

PVD3D2E, Proportional Valve Driver, two PWM solenoid outputs, epoxy potted
Benefits and Features:

- Versatile digital design
- Large, easy-to-use adjustments and 3-digit seven-segment LED display
- Wide range of supply voltage
- Electronic limiting circuit / short circuit proof
- Load can be connected & disconnected live
- Protected against wrong connection
- Simple control with analog input, the reference voltage is locally supplied
- Can be used either for one dual solenoid valve or two independent single valves
- Energy efficient PWM circuit, no heat sink is required
- Current sensing maintains output regardless of changes in supply voltage and coil resistance


Specifications:

- Operating voltage: 9 - 35VDC
- Maximum output: 3A
- Ramp time: 0.0 to 99.5s
- Linearity: 0.5%
- Input signal: user selectable
0-5V, 0-10V, 0-20mA or 4-20mA
- PWM / Dither frequency: 50-500Hz
- Operating temperature:
-40° to +75° Celsius
- Size: 3.00" x 0.875" x 3.25" (4.00" with flanges)

Settings & Range:

- AHI:** A high, output current corresponding to the highest input, in Amps
AJg: A jog, used to simulate signal, in Amps
ALO: A low, output current corresponding to the lowest input, in Amps
AUP: A ramp up, time required for the output to increase from **ALO** to **AHI**, in seconds
Adn: A ramp down, time req'd for the output to decrease from **AHI** to **ALO**, in seconds
Adb: A deadband, output is disabled when signal is less than this setting, in %
Ain: single mode A input signal selection: 0-5V, 0-10V, 0-20mA or 4-20mA

BHI: B high, output current corresponding to the highest input, in Amps
BJg: B jog, used to simulate signal, in Amps
BLO: B low, output current corresponding to the lowest input, in Amps
BUP: B ramp up, time required for the output to increase from **BLO** to **BHI**, in seconds
Bdn: B ramp down, time req'd for the output to decrease from **BHI** to **BLO**, in seconds
Bdb: B deadband, output is disabled when signal is less than this setting, in %
Bin: single mode B input signal selection: 0-5V, 0-10V, 0-20mA or 4-20mA

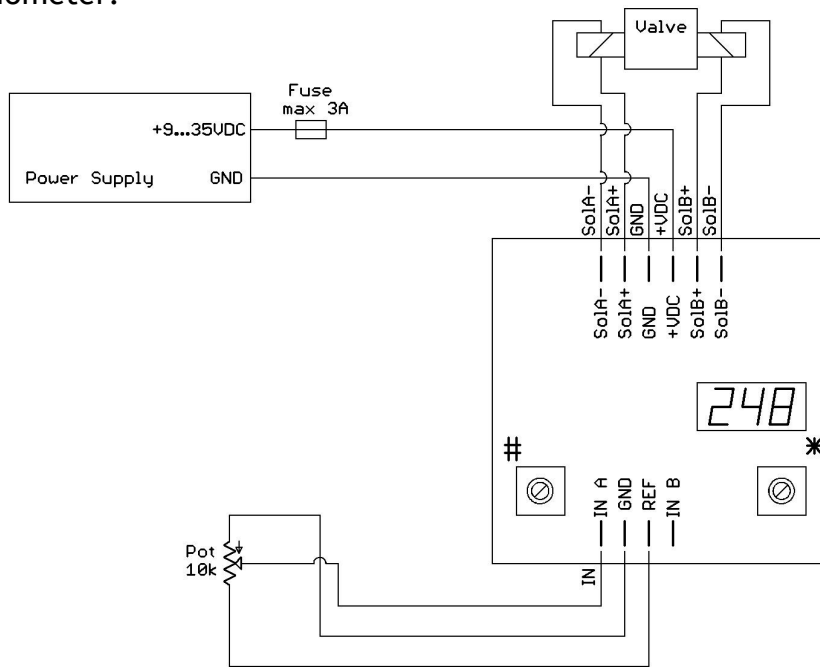
db: dual mode deadband, output is disabled when signal is less than this setting, in %
dF: dither frequency, in Hz
in: dual mode input signal selection: 0-5V, 0-10V, 0-20mA or 4-20mA
di: display orientation, normal or up-side-down
SA: save settings

Set-Up Procedure:

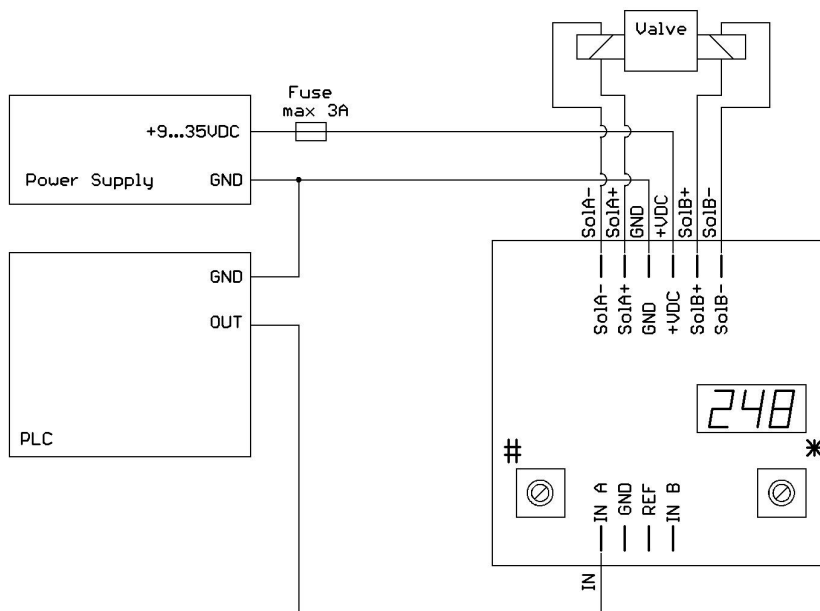
At power up, you may rotate the left side control **#** to select the variable displayed: **Ain** (A input), **Aot** (A output), **Bin** (B input) or **Bot** (B output), the actual solenoid output current directly in Amps or the command input signal in V or mA, corresponding to the input range pre-selected. To enter set-up mode, rotate right side control *****; the display will show the settings sequentially: **AHI**, **Ajg**, **ALO**, **AUP**, **And**, **Adb**, **Ain**, **BHI**, **BJg**, **BLO**, **BUP**, **Bdn**, **Bdb**, **Bin**, **db**, **dF**, **in**, **di** and **SA**. When you reach the setting that you want to modify, rotate **#** up or down to the desired value. To modify another setting, rotate ***** and repeat. The Driver is fully functional during the set-up procedure with any adjustments effective immediately (except the input range selection that becomes effective only after saving). In order to write the new settings in the memory and return to normal mode of operation, rotate ***** until the display shows **SA** and then rotate **#**. If you do not want to keep the new settings, simply power down without saving.

Dual mode wiring diagrams for one dual solenoid valve:

with signal source from joystick or potentiometer:

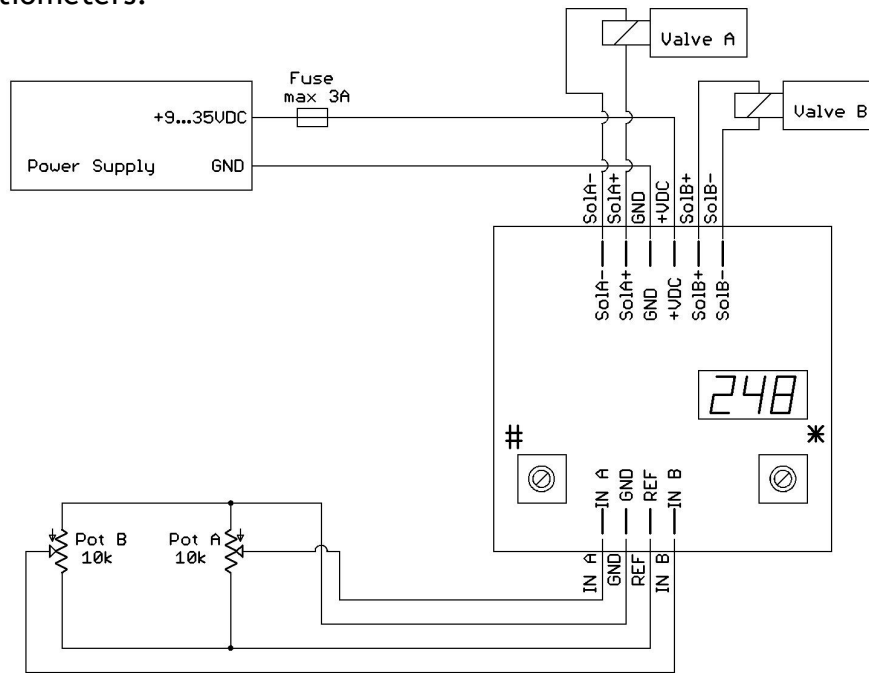


with signal source from PLC or Analogue Card:

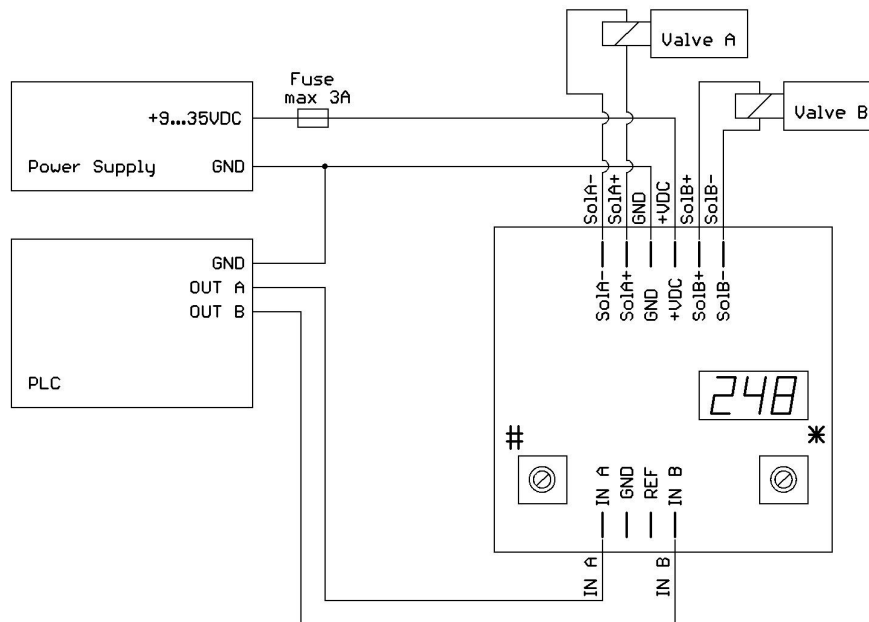


Single mode wiring diagrams for two independent solenoids:

with signal source from joysticks or potentiometers:

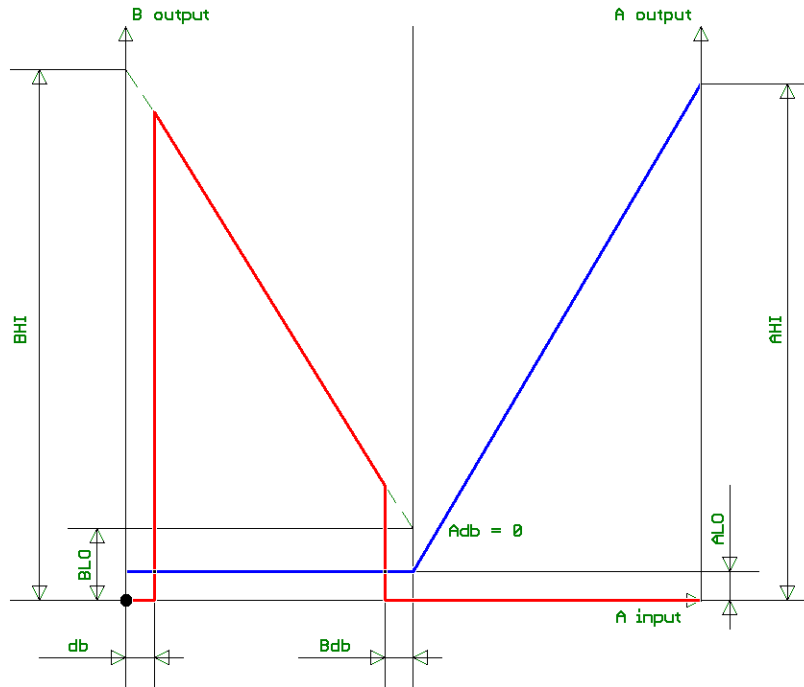


with signal source from PLC or Analogue Card:



Functional diagrams:

Dual mode: one dual solenoid valve:



Single mode: two independent solenoids:

