



WTC

### FEATURES

- One moving part
- Low friction jewel bearings
- Field repairable without removal from the line
- Choice of materials for chemical compatibility
- Variety of displays and controls

### APPLICATIONS

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

### GENERAL INFORMATION

This unique system of 2" to 8" turbine meters uses just one moving part, a precision helical rotor. Rotation of the rotor is electronically detected and processed. The high-quality jewel bearings and shafts minimize friction while providing long wear life in non-lubricating fluids. The entire rotor assembly can be easily removed for field service without removing the meter from the pipe.

WTP bodies are fabricated from Schedule 80 PVC fittings, WTC bodies from carbon steel tubing, and WTS bodies from stainless steel tubing. The turbine insert on WTC and WTS meters is machined from a stainless steel casting. The WTP turbine insert is machined from a solid piece of PVC. Turbine rotors on all models are Kynar (PVDF).

WT meters can be ordered with various output options. The basic model (100) comes with pulse output only. An electronic display (Seametrics FT420) is mounted on the 101 model to display flow rate and total (resettable or non-resettable), and provide a programmable pulse or 4-20 mA output. Other electronics options include a blind 4-20 mA transmitter (A055) on the 102 model and a battery-powered (FT415) rate/totalizer plus pulse output for applications that lack power (104 model). All of these controls/displays can be mounted on the meter or remotely mounted on a wall or panel up to 2,000 feet away. WT-Series meters are compatible for use with most other remote-mount Seametrics displays and controls as well.

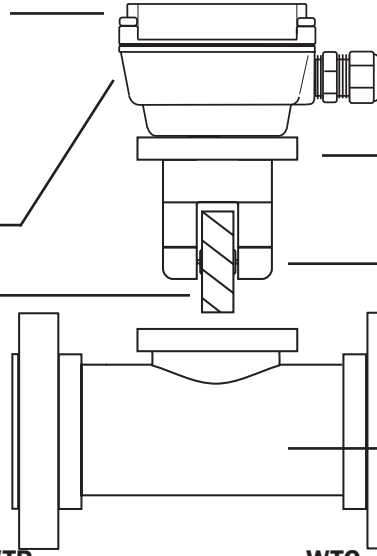
## FEATURES

- Modular electronics for a wide range of applications (available as meter or remote mount)
  - Pulse output only (100 model)
  - Rate/total and 4-20mA output (101 model)
  - Analog 4-20 mA transmitter (102 model)
  - Battery-powered rate/totalizer and programmable pulse output (104 model)

Rugged cast control housing

Rotor is the only moving part

150 lb. drilling flanges or female NPT threaded (depends on model and size)



Cast stainless steel (WTC & WTS) or PVC (WTP) insert removes easily for service

Jewel bearings for long life and low friction resulting in lower minimum flows

Schedule 80 PVC (WTP); Fabricated carbon steel (WTC); or stainless steel (WTS)

## SPECIFICATIONS\*

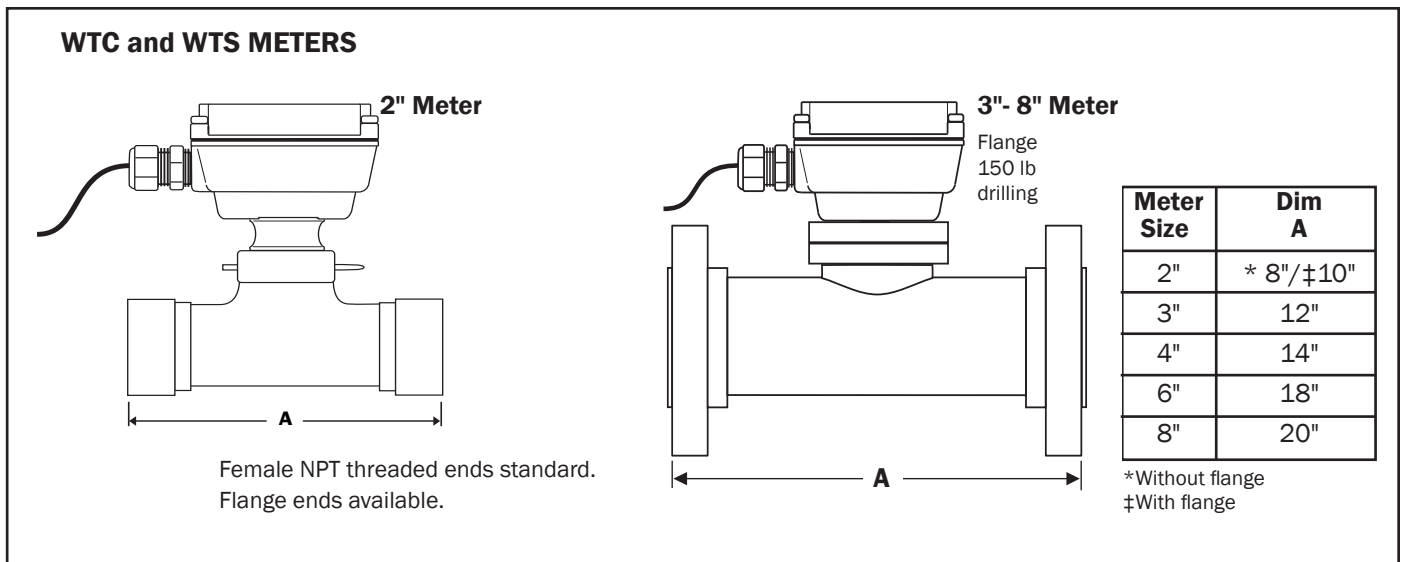
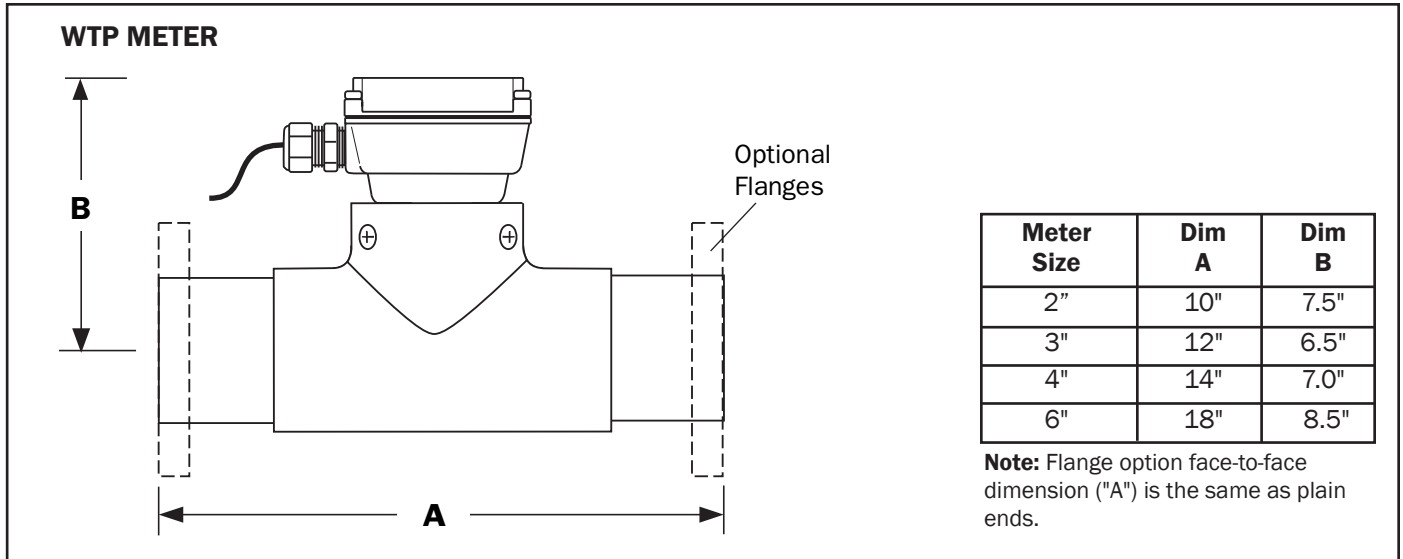
		WTP	WTC	WTS												
<b>Pipe Sizes</b>		2", 3", 4", 6"	2", 3", 4", 6", 8"	2", 3", 4", 6", 8"												
<b>Materials</b>	<b>Meter Body</b>	PVC Schedule 80 fittings	Painted carbon steel	304 Stainless steel (316 SS optional)												
	<b>Turbine Insert</b>	PVC	CF8M cast stainless	CF8M cast stainless												
	<b>Rotor</b>	Kynar (PVDF)	Kynar (PVDF)	Kynar (PVDF)												
	<b>Shaft</b>	Zirconia ceramic 3"-6"	Zirconia ceramic 3"-8"	Zirconia ceramic 3"-8"												
	<b>Shaft</b>	Tungsten Carbide 2"	Tungsten Carbide 2"	Tungsten Carbide 2"												
	<b>Bearings</b>	Sapphire journal, ruby endstone	Sapphire journal, ruby endstone	Sapphire journal, ruby endstone												
<b>Cable</b>		#22 AWG 3-con, 18'; 2000' max	#22 AWG 3-con, 18'; 2000' max	#22 AWG 3-con, 18'; 2000' max												
<b>Flanges</b>		Optional (See Dimensions)	150 lb. drilling (3-8" only)	150 lb. drilling (3-8" only)												
<b>Maximum Pressure</b>		150 psi @ 75 ° F (10 bar @ 24 ° C) (see chart)	200 psi (14 bar)	200 psi (14 bar)												
<b>Maximum Temperature</b>		120 ° F (50 ° C) (see chart)	200 ° F (93 ° C)	200 ° F (93 ° C)												
<b>Accuracy</b>		+/- 1% of full scale	+/- 1% of full scale	+/- 1% of full scale												
<b>Flow Range (GPM)</b>		<b>2"</b>	<b>3"</b>	<b>4"</b>	<b>6"</b>	<b>8"</b>	<b>2"</b>	<b>3"</b>	<b>4"</b>	<b>6"</b>	<b>8"</b>	<b>2"</b>	<b>3"</b>	<b>4"</b>	<b>6"</b>	<b>8"</b>
	<b>Minimum</b>	2	3	6	12	2	3	6	12	30	2	3	6	12	30	
	<b>Maximum</b>	150	400	600	1200	150	400	600	1200	3000	150	400	600	1200	3000	

## Electronic Options Specifications\*

<b>WT100 (Pulse Output Only)</b>		<b>WT102 (Blind 4-20 Transmitter) (e.g. A055)</b>	
Power	6-24 Vdc	Power	24 - 36 Vdc (isolated)
Pulse Output	0-160 pulse/second current sinking	Analog Output	4-20 mA loop
Regulatory	CE Mark	Response Time	2-60 seconds, 90% of full scale (depends on input averaging)
<b>WT101 (Powered Rate/Totalizer) (e.g. FT420)</b>		<b>WT104 (Battery-powered Rate/Totalizer) (e.g. FT415)</b>	
Power	12-32 Vdc (for 4 mA DC min); 24-32 Vdc (for accuracy of 4-20 mA loop)	Power	3.6 Vdc Lithium battery replaceable, 3-5 year life
Rate	6-digit autorange	Rate	6-digit auto range
Total	8-digit	Total	8-digit
Memory	Non-volatile (no battery needed)	Pulse Output	0.1 second open collector (scaled); 0-75 pulse/second passthrough (unscaled); High alarm or low alarm
Pulse Output	0.1 second open collector (scaled); 0-75 pulse/second passthrough (unscaled); High alarm or low alarm		
Analog Output	4-20 mA loop (24-32 Vdc required)		
Regulatory	CE Mark		

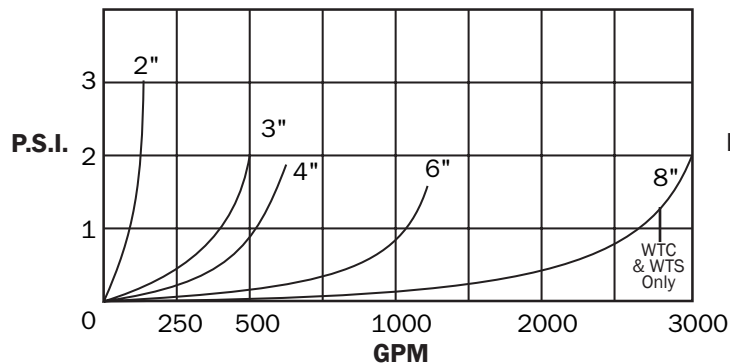
\*Specifications subject to change • Please consult our website for current data ([www.seametrics.com](http://www.seametrics.com)).

## DIMENSIONS

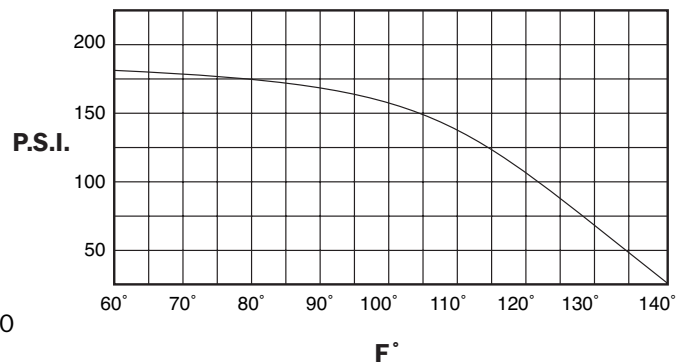


## PRESSURE and TEMPERATURE

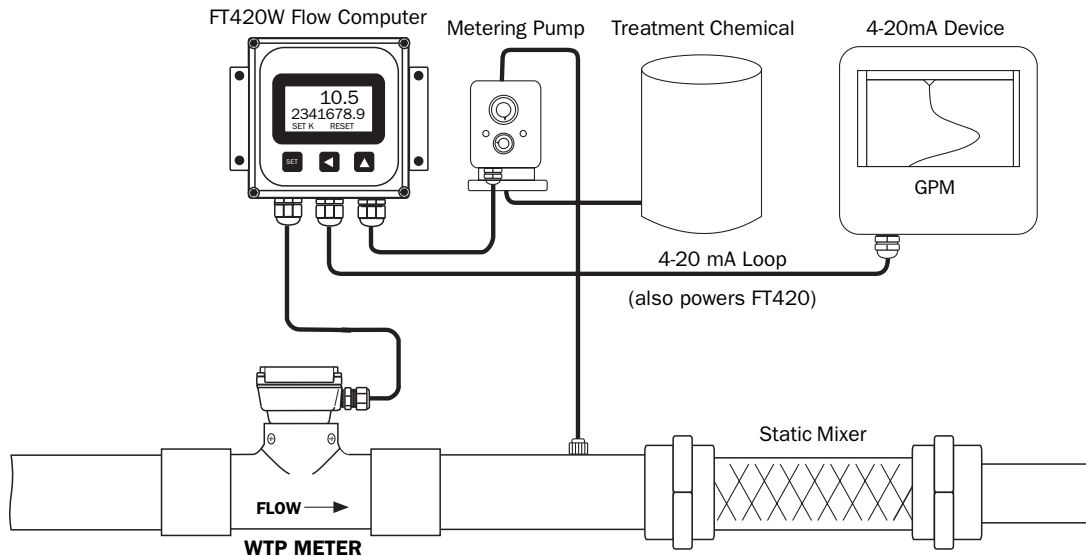
**PRESSURE LOSS CHART (ALL)**



**PRESSURE VS. TEMPERATURE (WTP Only)**



## TYPICAL APPLICATION



## HOW TO ORDER

MODEL	ELECTRONICS	SIZE	OPTIONS
Carbon Steel = <b>WTC</b>	Pulse Output = <b>100</b>	2" = <b>-200</b>	Micropower Sensor = <b>-04</b> (For use with FT415W)
PVC = <b>WTP</b>	Rate+Total/Pulse/4-20 mA = <b>101</b>	3" = <b>-300</b>	316 SS (WTS only) = <b>-14</b>
Stainless Steel = <b>WTS</b>	4-20 mA only = <b>102</b>	4" = <b>-400</b>	Flanged Ends (WTP) = <b>-18</b>
	Battery-Powered Rate+Total/Pulse = <b>104</b>	6" = <b>-600</b>	Flanged Ends (2" WTS) = <b>-20</b>
		8" = <b>-800</b> (WTC & WTS Only)	Flanged Ends (2" WTC) = <b>-34</b>
			Carbide Shaft (3"-8") = <b>-119</b>
<b>ACCESSORIES</b>			
Remote Rate and Total Indicator = <b>FT420W</b>		Remote Battery-Operated Rate/Totalizer = <b>FT415W</b>	
Remote Blind 4-20 mA Converter = <b>AO55W</b>		Remote Pulse Divider = <b>PD10W</b>	

## CONTACT YOUR SUPPLIER