

PFV Miniature Proportional Valves



Low hysteresis and a consistent lift-off current make the PFV series of 2-way proportional valves ideal for OEM applications where repeatable, accurate performance is key. Featuring stainless steel construction and an IP67 rating, these valves are top-in-class for both performance and construction.

Features

- Low Hysteresis
- Consistent Lift-Off Current
- Stainless Steel Construction
- Bi-Directional Flow
- Lightweight
- Low Power Consumption
- 6 Available Flow Rates
- Compact Size

Applications

- Gas Chromatography
- Respiratory Care
- Mass Flow Control
- Air Analysis & Monitoring
- Pressure Control
- Diagnostics
- Mass Spectrometry
- Oxygen Handling
- Dispensing and Dosing

Industries

- Life Sciences
- Medical Equipment
- Industrial Automation
- Semiconductor
- Pharmaceutical

Mechanical Specifications:

Valve Type:

2-Way Proportional Normally Closed

Gating Element:

Poppet Seat Valve

Environmental Protection Class:

IP67

Ports:

Concentric Porting with 10-32 Male Stud

Connector:

Wire Leads - 22 Gauge, 193mm length

Mounting:

10-32 UNC Male Stud

Operating Temperature

-20...50C (-4...122F)

Filtration:

5 um Particulate

Media:

Neutral Gases, Oxygen

Other Compatibilities Available

Height:

62.2 mm (2.45 in)

Width:

26.0 mm (1.02 in)

Length:

26.0 mm (1.02 in)

Weight:

125 g (0.275 lbs)

Burst Pressure:

35 bar (500 psi)

Electrical Specifications

Nominal Coil Resistance:

68 Ohm

Current for Full Open:

175mA

Nominal Maximum Power Consumption:

2.1W

Maximum Coil Voltage:

24Vdc

Performance Specifications:

Orifice Sizes Available:

Ø0.50 mm, Ø0.75 mm, Ø1.00 mm,
Ø1.25 mm, Ø1.50 mm, Ø1.75 mm

Hysteresis:

±5% of full current (typical)

Response Time:

<30 ms

Wetted Material Specifications:

Body:

316 Series Stainless Steel

Seals:

FKM (Viton®) - other materials available on request

Moving Elements:

430 Series Stainless Steel

302 Series Stainless Steel

304 Series Stainless Steel

PFV Miniature Proportional Valve



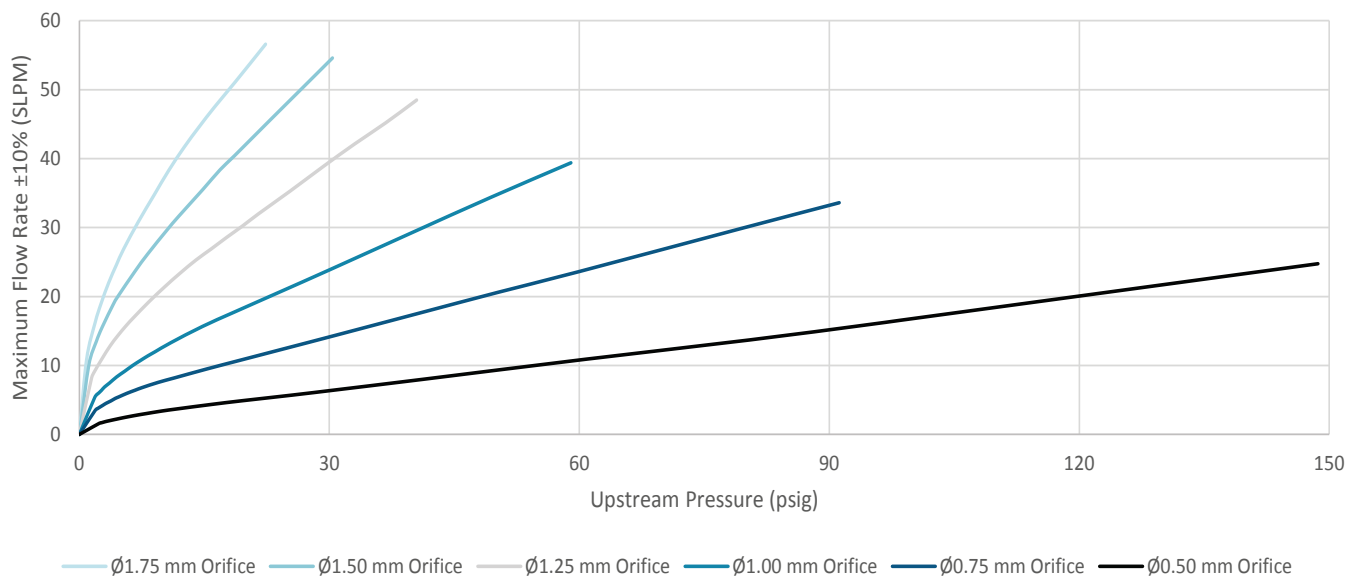
The PFV Miniature Proportional Valves simplify design and installation for makers of medical, life science, semiconductor and other OEM equipment by providing repeatable, accurate flow in response to input current. With six available orifice sizes ranging from Ø0.50 mm to Ø1.75 mm, choosing a valve based on inlet air pressure and required flow becomes easy. Each valve and orifice combination is then individually calibrated to maximize linearity and minimize hysteresis, providing top of the line performance in a small package size.

PFV - W24 - M175 - C

Order Code	Max Coil Voltage
24	24Vdc

Order Code	Orifice Diameter
050	Ø0.50 mm
075	Ø0.75 mm
100	Ø1.00 mm
125	Ø1.25 mm
150	Ø1.50 mm
175	Ø1.75 mm

Maximum Flow Rate vs. Upstream Pressure



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