# NEW **Electronic Valves** – 2/2 Stepper-Controlled Proportional Valve

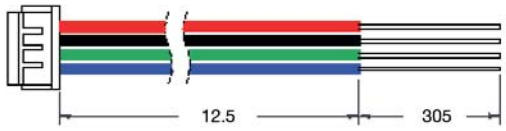
## Control Data

A Bipolar Chopper Drive (not included) is a power-efficient method of using current to drive a stepping motor to obtain high stepping rates. The chopper gets its name from the technique of rapidly turning the output voltage on and off (chopping) to control motor current.

Stepper motors require some external electrical components in order to operate. These components typically include a power supply, logic sequencer switching components and a clock pulse source to determine the step rate. Many commercially available drives have integrated these components into a complete package.

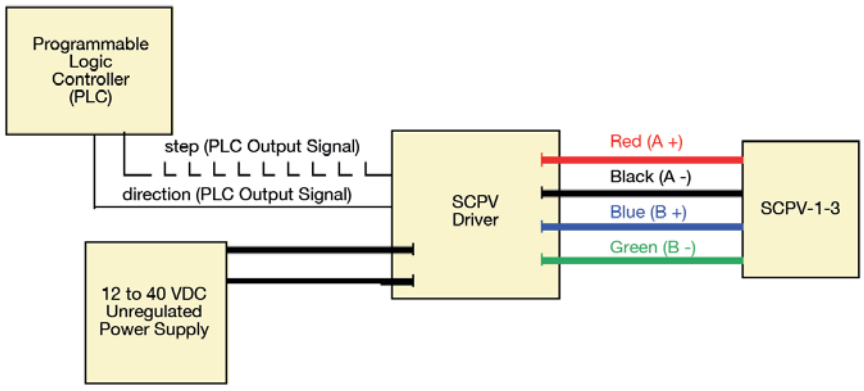
For more information on the process, visit www.clippard.com/cms/wiki/clippard-stepper-controlled-proportional-valve.

**Wiring Harness (included)**




| Pin | Color | Pin | Color |
|---|---|---|---|
| 1 | Red (A +) | 3 | Green (B -) |
| 2 | Black (A -) | 4 | Blue (B +) |

**Functional Diagram**




Wiring:
Bipolar

Power Consumption:
3.85 watts

Temperature Rise:
75°C

Current/Phase:
385 mA

Resistance/Phase:
13 W

Inductance/Phase:
8.08 mH

Motor Voltage:
5 VDC

Rotor Inertia:
1.07 $gcm^2$

Insulation Resistance:
20M ohms

| Part No. | Description |
|---|---|
| M-SCPV-1-3 | Proportional Valve, in-Line |
| M-SCPV-1-3M | Proportional Valve, Manifold |
| M-SCPV-1-3C | Proportional Valve, Cartridge |