

### General Information

These “hot tap” versions of the proven TX insertion flow sensors are designed to install or be serviced without depressurizing the pipe. Like all TX sensors, they have a turbine rotor and jewel bearings for superior low-flow performance. Rotation of the rotor is detected by a non-drag Hall-effect sensor, which interfaces easily with many types of electronic control. A display, divider, or analog transmitter can be installed on the end of the sensor, or the signal can be sent without amplification for hundreds of feet to remote electronics.

Insertion and removal under pressure is possible due to the 2" full-port isolation valve, which comes with a nipple for installation on the pipe fitting. If it is necessary to do the initial installation under pressure, any standard hot tap drilling machine with 2" NPT adapter, such as a Transmate or a Mueller, can be used. Ordinarily, it is not necessary to use an installation tool, since the small-diameter tube can be controlled by hand at all but the highest pressures.

For installations which lack electrical power, an FT415 battery-powered flow computer can be installed directly on the hot-tap turbine to provide local reading. For this application, a passive pickup is required (see How To Order).

### Specifications

#### Sensor

Hall Effect Sensor 12 VDC current sinking pulse

#### Materials

Sensor body Brass, 316 SS  
Rotor Polypro, PVDF (optional)  
Bearings Ruby  
Shaft Nickel-bound tungsten carbide, zirconia ceramic optional

**Range** 0.2 - 30 FPS (.006-9 M/s)

**Accuracy** +/- 1% FS

**Maximum Pressure** 200 psi (14 bar)

**Maximum Temperature** 200° F (93°C)

#### Pipe Size

TX115 3" - 10" (50-250mm)  
TX215 10" - 48" (250-1200mm)

**Fitting Size** 2" NPT

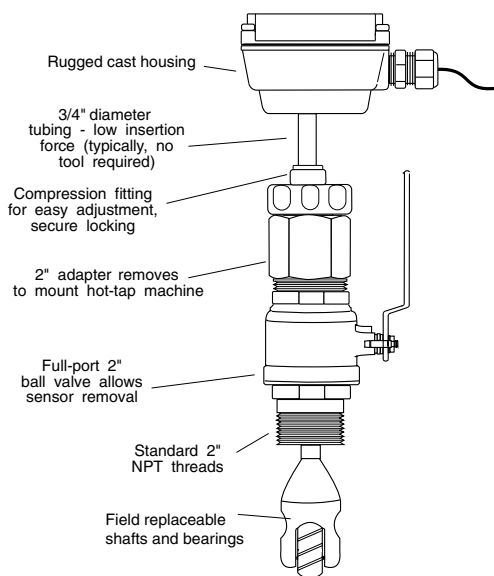
**Insertion Force** 0.44 x pressure in pipe

**Power** 5 - 24 VDC, 1.5 mA

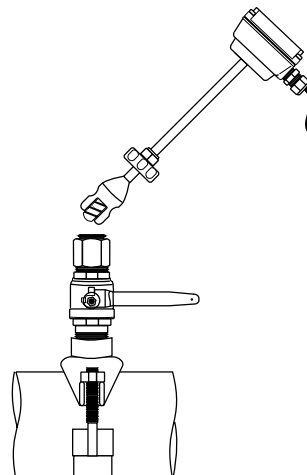
**Cable** #22 AWG 3-con, 18' (6m)

**Max. Cable Run** 2,000 ft. (650m)

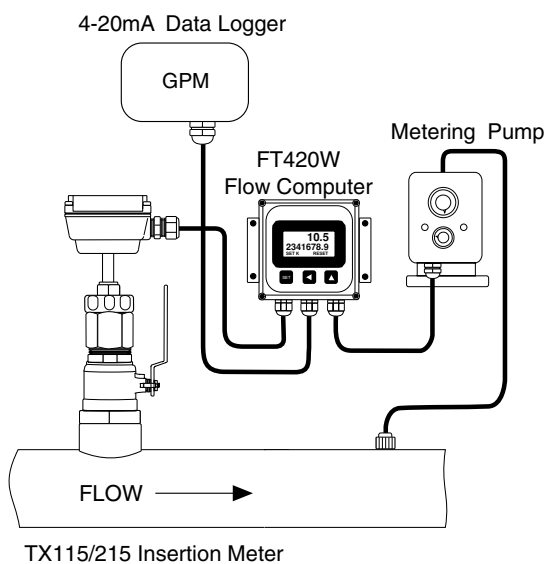
## Features



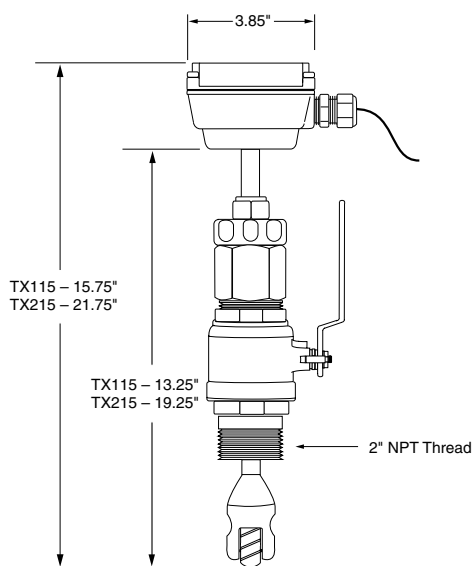
### TX115/215 Sensor Removal



## Typical Application



## Dimensions



## How To Order

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

Option codes: (see options at right)

TX115 - \_\_\_\_ - \_\_\_\_ Adjustable 3" to 10"

TX215 - \_\_\_\_ - \_\_\_\_ Adjustable 12" to 48"

### Option codes:

- 03 Bidirectional flow (Hall-Effect only)
- 04 Micropower sensor
- 05 PVDF rotor/ceramic shaft
- 06 LMI connector
- 07 SeaMetrics control connector
- 08 Stainless valve assembly
- 09 No valve assembly
- 40 Submersible

# SeaMetrics

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