

# OVP-100

# Optical Volume Pulser



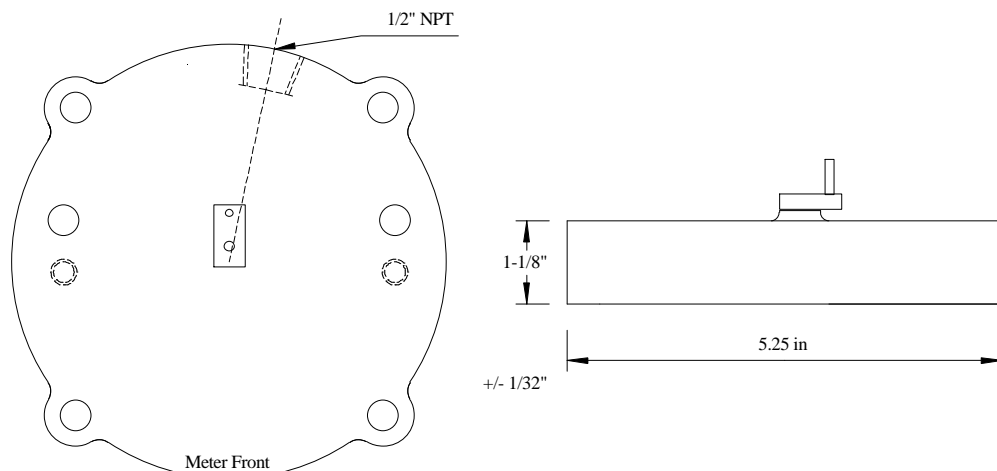
- ❑ **Transmit Rate & Volume Data**
- ❑ **Fits all Industrial/Commercial Meters**
- ❑ **Standard 100 Pulses/rev.**
- ❑ **Available in Other Pulse Values**
- ❑ **1/2" NPT Output Connection for Conduit**

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The Miners & Pisani, Inc. OVP-100 Optical Volume Pulser is an optically actuated switch mounted in a polycarbonate housing for easy installation on commercial and industrial gas meters. Meter shaft rotation actuates the switch which can then be used to transmit the metered volume and rate to a remote totalizer or rate indicator.

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## Dimensions



Miners & Pisani, Inc.

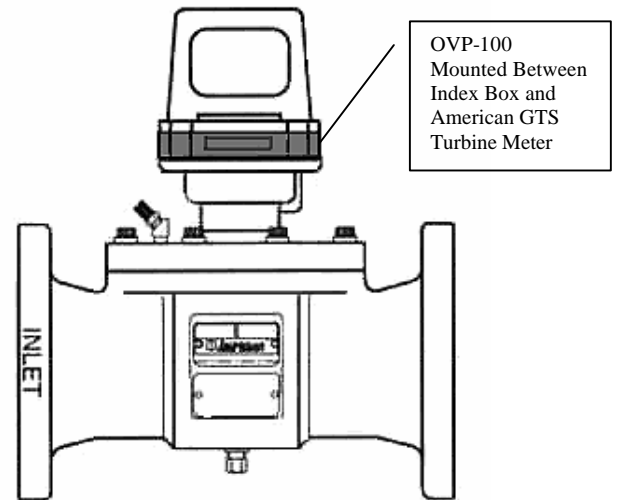
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2010 Farallon Drive, San Leandro, CA 94577  
Tel: 510-352-9040 ° Fax: 510-352-2307  
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## SPECIFICATIONS / INSTRUCTIONS

### SPECIFICATIONS

Cycles per Revolution: 100  
Voltage (nominal): 12VDC  
Operating Temperature: -40 to 150° F  
Current: 50 ma  
Wire Colors: Red: +V  
Black: common  
White: signal



### MOUNTING INSTRUCTIONS

### CIRCUIT DESCRIPTION

The photodetector circuit consists of two photodiode sensors and a set-reset logic circuit with Schmitt trigger inputs driving an open collector NPN transistor with pull-up resistor. The Schmitt trigger hysteresis characteristics provide high immunity to noise. The output is TTL compatible and ideal for interfacing with a number of counters or flow rate indicators.

- ❑ The OVP-100 has a universal mounting pattern to facilitate mounting on most commercial and industrial gas meters. 5/16"-18 X 2" screws are supplied for mounting. American Meter Co. mounting holes on meter should be enlarged to standard size by running a 5/16-18 tap down through the existing #18-18 threads.
- ❑ Remove the existing meter index or instrument from the meter. Place the OVP-100 over the mounting holes and reinstall the original index or instrument using the supplied screws.
- ❑ The American Meter index drive shaft is not concentric with the mounting bolt circle. Care should be taken to mount the OVP-100 with the wiring access hole to the back of the meter to insure proper alignment of the drive shaft and the driven shaft.

### OPTIONAL EQUIPMENT

- ❑ Intrinsically Safe Barrier
- ❑ Battery Powered Remote Totalizer
- ❑ 4-20 ma Converter

### CAUTION

- ❑ The OVP-100 is designed to operate with high impedance loads and cannot be used to directly operate solenoid actuated devices or similar inductive loads. To operate the OVP-100 in circuits containing inductive loads or at ratings above those listed for the circuit, additional protective devices must be used.
- ❑ Care must be exercised when installing electrical equipment in locations deemed hazardous by local authorities. When OVP-100 pulsers are installed in such locations, the pulser must be protected by an energy limiting barrier located in a non-hazardous area.

