

Basic & FB Series Operation



Motorized control operation:

Our basic MFC only needs 12 or 24VDC and a switch to operate. See below schematic.

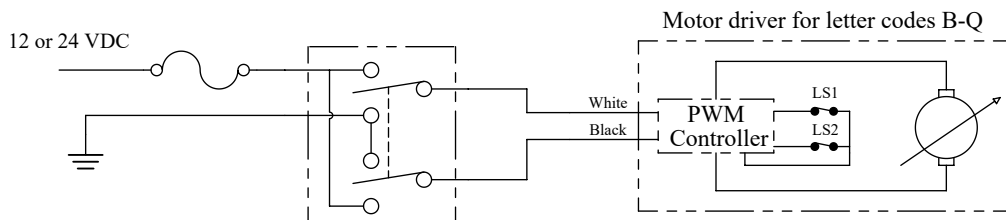
Flow Controls:

Positive on black wire and ground on white wire opens the valve
 Positive on white wire and ground on black wire closes the valve

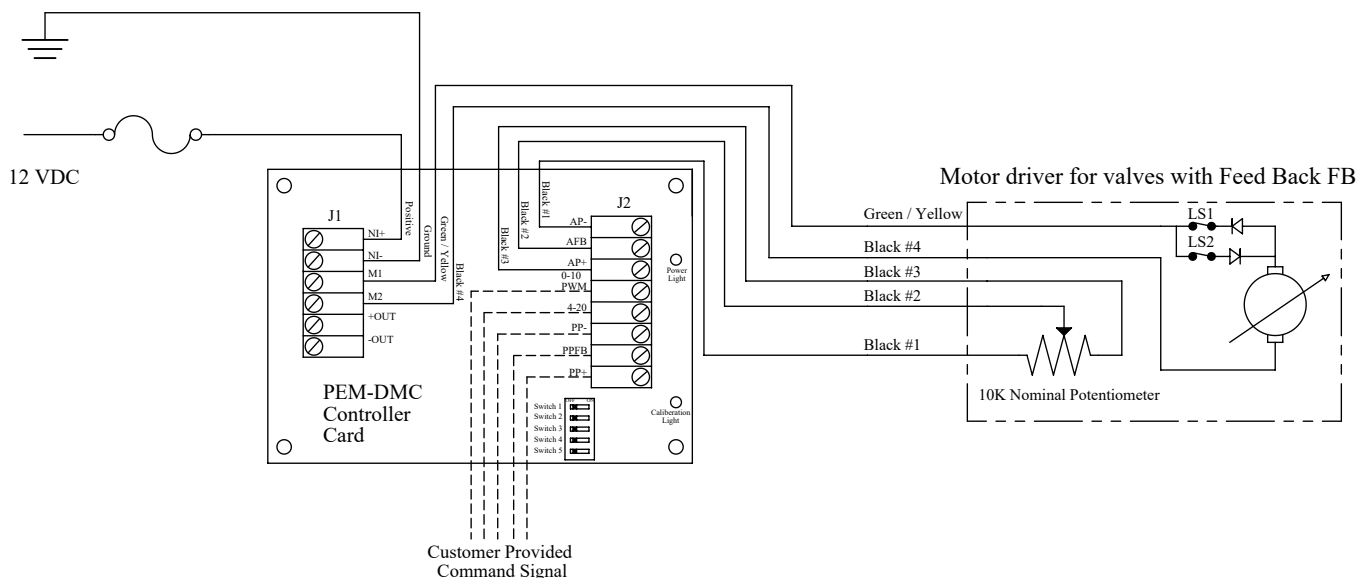
Pressure Controls:

Positive on black and ground on white wire increases pressure
 Positive on white and ground on black wire decreases pressure

Power will disconnect at end of travel and respond only to reverse polarity.
 Disconnect power to hold valves position.



Wiring diagram for optional PEM-DMC motor controller
 To be used with FB motor series



See separate sheets for calibration procedures and specifications

S Series Operation



Function

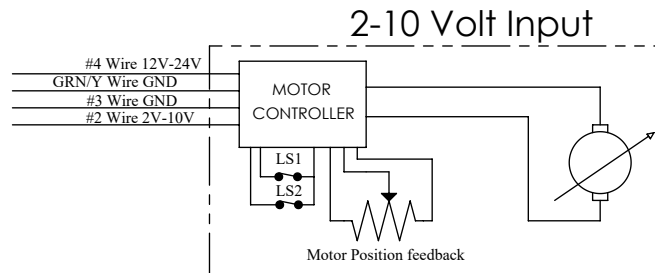
- This option using a 2-10V input signal operates proportionally to the input signal. This option does not require an external driver card.

Applications

- This allows the motorized valve to replace existing proportional valve drives without having to modify the existing controller.

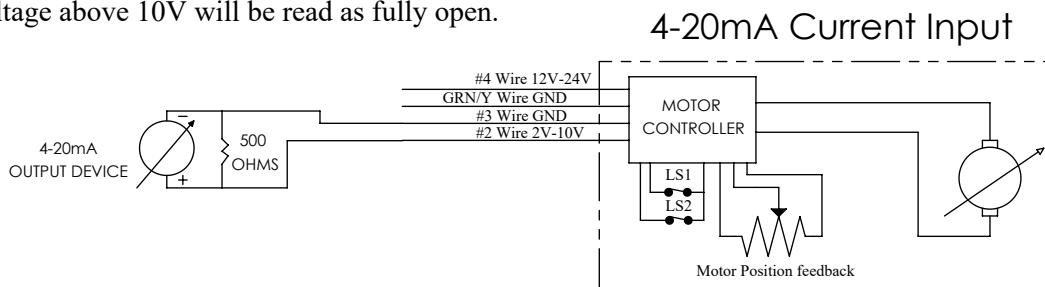
Specifications

- Supply Voltage: 9-28 VDC
- Control input:
 - 2-10 VDC
 - 4-20 mA
 - Potentiometer



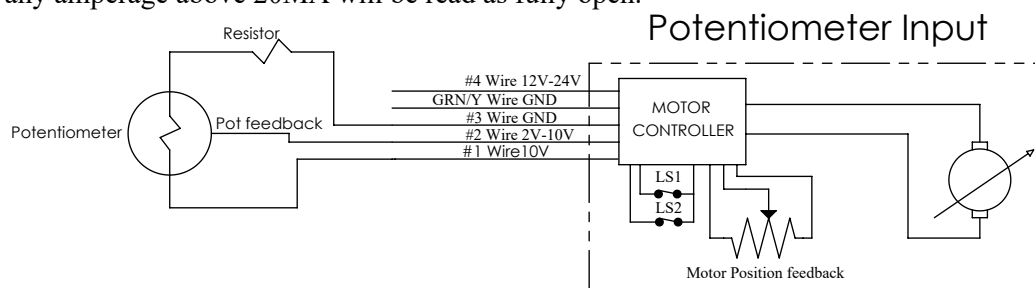
The 12V-24V wire will connect to the positive terminal of a power supply or battery and GND to the negative terminal. 2V-10V will connect to the positive terminal of a signal source to supply the 2V-10V signal. GND connects to the negative terminal of the signal source. Both GND wires are internally tied together on the motor controller.

The valve will move from closed to open in proportion to the 2V-10V supplied input. Any voltage below 2 will be read a closed and any voltage above 10V will be read as fully open.



The 12V-24V wire will connect to the positive terminal of a power supply or battery and GND to the negative terminal. 2V-10V will connect to the positive side of a 4-20MA current supply with a 500Ω resistor to GND. GND connects to the negative terminal of the 4-20MA power supply. Both GND wires are internally tied together on the motor controller.

The valve will move from closed to open in proportion to the 4-20MA supplied input. Any amperage below 4MA will be read as closed and any amperage above 20MA will be read as fully open.



The 12V-24V wire will connect to the positive terminal of a power supply or battery and GND to the negative terminal. The 10V wire connects to the positive side of an external potentiometer. The GND wire connects to a resistor that is in series to the potentiometers negative side. 2V-10V connects to the feedback of the potentiometer. Both GND wires are internally tied together on the motor controller.

- 1K OHM Pot use 250 OHMS resistor
- 10k OHM Pot use 2.5K OHMS resistor

By using the potentiometer and resistor values, 2V-10V will be controllable by turning the potentiometer. The valve will move the valve in proportion to the potentiometer.