# **Pulse Output Device (POD)**

# Electronic Pulse Output for Positive Displacement Metering



### **General Information**

The Liquid Controls Pulse Output Device (POD) converts the rotary motion of Liquid Controls Positive Displacement Flowmeters into electronic pulses that equal the volumetric measurements of the meter.

The POD mounts directly to the front cover of the meter in place of the packing gland. The motion of the meter's blocking rotor is magnetically coupled through a stainless steel wall to the electronics compartment of the POD. This eliminates the dynamic seal of the packing gland and isolates the electronics from the process fluid in the meter.

The electronic pulses generated by the POD is easily adapted to a wide variety of electronic monitoring devices and control equipment.

### **Features & Benefits**

- Glandless drive
- No dynamic seals to fail or leak
- Unscaled pulse output
- Easily adapts to remote totalizers, batch controllers, computers, PLC's and other pulse receiving devices.
- No amplifier or signal conditioner required
- Wetted parts 316 stainless steel or equivalent

- Meets current environmental standards: Weights & Measures; NEMA 4X; Class I, Div. 1 & 2, Groups C & D; DNV 11 ATEX 01600X and IECEx DNV 11.0012X
- 350 PSI (24 BAR) working pressure rating
- Burst pressure exceeds 1,750 PSI (121 BAR)
- ½" NPT conduit port with a removable screw terminal block

## **Specifications**

#### Voltage

• 9 to 30 VDC; POD5 is 5 VDC

#### **Current supply**

• 50 mA maximum

#### **Output Signal Resolution**

• 100 pulses per channel per revolution, unscaled *see table* 

#### **Square Wave**

- Single channel output channel A or channel B
- Quadrature channel output channel A and channel B

#### **Pulse Timing**

Nominal 50% on and 50% off

#### **Rise/Fall Time of Pulse**

• <5 µs

#### **Operating Temperature Range**

• -40 to 176 °F (-40 to 80 °C)

#### **Output**

- Current sinking100 mA maximum in "ON" state
- V+ supply @ 2.2 K $\Omega$  in "OFF" state.
- Optional Open Drain FET (Field Effect Transistor).
- FET rating (drain to source voltage) 30 VDC maximum

#### **Humidity Range**

• 0-100%, non-condensing

#### Shock

• 50 Gs for 10 ms

#### **Vibration**

• 1 G at 10-150 Hz

#### **Pulse Transmission Distance**

• 5.000 feet (1.524 meters)

# Electromagnetic Compatibility (EMI, RFI, etc.)

- EU Directive 2004/108/EC (EMC)
- IEC 61000-4-2
- IFC 61000-4-3
- IEC 61000-4-5
- IEC 61000-4-6
- IEC 61000-4-17
- IEC 61000-4-29
- IEC 61000-6-3
- ISO 7637-2

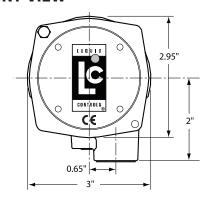




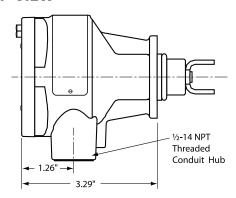
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### **Dimensions**

### **FRONT VIEW**

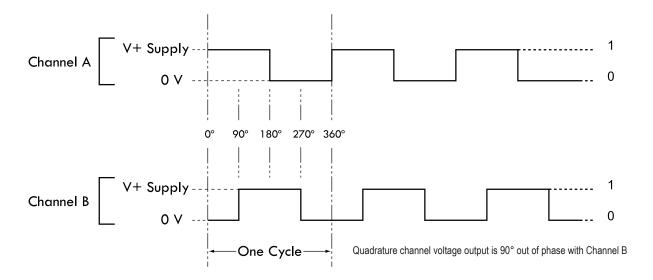


### **TOP VIEW**



Consult the factory when certified engineering drawings are required. Dimensions shown are not suitable for construction or modifications

# **Signal Output**



POD Voltage Output clockwise rotation

