APECS® 0250 Series Actuators

Provides proportional fuel control for construction, industrial and agricultural equipment. 2.50” diameter spring-return actuator, pull or push models, four spring types available.

Features:
• Pull or push actuation (Model 0250 pull, Model 0250P push)
• Flange or base mount
• Failsafe operation using spring to return actuator to minimum fuel position
• Corrosion resistant, plated steel housing and mounting base/flange
• Precise engine speed control when used with APECS electronic controllers.
  (See Controllers section, pages 74-83, for ordering information.)
• Variety of mounting styles, plungers, terminations, and springs available

Order Information: Complete the following model descriptions to build your Order No.

<table>
<thead>
<tr>
<th>Model No.</th>
<th>Voltage</th>
<th>Mounting Style</th>
<th>Plunger Type</th>
<th>Termination Type</th>
<th>Return Spring</th>
</tr>
</thead>
<tbody>
<tr>
<td>0250</td>
<td>12</td>
<td>A</td>
<td>2</td>
<td>L</td>
<td>S1</td>
</tr>
<tr>
<td></td>
<td>12 VDC</td>
<td>Flange</td>
<td>24</td>
<td>Ext. M-6 thread</td>
<td>S2</td>
</tr>
<tr>
<td>0250P</td>
<td>24</td>
<td>E</td>
<td>3</td>
<td>L</td>
<td>S3</td>
</tr>
<tr>
<td></td>
<td>24 VDC</td>
<td>Base</td>
<td>3</td>
<td>Ext. M-6 thread</td>
<td>S4</td>
</tr>
</tbody>
</table>

*Spring Chart

<table>
<thead>
<tr>
<th>Spring Type</th>
<th>PART NO.</th>
<th>De-energized Spring Force</th>
<th>Energized Spring Force</th>
<th>Spring Rate</th>
</tr>
</thead>
<tbody>
<tr>
<td>S1</td>
<td>SA-4684</td>
<td>1.60 lbs (7.1 N)</td>
<td>11.40 lbs (50.7 N)</td>
<td>9.80 lbs/in (0.17 kg/mm)</td>
</tr>
<tr>
<td>S2</td>
<td>SA-4685</td>
<td>0.75 lbs (3.3 N)</td>
<td>14.00 lbs (62.3 N)</td>
<td>13.25 lbs/in (0.24 kg/mm)</td>
</tr>
<tr>
<td>S3</td>
<td>SA-4728</td>
<td>0.75 lbs (3.3 N)</td>
<td>8.80 lbs (39.1 N)</td>
<td>8.05 lbs/in (0.14 kg/mm)</td>
</tr>
<tr>
<td>S4</td>
<td>SA-4729</td>
<td>0.75 lbs (3.3 N)</td>
<td>14.55 lbs (64.7 N)</td>
<td>13.80 lbs/in (0.25 kg/mm)</td>
</tr>
</tbody>
</table>

phone: 847-967-7730
APECS® 0250 Series

0250 / Pull Actuation

FLANGE MOUNT

BASE MOUNT

0250P / Push Actuation

FLANGE MOUNT

BASE MOUNT

Electrical Specifications:

- Stroke: 1.0" Maximum (25.4 mm)
- Net Force: 6.0 lbs (26.7 N)
- Work Rating: 0.7 ft. lbs (0.95 Nm)
- Nominal Rated Current: 6.8 A (12 VDC), 3.5 A (24 VDC)
- Response Time: 65 milliseconds for 10%–90% of stroke
- Resistance* (nominal): 1.76 Ohms (12 Volt), 6.84 Ohms (24 Volt)

Mechanical Specifications:

- Operating Temperature: -40°F to + 250°F (-40°C to + 121°C)
- Vibration: 15 G’s
- Shock: 200 G’s
- Weight: Approx. 3.0 lbs (1.4 kg)

Specifications are for reference only.

*At ambient temperature

WARNING: An overspeed shutdown device, independent of the APECS system, should be provided to prevent loss of engine control that may cause personal injury or equipment damage.

e-mail: info_niles@woodward.com