

# C1 Servo Pneumatic Controller & Proportional Valve Driver



Compact and powerful, the C1 controller and driver pairs with the LS and M-series valves to deliver the optimal performance for pressure, position, force, vacuum and flow control applications.

## Features

- Small Footprint
- Lightweight
- Two Control Modules
- Test Ports for Troubleshooting
- RoHs Compliant
- Enclosed Circuitry Preventing ESD
- Works with LS & Enfinity Style Valves

## Applications

- Material Removal
- Temperature Control
- Bi-Directional Air Motor
- Bottle & Bag Filling
- Glass Forming
- Quality Control Sorting
- Pick & Place
- Product or Pallet Indexing
- Rotary Indexing

## Compatibility

### LS-Series Valves

- LS-V05s
- LS-V15s
- LS-V25s

### M-Series Valves

- M2s

## Mechanical Specifications:

- Temperature Range:**  
-40° to 65°C (-40° to 150°F)
- Connector:**  
8 Pin Pluggable Terminal Block
- Mounting:**  
Removable DIN Clip w/ Flush Option
- Height:**  
45 mm (1.76 in)
- Width:**  
46 mm (1.76 in)
- Length:**  
56 mm (2.20 in)
- Weight:**  
45 g (1.6 oz)

## Material Specifications:

- Main Body:**  
ABS
- Gray Cap:**  
PAGF 30% Glass Filled Nylon
- DIN Clip:**  
ABS

## Control Algorithms:

- Configuration 1:**  
Proportional, Ramp Rate, Minimum Position & Maximum Position
- Configuration 2:**  
Proportional, Ramp Rate, Integral & Derivative.

## Electrical Specifications

- Power Requirement:**  
12 ± 2 VDC  
24 ± 4 VDC @ 15W
- Command Input Impedance:**  
0...10 VDC: 100kΩ  
4...20mA: 210Ω
- Feedback Input Impedance:**  
0...10 VDC: 100kΩ  
4...20mA: 210Ω
- Command Input:**  
Configurable 0...10 VDC; 4...20mA
- Feedback Input:**  
Configurable 0...10 VDC; 4...20mA
- Output:**  
-1A...0...1A
- Electronic Adjustments:**  
Four Configurable Potentiometers  
Jumpers Select Analog Input Signal Types  
Jumper for Control Algorithm
- Status Indications:**  
2 Power and Status LEDs
- Excitation:**  
+10V (15mA max)
- Electrical Connection:**  
Eight Pin Pluggable Terminal Block

# C1 Servo Pneumatic Controller & Proportional Valve Driver

The C1 Controller & Driver is compact in size yet expansive in capability. This powerful combination of controller and driver is the ideal solution for pressure, position, force, vacuum and flow controls. The C1 features two independent control algorithms selected via an on-board jumper. Each selectable algorithm configures the functionality of the four potentiometers delivering maximum performance and flexibility.

## Control Algorithms

