Precision Series SPR - 1/2 Watt 1/8" shaft diameter

Precision series SPR/RV8 potentiometers are for PCB applications requiring a rugged potentiometer.

FEATURES:
- hot molded carbon element
- board washable
- stainless steel shaft
- compact size
- quality meeting or exceeding MIL-R-94 - QPL listed

OPTIONS:
- custom shafts and bushings
- special tapers
- customer specified marking
- location tab position

ELECTRICAL SPECIFICATIONS:
- Resistance range, linear taper: 100 Ω to 5 Meg Ω
- Resistance range, logarithmic taper: 150 Ω to 1 Meg Ω
- Resistance tolerance: ±10% or ±20%
- Resistance taper: linear, logarithmic, reverse logarithmic; other tapers by special order
- Power rating: 0.5 watts at 70°C derated to 0 watts at 120°C
- Insulation resistance:
  - dry: 10K Meg Ω
  - wet: 100K Meg Ω
- Dielectric strength: 750 V RMS at sea level
- Operating voltage: 350 V, subject to power rating

MECHANICAL SPECIFICATIONS:
- Mechanical rotation: 295°
- Operating torque: 0.5 oz/in to 6 oz/in
- Rotational life: 25,000 cycles

ENVIRONMENTAL SPECIFICATIONS:
- Operating temperature: −65°C to +125°C
- Resistance to soldering heat: 350°C for 5 seconds
- Humidity range: per MIL-R-94
- Vibration range: per MIL-R-94
- Shock resistance: per MIL-R-94
- Load life: 1000 hours at 70°C
**ORDERING INFORMATION:**

### Ordering Information - Commercial Part Numbers

<table>
<thead>
<tr>
<th>Series</th>
<th>Bushing</th>
<th>Bushing Length</th>
<th>Taper</th>
<th>Resistance Value</th>
<th>Tolerance</th>
<th>Shaft Style</th>
<th>Shaft Length</th>
</tr>
</thead>
<tbody>
<tr>
<td>SPR = series SPR Blank = standard L = locking W = panel &amp; shaft seal Blank = 1/4&quot; 6 = 3/8&quot;</td>
<td>U = linear A = logarithmic B = reverse logarithmic</td>
<td>Total resistance value in Ω: first 2 digits significant, third digit = number of zeroes</td>
<td>1 = 10% of nominal 2 = 20% of nominal</td>
<td>R = round S = slotted F = flattened</td>
<td>16 = 1/2&quot; 20 = 5/8&quot; 24 = 3/4&quot; 28 = 7/8&quot; 32 = 1&quot;</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Example:** SPRU2521R20  
**note:** not all part number combinations are valid

### Ordering Information - Military Part Numbers

<table>
<thead>
<tr>
<th>Style</th>
<th>Bushing</th>
<th>Switch</th>
<th>Temperature &amp; Moisture Characteristics</th>
<th>Shaft Style</th>
<th>Shaft Length</th>
<th>Resistance Value</th>
<th>Taper &amp; Tolerance</th>
</tr>
</thead>
<tbody>
<tr>
<td>RV8 = MIL style RV8 N = standard L = locking S = panel &amp; shaft seal</td>
<td>A = without switch Y = as per MIL-R-94</td>
<td>S = slotted F = flattened</td>
<td>L = 3/8&quot; B = 1/2&quot; A = 5/8&quot; D = 7/8&quot;</td>
<td>Total resistance value in Ω: first 2 digits significant, third digit = number of zeroes</td>
<td>A = linear 10% B = linear 20% C = logarithmic 10% D = logarithmic 20% E = reverse logarithmic 10% F = reverse logarithmic 20%</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Example:** RV8NAYSD252A  
**note:** not all part number combinations are valid

### Series SPR Cross Reference

<table>
<thead>
<tr>
<th>Precision</th>
<th>Military</th>
<th>Clarostat</th>
<th>Allen Bradley</th>
</tr>
</thead>
<tbody>
<tr>
<td>SPR</td>
<td>RV8NAY</td>
<td>392</td>
<td>W or G</td>
</tr>
<tr>
<td>SPRL</td>
<td>RV8LAY</td>
<td>392</td>
<td></td>
</tr>
</tbody>
</table>