

MODEL 420

PUMP CONTROLLER

AT LAST.....A controller designed to accurately, simply and economically operate solenoid-controlled AODD pumps utilizing a 4-20 ma. loop to set pump speed. The Polytrace Model 420™ has all the features you've been looking for in one compact unit.

SIMPLICITY...All variables are set using the internal 5-key touchpad and there are no multiple-screens to deal with. The keypad is safely away from unauthorized users. The unit provides 12 volts DC from its internal power supply to operate the pump. The system panel has one sealed switch on it; to RUN, STOP or JOG the pump. The loop milliamps and the pump speed and condition (Run/Stop/Jog) are all continuously displayed.

SMART DESIGN...The pump speed is variable over any value in the range of 0 to 499 **Strokes/Minute**. This means it's easy to calculate the volumetric output of the pump in standard engineering units and that the internal calculations by the controller are *linearly proportional* to the loop current across the entire range of values. It's intuitively easy to use this way and easy to "dial in" to the right values. The NEMA 4X enclosure can be mounted with hand tools and the unit is powered by 120 volts AC.

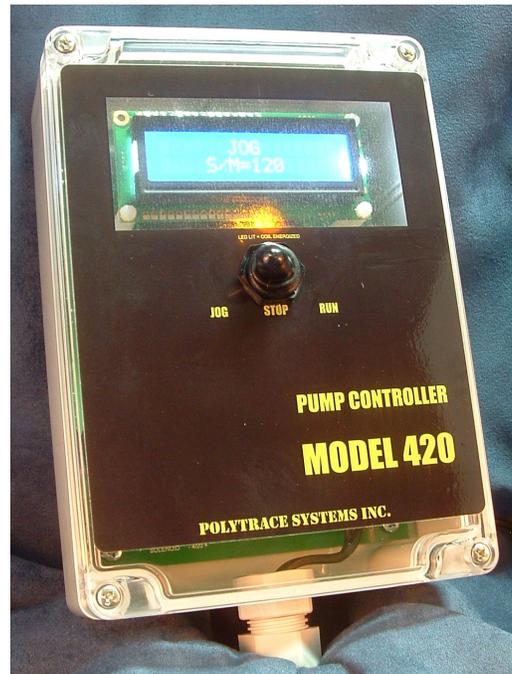
VERSATILE...The unit can be controlled remotely. A simple switch or relay can provide the contact closures the unit needs to Run/Stop/Jog. It only takes three wires and they connect to a terminal strip on the circuit board. Any loop current can be the low value and any current above 10 ma. can be the high value. The low value can be equivalent to the slowest or fastest pump speed as can the high current value. This makes the system compatible with an enormous variety of sensors and signals.

JOG... There are times when you might need to operate the pump without the current loop. Maybe the loop is down due to a sensor failure or there is a situation that isn't covered by the setup. If you need to run the pump without the loop, simply switch to JOG. The system will operate the pump at the midpoint speed value of your two settings.

SELF-CONTAINED...Everything you need to run a pump is in this system except the air. It monitors, calculates, supplies and switches power. All you need to do, is determine how you want the pump to respond to a signal and the system takes over. No time or setup expenses are needed to get optimal results. Even the internal circuit-breaker for the solenoid output is self-resetting. If you need to talk to somebody about a technical matter, we understand both electronics/instrumentation and pumps/piping.

SAFETY... The system operates the pump using low voltage and is designed to be failsafe in every likely scenario. Loop outages, sensor failures and wire-breaks all result in the pump stopping. The external control design permits the addition of panic buttons and automatic shutoffs as well. The output to the solenoid is even circuit-breaker protected.

NNN... No Nerds Needed. Anybody can program and run this system. Its interface is very intuitive and its operation is simplicity itself. If you need to operate solenoid-controlled AODD pumps with a 4-20 ma. signal this system is the solution. Polytrace Systems has been designing and building process instruments for two decades and has engineered this as the right product for you.



POLYTRACE SYSTEMS INC

DIMENSIONS: 6-3/4" H x 4-3/4" W X 2-1/4" D

ENCLOSURE CONSTRUCTION: NEMA 4X with sealing gland for cable and boot for switch

WEIGHT: 1-1/2 Pounds

POWER CONSUMPTION: 12 Watts

VOLTAGE REQUIREMENTS: 120 VAC

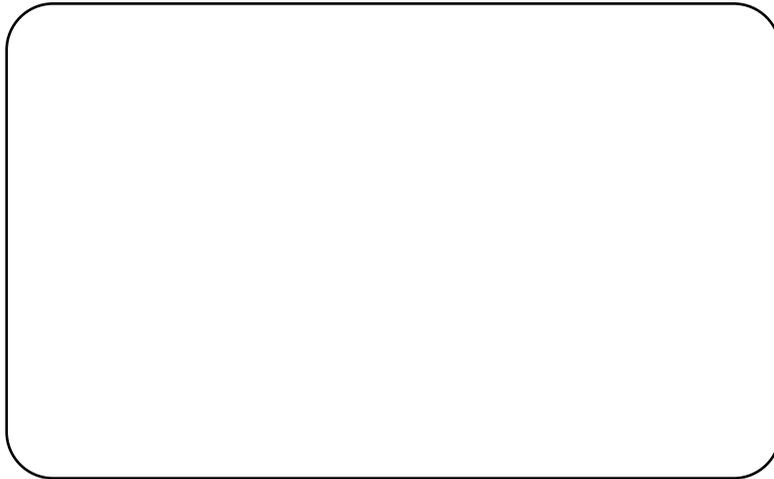
VOLTAGE OUPUT (TO SOLENOID): 12 VDC 750 ma MAXIMUM

OPERATING TEMPERATURE RANGE: 40F to 100F

SPEED RANGE: 0 TO 499 Strokes/ Minute

We will be happy to address any technical questions you may have. Please ask you local distributor and we'll see to it that you quickly receive the information.

YOUR LOCAL POLYTRACE SYSTEMS DISTRIBUTOR



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