



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



Precision series S/RV6 potentiometers are ideal for applications requiring high reliability and a compact size.

### FEATURES:

- hot molded carbon element
- one piece housing and bushing
- stainless-steel shaft
- compact size
- quality meeting or exceeding MIL-R-94 - QPL listed

### OPTIONS:

- custom shafts and bushings
- special tapers
- customer specified marking

### 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

### 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

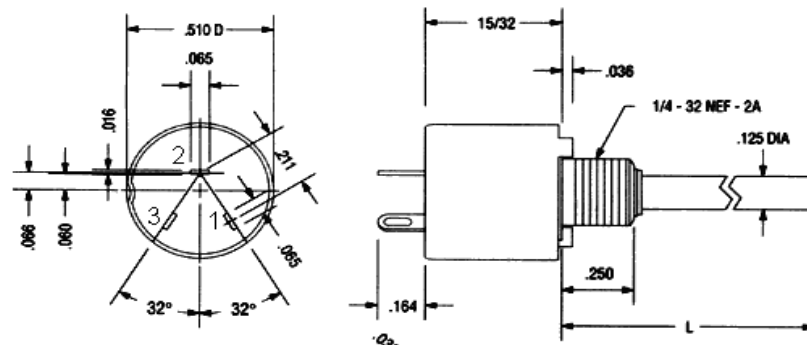
**Shock resistance:** per MIL-R-94

**Load life:** 1000 hours at 70°C

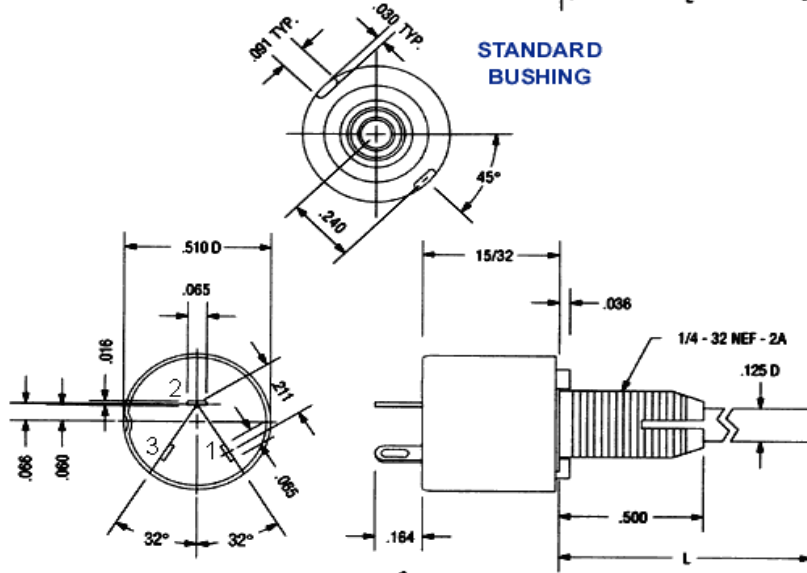


**DRAWING:**

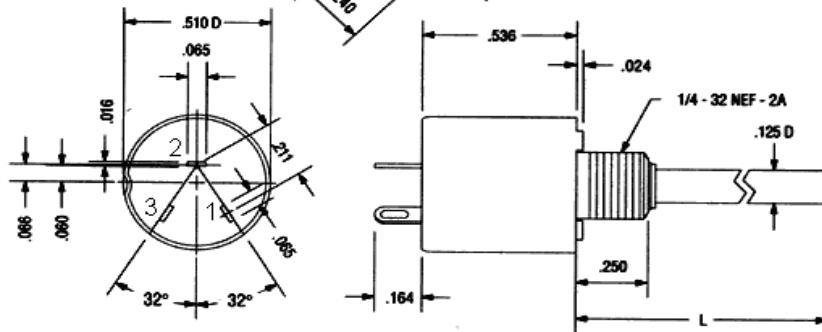
**MIL Style RV6**



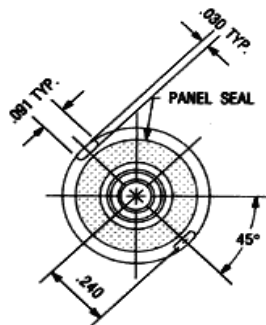
**STANDARD BUSHING**



**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
<b>S</b> = series S	<b>Blank</b> = standard  <b>L</b> = locking  <b>W</b> = panel & shaft steel	<b>Blank</b> = 1/4"  <b>6</b> = 3/8"	<b>U</b> = linear  <b>A</b> = logarithmic <b>B</b> = reverse logarithmic	<b>Total resistance value in Ω:</b> first 2 digits significant, third digit = number of zeroes	<b>1</b> = 10% of nominal  <b>2</b> = 20% of nominal	<b>R</b> = round <b>S</b> = slotted <b>F</b> = flatted	<b>16</b> = 1/2" <b>20</b> = 5/8" <b>24</b> = 3/4" <b>28</b> = 7/8" <b>32</b> = 1" <b>36</b> = 1 1/8"
<b>Example: SLA1021S20</b> <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
<b>RV6</b> = MIL style RV6	<b>N</b> = standard  <b>L</b> = locking <b>S</b> = panel & shaft seal	<b>A</b> = without switch	<b>Y</b> = as per MIL-R-94	<b>S</b> = slotted <b>F</b> = flatted	<b>L</b> = 3/8" <b>B</b> = 1/2" <b>A</b> = 5/8" <b>D</b> = 7/8"	<b>Total resistance value in Ω:</b> first 2 digits significant, third digit = number of zeroes	<b>A</b> = linear 10% <b>B</b> = linear 20% <b>C</b> = logarithmic 10% <b>D</b> = logarithmic 20% <b>E</b> = reverse logarithmic 10% <b>F</b> = reverse logarithmic 20%
<b>Example: RV6LAYS A102C</b> <b>note:</b> not all part number combinations are valid							

Series S Cross Reference				
Precision	Military	Clarostat	Allen Bradley	Ohmite
SU S28	RV6NAYSD A	392M / 382C3	WA2G056S UA	ASM
SU S12	RV6NAYSL A	392M / 382C4	WA2G024S UA	N/A
SLU S20	RV6LAYS A	392M / 382C2	WA2L040S UC	AS
SLU S28	RV6LAYS D A	393M / 382C5	WA2L056S UC	N/A