

Flow Meters



F to I / F to V

# Intelligent Frequency Converter

- Converts turbine pulse output into linearized analog output
- Choice of 4-20 mA or 0-5 VDC output
- Accuracy of frequency measurement is ±0.1%
- Enables integration with data acquisition devices
- Two mounting styles available for ease of installation





#### Introduction

The Blancett Frequency-to-Current (F to I) and Frequency-to-Voltage (F to V) intelligent converters are state-of-the-art active sensors designed to provide enhanced features and greater flexibility for the Blancett turbine. These microprocessor-based devices are engineered to provide an analog output directly from a Blancett turbine flow meter. The converters measure and calculate the flow rate of a turbine flow meter and produce an analog output proportional to the flow rate. The F to I and F to V converters are offered with either a 4-20 mA or a 0-5 VDC output signal, enabling easy electronic integration. Choose between the capped aluminum condulet Y-enclosure (model B220-873 or B220-874) or the canister style (model B220-950 or B220-951) converters. When a converter is ordered with a flow meter, the two components ship from the factory calibrated as a system. If the converter is a replacement, Manucell the turbine's K-Factor has changed, or the converter is being used with a different manufacturers flow meter, then re-programming is possible with an optional Windows®-based software utility. Please consult the factory for details.

### **Specifications**

	<b>F to I</b> Models B220-873 & B220-950	<b>F to V</b> Models B220-874 & B220-951
Power:	10 to 30 VDC supply range Loop-powered, 6V insertion loss maximum	10 to 26 VDC supply range
Inputs:	Magnetic Pickup	Magnetic Pickup
Frequency	0 to 3500 Hz	0 to 3500 Hz
Trigger Sensitivity	30 mV p-p	30 mV p-p
Frequency Measurement Accuracy	±0.1%	±0.1%
Analog Output:	4 to 20 mA current loop	0 to 5 VDC
Resolution	1 : 4000	1:4000
Temperature Drift	50 ppm/°C (max)	50 ppm/°C (max)
Environmental:		
Ambient Temperature	-22 °F to 158 °F (-30 °C to 70 °C)	-22 °F to 158 °F (-30 °C to 70 °C)
Humidity	0-90%, non-condensing	0-90%, non-condensing

### **Models and Wiring Diagrams**

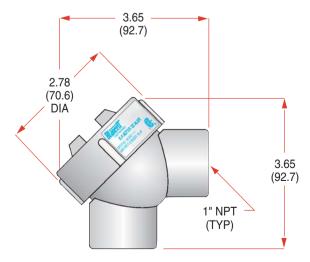
Model No.	Intelligent Converter	Output
B220-873	F to I	4-20 mA
B220-874	F to V	0 to 5 VDC

Model No.	Intelligent Converter	Output	
B220-950	F to I	4-20 mA	
B220-951	F to V	0 to 5 VDC	

#### **Connecting Cables:**

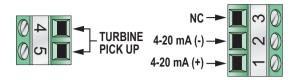
Model No.	Length	Description	
B220952-6	6 feet	5-pin cable assembly	
<b>B220952-15</b> 15 feet		5-pin cable assembly	

## Dimensions - Inches (mm)

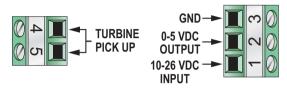


Models B220-873 & B220-874

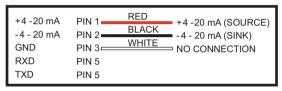
#### F to I CONVERTER

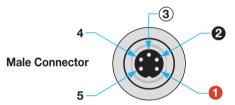


#### F to V CONVERTER



#### F to I Converter





#### F to V Converter

+10 -26 VDC SIGNAL GND RXD	PIN 1—PIN 2—PIN 3—PIN 5	RED BLACK WHITE	■ +10 -26 VDC ■ 0 - 5 V OUTPUT = Ø V
TXD	PIN 5		



Models B220-950 & B220-951

### Related Blancett Products

#### Model 1100 In-Line Turbine Flow Meter

- Accuracy: ±1% of reading
- Repeatability: ±0.1%
- Flow ranges from 0.6 3 GPM to 500 5,000 GPM in line sizes from 1/2" to 10"
- Rugged 316 stainless steel construction
- NIST traceable calibration certificates available



### **QuikSert®In-Line Turbine Flow Meter**

- Modified flow straighteners for enhanced fluid dynamics
- Body dimensions allow for installation in confined areas
- "Between the flange" design eliminates the need for mating flanges
- Flow ranges from 0.6 3 GPM to 500 5,000 GPM in line sizes from 1/2" to 10"
- NIST traceable calibration certificates available
- Optional installation kit available



#### **B2800 Flow Monitor**

- Microprocessor-based flow monitor and totalizer
- Use with Blancett turbine flow meters as well as other flow meters with a frequency output
- Battery (1.5 VDC) and loop-powered (4-20 mA) versions
- Meter, remote, panel and swivel mounting options
- Hand-held and explosion-proof models also available





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