Type 124
solenoid

**FEATURES**
- Double-make or double-break contacts
- Steel enclosure
- Offers high and low current capabilities
- Isolated or grounded coils

**ENGINEERING DATA**

**Contacts**
- Pole form—SPNO, SPNC and SPDT
- Material—silver alloy
- Termination—\(\frac{3}{16}\)-24 UNF-2A thread

**RATINGS**

<table>
<thead>
<tr>
<th>Volts DC</th>
<th>NO Cont.</th>
<th>NO Inrush</th>
<th>NC Cont.</th>
<th>NC Inrush</th>
</tr>
</thead>
<tbody>
<tr>
<td>6</td>
<td>100 A</td>
<td>400 A</td>
<td>50 A</td>
<td>200 A</td>
</tr>
<tr>
<td>12</td>
<td>100 A</td>
<td>400 A</td>
<td>50 A</td>
<td>200 A</td>
</tr>
<tr>
<td>24 &amp; 36</td>
<td>100 A</td>
<td>400 A</td>
<td>50 A</td>
<td>100 A</td>
</tr>
</tbody>
</table>

**Coils**
- Voltage—6 VDC through 48 VDC
- Termination—#10-32 UNF-2A thread
- Power (approximate)
  - Continuous 12 watts
  - Intermittent 24 watts
- Connections
  1. Coil isolated (two terminals)
  2. One coil lead grounded to case (one terminal)
- Operate (77°F/25°C)
  - 75% of nominal coil voltage
  - 110% max. safe of nominal coil voltage

**COIL DATA**

<table>
<thead>
<tr>
<th>Volts DC</th>
<th>Resistance in Ohms</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Continuous</td>
</tr>
<tr>
<td>6</td>
<td>1.7</td>
</tr>
<tr>
<td>12</td>
<td>6.6</td>
</tr>
<tr>
<td>15</td>
<td>10.2</td>
</tr>
<tr>
<td>24</td>
<td>26.0</td>
</tr>
<tr>
<td>36</td>
<td>59.0</td>
</tr>
<tr>
<td>48</td>
<td>105.0</td>
</tr>
</tbody>
</table>

**GENERAL DATA**

- **Dielectric Strength**
  - 500 Volts
- **Temperature Range**
  - -40°F/-40°C to 149°F/65°C
- **Mechanical Life (no load)**
  - 100,000 operations
- **Electrical Life (rated load)**
  - 50,000 operations
- **Mounting Position**
  - Recommended mounting is vertical plane with coil terminals up
- **Weight (approximate)**
  - SPNO—16.0 oz.
  - SPDT—19.0 oz.
- **Duty Cycle**
  - Continuous
  - Intermittent—10 seconds “on” maximum and minimum 60 seconds “off”
  - One minute “on” maximum and minimum 6 minutes “off”
- **Hardware Torque Specification**
  - Contact Terminal: 60 inch-lbs. max.
  - Coil Terminal: 12-18 inch-lbs.
TYPE 124 PART NUMBERING SYSTEM

124 – x xx x x x - x

Basic Part Number Series

Coil Voltage/Duty
02 – 6 Volt continuous
03 – 6 Volt intermittent
05 – 12 Volt continuous
06 – 12 Volt intermittent
08 – 15 Volt continuous
09 – 15 Volt intermittent
14 – 24 Volt continuous
15 – 24 Volt intermittent
17 – 36 Volt continuous
18 – 36 Volt intermittent
20 – 48 Volt continuous
21 – 48 Volt intermittent

Coil Termination
1 – Isolated
2 – Grounded

Mounting Bracket
1 – Standard bracket

Contact Material
1 – AgCdO
4 – AgCdO (to be replaced by 1)
5 – Au plated NC/AgCdO NO

Factory Assigned Specials
(Where undefined, contact factory)
No dash – Standard assembly, hardware sent bulk

APPLICATION NOTES
- Not all part number combinations are available. Please contact your Sales Representative for available part numbers.
- Solenoids applied in battery charging circuits should be protected from higher than rated voltage during charging. The service life may be affected by this condition and the solenoid may or may not operate the circuit as intended.
- Circuits should be designed to provide safe operation should the solenoid fail in either the open or closed position.
- A back-up wrench must be used to hold the bottom nut stationary during installation.

SPNO – Isolated Coil

Coil Grounded to Case

SPDT – Isolated Coil