

# **Intelligent Frequency Converter**

F to I / F to V

### **DESCRIPTION**

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...5V DC 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, 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.

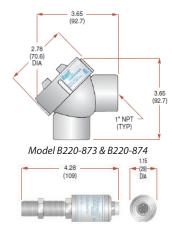
#### **FEATURES**

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



## **DIMENSIONS**

Dimensions are in inches (mm).



Model B220-950 & B220-951

SPECIFICATIONS		F to I Models B220-873 & B220-950	F to V Models B220-874 & B220-951	
Power		1030 VDC supply range Loop-powered, 6V insertion loss max	1026V DC supply range	
Inputs	Source	Magnetic Pickup	Magnetic Pickup	
	Frequency	03500 Hz	03500 Hz	
	Trigger Sensitivity	30 mV p-p	30 mV p-p	
	Frequency Measurement Accuracy	±0.1%	±0.1%	
Analog Output	Type	420 mA current loop	05V DC	
	Resolution	1:4000	1:4000	
	Temperature Drift	50 ppm/°C (max)	50 ppm/°C (max)	
Environmental	Ambient Temperature	–22158 °F (–3070 °C)	−22158 °F (−3070 °C)	
	Humidity	090%, non-condensing	090%, non-condensing	
	Altitude	2000 m	2000 m	
	Use	Indoor/outdoor	Indoor/outdoor	
Enclosure	Kilark aluminum capped elbow Y-3. Class I, Div. 1 & 2, Groups C & D; Class II, Div. 1 & 2, Groups E, F and G; Class III			
Agency Listings	Ordinary locations	CAN/CSA-C22.2 No. 61010-1-12, UL Std. No. 61010	0-4 (3rd Edition)	
	Pollution Degree 2			
	Overvoltage Category I			



### **MODELS**

Model	Intelligent Converter	Output
B220-873	F to I	420 mA
B220-874	F to V	05V DC
B220-950	F to I	420 mA
B220-951	F to V	05V DC

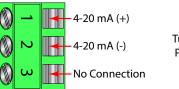
### **Connecting Cables**

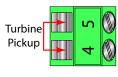
Model	Length	Description
B220952-6	6 ft	5-pin cable assembly
B220952-15	15 ft	5-pin cable assembly

## **Male Connector**

# WIRING DIAGRAMS

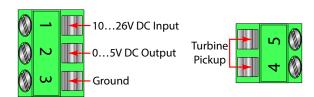
### F to I Converter, B220-873



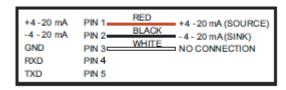


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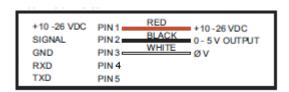
### F to V Converter, B220-874



## F to I Converter, B220-950



## F to V Converter, B220-951



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