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MQ3728-XXX-X Valve Operation:

The ARO **MQ3728-XXX-X** is used to control operation of a diaphragm pump. It comes in two voltage options:

MQ3728-024-D: 24-volt DC coil
MQ3728-120-A: 120-volt AC coil

The valve has 1/4" ports. The flow rate is 50-SCFM and the flow coefficient is 1.5-Cv. So it will deliver enough air to properly drive a diaphragm pump. It should be used with these models:

1/4" models: PD01P-HXS-XXX-A.
3/8" models: PD03P-XXS-XXX.
1/2" models: PD05P-XXS-XXX, 66605X-XXX non-metallic. PD05X-XXS-XXX-B metallic.
3/4" models: PD07P-XPS-PXX non-metallic. PD07X-XAS-XXX metallic.
1" models: PD10P-XXS-XX (EXP-series) and 6661XX-XXX-C (PRO-series) non-metallic.
PD10X-XXX-XXX (EXP-series) and 6661XX-XXX-C (PRO-series) metallic.

The **MQ3728-XXX-X** will be mounted at the pump's air inlet. When the valve's solenoid coil is energized, air will flow into the pump's motor and the pump will begin operation. The pump will continue running until the coil is de-energized and the valve resets.
In this manner, an electrical signal to the coil can be used to start and stop the pump.
Connect the air supply to the #1 port on the valve. Then plumb the #4 port on the valve to the air inlet of the pump. These numbers are stamped above the corresponding port on the valve.
The photo at right shows an **MQ3728-120-A** mounted at the pump inlet. The customer placed an airline regulator between the valve and the air inlet.
Using the **MQ3728-XXX-X** valve is an economical way to remotely control pump operation. Along with the valve, consider using the **CHW** Solenoid Connector. The **CHW** connector provides 36-inch molded lead wires that allow the customer to wire the valve to their PLC.