



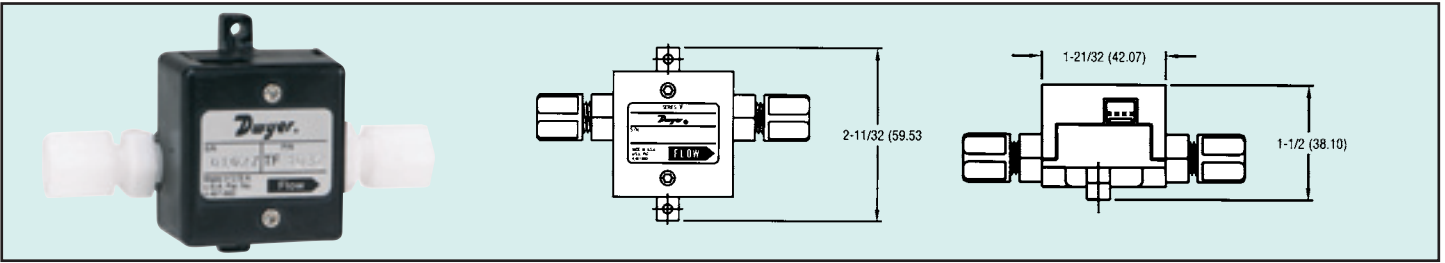
Series
TF

Turbine Flow Sensor

0 to 5 VDC Output, Liquid or Gas Models



Flow



Series TF Turbine Flow Sensors are suitable for a wide variety of industrial, commercial and laboratory flow applications. Sensors use a turbine wheel and electro-optical detection to convert flow rates into a linear 0 to 5 VDC signal for recording and datalogging. Models for use with liquids also provide a pulsed output for flow totalizing – see model TM2 below.

STOCKED MODELS in bold

Model Number	Range	Connection
Flow Sensors for liquids		
TF1032	0.1 to 2.0 LPM	1/4" OD
TF1053	1 to 10 LPM	3/8" OD
TF1062	1 to 10 GPH	3/8" OD
TF1072	4 to 100 GPH	3/8" OD
Flow Sensors for gases		
TF2110	2.0 to 10 LPM	1/4" OD
TF2120	4.0 to 20 LPM	3/8" OD
TF2130	10 to 50 LPM	3/8" OD
TF2140	20 to 100 LPM	3/8" OD

SPECIFICATIONS

Service: Clean gases or clean low viscosity liquids (≤ 10 centistokes) depending on model.

Wetted Materials: 40% glass filled polyphenylene sulfide sensor, Ryton® fittings, sapphire bearing, Viton® O-ring.

Accuracy: $\pm 3\%$ full scale

Linearity: $\pm 3\%$ full scale.

Repeatability: $\pm 0.2\%$ full scale (liquid models), $\pm 1\%$ full scale (gas models).

Temperature Limits: 122°F (50°C). Temperature Sensitivity: $\pm 0.2\%$ per °C.

Accessories

No. TF01, 120 VAC, 60 Hz power supply/adaptor for liquid flowmeters.....

No. TF02, 240 VAC, 50 Hz power supply/adaptor for liquid flowmeters.....

No. TF03, 120 VAC, 60 Hz power supply/adaptor for gas flowmeters.....

No. TF04, 240 VAC, 50 Hz power supply/adaptor for gas flowmeters.....

No. TF05, Optional connecting cable for liquid flowmeters.....

No. TF06, Optional connecting cable for gas flowmeters.....

Pressure Limits:

100 psi (6.89 bar) at 20°C (liquid models); 40 psi at 20°C (gas models). Pressure Sensitivity: $\pm 0.07\%$ per mm Hg (for air at 1 to 3 atm).

Supply Voltage: 12.5 ± 2 VDC, 30 mA (connecting cable or cable/adaptor sold separately).

Output: 0 to 5 VDC (gas models), 0 to 5 VDC and 7.5 VDC peak pulse output, 0 to 400 pps typical (liquid models).

Weight: 1 lb (0.5 kg).

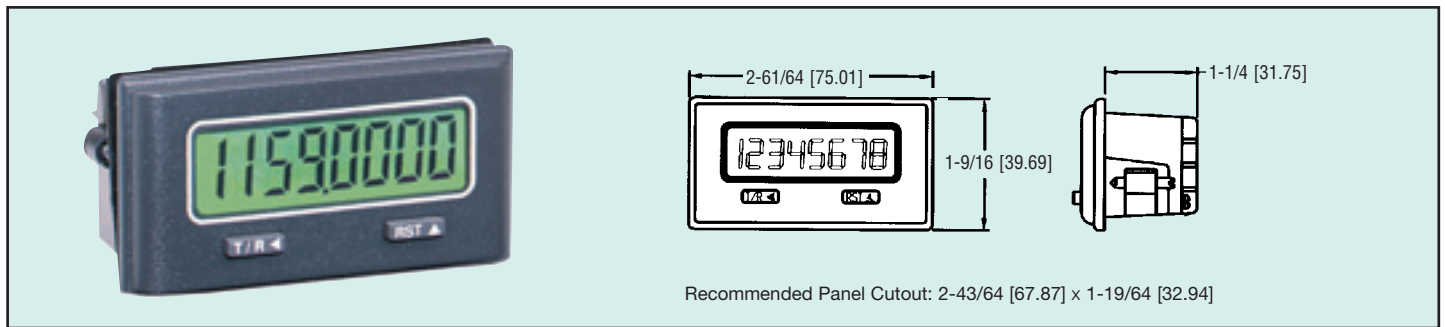
Agency Approvals: CE.



Model
TM2

Flow Totalizer

Pulse Input, 8-digit LCD Display



Monitor flow rate or total flow with Model TM2 Flow Totalizer. Unit features a four digit flow rate display and an eight digit totalizing display with a programmable, five position decimal point. Easily toggle between rate and total with front-panel push-button. Use scaling factor to define flow rate in engineering units such as ml/hr, l/min, or gal/hr.

STOCKED MODELS

- TM2**
- Accessory**
- TM25,** Replacement 3V lithium battery

SPECIFICATIONS

Input: 7.5 VDC max. pulse.

Accuracy: $\pm 0.2\%$.

Input Impedance: 27 k Ω at 3 VDC.

Totalizer Type: UP count.

Rate Indication Type: Frequency.

Count Input Speed: 10 kHz @ 50% duty cycle.

Totalizing Range: 0.0001 to 100.0000 with five position decimal point.

Rate Indication Range: 0.001 to 9999 (five position decimal point).

Update Time: 0.7 seconds.

Display: 8-digit LCD, 7/8" H.

Temperature Limits: 32 to 131°F (0 to 55°C).

Housing Material: Cyclac X-17.

Power: One 3V lithium battery (included).

Average Battery Life:

Approximately 5 years.

Weight: 1 lb (0.5 kg).

Agency Approvals: CE.