# TFE TURBINE METERS



- ✓ ±1% of Reading Accuracy
- All Wetted Parts, Including Flowmeter Liner, are TFE Recommended for Corrosive Service and Ultra-Pure Water Flow Applications
- Suitable for Clean Liquid Service
- Supplied with 316 SS Flowmeter Housing and 150# ANSI Flanges
- Compatible with Signal Conditioners

All wetted parts of OMEGA's FTB-1200 Series turbine meters are TFE, including liner in the flowmeter housing. Magnets are embedded in the TFE blades of the rotor assembly. Within the turbine flowmeter, the flowing medium engages a vaned rotor, causing it to rotate at an angular velocity proportional to the flow rate. The pickup coil senses the spinning motion of the rotor through the housing and converts it into a pulsing electrical signal. Totaling the pulsing electrical signal directly yields to the total flow, while the frequency is linearly related to the flow rate. Sleeve-type bearing, rotor, cones, and flow straightening sections are made of

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TFE flowmeter shown with flanged housing

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machined TFE. 150# ANSI flanges are available in sizes from ½ to 3". The TFE Series offers a linearity of  $\pm 1\%$ of reading and a repeatability of  $\pm 0.1\%$  of reading.

#### **SPECIFICATIONS**

Accuracy: ±1% of reading over linear flow range

**Repeatability:** ±0.1% of reading over repeatable flow range

**Temperature and Pressure Limitations:** Flanged meters are limited by the pressure rating of the flange, 150 psi @ 21°C (70°F) FLSC-18B, FLSC-28, FLSC-34, FLSC-35B, FLSC-51 and FLSC-51B Compatible Signal Conditioners. See page F-51 for specifications.

**Pressure Drop:** Less than 4 psi at maximum linear flow rate **Output:** 10 mVrms or greater into a 10 k $\Omega$  load at a minimum flow rate **Wetted Parts:** TFE bearings, TFE sleeve

Construction: 316 SS housing Max Particle Size: 0.14 mm (0.0055") Minimum Straight Pipe Length Requirements: 10 pipe diameters upstream, 5 pipe diameters downstream

### ALL MODELS AVAILABLE FOR FAST DELIVERY!

IO Urder (Specify Model Number)							
			Linear		Nominal K Factor (±10%)	Length	Weight
Model No.	Price	Meter Size (in)	GPM	LPM	(Pulses/Gal)	mm (in)	kg (Īb)
FTB-1201	\$1989	1⁄4	0.35 to 3.5	1.3 to 13.2	1200	62 (2.45)	2 (4.5)
FTB-1202	1989	3%8	0.75 to 7.5	2.8 to 28.4	1000	62 (2.45)	2 (4.5)
FTB-1203	1989	1/2	1.25 to 9.5	4.7 to 36	800	62 (2.45)	2 (4.5)
FTB-1204	1989	5/8	1.75 to 16	6.6 to 60.6	500	83 (3.25)	2.7 (6)
FTB-1205	2025	3⁄4	2.5 to 20	9.5 to 76	375	83 (3.25)	2.7 (6)
FTB-1206	2096	1	4 to 45	15 to 170	124	113 (4.43)	2.7 (6)
FTB-1207*	2168	1¼	6 to 70	23 to 265	60	152 (6)	3.6 (8)
FTB-1208*	2192	1½	8 to 100	30.3 to 378	40	152 (6)	3.6 (8)
FTB-1209*	2630	2	15 to 170	56.8 to 643.5	17	152 (6)	5.9 (13)
FTB-1210*	3466	2½	25 to 300	95 to 1135	6	178 (7)	10 (22)
FTB-1211*	3573	3	40 to 485	151 to 1836	3.8	254 (10)	12 (27)

\* Units are only compatible with integral mount signal conditioners FLSC-51 and FLSC-51B.

Comes with complete operator's manual and NIST 10-point calibration certificate for 1 CK for water.

Ordering Examples: FTB-1211, 3" TFE turbine flowmeter, \$3210. FTB-1201, ¼" TFE turbine meter, \$1989.

To order with signal conditioner, specify **SYS/FTB-12\*\*/signal conditioner number. Example: SYS/FTB-1201/FLSC-28**, ¼" TFE turbine flowmeter plus 0 to 5 Vdc scaled frequency pulse output signal conditioner, \$1989 + 524 = **\$2513.** See page F-51 for signal conditioners.

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