

# EX 100/200 Series

(EX101/201, 115/215)  
ELECTROMAGNETIC INSERTION  
FLOW SENSOR SPECIFICATIONS



## GENERAL INFORMATION

The complete lack of moving parts of this insertion flow sensor is the source of its reliability. There is no rotor to stop turning in dirty water and there are no bearings to wear out. A rapidly reversing magnetic field is produced in the lower housing, and as the fluid moves through this field a voltage is generated. This tiny voltage is measured and translated into a frequency signal which is proportional to flow rate. This square wave signal can be sent directly to a PLC or other control, or can be converted using any of the SeaMetrics family of indicators and convertors.



A modular system of electronics can be attached directly to the flow sensor, or remotely mounted. The FT420 provides full indication of rate and total, plus 4-20 mA output. The AO55 provides blind 4-20 mA output, the PD10 divides the pulse frequency, and the FS30 can be used for a precise setpoint flow switch.

The installation fitting of the EX sensor is standard male NPT, and can be directly threaded into ordinary saddles or threaded weld fittings. The EX115 and 215 include an isolation valve, allowing hot-tap installation, or installation and removal under pressure. The standard isolation valve is Bronze, but a 316 Stainless Steel valve is available as an option if needed.

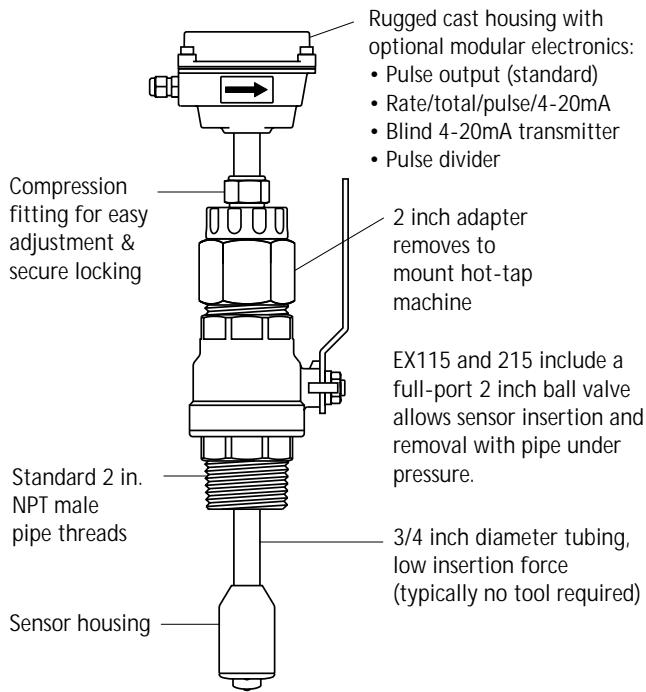
## SPECIFICATIONS

<b>POWER</b>	• 12 - 24 Vdc, 250 mA	
<b>FLOW RANGE</b>	• 0.2 - 20 ft/sec (.06 - 6.09 m/sec)	
<b>INSTALLATION FITTING SIZE</b>	• EX101, 201 = 1-1/2" MNPT • EX115, 215 = 2" MNPT	
<b>TEMPERATURE</b>	• Ambient 0° - 180° F (-17 - 82° C)	• Fluid 32° - 212° F (0° - 100° C)
<b>PRESSURE</b>	• 200 psi (13.8 bar)	
<b>MINIMUM CONDUCTIVITY</b>	• 20 microsiemens/cm	
<b>MATERIALS</b>	• Mechanical 316 SS/Brass	• Electrodes Carbon Graphite
	• Electrode plate PVDF	• Housing Cast powder-coated aluminum
<b>O-RINGS</b>	• EPDM	
<b>CALIBRATION ACCURACY</b>	• 1% of full scale	
<b>OUTPUT</b>	• Square wave pulse, opto isolated, 500 Hz @ 20 ft/sec	
<b>BI-DIRECTIONAL (OPTION)</b>	• Direction output, opto isolated	
<b>EMPTY PIPE DETECTION</b>	• Software, defaults to zero flow	

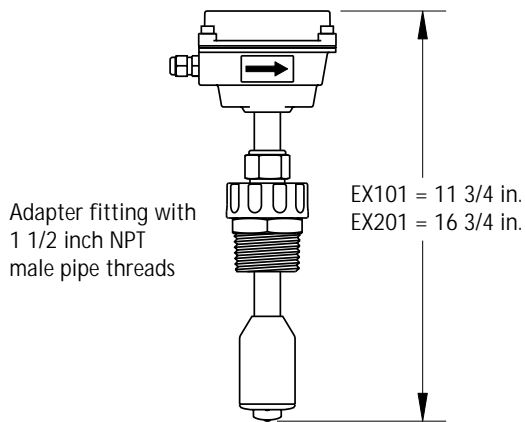
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INSERTION FLOW SENSOR SPECIFICATIONS

# EX100/200 SERIES ELECTROMAGNETIC INSERTION FLOW SENSOR Specifications

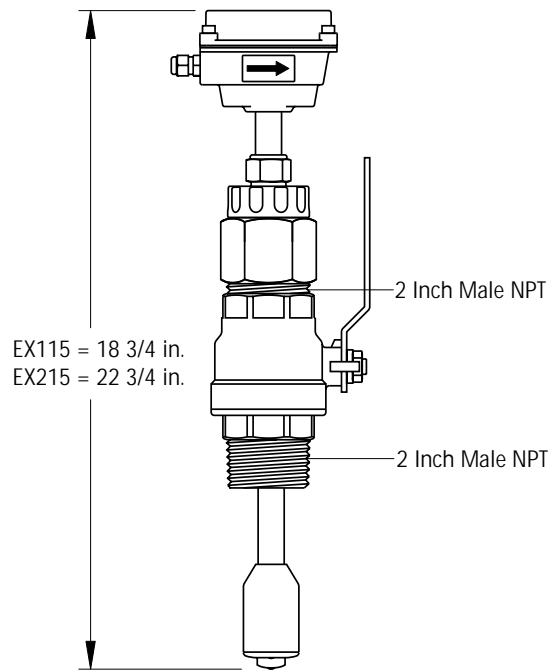
## DIMENSIONS & FEATURES



Flow Range (GPM)		
Pipe Size	Min. Flow	Max Flow
2	2.1	209
3	4.6	461
4	7.9	794
6	18	1,800
8	31.2	3,120
10	49.2	4,920
12	70	6,980
16	110	11,020
24	251	25,060



EX101 and EX201



EX115 and EX215

## HOW TO ORDER

### EX-SERIES INSERTION MAGNETIC METERS

Pipe Sizes:	Order:	Material Codes:
2" - 10"	EX101 - _____	B = Brass
10" - 48"	EX201 - _____	S = 316 SS
2" - 10"	EX115 - _____	
10" - 48"	EX215 - _____	

(Place Material Code Here)



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