## Humphrey

## ProControl™ Products & Services Guide Proportional Flow Solutions





### May We Help You? The ProControl™ Way

Proportional Control Solenoid Valves can be an excellent addition to any device or equipment, offering flexibility, precise flow control, and economy not available from ON/OFF solenoid valve systems. Finalizing your proportional control valve can be rather complex, particularly in critical or precision applications. A number of factors and conditions should be captured early in the specifying and testing process.

Our application specialists can guide you quickly to the best proportional control solution. Here's how:

**STEP 1: DISCOVERY.** We'll listen and learn your application parameters and expectations on valve performance. We'll suggest a product to test.

**STEP 2: EVALUATE.** Specialist remains available through valve testing, and can assist with set up issues and questions on proper valve assessment.

**STEP 3: FINALIZE.** Compressible fluid includes variables and initial testing may or may not require optimization. Your specialist knows what can be done and how to adjust valve performance.

**BOTTOM LINE:** Humphrey can help. Reach out to our specialists and streamline your understanding and use of proportional valve control ... **The ProControl™ Way** 

#### CONTACT PROCONTROL™ APPLICATION SPECIALISTS:

Toll Free 1.844.447.9009 procontrolway@humphrey-products.com



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# **ProControl™ Series Proportional Flow Solutions**

All ProControl™ valves feature low hysteresis, excellent repeatability, high turndown ratios for better resolution, fast response times, tight sealing and design flexibility. Our standard valves are calibrated for specific lift-off points and peak flows for optimal performance and repeatability valve to valve. Each valve may be tailored to your particular requirement.

**MINIATURE** – 2-port **PV3** and **PV10** Series; 10-32 UNF ports; Select from standard\* pressure calibration settings of 25, 50, 75 and 100 PSI.

**SMALL** – Rugged 2-port **PC30** Series; 1/4 PIPE ports; Select from standard\* pressure calibration settings of 25, 50 and 100 PSI.

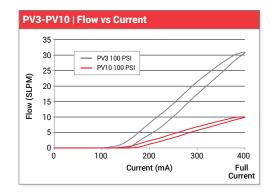
**HIGH FLOW, SERVOID SERIES** – Features perfected cartridge style, flat spring armature, achieving unmatched precise control to high flows. Long history of reliability in hospital critical care patient ventilation systems. The flexible design of the balanced servoid allows custom calibration for optimal performance and resolution in your application.

\*Contact a ProControl™ specialist for custom pressures.

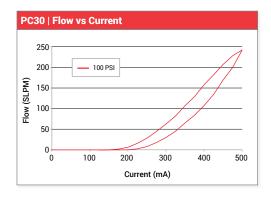
SPECIFICATIONS	PV3	PV10	PC30	BALANCED SERVOID
MEDIA	Air, Inert Gas			
SIZE (H X DIA)	1.62 x 0.88		3.27 x 1.82	5.03 x 2.0
MAX FLOW CAPACITY (SLPM)	30	75	225	200
MAX CURRENT (MA)	12V: 200 24V: 100	12V: 400 24V: 200	10V: 525 20V: 285	600
MAX POWER CONSUMPTION (WATTS)	2.4	4.8	7.7	8.0
PRESSURE SETTING (PSI)	100 MAX			11

Standard valves may be custom configured to your application. Consult factory.



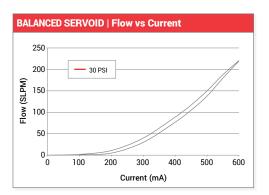












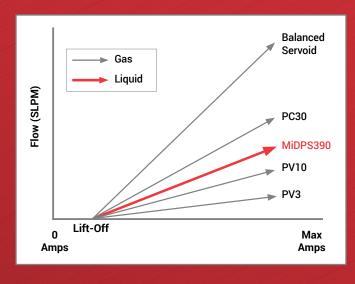
# ProControl™ Series PCD Proportional Valve Driver



Conveniently produces appropriate electrical control to drive any proportional valve of 1 amp or less via PWM or constant current. For such control, the PCD can receive a signal from various data acquisition sources or manually via navigation buttons.

- · LCD screen
- Push-button wire connection
- User friendly with a range of both input and output options.
- Easy transition from manual mode to DAQ controlled.
- Simple design with no jumpers or pots to adjust.
- Instructions included.

### ProControl<sup>™</sup> Series Valve Products - Range



### ProControl™ Series MiDP Stepper Proportional Valves

Variable flow control of aggressive liquid and gases with exceptional repeatability and low power consumption.

Safely isolated from media is Humphrey's stepper motor operator delivering exceptional hysteresis and performance.

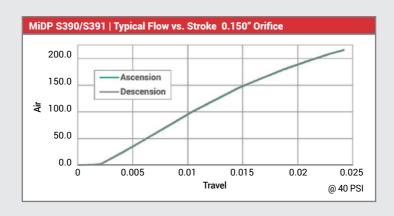






**S391** 2-Port Manifold Mount

SPECIFICATIONS	S390, S391	
TYPE OF OPERATION	Stepper Motor, Media Isolated	
MEDIA	Aggressive Liquid or Gases	
SIZE (H X D X W)	3.29 x 1.21 x 1.21	
PRESSURE RANGE – PSI (BAR)	0 - 60 (0 - 4.1)	
TYPICAL HYSTERESIS	< 2%	
TYPICAL FLOW RANGE (0.150" ORIFICE)	0-8.5 SLPM Water / 0-325 SLPM Air @ 60 PSI	
POWER CONSUMPTION (WATTS)	2.6 MAX	



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