

# LOW FLOW TURBINE METERS

## FTB9500 Series



- ✓ Up to 0.5% Rate Accuracy
- ✓ 5000 psig Rated
- ✓ For Flows Down to 23 cc/min (0.006 GPM)
- ✓ Ball Bearings Are Field Replaceable Without Loss of Calibration
- ✓ Includes 20-Point NIST Certification for Water

FTB9500 Series low flow meters offer extremely accurate low flow measurement of liquids. They utilize a Pelton wheel-like rotor whose motion is converted by a pickup coil into a frequency output that is proportional to flow.

These units are supplied with a mating 2-wire connector and can be supplied with FLSC-60 series integrally mounted signal conditioners to provide 4 to 20 mA, 0 to 5 V, or amplified pulse outputs.

The output of the FTB9500 Series low flow meters is **non-linear** and requires the use of a linearizing digital indicator such as OMEGA's DPF-311-LIN Series indicators. These turbine meters are intended for clean fluid service only; where there is any doubt as to the purity of the process fluid, strainers are recommended. In addition, when using these units for fluids with viscosities other than 1 centistoke, special calibrations are available—consult OMEGA's Flow Engineering Department.

### SPECIFICATIONS

**Accuracy:** ±0.5% of reading with linearization

**Repeatability:** ±0.25% or reading

**Fluid Temperature Range:**

-268 to 232°C (-450 to 450°F)

**Materials of Construction:** 304 SS housing, 440C SS ball bearings, 17.4 PH SS rotor, and FKM seals

**Weight:**

FTB9501 to FTB9508: 454 g (1 lb)

FTB9509 to FTB9512: 907 g (2 lb)

**Connections:** ½ MNPT std;

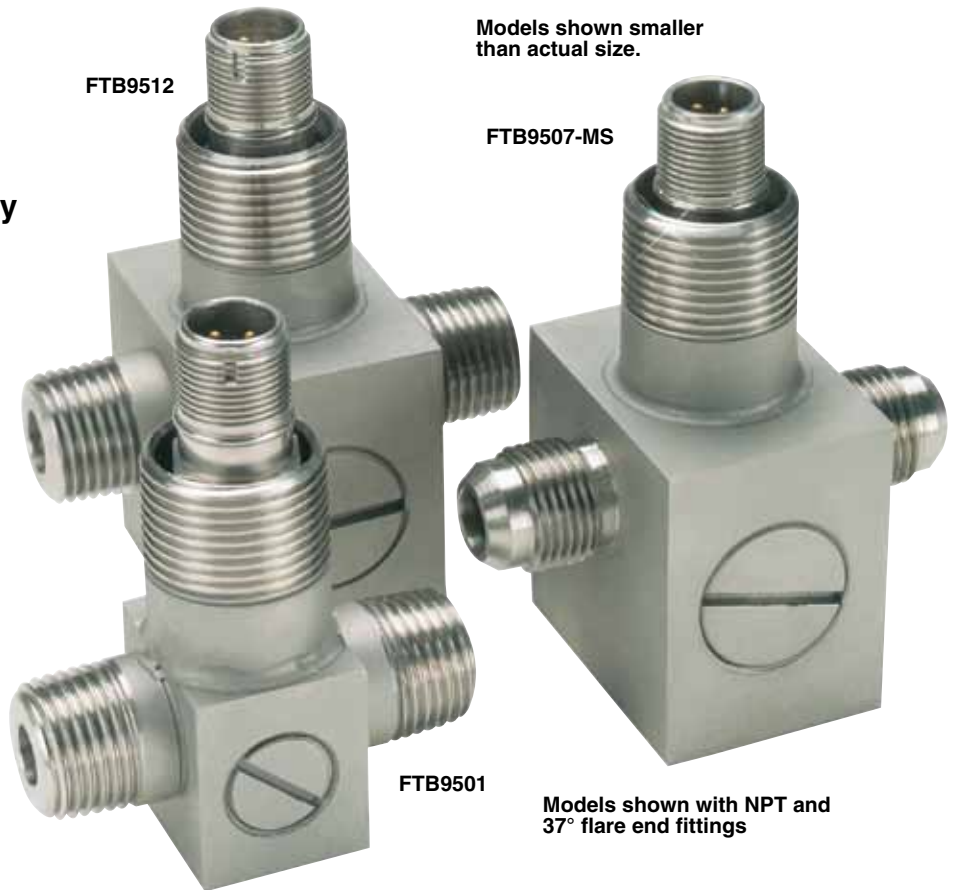
½" 37 degree flare optional

**Maximum Pressure Drop (at 1 CK):**

10 psid

**Maximum Pressure:** 5000 psig (std)

**Output:** Non-linear sinewave



Models shown smaller than actual size.

FTB9507-MS

FTB9501

Models shown with NPT and 37° flare end fittings

For FLSC-64 series of signal conditioners, visit us online.

### To Order

Model No.	Flow Range*		Freq Range*
	cc/minimum	GPM	Minimum/Maximum (Hz)
FTB9501	23 to 175	0.006 to 0.046	40 to 650
FTB9502	25 to 350	0.007 to 0.092	40 to 1050
FTB9503	40 to 700	0.011 to 0.185	40 to 1200
FTB9504	50 to 1000	0.013 to 0.264	40 to 1300
FTB9505	65 to 1400	0.017 to 0.370	40 to 1590
FTB9506	77 to 1900	0.020 to 0.501	40 to 1900
FTB9507	125 to 2300	0.030 to 0.650	40 to 780
FTB9508	150 to 2600	0.040 to 0.686	40 to 800
FTB9509	175 to 3500	0.046 to 0.924	40 to 900
FTB9510	275 to 5000	0.073 to 1.32	40 to 1000
FTB9511	400 to 8000	0.106 to 2.11	40 to 1050
FTB9512	500 to 10,000	0.132 to 2.64	40 to 1100

Comes complete with operator's manual and NIST certificate\*.

\* **Approximate:** 20-point calibration supplied with each unit. Calibrated for water. For fluids of different viscosities, please consult OMEGA's Flow Engineering Department.

For units with 37° Flare fittings, add suffix "-MS" to model number, for additional cost.

**Ordering Examples:** FTB9503-MS, flow meter with 40 to 700 cc/min range, and male 37° flare ports.

FTB9510, flow meter with 275 to 5000 cc/min range.