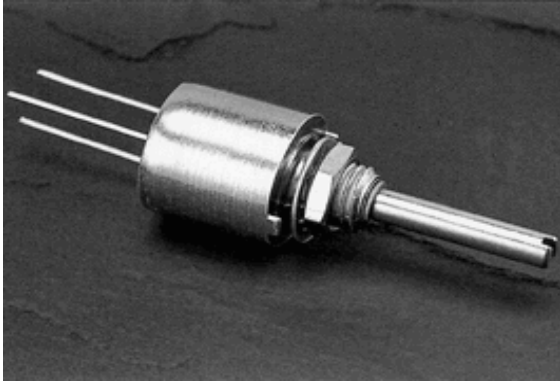




## Precision Series SPR - 1/2 Watt 1/8" shaft diameter



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  $\Omega$  to 5 Meg  $\Omega$

**Resistance range, logarithmic taper:** 150  $\Omega$  to 1 Meg  $\Omega$

**Resistance tolerance:**  $\pm 10\%$  or  $\pm 20\%$

**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  $\Omega$

**wet:** 100K Meg  $\Omega$

**Dielectric strength:** 750 V RMS at sea level

**Operating voltage:** 350 V, subject to power rating

### 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

### MECHANICAL SPECIFICATIONS:

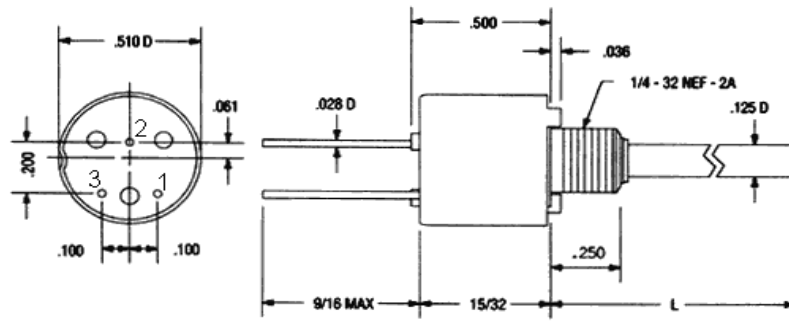
**Mechanical rotation:** 295°

**Operating torque:** 0.5 oz/in to 6 oz/in

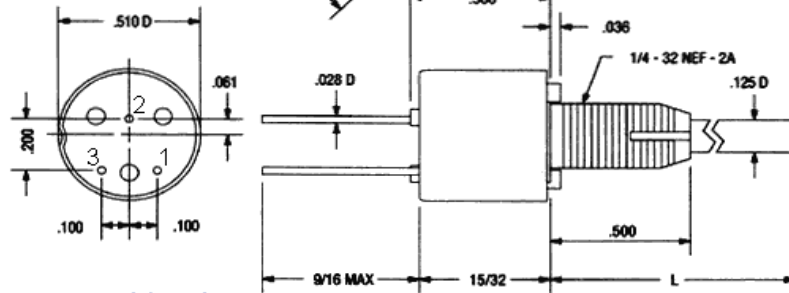
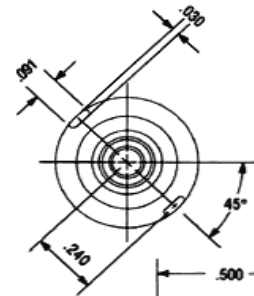
**Rotational life:** 25,000 cycles



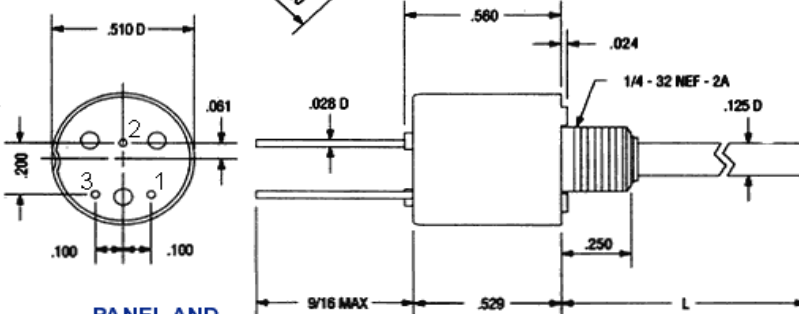
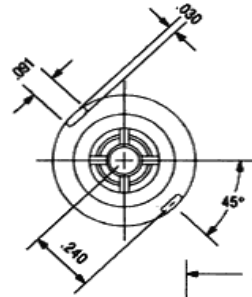
**DRAWING:**



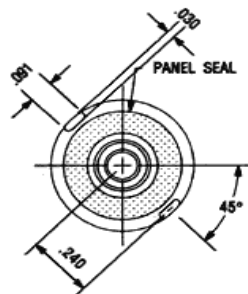
**STANDARD  
BUSHING**



**LOCKING  
BUSHING**



**PANEL AND  
SHAFT SEAL**





## ORDERING INFORMATION:

| Ordering Information - Commercial Part Numbers                                         |                                                           |                          |                                                          |                                                                                                 |                                          |                                         |                                                             |
|----------------------------------------------------------------------------------------|-----------------------------------------------------------|--------------------------|----------------------------------------------------------|-------------------------------------------------------------------------------------------------|------------------------------------------|-----------------------------------------|-------------------------------------------------------------|
| Series                                                                                 | Bushing                                                   | Bushing Length           | Taper                                                    | Resistance Value                                                                                | Tolerance                                | Shaft Style                             | Shaft Length                                                |
| SPR = series SPR                                                                       | Blank = standard<br>L = locking<br>W = panel & shaft seal | Blank = 1/4"<br>6 = 3/8" | U = linear<br>A = logarithmic<br>B = reverse logarithmic | Total resistance value in $\Omega$ : first 2 digits significant, third digit = number of zeroes | 1 = 10% of nominal<br>2 = 20% of nominal | R = round<br>S = slotted<br>F = flatted | 16 = 1/2"<br>20 = 5/8"<br>24 = 3/4"<br>28 = 7/8"<br>32 = 1" |
| <b>Example: SPRU2521R20</b><br><b>note:</b> not all part number combinations are valid |                                                           |                          |                                                          |                                                                                                 |                                          |                                         |                                                             |

| Ordering Information - Military Part Numbers                                            |                                                       |                    |                                        |                            |                                              |                                                                                                 |                                                                                                                                              |
|-----------------------------------------------------------------------------------------|-------------------------------------------------------|--------------------|----------------------------------------|----------------------------|----------------------------------------------|-------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------|
| Style                                                                                   | Bushing                                               | Switch             | Temperature & Moisture Characteristics | Shaft Style                | Shaft Length                                 | Resistance Value                                                                                | Taper & Tolerance                                                                                                                            |
| RV8 = MIL style RV8                                                                     | N = standard<br>L = locking<br>S = panel & shaft seal | A = without switch | Y = as per MIL-R-94                    | S = slotted<br>F = flatted | L = 3/8"<br>B = 1/2"<br>A = 5/8"<br>D = 7/8" | Total resistance value in $\Omega$ : first 2 digits significant, third digit = number of zeroes | A = linear 10%<br>B = linear 20%<br>C = logarithmic 10%<br>D = logarithmic 20%<br>E = reverse logarithmic 10%<br>F = reverse logarithmic 20% |
| <b>Example: RV8NAYSD252A</b><br><b>note:</b> not all part number combinations are valid |                                                       |                    |                                        |                            |                                              |                                                                                                 |                                                                                                                                              |

| Series SPR Cross Reference |          |           |               |
|----------------------------|----------|-----------|---------------|
| Precision                  | Military | Clarostat | Allen Bradley |
| SPR                        | RV8NAY   | 392       | W or G        |
| SPRL                       | RV8LAY   | 392       |               |