

SCOPE OF THIS MANUAL

This manual is intended to help you install and use the Blancett B220210 magnetic pick-up with preamplifier for Model 1100 and QuikSert turbine flow meters.

IMPORTANT

Read this manual carefully before attempting any installation or operation. Not following instructions properly may impair safety of equipment and/or personnel. Keep the manual accessible for future reference.

UNPACKING AND INSPECTION

Upon opening the shipping container, visually inspect the product and applicable accessories for any physical damage such as scratches, loose or broken parts, or any other sign of damage that may have occurred during shipment.

NOTE: If damage is found, request an inspection by the carrier's agent within 48 hours of delivery and file a claim with the carrier. A claim for equipment damage in transit is the sole responsibility of the purchaser.

INTRODUCTION

The Blancett B220210 magnetic pick-up with preamplifier was designed to directly replace a standard pick-up within a turbine flow meter when signal amplification is required. The pick-up is a combination of a standard Blancett magnetic pick-up and a solid state electronic preamplifier in a single stainless steel housing.

OPERATING PRINCIPLE

As fluid flows through the meter the turbine rotates at a speed proportional to the fluid velocity. As each turbine blade passes through the magnetic field at the base of the pick-up, an AC voltage pulse is generated in the pickup coil. The voltage signal generated by these pulses becomes amplified within the pick-up. The output signal generated from the pick-up is now in the form of a square wave. The frequency of this amplified signal is used to represent the flow rate of fluid passing through the turbine flow meter.

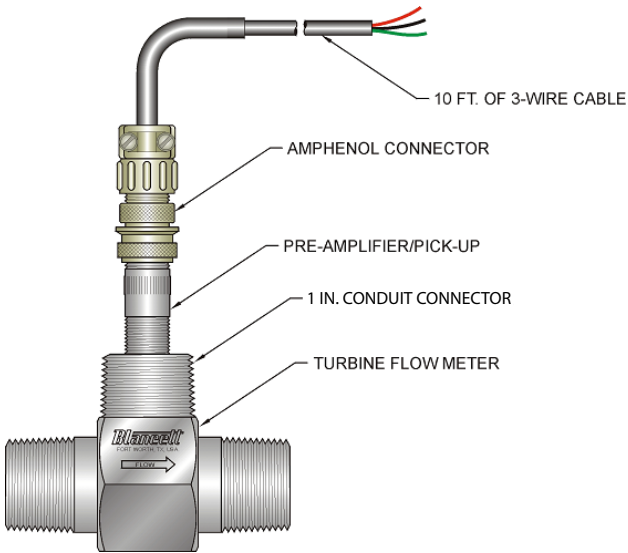


Figure 1: Model 1100 flow meter with preamplifier pick-up and connecting cable

INSTALLATION AND WIRING

The B220210 is simply threaded into the hole (5/8 inch – 18UNF) in the turbine meter until the pick-up bottoms out. Tighten the pick-up finger tight. Do not over tighten.

Install the 3-pin connector in the proper orientation and connect the wire ends of the cable using appropriate common wiring practices. Refer to the table and *Figure 2* below for wiring specifications.

Pin	Description	Wire Color
A	Power: 5...30V DC @ 15 mA	Red
B	Common: Power return	Black
C	Output Signal: 0...10V (Square Wave)	Green or Clear

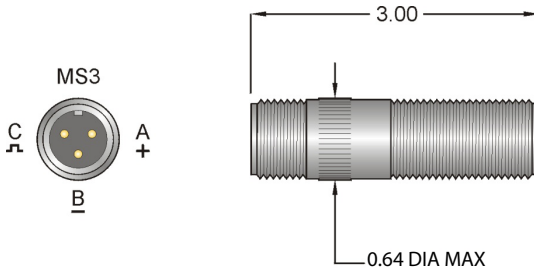


Figure 2: Pin configuration

SPECIFICATIONS

Supply Voltage	5...30V DC
Input Current	15 mA
Current Sinking	25 mA maximum
Pulse Out	0...10V peak-to-peak
Frequency Range	5 Hz... 10 kHz
Transmit Distance	1500 ft maximum
Temperature	-20... 160° F (-29... 71° C)
Housing	Stainless steel and epoxy encapsulated
Electrical Connection	3-pin straight Amphenol® connector supplied with 10 ft cable standard (Part No. B220-219, sold separately.)

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