

EX80-Series Insertion Magmeters

Fixed Depth Electromagnetic Insertion Flow Meters for Full Pipe Flows



Description

The EX80-Series Insertion Magmeters have a low-flow performance and accuracy superior to any mechanical flow sensor. The meters have no moving parts, so they are highly suitable for corrosive environments and difficult applications such as those involving changing viscosities and pulsating flows. They are particularly well-suited for metering the output of air-driven diaphragm pumps.

Select EX81 units for pipe sizes from 1" to 4", EX82 units for pipe sizes from 6" to 10", and EX83 units for 12" pipes. Meters are available in PVC (EX81P and EX82P) and stainless steel (EX81S, EX82S, and EX83S) materials.

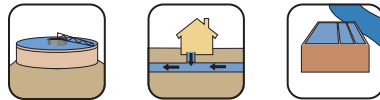
Versatile Output

Designed for modularity and versatility, the EX80-series meters have a current-sinking pulse output that you can integrate with an appropriate transmitter or indicator depending on your application. For a scaled pulse and 4-20 mA output display, you can use the FT420M meter mounted display or the FT420W wall mounted display. For a 4-20 mA analog output only, you can mount the AO55M blind 4-20 mA converter directly onto the meter. If you are using the EX80 meter with a programmable controller, the output signal can be fed directly with no other conditioning required.

Simple Installation Fittings

We offer a range of special installation fittings for the fixed depth meters that will automatically ensure correct depth placement in the pipe. Fittings are available in PVC, stainless steel, bronze and ductile iron.

Applications



Ideal for metering pipe flows, wastewater effluent, industrial water processing, and other difficult environments.

Specifications

Accuracy	1% full scale
Output	Square wave pulse, opto isolated, 500 Hz @ 20 ft/sec
Bi-Directional	Direction output, opto isolated
Empty Pipe Detection	Flow defaults to zero
Flow Range	0.2 to 20 ft/sec (.06 to 6.09 m/sec)
Maximum Pipe Pressure	200 psi (13.8 bar)
Maximum Temperature	PVC: 130°F (55°C) Stainless Steel: 200°F (93°C)
Minimum Conductivity	20 microsiemens/cm
Power	12 to 24 VDC, 250 mA minimum
Materials	Mechanical: 316 SS/PVC Electrodes: Hastelloy Electrode plate: PVDF Housing cast: Powder-coated aluminum O-rings: EPDM
Dimensions	4" square; 6 to 7" total length (10.2 cm square; 15.2 to 17.8 cm total length)
Weight	2 lbs (907g)

Features

- Ideal for wastewater and turbid water applications
- Low flow performance and accuracy superior to any mechanical flow sensor
- Retainer clip automatically sets correct depth
- Meter extends only about 1/8 of pipe diameter, minimizing potential for clogging with debris

Ordering & Options

Insertion Magmeters

Order No.	Material	Pipe Diameter
EX81P	PVC	1" to 4"
EX81S	Stainless Steel	1" to 4"
EX82P	PVC	6" to 10"
EX82S	Stainless Steel	6" to 10"
EX83S	Stainless Steel	12"

Installation Fittings for EX81

Order No.	Material	Fitting Type	Pipe Diameter
EF81T-P-100	PVC	Tee	1"
EF81T-P-150	PVC	Tee	1½"
EF81T-P-200	PVC	Tee	2"
EF82S-P-300-16 ¹ 2	PVC	Saddle	3"
EF82S-P-400 ²	PVC	Saddle	4"
EF81T-S-100	304 SS	Tee	1"
EF81T-S-150	304 SS	Tee	1½"
EF81T-S-200	304 SS	Tee	2"
EF82S-B-300	Bronze	Saddle	3"
EF82S-B-400	Bronze	Saddle	4"
EF82W-S-400	316 SS	Weld	4"

1) Installed on 16" long pipe stub.

2) PVC saddle is supplied with Buna-N O-rings only. For chemical service, the O-ring must be removed and the saddle glued on to the pipe with PVC cement.

Installation Fittings for EX82

Order No.	Material	Fitting Type	Pipe Diameter
EF82S-P-600 ²	PVC	Saddle	6"
EF82S-P-800 ²	PVC	Saddle	8"
EF82S-F-600	Ductile Iron	Saddle	6"
EF82S-F-800	Ductile Iron	Saddle	8"
EF82S-F-1000	Ductile Iron	Saddle	10"
EF82S-F-1200	Ductile Iron	Saddle	12"
EF82W-S-600	316 SS	Weld	6"
EF82W-S-800	316 SS	Weld	8"
EF82W-S-1000	316 SS	Weld	10"
EF82W-S-1200	316 SS	Weld	12"

2) PVC saddle is supplied with Buna-N O-rings only. For chemical service, the O-ring must be removed and the saddle glued on to the pipe with PVC cement.

Optional Output Displays & Converters

Order No.	Description
FT420M	Pulse to 4-20 mA Output and Meter Display
FT420W	Pulse to 4-20 mA Output and Wall Mounted Display
AO55M	Blind 4-20 mA Converter
AO55W	Blind 4-20 mA Converter and Wall Mounted Display

Regional Distributor



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