



### General Information

Ruby bearings and a non-drag pickoff give these adjustable insertion turbine flow sensors a wide flow range and long life. A sensor detects the passage of miniature magnets in the eight rotor blades. The resulting square-wave signal can be sent for hundreds of feet without a transmitter, over unshielded cable. This signal can be connected directly to many PLC's and other controls without any additional electronics.

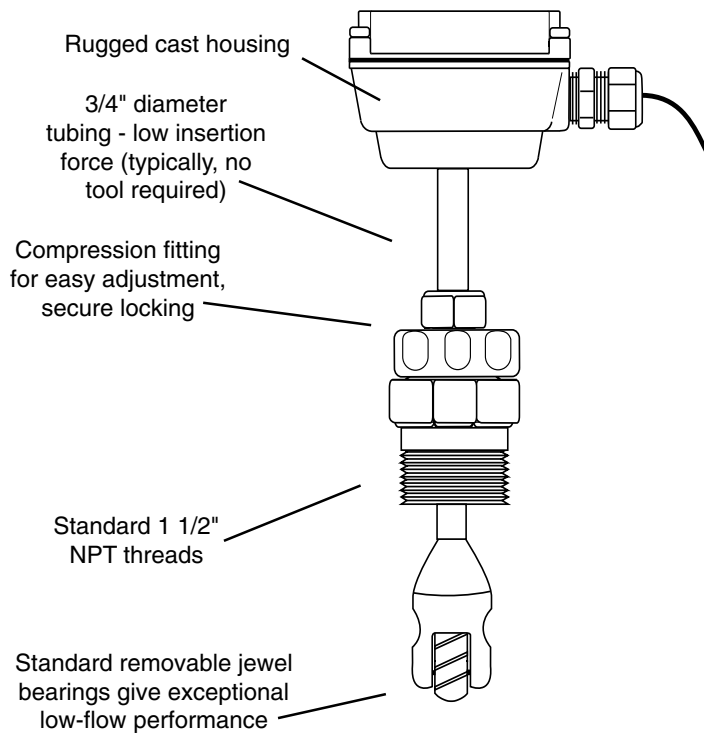
Installation fittings are standard 1-1/2" NPT. A depth adjustment system allows two basic sizes to cover pipe sizes from 3" to 48". Fittings such as saddles and weldolets may be purchased locally, and are also available from SeaMetrics.

A modular system of electronics can be installed directly on the flow sensor, in a splashproof cast housing. The FT415/420 provide digital rate and total display, as well as programmable pulse. The FT420 also provides a 4-20 mA analog output. The AO55 is a blind analog transmitter. Programmable pulse for pump pacing comes from the PD10. Each of these controls is also available in a wall mount housing.

### Specifications

<b>Sensor</b>	
Hall-Effect Sensor	12 VDC current sinking pulse
<b>Materials</b>	
Sensor body	Brass, 316 SS
Rotor	Polypro, PVDF (optional)
Bearings	Ruby
Shaft	Nickel-bound tungsten carbide, zirconia ceramic optional
<b>Range</b>	0.2 - 30 FPS (.006-9 M/s)
<b>Accuracy</b>	+/- 1% FS
<b>Maximum Pressure</b>	200 psi (14 bar)
<b>Maximum Temperature</b>	200° F (93°C)
<b>Pipe Size</b>	
TX101	3" - 10" (50-250mm)
TX201	10" - 48" (250-1200mm)
<b>Fitting Size</b>	1-1/2" NPT
<b>Insertion Force</b>	0.44 x pressure in pipe
<b>Power</b>	5 - 24 VDC, 1.5 mA
<b>Cable</b>	#22 AWG 3-con, 18' (6m)
<b>Max. Cable Run</b>	2,000 ft. (650m)

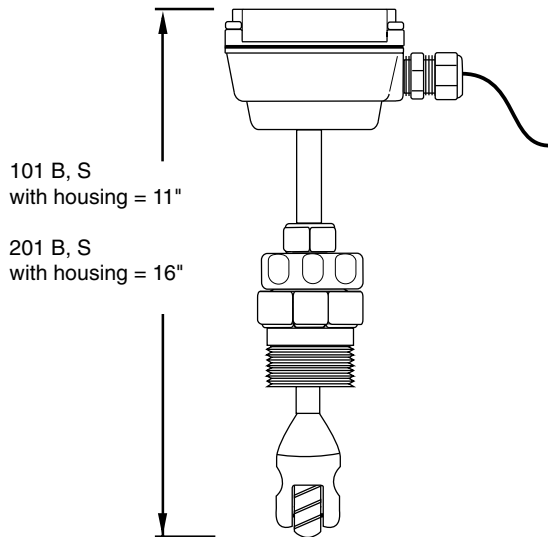
## Features



**Flow Range (GPM)**  
Pipe Size    Min Flow    Max Flow

Pipe Size	Min Flow	Max Flow
2"	2	300
3"	5	700
4"	8	1,100
6"	18	2,500
8"	30	4,500
10"	50	7,000
12"	70	10,000
16"	110	16,000
24"	250	35,000

## Dimensions



## How To Order

Material codes: B = Brass,  
S = (316 SS)

Option codes:

TX101 - \_\_\_\_\_ - \_\_\_\_\_  
TX201 - \_\_\_\_\_ - \_\_\_\_\_

### OPTIONS:

- 03 Bidirectional flow (Hall-Effect only)
- 04 Micropower sensor
- 05 PVDF rotor/ceramic shaft
- 06 LMI pump connector
- 07 SeaMetrics control connector
- 40 Submersible

# SeaMetrics

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