

PD10 Pulse Divider Instructions

General Information

Designed for use as a meter accessory, the PD10 divider is used primarily for pacing electronic metering pumps. It comes in two different housings, an enclosure which can be mounted near the pump and a round watertight housing for mounting on the meter. Any number from one to 999 can be set on rotary switches. Each time the divider has received the set number of pulses from the meter, it puts out one pulse to stroke the pump. When used with an M-series meter, this allows changes to the pulse rate, for example, to adjust to seasonal changes. Mounted on an IP insertion meter or a WT turbine, the PD10 creates a programmable pulse meter. Besides metering pumps, this combination can also be used with a PT34 or PT35 pulse timer, for boiler or cooling tower feed and/or bleed.

Power for the PD10 can be supplied by the metering pump if the pump has a sensor power supply. This is the case with LMI externally-paced metering pumps. Some other pumps require an external power supply, which is available from SeaMetrics. Connectors available as standard items are the LMI and SeaMetrics connectors.

Specifications

Enclosures

Wall (pump) Epoxy-encapsulated ABS

housing with cover

Meter Cast aluminum sealed

housing

Temperature 32° - 130° F

Divider 1 - 999

SettingRotary switchesPower6 - 18 VDCMaximum Load20 mA at 24 VDC

Maximum Frequency 350 Hz (pulses/second)

Output Open collector transistor/

100 mS duration

Input Connection

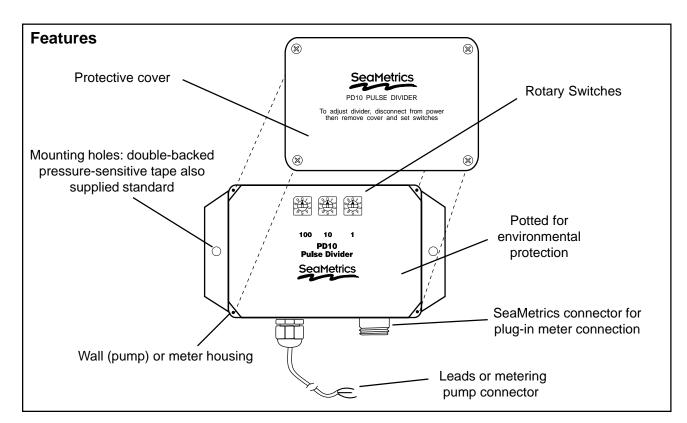
Wall SeaMetrics connector

Terminal

Meter
Output Connection

Wall Pump connector on 24" lead Meter Pump connector on 18 ft.

lead



Installation

Mounting

The PD10W is the only model which requires mounting, since the PD10M is factory-mounted on the flow sensor. The simplest way to mount this unit is by attaching it to the metering pump with the included double-backed, pressure-sensitive tape. As an alternative, the control can be mounted with screws using the lugs which extend out either side. Centers are 3-1/2" apart.

Connection

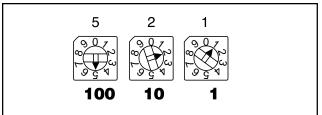
The 24" pigtail which extends from the PD10 connects to the metering pump. It is generally furnished with the specified metering pump connector or with bare leads, depending on the type of pump. If it has a connector, plug it into the mating half on the metering pump. The input connector half on the control mates with any three-pin SeaMetrics connector. (Meters or flow sensors to be used with a PD10 should be ordered with SeaMetrics connectors.)

When the PD10 is to be used with a Liquid Metronics pump, no additional power is necessary, since the pump provides power for both the divider and the meter or flow sensor. If the unit is used with a different pump, external 12 VDC power is necessary. If ordered for external power pump, the unit will have a color-coded power cord. Red is +12 VDC, black is -12 VDC.

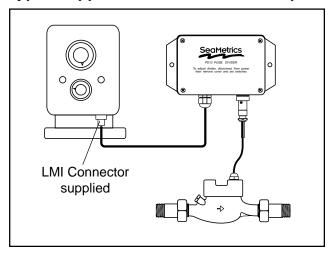
Setting

Note the three numbered rotary switches marked "100", "10", and "1". To set any three-digit number, rotate the switches to the appropriate numbers. For example, to set 521, set the three switches to "5", "2", and "1". Any unused switches should be set to zero. For example, to set 8, dial the switches to "0", "0", "8". When setting the switches, disconnect power to the unit by removing the connector from the pump or unplugging the power adapter.

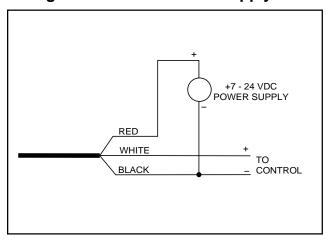
Setting Example



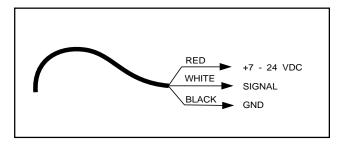
Typical Application: PD10W/LMI Pump



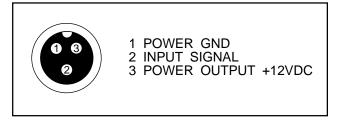
Wiring With External Power Supply



Output Wiring



SeaMetrics Connector Pin





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