
Max	49	110	196	440	783	1760	3130	4900	7050

PVC/Polypro Working Pressure vs. Temperature



Order Information

Sensor Style

Impeller sensor (1/2" - 3")	81
Impeller sensor (4" - 6")	82
Impeller sensor (12")	83

Sensor Material

PVC	P
Stainless Steel	S
Polypropylene	Y
Brass	B

Mounting Style

1/2" Tee fitting	050
3/4" Tee fitting	075
1" Tee fitting	100
1.5" Tee fitting	150
2" Tee fitting	200
3" Saddle/Weldolet fitting	300
4" Saddle/Weldolet fitting	400
6" Saddle/Weldolet fitting	600

Mounting Tee Material

PVC	P
304 Stainless Steel (available only for 0.5" - 2")	S
Bronze (Not available for 6" pipes)	B

Dimensions

