

# Blancett<sup>®</sup> turbine meters

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# **Rugged meters for harsh industrial applications**

Blancett<sup>®</sup> fluid flow meters are designed with stainless steel and tungsten carbide components. This rugged line of turbine meters is ideal for harsh industrial applications, including secondary oil recovery. These products are also well-suited for the semiconductor and chemical processing industries, applications with high corrosive, temperature and pressure environments and applications requiring 3-A sanitary certified equipment. Electronic options including magnetic pickups, rate and totalizer displays, enable the meter to interface with most computers and PLCs.

# Model B2800

Model B2800 is a technologically advanced flow monitor designed to be comprehensive, user-friendly, flexible and cost efficient. The digital signal processing display comes precalibrated by the factory when purchased with a Blancett<sup>®</sup> turbine flow meter; otherwise, it can easily be configured in the field. The B2800 can be utilized with nearly any flow sensor that outputs a low-amplitude AC signal, but when paired with a rugged, reliable Blancett<sup>®</sup> turbine flow meter, dependable and accurate flow information will be provided for years to come.



# Features

- Displays rate and/or total on a large 8-digit by ¾" display
- User-friendly front panel programming
- Six mounting options available: meter, remote, swivel, handheld, panel or explosion proof
- Simplified model displays in five selectable units of measure
- Advanced model offers thirteen units and four selectable time intervals for rate measurement
- CSA Class I, Div 1 approval
- Standard pulse output
- Battery or loop-powered, 4-20 mA version



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# Model 1100



Model 1100 turbine flow meter withstands the demands of the most rigorous flow measurement applications. Designed to maintain accuracy and mechanical integrity, its rugged 316 stainless steel construction ensures a long service life in severe operating environments. It meets a wide range of measurement requirements and integrates electronically with the Blancett<sup>®</sup> B2800 flow monitor, K-factor scaler or the F to I/F to V intelligent converters. Originally developed for the secondary oil recovery market, the model 1100 is an ideal meter for nearly all liquid flow measurement on or off the oilfield.

#### Features

- Accuracy of ± 1% of reading for 7/8" and larger meters ± 1% of reading over the upper 70% of the measuring range for 3/8", 1/2" and 3/4" meters
- Repeatability of ±0.1%
- Installation in pipe sizes from ½" to 10"
- Available in NPT, BSP, Victaulic<sup>®</sup>, flange, hose barbed or Grayloc<sup>®</sup> end connections
- NIST traceable calibration
- Flow measurement ranges from 0.03 0.1 l/s through 30 315 l/s (0.6 3.0 through 500 5000 GPM)
- CSA explosion proof models available

# QuickSert®

The QuikSert<sup>®</sup> in-line turbine flow meter's durable stainless steel body incorporates a helical turbine with tungsten carbide shaft and bearings. The meter provides an efficient, long service life and a cost effective solution for your measurement requirements. The QuikSert's compact design requires less space in the flow line, allowing easy installation and lower mechanical costs. The QuikSert<sup>®</sup> utilizes modified upstream and downstream flow straighteners for enhanced fluid dynamics. QuikSert<sup>®</sup> provides a local flow rate and volume totalization when used with the Blancett<sup>®</sup> B2800.

# Features

- Accuracy of ±1% of reading for 7/8" and larger meters ±1% of reading over the upper 70% of the measuring range for 3/8", 1/2" and 3/4" meters
- Repeatability of ±0.1%
- Temperatures up to 170 °C (350 °F)
- Easy installation, lower maintenance costs
- Unique design eliminates need for mating flanges
- NIST traceable calibration
- CSA explosion proof models available



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# Models 200 and 900



The model 200 and model 900 flow meters use multi-jet impeller (200) and impeller-type (900) flow measuring mechanisms for reliable, long-term operation. The 200 meters have been specifically designed for low flow capacity applications and record the accumulative volumetric totals of high pressure floodwater. Type 900 uses a time-proven rotary vane mechanism and has been designed for the measurement of flood water in secondary oil recovery operations. Both models consist of housings that are constructed of abrasive and chemical-resistant stainless steel and allow quick, easy service access to the internal measuring mechanisms without removing the meter.

	Model 200 Multi-Jet	Model 900 impeller-type
Flow range	0.5 to 75 l/min (0.15 - 20 GPM)	Low, mid and high flow ranges available
Accuracy	±1% of reading	±1% of reading
Max. pressure rating	70 bar (1000 psi)	345 bar (5000 psi)

# FloClean™ 3-A

The FloClean<sup>™</sup> 3-A sanitary turbine flow meter meets the requirements of 3-A sanitary standard number 28-03 and is recommended for use in clean out-of place (COP) and sanitize outof place (SOP) applications. FloClean<sup>™</sup> uses the most advanced polishing technology in a durable 316L stainless steel body and was developed for use in the food, beverage and pharmaceutical industries. FloClean<sup>™</sup> provides a local flow rate and volume totalization when used with the Blancett<sup>®</sup> B2800, as well as the ability to interface with a variety of PLCs and computers.

#### Features

- Accuracy of  $\pm 1\%$  and repeatability of  $\pm 0.1\%$
- Temperatures up to 150 °C (300 °F)
- 0.03 0.1 through 2.5 25 l/s (0.6 3.0 GPM through 40 - 400 GPM) flow ranges
- Sanitary end connections
- NIST traceable calibration
- Materials comply to FDA requirements

# Model B1750





The B1750 positive displacement flow meter is designed to meet the accuracy requirements for applications that maintain low flow rates and high fluid viscosities. Applications include lubricants, fuels, chemicals, oils and greases. It allows for easy installation and a long service life with two housing materials available, high strength aluminum and stainless steel. There is no need for additional upstream or downstream straight run piping. The B1750 has an optional magnetic pickup that interfaces with the Blancett<sup>®</sup> B2800, as well as a variety of other PLCs or PC data acquisition systems.

# Features

- Accuracy of  $\pm 0.5\%$  of reading and repeatability of  $\pm 0.1\%$
- Temperatures up to 200 °C (400 °F), with a maximum pressure of 354 bar (5000 PSI)
- Flow ranges from 0.01 7.5 through 3,5 455 l/min (0.01 - 2.0 GPM through 1 - 120 GPM)
- ¼", ¾", and 1¼" NPT connections
- Turndown ratio up to 400:1 in some models

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# K-factor scaler



The Blancett<sup>®</sup> K-factor scaler converts the output of a Blancett<sup>®</sup> turbine flow meter, or other low-level frequency output, into a scaled square wave output signal which then translates into the desired units of measure. The output from the K-factor scaler can be recognized by almost any data collection device. The K-factor scaler is available in an eight rotary switch selectable model and a programmable version that is precalibrated when ordered with a Blancett<sup>®</sup> series 1100 turbine meter.

- CSA Class I, Division 1 approval
- Operating temperature up to 70 °C (158 °F)
- Windows<sup>®</sup> based software available for configuration of programmable scaler
- Amplifies turbine meter pulse output

# **Frequency converter**

The Frequency to Current (F to I) and Frequency to Voltage (F to V) converters are active sensors designed to provide enhanced features and greater output flexibility for Blancett<sup>®</sup> turbine meters. These digital signal processing devices measure and calculate the flow rate of a turbine flow meter and produce an analog output proportional to the flow rate. The converters are calibrated with the Blancett<sup>®</sup> turbine meters when ordered together, and an optional Windows<sup>®</sup> based software utility is also available for in-field programming.

#### Features

- Accuracy of frequency measurement is ±0.1%
- Offered with either a 4-20 mA or a 0-5 VDC output
- Ambient temperature up to 70 °C (158 °F)
- Two mounting styles available for ease of operation

#### Repair kits



The turbine meter repair kits are designed for use with Blancett<sup>®</sup> turbines and those of other turbine meter manufacturers. They can be used in abrasive waterflood projects and hostile industrial environments, as well as conventional applications. All repair kits are factory calibrated and supplied with a unique K-factor for use within each turbine's standard flow range. When combined with the Blancett<sup>®</sup> B2800 flow monitor, extended range calibrations are available for improved accuracy. Repair kits are available for Blancett<sup>®</sup> Model 1100, QuikSert<sup>®</sup>, Model 200 and 900 and FloClean™ turbine meters.

# Features

- Long and cost effective operating life
- Quick and simple installation, with no special tools required
- Prompt "off-the-shelf" delivery on all standard sizes

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