

PCD Proportional Valve Driver

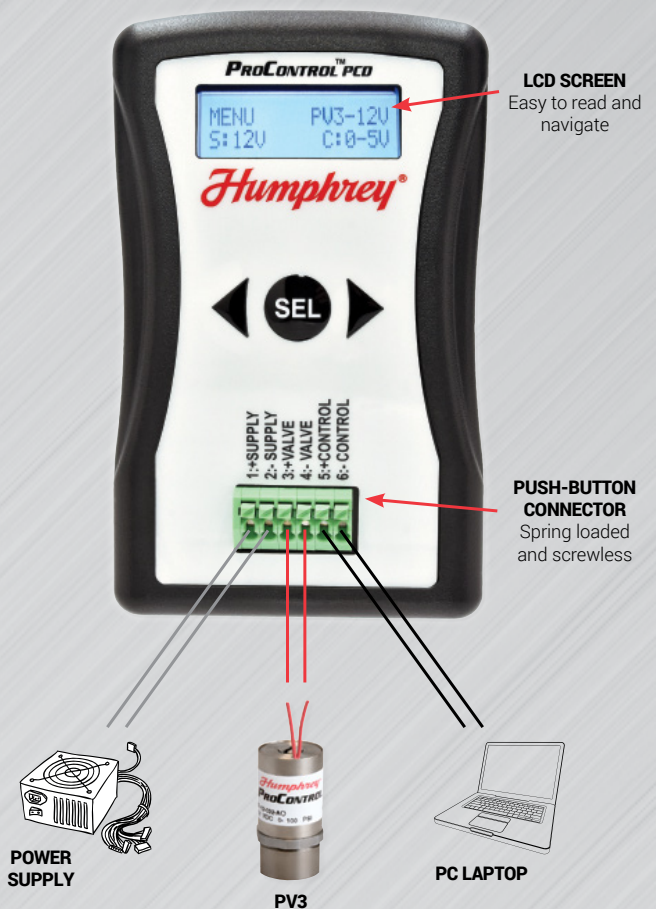
Humphrey ProControl™ PCD is a rugged proportional valve driver designed to drive proportional valves through PWM or constant current signals. The versatile design allows great flexibility of various drive/control inputs, or manual operation. Valve and interface can be controlled with a host of data acquisitions, such as PLCs, IoTs, or sensor feedback (closed loop) systems.

FEATURES

- Control Input Options: 0 to 5v, 0 to 10v, 4-20mA, or manual via navigation buttons.
- Valve Presets: Humphrey valve models PV3, PV10, PC30 and iDP390/391 are loaded as presets, while other proportional valves are controlled via custom mode.
- Signal Conditioning via Linearization attribute (see illustration on back page).
- Connector: Screwless, push-button clamp
- User Interface: LCD Screen (no jumpers or pots to adjust).
- Industry leading LCD readout.
- Setup and Installation instructions included.

FEATURES: OUTPUT OPTIONS

- Constant Current:
 - 0 to 1 Amp
 - Dithering: 0 to 40mA
- PWM:
 - Freq: 500, 1.25k, 2.5k, 5k, 10k Hz
 - Duty Cycle: 0 to 100%
 - Dithering: 0 to 10%



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How to Order

ProControl™ PCD Proportional Valve Driver

PCD

ORDER CODE

PCD is ideal to evaluate and operate proportional valves, such as the Humphrey ProControl™ Series.



iDP390/391



PC30



PV3



PV10



SERVOID SERIES



ProControl™ Series PCD Proportional Valve Driver

SPECIFICATIONS	PCD
SUPPLY VOLTAGE	12-28VDC
CONTROL SIGNAL	0-5v, 0-10v, 4-20mA, PWM signal, or manual via navigation buttons
OUTPUT AMPERAGE	0-1A (internally protected)
VALVE PRESETS	Humphrey Proportional Valves (others controlled via custom preset)
WIRE	16-24AWG, Stranded
CONNECTOR	Screwless - Push-Button Clamp

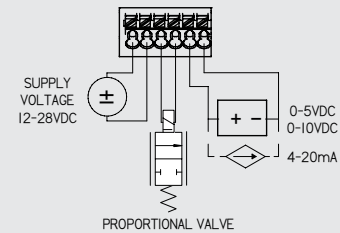
PCD is versatile. Control a proportional valve on your test bench for evaluation, then transition to your production environment. Keeping the same set up, you can now integrate the valve and driver into your system and use your DAQ output for valve control.

For assistance with set up, questions, or for more information on the PCD, please contact our ProControl™ application specialist at 1.844.447.9009 or email procontrolway@humphrey-products.com.

DIMENSIONAL DRAWING



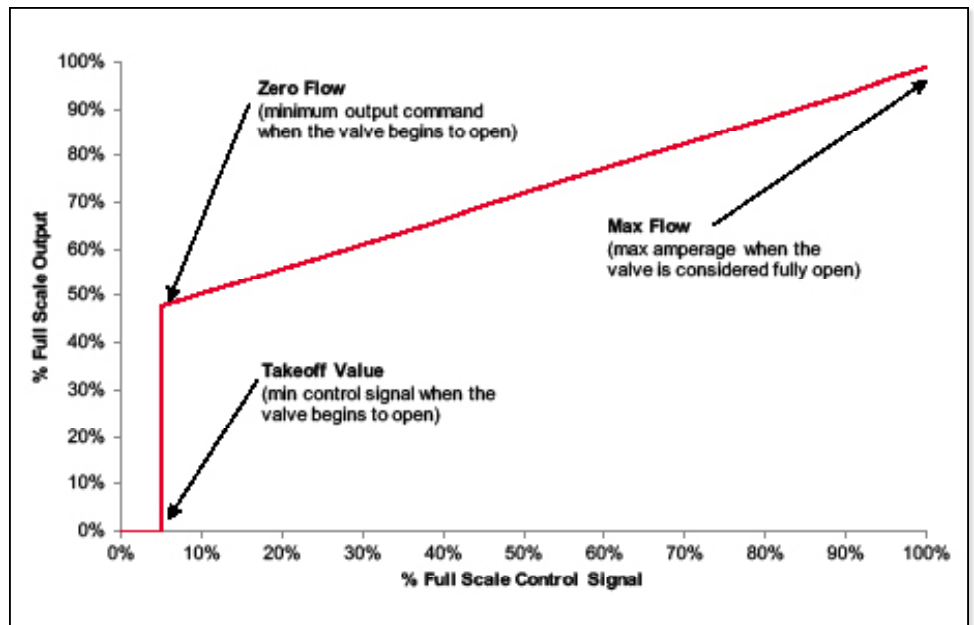
CONNECTION DIAGRAM



PCD LINEARIZATION

Feature amplifies various control/input signals and provides a stable proportional valve output. The amplified and conditioned output signal allows you to “pre-load” or set your current control signal. This maximizes valve control range when driven with the PCD. You can start your flow at 5% control signal and operate the valve through the full control range, equating to the optimal operational range of the valve (lift off to full flow).

EXAMPLE: Takeoff control signal is set to 5% of control signal, and the valve lift off amperage is 100mA. PCD will send 100mA to the valve when 5% signal is reached. Remaining control signal range (95%) is linearized for the remaining valve operational range (100-200mA).



Certified: ISO 9001:2015

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