

The Reed Capsule Assembly enables any PULSAtron electronic metering pump to transmit stroke signals to any pump having the external pace option. The capsule contains an electrical device called a red switch, which closes and makes an electrical contact each time a magnetic field is applied. The capsule is installed on the transmitting pump and the cord plug is inserted in the external pacing receptacle of the receiving pump which must be a pump with the external pacing feature. The magnetic field momentarily developed by the solenoid of the transmitting pump during each stroke actuates the reed switch to stroke the receiving pump one.

The stroking rate of the receiving pump will always remain the same as that of the transmitting pump. The pumps can be different rated capacities, stroke lengths can be individually set, and different chemicals can be pumped. Such a system is proportioning; that is, individual pump flow rates remain in the same constant proportion to one another regardless of the primary stroking rate.

Pumps can be sequentially operated, or cascaded, as shown in the example on back without limit. Due to the short time delay in the operation of each reed switch, a noticeable overall delay will accumulate if a significant number of pumps are cascaded; however, each stroke of the originating pump will always cause one stroke of every pump.

Operating Benefits

- Operate more than one pump in unison.
- Pump two or more chemicals in proportion.
- Increase capacity by the use of multiple pumps.
- Actuate a stroke counting device.
- Actuate a stroke indicator light.
- Actuate equipment which operates in conjunction with a pump.



Aftermarket

- Water Meters
 - Gauges
- Dampeners
- Pressure Relief Valves
- Tanks
- Pre-Engineered Systems



Reed Capsule Assembly

Reed Capsule Assembly **Specifications**



lowmeter with contact

Illustration of the cascaded operation of multiple pumps from a single flowmeter for water treatment.

As described any pump size can be selected. different chemicals can be injected, individual flow rates can be varied, and the entire system is proportioning.

Pump #1 must match the flowmeter output signal. A contact output must go to a pump with the external pacing feature or a 4-20mA output must go to a pump with the 4-20mA control feature. Pumps #2 and #3 must have the external pacing feature.



Procedures

The clip is affixed to the transmitting pump by a premounted pressure-sensitive adhesive pad, installed in the position shown. Half the length of the capsule must be adjacent to the black ribbed surface of the solenoid assembly. For an effective adhesive bond, the housing surface must be absolutely clean in the vicinity of the clip. Remove all surface contaminants. If the pump has been in service, cleaning with sandpaper may be necessary. Remove the protective paper from the adhesive pad, position the pad on the housing and press firmly, and install the capsule. Insert the plug into the external control receptacle of the receiving pump. The selector switch of the receiving pump must be in the "external" position.



Operation can be verified by a simple electrical continuity check between the plug terminals. The reed switch is normally open, and closes in the presence of a magnetic field of sufficient strength. This can be verified with the capsule in place on a operating transmitting pump (each pump stroke causes momentary closure) or, on the bench, by positioning a small permanent magnet nest to the capsule (which causes closure). The assembly is not repairable and must be replaced as a unit.

Engineering Data

Cord Length: Not Polarized

DC:

AC:

10 feet (3 meters)

Electrical Rating of Reed Switch (not related to pump rating)

120 V Max .5 Amp resistive .1 Amp 240 V Max .2 Amp resistive .1 Amp inductive

Custom Engineered Designs – Pre-Engineered Systems



Pre-Engineered Systems

Pulsafeeder's Pre-Engineered Systems are designed to provide complete chemical feed solutions for all electronic metering applications. From stand alone simplex pH control applications to full-featured, redundant sodium hypochlorite disinfection metering, these rugged fabricated assemblies offer turn-key simplicity and industrial-grade durability. The UVstabilized, high-grade HDPE frame offers maximum chemical compatibility and structural rigidity. Each system is factory assembled and hydrostatically tested prior to shipment.



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