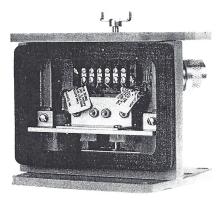
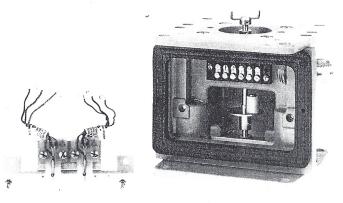


Model 210 Pulse Transmitter



Model 210 Pulse Transmitter interior showing optional dual switch configuration



Model 210 Pulse Transmitter interior with switches removed

# Model 210 Pulse Transmitter

The Model 210 Pulse Transmitter is designed for use with turbine, rotary and diaphragm gas meters equipped with an instrument-mounting facility. It transmits uncorrected volume to a remote location, utilizing a magnetically operated reed switch to produce one pulse for each revolution of the meter output drive. The Model 210 is self-contained and can be used by itself on the meter. It also has an instrument drive output and can be used in conjunction with a chart recorder or correcting device which can be mounted on top of it. The Pulse Transmitter is bidirectional, with no internal gears and no index. Torque load on the meter is less than 0.5 inch ounces. Standard mounting bolts and hardware adapt the Model 210 to the meter.

Housing

The Model 210 is housed in a die cast aluminum enclosure with the bottom and top plates both drilled to match meter and instrument mountings. The one-piece drive shaft is aligned and supported by oilite bearings. A disk mounted on the shaft, provides a platform for the permanent magnet which operates the reed switch. The magnet is offset from the shaft, passing the switch once for each revolution, creating a very reliable pulse output. A terminal block provides convenient electrical connections for field wiring. A compression gland case connector is provided for cable connection with an optional 1/2" NPT connector available for conduit connection. When used by itself on a meter, the Model 210 has a gasketed protective cover over the output wriggler.

#### Switch

The Model 210 uses a sealed reed switch with a single-pole, double-throw, Form C contact. A second switch can be supplied as an option to provide an isolated second output pulse for the purchaser's customer, or simply to supply a redundant output pulse.

Application

- ☐ Provide pulse output to Metretek Data Collection System
- ☐ Provide pulse output to purchaser's industrial or commercial customer (dual switches required)
- ☐ Provide redundant pulse output to separately mounted Mercor EC Electronic Corrector (dual switches required)

For more information contact your Mercury Instruments representative.



**Specifications** 

Aluminum housing, mounting bracket and mounting plates provided with standard blue wrinkle paint finish

Gasketed protective cover for top wriggler (can be removed when used with chart recorder or correcting device)

☐ Gasketed Lexan cover for front of housing with cross-drilled holes for sealing-wire

☐ Mounting hardware and gaskets

To Order

To order the Model 210 Pulse Transmitter, specify the following:

☐ Model 210 Pulse Transmitter with single switch and compression gland case connector

☐ Meter make and model

□ Optional dual switch, if required

□ Optional 1/2" NPT adaptor for conduit connection

□ Optional American Meter mounting kit

# Electrical Specifications — Switch

☐ Max Switching Voltage: 30 VAC, 30 VDC

☐ Max Switching Current: 200 MA (DC Resistive)

☐ Max Switching Power: 3 VA

☐ Max Operating Time, including bounce: 1.5 Milliseconds

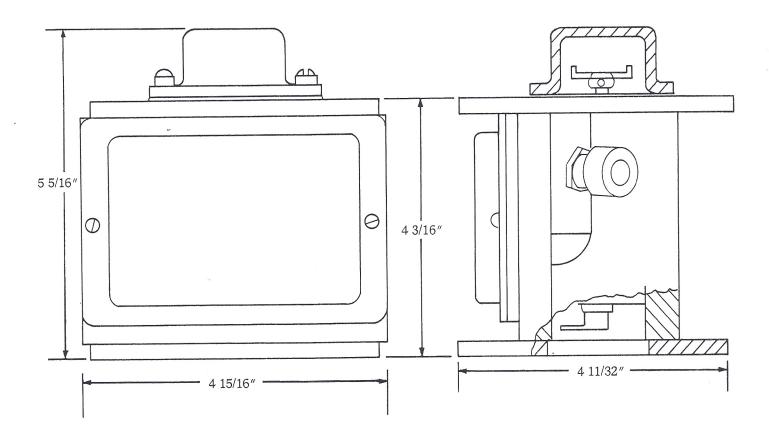
## **Mounting Hardware**

☐Gasket Kit

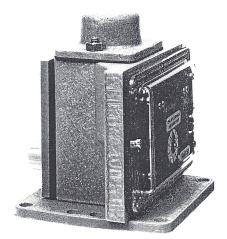
☐ Standard Bolts and Nuts

□ Optional American Meter Mounting Kit

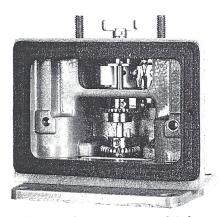
### **Dimensions**



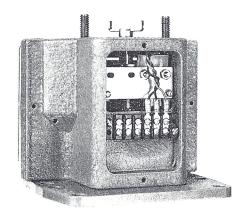




Model 212 Pulse Transmitter with digital index



Model 212 Pulse Transmitter with index and top cover removed showing single magnet and switch, also reversing gear mechanism



Model 212 Pulse Transmitter with back cover removed

# Model 212 Pulse Transmitter

The Model 212 Pulse Transmitter is designed for use with turbine, rotary and diaphragm gas meters equipped with an instrument-mounting facility. It can provide single- or multiple-pulse outputs for each meter wriggler rotation utilizing a magnetically operated reed switch. An uncorrected index is provided in the housing. The Model 212 is self-contained and can be used by itself on the meter. It also can be used in conjunction with a chart recorder or corrector device, in place of the standard mounting bracket. A reversing gear mechanism permits mounting on either a clockwise or counter-clockwise rotating instrument drive. Torque load on the meter is less than 0.5 inch ounces. Standard mounting bolts and hardware adapt the Model 212 to the meter.

Housing

The Model 212 is housed in a die-cast aluminum enclosure with the bottom plate drilled to match the meter mounting. The drive shaft is aligned and supported by bearings. A disc mounted on the shaft provides a platform for the permanent magnet which operates the reed switch. Depending on the number of output pulses per revolution desired, either one, two, three, four, five, six, seven, eight or ten magnets can be mounted on the disc. A terminal block provides convenient electrical connections for field wiring. A compression gland case connector is provided for a cable connection. A digital index with test hand is standard; however, an optional circular dial face index can be provided but is limited to use with four or less pulses per revolution. When used by itself on a meter, the Model 212 has a gasketed protective cover over the output wriggler.

### Switch

The Model 212 uses a sealed reed switch with a single-pole, double-throw Form C contact. A second switch can be supplied as an option to provide an isolated second output pulse for the purchaser's customer, or simply to supply a redundant output pulse.

## **Application**

The Model 212 Pulse Transmitter can:

- ☐ Provide pulse output to Metretek Data Collection System
- ☐ Provide pulse output to purchaser's industrial or commercial customer (dual switches required)
- ☐ Provide redundant pulse output to separately mounted Mercor EC Electronic Corrector (dual switches required)

For more information, contact your Mercury Instruments representative.



## **Specifications**

Special features of the Model 212 Pulse Transmitter include:

- ☐ Aluminum housing, mounting bracket and mounting plate provided with standard blue wrinkle paint finish
- Gasketed protective cover for top wriggler (not furnished when supplied with chart recorder or mechanical corrector)
- ☐ Digital index with gasketed lexan cover for front of housing with cross-drilled holes for sealing wire
- ☐ Mounting hardware and gasket

### To Order

To order the Model 212 Pulse Transmitter, specify the following:

- ☐ Model 212 Pulse Transmitter with single switch, digital index and standard mounting hardware
- □ Number of pulses per meter wriggler revolution: specify 1, 2, 3, 4, 5, 6, 7, 8 or 10
- ☐ Meter make and model
- □ Optional circular dial face index (1, 2, 3 or 4 pulses/rev only)
- □ Optional no index
- □Optional dual switch, if required
- □ Optional American Meter mounting kit

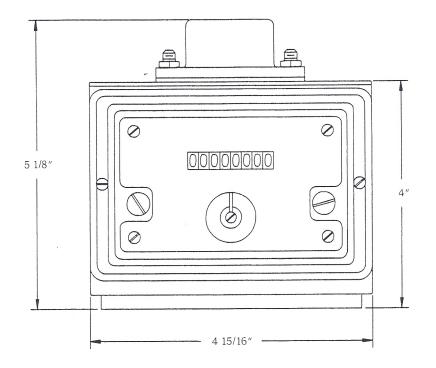
# Electrical Specifications — Switch

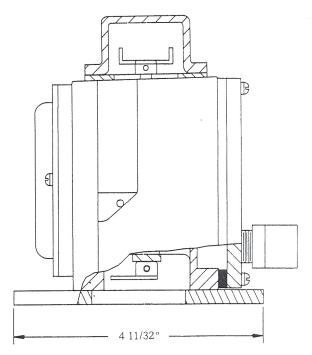
- ☐ Maximum switching voltage: 30 VAC, 30 VDC
- ☐ Maximum switching current: 200 MA (DC resistive)
- ☐ Maximum switching power: 3 VA
- ☐ Maximum operating time, including bounce: 1.5 milliseconds

# **Mounting Hardware**

- ☐ Gasket kit with standard bolts and nuts
- □Optional American Meter mounting kit

#### **Dimensions**







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