

### Seametrics EX100/200-Series Insertion Flow Sensors

EX100 & EX200-Series flow meters are adjustable depth insertion magmeters suitable for installations with a wide range of temperatures, pressure, and chemical conditions. EX-Series meters are available for 3 inch to 48 inch pipe installations, and feature an electrode resistant to fouling. The EX-Series is also available with a hot-tap model that can be installed or serviced without shutting down the line. These sensors are compatible with external PLC controllers or directly mounted to a FT430 or FT440 Seametrics display.

#### FEATURES

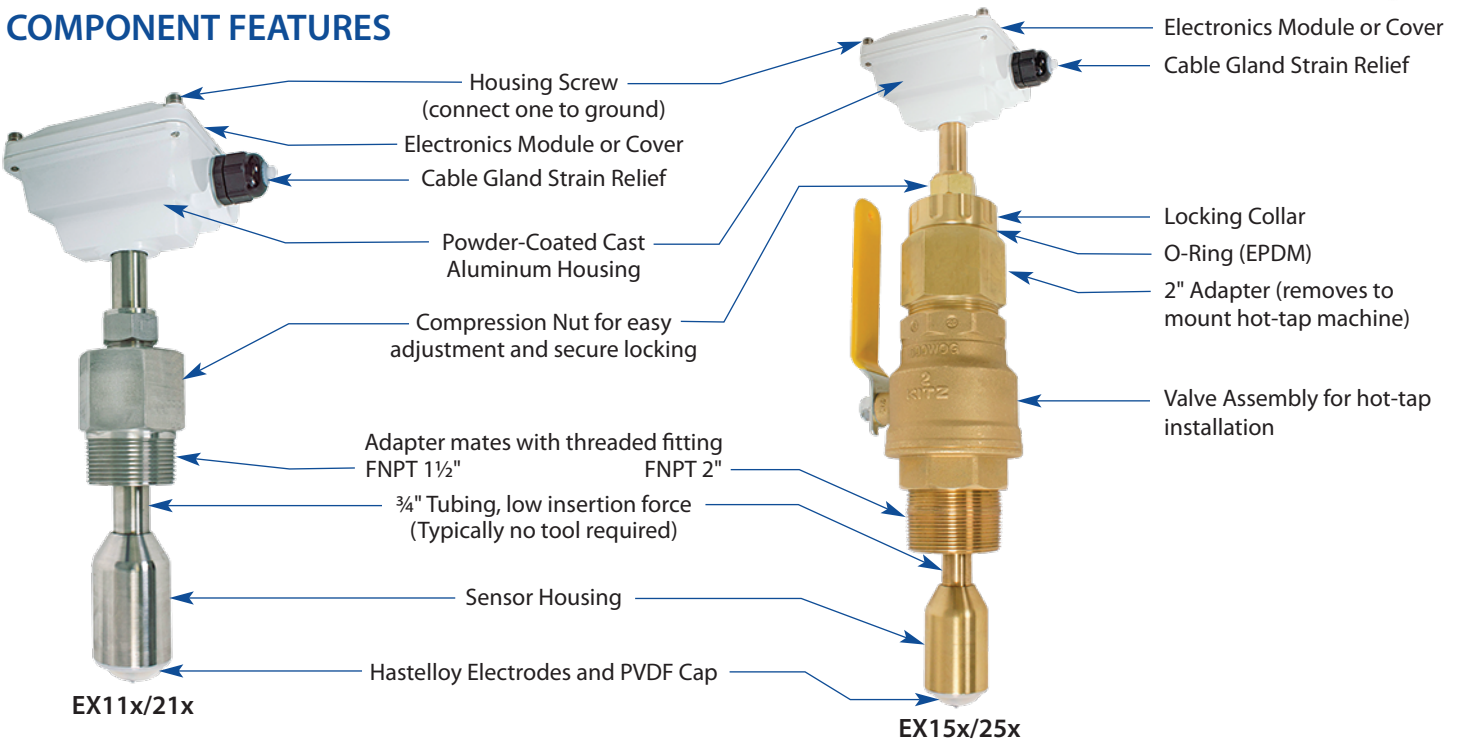
- Adjustable depth
- Hot Tap available
- Stainless or Brass
- No moving parts
- Durable
- Available reverse flow output
- IP Rating based on mounted display

#### APPLICATIONS

- Total Fluids Remediation
- Pump Tests
- Municipal
- Industrial
- Irrigation



#### COMPONENT FEATURES



**CALL GEOTECH TODAY (800) 833-7958**

**Geotech Environmental Equipment, Inc.**  
 2650 East 40th Avenue • Denver, Colorado 80205  
 (303) 320-4764 • FAX (303) 322-7242  
 email: sales@geotechenv.com • website: www.geotechenv.com

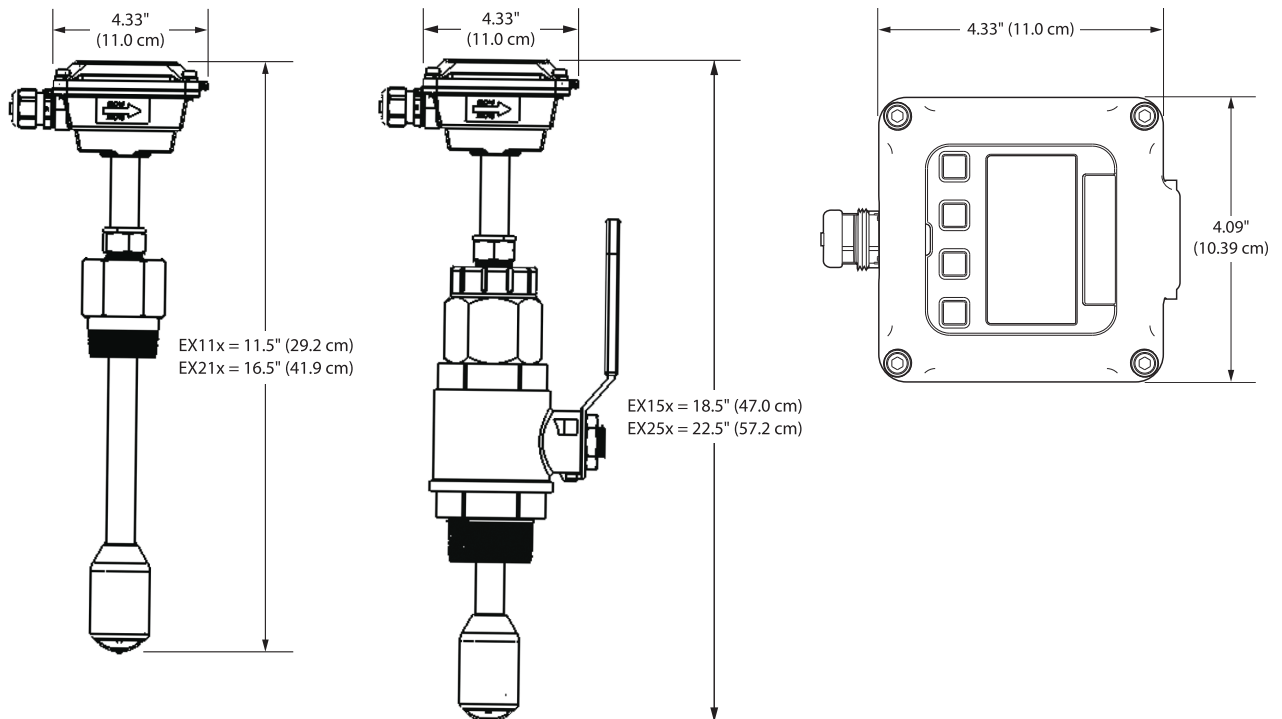
## Seametrics EX100/200-Series Insertion Flow Sensors

### SPECIFICATIONS\*

<b>Pipe Size</b>	3" to 48" (up to 72" optional)												
<b>Power</b>	<b>Full Power:</b> 12-24 VDC, 250mA <b>Low Power:</b> 12-24 VDC, 40mA average with 250mA peaks												
<b>Materials</b>	<table border="0"> <tr> <td><b>Housing</b></td> <td>Powder-coated cast aluminum</td> </tr> <tr> <td><b>Tubing/Fitting/Sensor Housing</b></td> <td>Brass or 316 Stainless Steel</td> </tr> <tr> <td><b>Electrodes</b></td> <td>Hastelloy</td> </tr> <tr> <td><b>Electrode Cap</b></td> <td>PVDF</td> </tr> <tr> <td><b>O-Ring (15x/25x only)</b></td> <td>EPDM</td> </tr> <tr> <td><b>Valve Assembly (15x/25x only)</b></td> <td>Bronze (stainless optional) with bronze ball valve</td> </tr> </table>	<b>Housing</b>	Powder-coated cast aluminum	<b>Tubing/Fitting/Sensor Housing</b>	Brass or 316 Stainless Steel	<b>Electrodes</b>	Hastelloy	<b>Electrode Cap</b>	PVDF	<b>O-Ring (15x/25x only)</b>	EPDM	<b>Valve Assembly (15x/25x only)</b>	Bronze (stainless optional) with bronze ball valve
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<b>Valve Assembly (15x/25x only)</b>	Bronze (stainless optional) with bronze ball valve												
<b>Fitting Size Required</b>	<b>11x/21x:</b> 1.5" FNPT <b>15x/25x:</b> 2" FNPT												
<b>Maximum Pressure</b>	200 psi (14 bar)												
<b>Temperature</b>	<table border="0"> <tr> <td><b>Ambient</b></td> <td>0° to 160°F (-17° to 72°C)</td> </tr> <tr> <td><b>Fluid</b></td> <td>32° to 200°F (0° to 93°C)</td> </tr> </table>	<b>Ambient</b>	0° to 160°F (-17° to 72°C)	<b>Fluid</b>	32° to 200°F (0° to 93°C)								
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<b>Fluid</b>	32° to 200°F (0° to 93°C)												
<b>Minimum Conductivity</b>	20 microSiemens/cm												
<b>Flow Velocity</b>	0.28-20 ft./sec. (0.08-6.09 m/sec)												
<b>Accuracy</b>	±1% of full scale												
<b>Output</b>	Square wave pulse, opto-isolated, 500 Hz @ 20 ft./sec. 6 mA max, 30 VDC forward flow standard; reverse flow optional												
<b>Empty Pipe Detection</b>	Software, defaults to zero flow												
<b>Cable</b>	Standard 18' (6m), #22 shielded twisted pair, 4-conn. Max. cable run at 24 VDC = 1000' (300m); at 12 VDC = 500' (150m). For other circumstances, contact Geotech.												
<b>Environmental</b>	See meter mounted electronic specification for rating.												

\*Specifications subject to change • Please consult our website for current data ([www.geotechenv.com](http://www.geotechenv.com)).

### DIMENSIONS



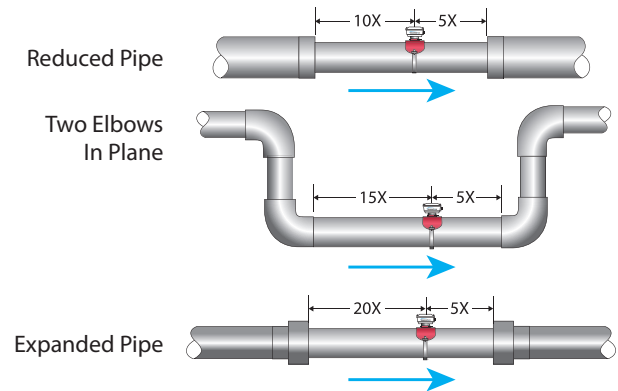
## Seametrics EX100/200-Series Insertion Flow Sensors

### FLOW RANGE (GPM)

Nominal Pipe Size	Minimum Flow	Maximum Flow
3	6	440
4	11	783
6	25	1,762
8	44	3,133
10	69	4,895
12	99	7,050
14	134	9,596
16	175	12,533
18	222	15,863
20	274	19,584
24	395	28,200
30	617	44,064
36	888	63,452
48	1,580	112,804

### Straight Pipe Recommendations (X = diameter)

More straight pipe recommendations in the operation manual.



### HOW TO ORDER

	Description	Size	Sensor Material	Options (110/210)	Options (150/250)
<b>Sensor Only</b>	Externally powered (12-24 VDC) sensor only.	3"-10" pipe = EX110 10"-48" pipe = EX210 Hot Tap 3"-10" pipe = EX150 10"-48" pipe = EX250	Brass = B 316 Stainless = S	Brass Adapter Fitting 2" NPT = -02 SS Adapter Fitting 2" NPT = -02 Reverse Flow Output = -15 Brass Adapter 1½" BSP = -23 SS Adapter 1½" BSP = -24 Old Style Adapter 1½" NPT = -35 Immersible = -40* Low Power = -50 12" Extension (200 Series Only) = -72	316 SS Valve Assembly = -08 No Valve Assembly = -09 Reverse Flow Output = -15 Immersible = -40* Low Power = -50 12" Extension (200 Series Only) = -72
<b>FT430 Mounted on Sensor</b>	Externally powered (12-24 VDC) with FT430 rate and total indicator (with pulse outputs) mounted on the sensor.	3"-10" pipe = EX113 10"-48" pipe = EX213 Hot Tap 3"-10" pipe = EX153 10"-48" pipe = EX253	Brass = B 316 Stainless = S	Brass Adapter Fitting 2" NPT = -02 SS Adapter Fitting 2" NPT = -02 Reverse Flow Output = -15 Brass Adapter 1½" BSP = -23 SS Adapter 1½" BSP = -24 Tamper Evident Kit = -32 Old Style Adapter 1½" NPT = -35 Low Power = -50 Non-resettable Total = -64 12" Extension (200 Series Only) = -72 Hinged Display Cover = -126	316 SS Valve Assembly = -08 No Valve Assembly = -09 Reverse Flow Output = -15 Tamper Evident Kit = -32 Non-resettable Total = -64 12" Extension (200 Series Only) = -72 Dual Relay Output = -98 Hinged Display Cover = -126
<b>DL76 Mounted on Sensor</b>	Externally powered (12-24 VDC) with self powered DL76 data logger mounted on the sensor.	3"-10" pipe = EX116 10"-48" pipe = EX216 Hot Tap 3"-10" pipe = EX156 10"-48" pipe = EX256	Brass = B 316 Stainless = S	Brass Adapter Fitting 2" NPT = -02 SS Adapter Fitting 2" NPT = -02 Reverse Flow Output = -15 Brass Adapter 1½" BSP = -23 SS Adapter 1½" BSP = -24 Tamper Evident Kit = -32 Old Style Adapter 1½" NPT = -35 Low Power = -50 12" Extension (200 Series Only) = -72	316 SS Valve Assembly = -08 No Valve Assembly = -09 Reverse Flow Output = -15 Tamper Evident Kit = -32 Low Power = -50 12" Extension (200 Series Only) = -72
<b>FT440 Mounted on Sensor<sup>1</sup></b>	Externally powered (12-24 VDC) with FT440 rate and total indicator (with pulse and 4-20mA outputs) mounted on the sensor.	3"-10" pipe = EX119 10"-48" pipe = EX219 Hot Tap 3"-10" pipe = EX159 10"-48" pipe = EX259	Brass = B 316 Stainless = S	Brass Adapter Fitting 2" NPT = -02 SS Adapter Fitting 2" NPT = -02 Reverse Flow Output = -15 Brass Adapter 1½" BSP = -23 SS Adapter 1½" BSP = -24 Tamper Evident Kit = -32 Old Style Adapter 1½" NPT = -35 Low Power = -50 Non-resettable Total = -64 12" Extension (200 Series Only) = -72 Hinged Display Cover = -126	316 SS Valve Assembly = -08 No Valve Assembly = -09 Reverse Flow Output = -15 Tamper Evident Kit = -32 Non-resettable Total = -64 12" Extension (200 Series Only) = -72 Dual Relay Output = -98 Hinged Display Cover = -126

\* Immersible to maximum of 3 ft. (1m), up to 2 weeks

<sup>1</sup> When ordering an EX with an FT440 mounted, the EX sensor cannot be loop powered.