

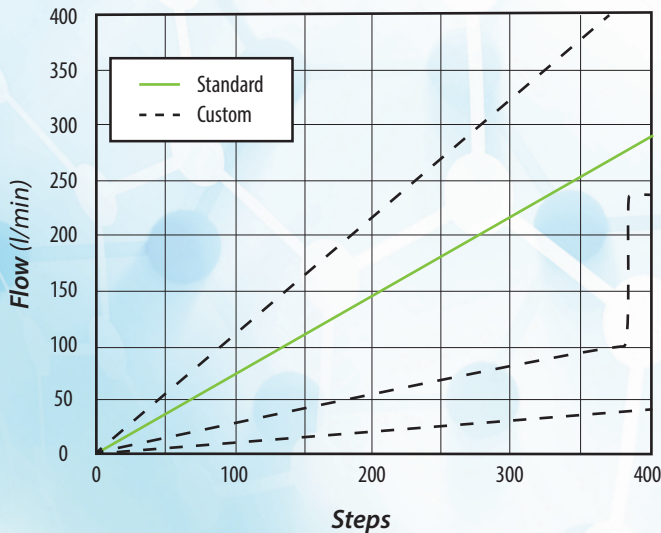
SCPV NEEDLE VALVES



Utilizing the industry's most robust and powerful linear actuator, the SCPV series high flow stepper-controlled proportional valves outperform the competition in performance and durability. These valves are ideal in critical applications such as gas delivery, medical, analytical, and industrial automation requiring high resolution, high flow, and low hysteresis. In addition, the unique design allows for custom flow profiles when required.

Positioning a 3.5° needle through a 0.152" (3.9 mm) orifice in 0.001" (0.03 mm) step increments provides for very linear and repeatable flow control within your application process. Standard models, inline, cartridge, and manifold mounts are ready to go for control of air and other inert gases.

Flow Rate (SCPV-1-3 @ 100 psig)



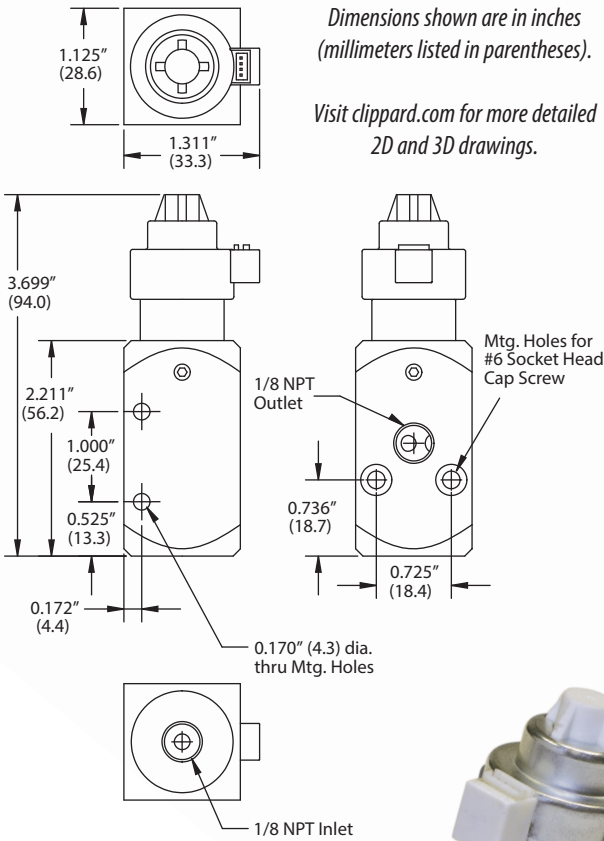
Connection	Connector / wiring harness
Driver	Bipolar chopper drive required
Flow Range	Up to 280 l/min
Flow Resolution	0.7 l/min per step
Linearity	<2.5% of full scale
Material, Wetted	Stainless steel, aluminum, brass, acetal, and FKM
Max. Hysteresis	<2%
Max. psig	100 psig
Medium	Air or compatible gases
Mount	In-line, manifold, or cartridge
Needle	3.5°
Number of Ports	2
Logic Input Voltage	3.3V or 5V jumper selectable
Operating Pressure	Vac. to 100 psig (7 bar)
Operating Temp. Range	32 to 184°F (0 to 84°C)
Operating Voltage	7 to 35 VDC
Port, Inlet	1/8" NPT, manifold, or cartridge
Port, Outlet	1/8" NPT, manifold, or cartridge
Position Resolution	0.001" (0.03 mm) per step
Repeatability	<0.5% of full scale
Response Time	0.95 secs fully-open to fully-closed
Wattage	3.85 watts nominal (<i>only during adjustment—zero power consumption to maintain position</i>)
More Details	clippard.com/link/scpv-series

HIGHLY CUSTOMIZABLE FOR OEM APPLICATIONS

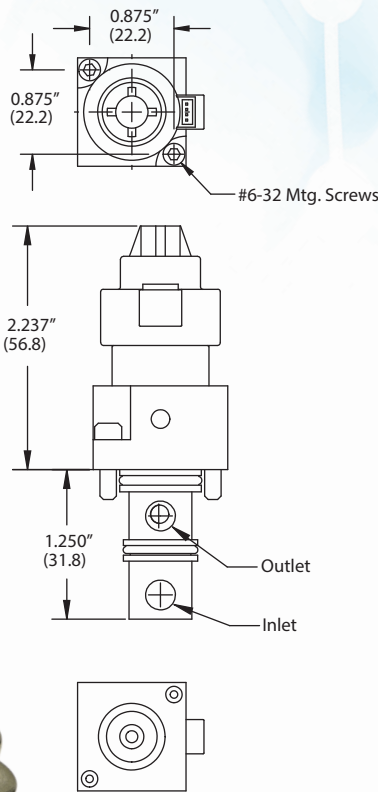
- Flow profiles up to 5,800 l/min
- High flow at low pressure
- Materials such as PEEK or stainless steel
- Special seal materials such as FFKM and others
- Applications for control of water
- Applications that provide zero leak shutoff
- Changing the motor to accommodate an encoder
- Providing specific testing procedures

Contact Clippard to discuss what changes can be made to best fit your application requirements.

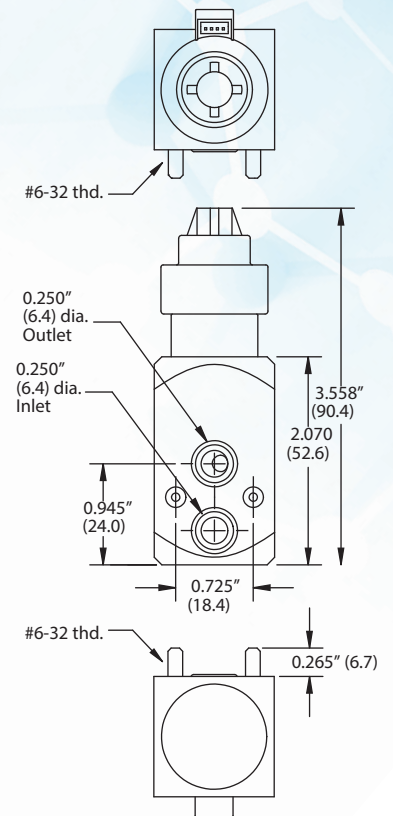
Inline Mount



Cartridge Mount



Manifold Mount

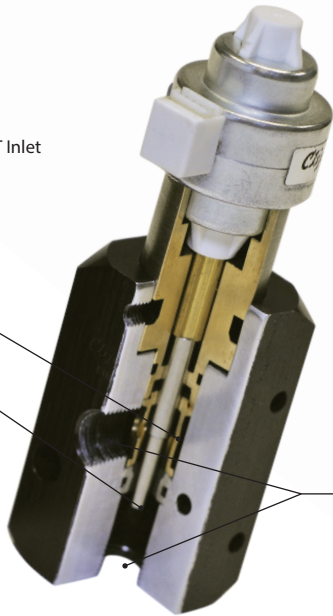


Acetal seat

Customizable stainless steel needle

Anodized aluminum body

Brass housing and internals

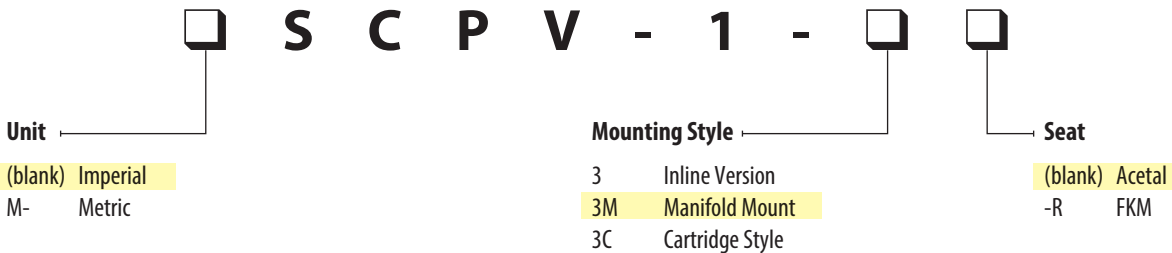


Stepper-controlled linear actuator with acme lead screw

1/8" NPT inlet & outlet ports (SCPV-1-3)

- <2% hysteresis
- Excellent linearity, <2.5% of full-scale
- 2 ms reaction time
- Millions of cycles
- Holds position for power savings or at a loss of power

ORDERING INFORMATION



Example Part Number:
SCPV-1-3M

For more info, scan the QR code or visit
clippard.com/link/scpv-series

