

# Life Science Group

## Featured Valve Products



**Humphrey**

### SOLENOID VALVES



#### MINIATURE CARTRIDGE STYLE VALVES

- 10mm and 12mm CSV Series designed for versatility and performance in tight spaces.
- Multi-purpose 3-port function.
- High flow poppet design seals tight.
- Vacuum to 30 PSI air or inert gases.



#### DIAPHRAGM SEPARATED, AGGRESSIVE MEDIA VALVES

- iDP 300, 350 and 370 Series.
- Designed for difficult gas and liquid chemicals and cleaners.
- 2- and 3-port, inline and manifold mount models.
- 0 to 40 PSI pressure range (liquid).
- Successfully applied in clinical diagnostics, analytical chemistry and dialysis.



#### PRESSURE BALANCED HIGH FLOW POPPET VALVES

- Featuring streamlined Balanced Valve Series.
- 15, 19 and 25mm sizes.
- 3- and 4-port inline and manifold mount models.
- Multi-purpose functionality.
- IP67 protection models offered for difficult environments.
- Large flow capacity, from 0.15 to 1.2 Cv.



#### MINIATURE DIAPHRAGM-POPPET SOLENOID VALVES

- HK5 Series (pneumatic); HKL5 Series (low pressure liquids).
- Multi-purpose 3-port function.
- Compact 12mm width and up to 85 SLPM flow.
- Symmetrical porting is flexible, many options.
- Design eliminates seal wear.
- Alternative media and purity applications possible.

### PROPORTIONAL VALVES



#### PROCONTROL™ SERIES

- Miniature PV3 & PV10 and small PC30 Series.
- Deliver variable output flow from corresponding current to solenoid.
- Calibrated flow from upstream standard pressure settings of 25, 50, 75 or 100 PSI.
- Precise control via direct current or PWM.
- Excellent resolution and low hysteresis.



#### PROCONTROL™ BALANCED SERVOID VALVE

- Large flow capacity and unmatched precision control.
- Pressure Balanced servoid is unaffected by unstable upstream pressure.
- Excellent turn down ratios, cycle repeatability and low hysteresis.
- Control via direct current or PWM.
- Excellent reputation in medical technology, critical care patient ventilation systems.



#### STEPPER OPERATED, DIAPHRAGM ISOLATED, AGGRESSIVE MEDIA VALVES

- MiDP S390 Series designed to precisely control variable flow of aggressive media and high flow while using minimal power.
- Field proven and reliable diaphragm separated body construction of the Humphrey 350 Series iDP Valves.
- 2-port inline and manifold mount models.
- Outstanding repeatability and low hysteresis.



#### PROCONTROL™ VALVE DRIVER

- Connect power supply and control any proportional valve 1 amp or less.
- Interface valve to data acquisition's voltage or current signals, or PWM.
- Pre-settings for Humphrey models. Custom setting for others.
- Excellent for evaluation and convenient control of proportional valves.

Our customers build a better product when their critical resources are focused on what differentiates them. Typically, it's outside fluid control.

We are fluid control specialists offering a variety of unique, proven valve designs, innovative system capability, and production experience for medical, analytical and industrial equipment makers.



Scan for additional product details on our online catalog.



### VISIT OUR ONLINE CATALOG

#### VALVE CATALOG & CAD

Navigate to over 9000 unique valve configurations easily to a final selection and obtain:

- Product image
- Specifications
- Downloadable CAD models
- CAD viewer
- Support documentation pdfs
- Related items & accessories
- Published List Price & Product Availability
- Request a Quotation Shopping Cart
- Request to Purchase Shopping Cart

### APPLICATION ASSISTANCE

#### CONTACT OUR VALVE EXPERTS

Pneumatic and Fluid Handling Valves are engineered products and applying them in systems can be complicated. We are here to help:

Ph: 800.477.8709

Email: [webtech@Humphrey-Products.com](mailto:webtech@Humphrey-Products.com)

Selecting and finalizing your proportional valve, especially in precise applications is critical. A Humphrey ProControl™ specialist can assist you through the process:

Ph: 844.447.9009

Email: [procontrolway@Humphrey-Products.com](mailto:procontrolway@Humphrey-Products.com)

### ENGINEERED SOLUTIONS

*Valves & Valve Systems to Your Exact Requirements!*

Our Engineered Solutions Group offers complete fluid handling and/or pneumatic system design, development and production capabilities to the OEM equipment or device maker. We are uniquely qualified to assist on projects where standard catalog components fall short, and a better valve, or valve system, is required.

Working peer-to-peer basis, our Engineered Solutions Team will concept, design, develop and produce a logical solution to your need. We'll select from

and incorporate proven Humphrey valve technology into the design. We couple our application experience with advanced techniques, design tools and understanding of manufacturing processes to give you a logical and cost effective solution.

Direct more engineering time to leveraging your technology; outsource your fluid handling or pneumatic control to us.

#### EXAMPLE

Control Manifold for Patient Support Surface (Medical Air Mattress)



#### OUR SOLUTION

- 14-Valve, Four Zone Control.
- Patient Turn Assist.
- Pressure Relief Function.
- CPR Quick Release Function.
- Cost Effective Design.
- Ongoing KanBan Fulfillment.



We are a privately held U.S. innovator and manufacturer since 1901, and proudly serving the global market from Kalamazoo, Michigan, through 100+ authorized stocking distributors worldwide. When not in stock, our team of over 200 employees consistently ships within two weeks, any of our 9000+ standard valve configurations.

When standard products are too much of a compromise, our Engineered Solutions Team stands ready to assist,

and tailoring a valve specifically for the original equipment maker and from our range of proven sealing and actuation technologies.

Industries utilizing our products and engineered solutions include medical devices, healthcare rehabilitation, analytical instrumentation, transportation, general industry and factory automation.