



### APPLICATIONS

- Water treatment
- Industrial wastewater treatment
- Cooling water monitoring
- Industrial fluid control

### FEATURES

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

### GENERAL INFORMATION

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.

## FEATURES

Cable-seal strain relief

Optional electronics available

U-clip insertion point  
EPDM or Viton O-ring

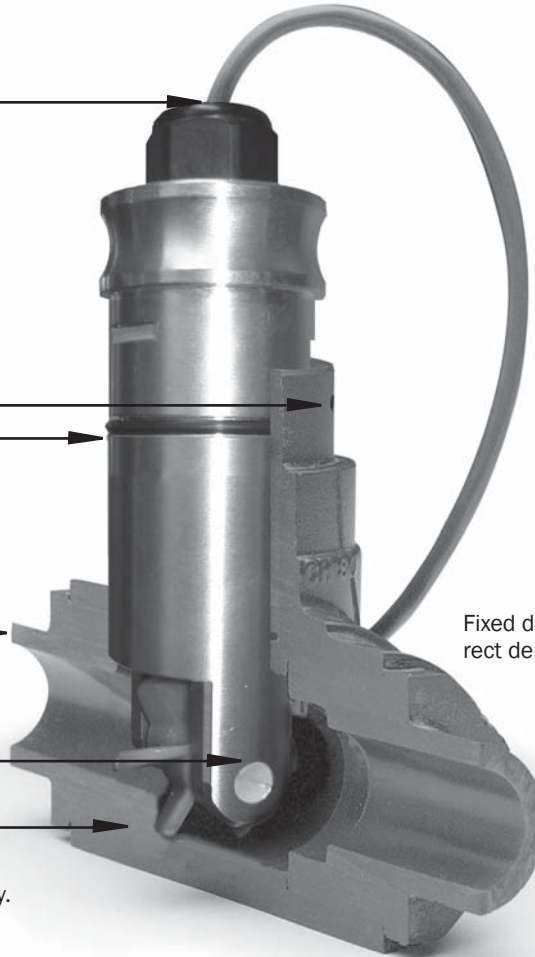
Choice of fitting  
materials/styles

Fixed depth in fitting ensures cor-  
rect depth placement in pipe

Threaded jewel bearings  
for easy field repair

Turbine machined from solid rod

Choice of rotor/shaft materials for  
chemical compatibility and durability.



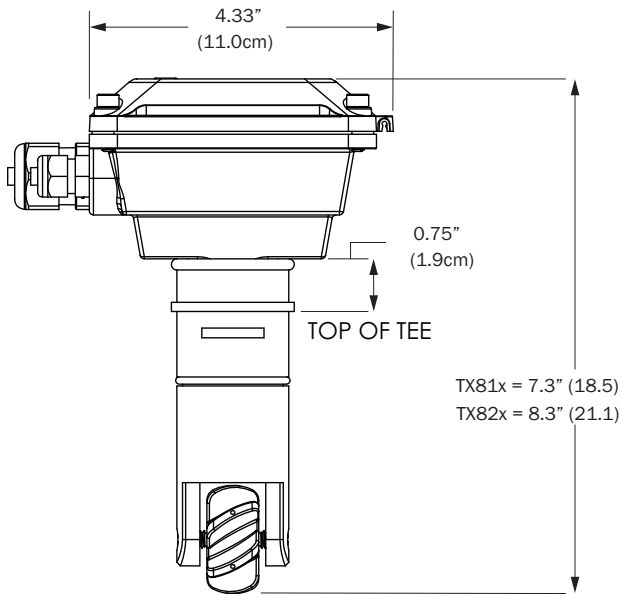
## SPECIFICATIONS\*

Power Source		Low Power	Micropowered (-04 Option)	
Supply Voltage/Current		6-40 Vdc/< 2 mA	3.1-16 Vdc/60 µA @ 3.6 Vdc	
Sensor		Digital Magneto-resistive	Giant Magnetoresistance (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 <small>(See Pressure vs. Temp. Chart)</small>
	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			

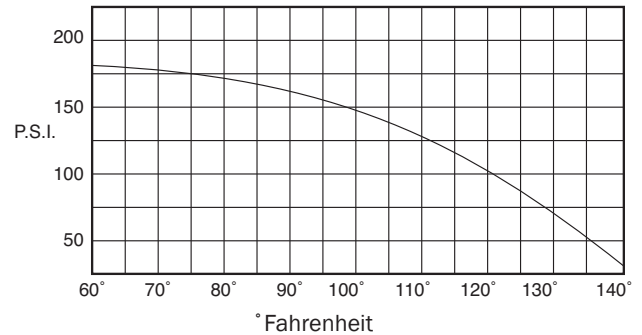
\*Specifications subject to change • Please consult our website for current data ([www.seametrics.com](http://www.seametrics.com)).  
Kynar is a registered trademark of Arkema, Inc., Viton is a registered trademark of DuPont Corporation.

## DIMENSIONS

**NOTE:** Top Housing Optional



## PRESSURE VS. TEMPERATURE (PVC)



## FLOW RANGE (in Gallons Per Minute)

	1½"	2"	3"	4"	6"	8"
<b>Min</b>	2.8	5	11.5	19.8	45	78
<b>Max</b>	190	314	691	1190	2700	4680

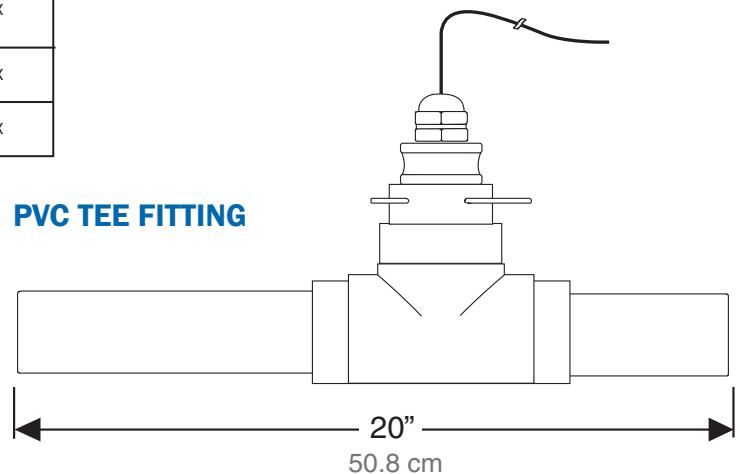
## FLOW RANGE (in Liters Per Minute)

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

## AVAILABLE FITTINGS

	Tee	Saddle	Weld	Braze	Sweat Tee
<b>Bronze</b>	1-1/2"-4"	3"-8"	x	3"-8"	1-1/2"-4"
<b>PVC</b>	1-1/2"-2"	3"-8"	x	x	x
<b>Stainless Steel</b>	1-1/2"-2" 304SS	x	3"-8" 316SS	x	x
<b>Carbon Steel</b>	1-1/2"-2"	x	3"-8"	x	x
<b>Ductile Iron</b>	x	3"-8"	x	x	x

## PVC TEE FITTING



## HOW TO ORDER

	Description	Size	Sensor Material	Options
<b>Sensor Only</b>	Sensor Only.	1 1/2" - 3" = <b>TX810</b> 4" - 8" = <b>TX820</b>	Brass = <b>B</b> 316 Stainless Steel = <b>S</b> PVC = <b>P</b>	Micropower Pickup = <b>-04</b> LMI Pump Connector = <b>-06</b> Seametrics Control Connector = <b>-07</b> *Immersible = <b>-40</b> Viton® O-Ring = <b>-60</b> Roytronic® Series A Pump 5-pin Connector = <b>-106</b> **High Pressure (Stainless Only) = <b>-HP</b>
<b>A055 Mounted on Sensor</b>	Blind 4-20 mA analog transmitter (A055) mounted on the sensor.	1 1/2" - 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 = <b>-06</b> Viton® O-Ring = <b>-60</b> Roytronic® Series A Pump 5-pin Connector = <b>-106</b> **High Pressure (Stainless Only) = <b>-HP</b>
<b>FT430 Mounted on Sensor</b>	Rate & total indicator with pulse, externally powered (FT430) mounted on the sensor.	1 1/2" - 3" = <b>TX813</b> 4" - 8" = <b>TX823</b>	Brass = <b>B</b> 316 Stainless Steel = <b>S</b> PVC = <b>P</b>	Tamper Evident Kit = <b>-32</b> Viton® O-Ring = <b>-60</b> Nonresettable Total = <b>-64</b> Hinged Display Cover= <b>-126</b> **High Pressure (Stainless Only) = <b>-HP</b>
<b>DL76 Mounted on Sensor</b>	Data logger (DL76) mounted on the sensor.	1 1/2" - 3" = <b>TX816</b> 4" - 8" = <b>TX826</b>	Brass = <b>B</b> 316 Stainless Steel = <b>S</b> PVC = <b>P</b>	Tamper Evident Kit = <b>-32</b> Viton® O-Ring = <b>-60</b> **High Pressure (Stainless Only) = <b>-HP</b>
<b>FT450 Mounted on Sensor</b>	Rate & total indicator with pulse, battery powered (FT450) mounted on the sensor.	1 1/2" - 3" = <b>TX817</b> 4" - 8" = <b>TX827</b>	Brass = <b>B</b> 316 Stainless Steel = <b>S</b> PVC = <b>P</b>	Tamper Evident Kit = <b>-32</b> Viton® O-Ring = <b>-60</b> Nonresettable Total = <b>-64</b> Hinged Display Cover= <b>-126</b> **High Pressure (Stainless Only) = <b>-HP</b>
<b>PD10 Mounted on Sensor</b>	Pulse Divider (PD10) mounted on the sensor.	1 1/2" - 3" = <b>TX818</b> 4" - 8" = <b>TX828</b>	Brass = <b>B</b> 316 Stainless Steel = <b>S</b> PVC = <b>P</b>	LMI Pump Connector = <b>-06</b> 10 Ft. Cable for LMI Connector = <b>-37</b> Viton® O-Ring = <b>-60</b> Roytronic® Series A Pump 5-pin Connector = <b>-106</b> **High Pressure (Stainless Only) = <b>-HP</b>
<b>FT440 Mounted on Sensor</b>	Rate & total indicator with pulse & 4-20 mA output, loop powered (FT440) mounted on the sensor.	1 1/2" - 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 = <b>-32</b> Viton® O-Ring = <b>-60</b> Nonresettable Total = <b>-64</b> Hinged Display Cover= <b>-126</b> **High Pressure (Stainless Only) = <b>-HP</b>

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

\*\*Requires appropriate fitting.

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## CONTACT YOUR SUPPLIER