

ECONOMICAL FLOW RATE SENSORS

FTB2000 Series



- ✓ Low Cost
- ✓ High Accuracy ($\pm 3\%$ of Reading)
- ✓ Measures Low Liquid Flow Rates of 0.13 to 7.9 GPM
- ✓ FDA-Approved Materials
- ✓ Lightweight Plastic Design Permits Mounting in Any Position

The FTB2000 Series Hall-effect turbine flow rate sensors are ideal for OEM applications involving low-flow liquid monitoring. The low cost, coupled with $\frac{1}{2}\%$ repeatability, makes it suitable for replacing dispensing timer systems. Unlike traditional timing systems, turbine technology is not influenced by changes in system pressure caused by aging filters. The sensor's standard power and output specifications make it easy to retrofit to existing controllers.

SPECIFICATIONS

Wetted Materials

Accuracy: $\pm 3\%$ of reading

Repeatability: 0.5% FS

Body: Nylon 12

Turbine: Nylon 12 composite

Bearings: PTFE/15% graphite

Operating Pressure: 200 psig

Operating Temperature:

-20 to 100°C (-4 to 212°F)

Viscosity: 32 to 81 SSU
(0.8 to 16 centistokes)

Filter: <50 microns

Input Power: 5 to 24 Vdc @ 8 mA

Output: NPN sinking open collector @ 50 mA max (1 to 2.2 k Ω pull-up resistor required) (Hz output)

Electrical Connection: Spade terminals 2.8/6.3 x 0.8 mm (0.110/.248 x 0.031")

Inlet/Outlet Ports: $\frac{1}{2}$ MNPT

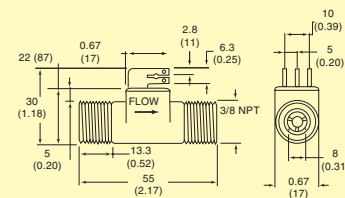
FTB2001, shown larger than actual size.



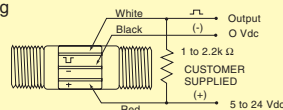
DPF701 Series compatible meter, shown smaller than actual size. See page M-12.



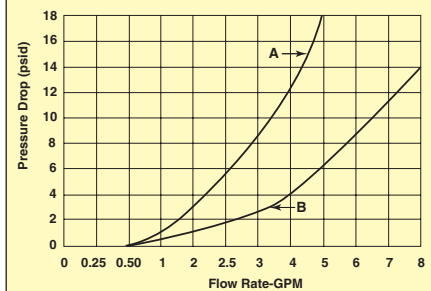
Dimensions: mm (in)



Wiring



Pressure Drop—Typical



Tests conducted with water at 20°C (68°F)

A) All Others B) FTB2004, FTB2005

MOST POPULAR MODELS HIGHLIGHTED!

To Order (Specify Model No. Based on Desired Body Material and Port Size)

Model No.	% NPT	Flow Range		Pulses per		Frequency Output
		GPM	LPM	Gallon	Liter	
FTB2001		0.13 to 1.3	0.5 to 5	26100	6900	58 to 575 Hz
FTB2002		0.26 to 2.6	1 to 10	12500	3300	55 to 550 Hz
FTB2003		0.26 to 4.0	1 to 15	17400	4600	76 to 1150 Hz
FTB2004		0.26 to 4.0	1 to 15	8300	2200	37 to 550 Hz
FTB2005		0.53 to 7.9	2 to 30	3800	1000	33 to 500 Hz

Accessories

Model No.	Description
FTB173941	Mating connector with 9 m (3'), 3-conductor, PVC pigtail leads
FTB173942	Mating connector with 3 m (10'), 3-conductor, PVC pigtail leads

Comes with complete operator's manual.

Ordering Example: FTB2002, turbine meter, plus FTB173942, mating connector with 3 m (10') cable,

omega.co.uk[®]

Your One-Stop Source for Process Measurement and Control!

Freephone 0800 488 488 | International +44(0) 161 777 6622 | Fax +44(0) 161 777 6622 | Sales@omega.co.uk

www.omega.co.uk



UNITED STATES

www.omega.com

1-800-TC-OMEGA
Stamford, CT.

CANADA

www.omega.ca

Laval(Quebec)
1-800-TC-OMEGA

GERMANY

www.omega.de

Deckenfronn, Germany
0800-8266342

UNITED KINGDOM

www.omega.co.uk

Manchester, England
0800-488-488
+44-(0)161-777-6611

FRANCE

www.omega.fr

0800-466-342

BENELUX

www.omega.nl

0800-099-33-44



More than 100,000 Products Available!

• Temperature

Calibrators, Connectors, General Test and Measurement Instruments, Handheld Instruments for Temperature Measurement, Ice Point References, Indicating Labels, Crayons, Cements and Lacquers, Infrared Temperature Measurement Instruments, Recorders, Relative Humidity Measurement Instruments, PT100 Probes, PT100 Elements, Temperature & Process Meters, Timers and Counters, Temperature and Process Controllers and Power Switching Devices, Thermistor Elements, Probes and Assemblies, Thermocouples, Thermowells and Head and Well Assemblies, Transmitters, Thermocouple Wire, RTD Probes

• Flow and Level

Air Velocity Indicators, Doppler Flowmeters, Level Measurement, Magnetic Flowmeters, Mass Flowmeters, Pitot Tubes, Pumps, Rotameters, Turbine and Paddle Wheel Flowmeters, Ultrasonic Flowmeters, Valves, Variable Area Flowmeters, Vortex Shedding Flowmeters

• pH and Conductivity

Conductivity Instrumentation, Dissolved Oxygen Instrumentation, Environmental Instrumentation, pH Electrodes and Instruments, Water and Soil Analysis Instrumentation

• Data Acquisition

Communication Products and Converters, Data Acquisition and Analysis Software, Data Loggers Plug-in Cards, Signal Conditioners, USB, RS232, RS485, Ethernet and Parallel Port Data Acquisition Systems, Wireless Transmitters and Receivers

• Pressure, Strain and Force

Displacement Transducers, Dynamic Measurement Force Sensors, Instrumentation for Pressure and Strain Measurements, Load Cells, Pressure Gauges, Pressure Reference Section, Pressure Switches, Pressure Transducers, Proximity Transducers, Regulators, Pressure Transmitters, Strain Gauges, Torque Transducers, Valves

• Heaters

Band Heaters, Cartridge Heaters, Circulation Heaters, Comfort Heaters, Controllers, Meters and Switching Devices, Flexible Heaters, General Test and Measurement Instruments, Heater Hook-up Wire, Heating Cable Systems, Immersion Heaters, Process Air and Duct, Heaters, Radiant Heaters, Strip Heaters, Tubular Heaters