Product Overview

Enfield Technologies’ LS-C40 and LS-C41 pneumatic systems controllers offer flexible PID with feed-forward control topology for the serious control systems engineer. The LS-C40 model (without a valve driver onboard) for compatibility with Enfield Technologies’ line of driver-on-board valves, while the LS-C41 contains the driver for those valves that require it. The LS-C40 and LS-C41’s adjustable gain, deadband, and dither (both frequency and amplitude) settings put the user in full control of their applications.

Features
- Analog PID (Hybrid) w/ Feedforward
- Adjustable Gain Settings
- Optional Onboard Valve Driver
  - Highly Efficient PWM
- Driver/Valve Disable
- Adjustable Deadband
- Adjustable Dither Frequency & Amplitude
- Available ±10 Vdc Feedback Reference
- Din-Mount Chassis

Typical Applications
- High-Performance Pneumatic Systems:
  - Position Control
  - Motion Control
  - Flow Control
  - Force Control
  - Pressure Control

Industries
- Laboratory Test & Measurement
- Industrial Automation
- Animatronics
- Medical Equipment/Devices
- Analytical Devices

Available Models:

LS-C40 = Pneumatic Device Controller without optional onboard valve driver
LS-C41 = Pneumatic Device Controller with optional onboard valve driver

<table>
<thead>
<tr>
<th>Specification</th>
<th>SI Units</th>
<th>Imperial Units</th>
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<tbody>
<tr>
<td>Mass (Weight)</td>
<td>0.202 kg</td>
<td>(7.1 oz)</td>
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<tr>
<td>Approximate Physical Dimensions (L x W x H)</td>
<td>137 mm x 126 mm x 45 mm</td>
<td>5.38” x 4.95” x 1.76”</td>
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<tr>
<td>Mounting</td>
<td>DIN 3 (35 mm/1.38”) Rail Mount Clip</td>
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Electrical Characteristics

- Power: 30W Max
- Current: 1.0A Max
- Supply Voltage: 18 to 36Vdc, 24 Vdc Nom.
- Input Impedance: 80 kΩ, all inputs
- Electrical Connections: Terminal Blocks
- Input Signal Ranges: -10 Vdc to 10 Vdc (Command and Feedback Scales Must Be Coordinated)
- Output Signals: 0 to 5 Vdc Command Effort

Optional Valve Driver (LS-C41 models)
- Voltage Output: PWM @ Supply Voltage
- PWM Frequency: 39kHz
- Dither Frequency: 40 Hz to 4 kHz
- Output Current: ±1.25 A Max

Environmental Characteristics

- Environmental Protection Class: N/A
- Temperature: 0°C - 70°C | 32°F - 158°F
- Humidity: 5% - 65% RH