# TX800-Series

#### **INSERSION TURBINE FLOW SENSOR**





#### **APPLICATIONS**

Water treatment

Industrial wastewater treatment

Cooling water monitoring

Industrial fluid control

#### **Features**

- Low-friction, long-life jewel bearings
- One moving part
- Field repairable
- Fits 1-1/2" to 8" pipe
- Fixed depth in fitting ensures correct depth in pipe

The **TX800-Series** are insertion turbine meters designed for use in 1-1/2" to 8" pipe and are available in 316 stainless steel, brass, and PVC sensor bodies, machined from solid rod for maximum low-flow performance. The TX800-Series use special fittings that ensure ease of installation and correct depth setting in the pipe.

Ruby bearings and a non-drag Hall-effect sensor give these insertion turbine flow sensors a wide flow range and long life. A sensor detects the passage of miniature magnets in the rotor blades. The resulting square-wave signal can be sent long distances (up to 2,000 feet) without a transmitter. This signal can be connected directly to Seametrics controls and displays, as well as PLC's, counters, and computer cards.

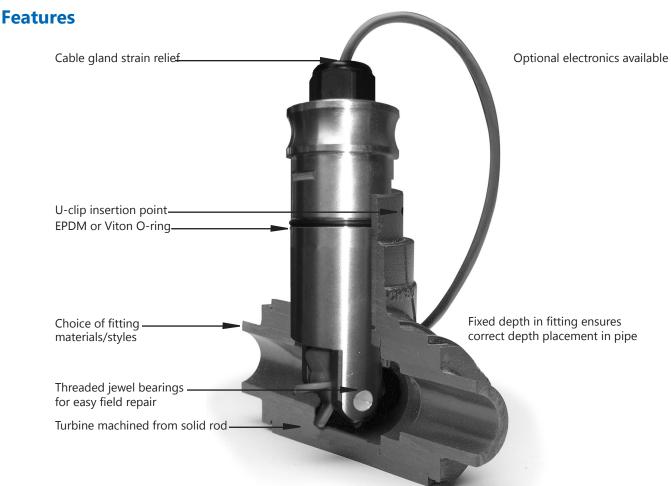
Seametrics TX800 meters are ideal for chemical proportioning applications. If no display is required, a simple divider such as the PD10 provides adjustable pump pacing. For rate and total display, as well as pump pacing, a modular system of electronics can be installed directly on the flow sensor or mounted remotely. The FT430 (externally powered with pulse), FT440 (loop powered), and FT450 (battery powered) all provide digital rate and total displays, as well as a programmable pulse; the FT440 also provides a 4-20 mA analog output.

### **Contact Your Supplier**



253.872.0284 seametrics.com





# **Specifications\***

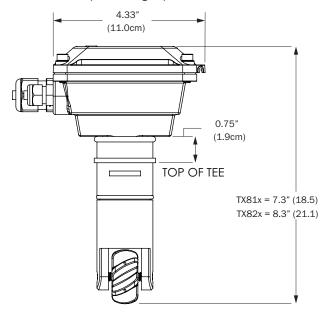
Power Source		Low Power Micropowered (-04 Option)					
Supply Voltage/Current		6-40 Vdc/< 2 mA	3.1-16 Vdc/60 μA @ 3.6 V	3.1-16 Vdc/60 μA @ 3.6 Vdc			
Sensor		Digital Magnetoresistive	Giant Magetoresistance (	Giant Magetoresistance (GMR)			
Materials Sensor Body		PVC, brass or stainless steel					
Rotor		PVDF (Kynar®)					
Shaft		Nickel-bound tungsten carbide					
Bearings		Ruby jewel					
	O-Ring	EPDM (Viton® optional)					
Maximum		Brass	316 SS	PVC (See Pressure vs. Temp. Chart)			
	Pressure	200 psi (14 bar)	200 psi (14 bar)	175 psi (12 bar) at 75°			
	High Pressure	Not Available	400 psi (28 bar)	Not Available			
	Temperature	200° F (93° C)	200° F (93° C)	130° F (55° C)			
Flow Range		0.5 to 30 ft./sec. (0.15 - 9.14 meter/sec)					
Calibrated Accuracy		+/- 2.5% of full scale					
Output Transistor Maximum Current Sinking		150mA (Low power version only)					
Cable		22 AWG, 3 Con, 18' (6m); 2000' (610m) max run					
Regulatory		CE					

<sup>\*</sup>Specifications subject to change • Please consult our website for current data (www.seametrics.com). Kynar is a registered trademark of Arkema, Inc., Viton is a registered trademark of DuPont Corporation.

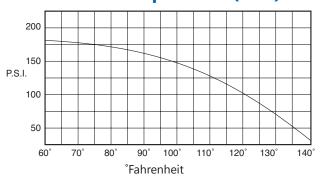


### **Dimensions**

#### **NOTE**: Top Housing Optional



# **Pressure vs. Temperature (PVC)**



# Flow Range (in Gallons Per Minute)

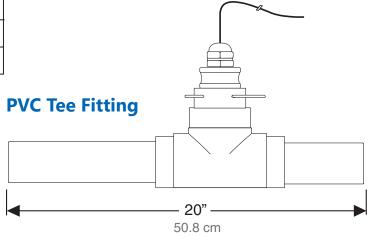
	<b>1</b> ½″	2″	3″	4"	6"	8″
Min	2.8	5	11.5	19.8	45	78
Max	190	314	691	1190	2700	4680

# **Flow Range (in Liters Per Minute)**

	1½"	2"	3″	4"	6″	8"
Min	10.60	18.93	43.53	74.95	170.34	295.26
Max	719.23	1188.62	2615.72	4504.64	10220.61	17715.73

### **Available Fittings**

	Tee	Saddle	Weld	Braze	Sweat Tee
Bronze	1-1/2"-4"	3"-8"	Х	3"-8"	1-1/2"-4"
PVC	1-1/2"-2"	3"-8"	Х	Х	Х
Stainless Steel	1-1/2"-2" 304SS	Х	3"-8" 316SS	Х	Х
Carbon Steel	1-1/2"-2"	х	3"-8"	Х	Х
Ductile Iron	Х	3"-8"	Х	Х	Х





### **How to Order**

>	Description	Size	Sensor Material	Options
Sensor Only	Sensor Only.	1 <sup>½</sup> " - 3" = <b>TX810</b> 4" - 8" = <b>TX820</b>	Brass = B 316 Stainless Steel = S PVC = P	Micropower Pickup = -04 LMI Pump Connector = -06 Seametrics Control Connector = -07 "Immersible = -40 Viton® O-Ring = -60 Roytronic® Series A Pump 5-pin Connector = -106 **High Pressure (Stainless Only) = -HP
<u>-</u>	Description	Size	Sensor Material	Options
AO55 Mounted on Sensor	Blind 4-20 mA analog transmitter (AO55) mounted on the sensor.	1 <sup>1</sup> √" - 3" = <b>TX812</b> 4" - 8" = <b>TX822</b>	Brass = <b>B</b> 316 Stainless Steel = <b>S</b> PVC = <b>P</b>	LMI Pump Connector = -06 Viton® O-Ring = -60 Roytronic® Series A Pump 5-pin Connector = -106 **High Pressure (Stainless Only) = -HP
ᇴᇂ	Description	Size	Sensor Material	Options
FT430 Mounted on Sensor	Rate & total indicator with pulse, externally powered (FT430) mounted on the sensor.	1 <sup>1</sup> / <sub>2</sub> " - 3" = <b>TX813</b> 4" - 8" = <b>TX823</b>	Brass = B 316 Stainless Steel = S PVC = P	Tamper Evident Kit = -32 Viton® O-Ring = -60 Nonresettable Total = -64 Hinged Display Cover= -126 **High Pressure (Stainless Only) = -HP
p z	Description	Size	Sensor Material	Options
DL76 Mounted on Sensor	Data logger (DL76) mounted on the sensor.	1 <sup>½</sup> " - 3" = <b>TX816</b> 4" - 8" = <b>TX826</b>	Brass = B 316 Stainless Steel = S PVC = P	Tamper Evident Kit = -32 Viton® O-Ring = -60 **High Pressure (Stainless Only) = -HP
75	Description	Size	Sensor Material	Options
FT450 Mounted on Sensor	Rate & total indicator with pulse, battery powered (FT450) mounted on the sensor.	1 <sup>∞</sup> " - 3" = TX817 4" - 8" = TX827	Brass = <b>B</b> 316 Stainless Steel = <b>S</b> PVC = <b>P</b>	Tamper Evident Kit = -32 Viton® O-Ring = -60 Nonresettable Total = -64 Hinged Display Cover= -126 **High Pressure (Stainless Only) = -HP
	Description	Size	Sensor Material	Options
PD10 Mounted on Sensor	Pulse Divider (PD10) mounted on the sensor.	1 <sup>1</sup> / <sub>4</sub> " - 3" = <b>TX818</b> 4" - 8" = <b>TX828</b>	Brass = B 316 Stainless Steel = S PVC = P	LMI Pump Connector = -06 10 Ft. Cable for LMI Connector = -37 Viton® O-Ring = -60 Roytronic® Series A Pump 5-pin Connector = -106 **High Pressure (Stainless Only) = -HP
p z	Description	Size	Sensor Material	Options
FT440 Mounted on Sensor	Rate & total indicator with pulse & 4-20 mA output, loop powered (FT440) mounted on the sensor.	1 <sup>₩</sup> " - 3" = <b>TX819</b> 4" - 8" = <b>TX829</b>	Brass = <b>B</b> 316 Stainless Steel = <b>S</b> PVC = <b>P</b>	Tamper Evident Kit = -32 Viton® O-Ring = -60 Nonresettable Total = -64 Hinged Display Cover= -126 **High Pressure (Stainless Only) = -HP

<sup>\*</sup> Immersible to maximum of 3 ft (1m), up to 2 weeks

Roytronic is a registered trademark of Milton Roy Company. Viton is a registered trademark of DuPont Corporation.

<sup>\*\*</sup> Requires appropriate fitting.