



## Precision Series K - 2 Watt 1/4" shaft diameter



**Precision series K/RV4 potentiometers are suitable for both military and commercial applications. They can easily be customized to meet special requirements.**

### **FEATURES:**

- hot molded carbon element
- gold-plated terminals
- stainless-steel shaft and housing
- quality meeting or exceeding MIL-R-94 - QPL listed

### **OPTIONS:**

- custom shafts and bushings
- special tapers
- fourth (center) terminal
- high life
- attached switch

### **ELECTRICAL SPECIFICATIONS:**

**Resistance range, linear taper:** 50  $\Omega$  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:** 2 watts at 70°C derated to 0 watts at 120°C

**Insulation resistance:**

**dry:** 10K Meg  $\Omega$

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

**Dielectric strength:** 900 V RMS at sea level

**Operating voltage:** 500 V, subject to power rating

### **MECHANICAL SPECIFICATIONS:**

**Mechanical rotation:** 314°

**Operating torque:** 1 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

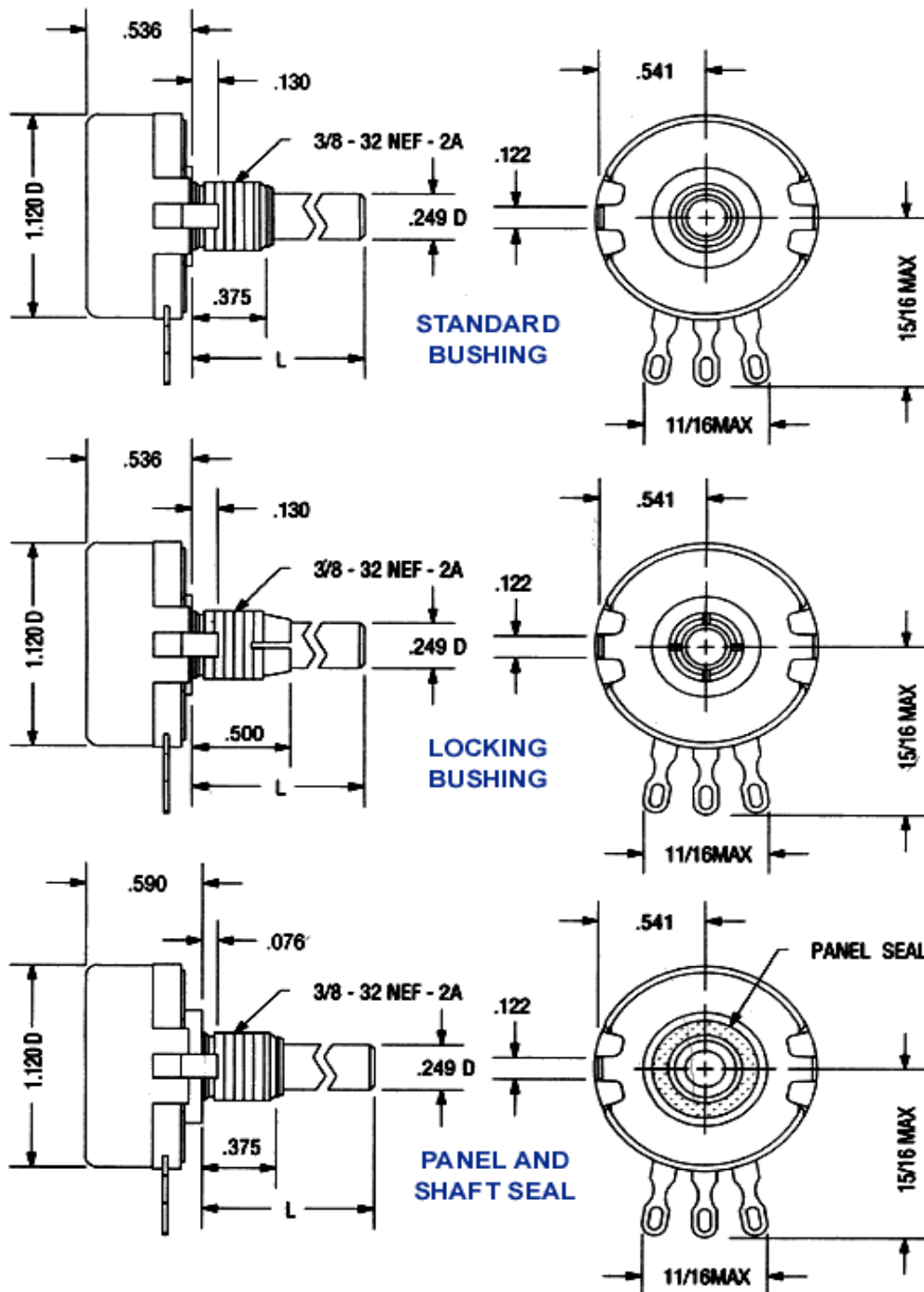
**Vibration range:** per MIL-R-94

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

**Load life:** 1000 hours at 70°C



**DRAWING:**





## ORDERING INFORMATION:

| Ordering Information - Commercial Part Numbers                                        |                                                                                         |                                                             |                                                                                   |                                                                                                                  |                                                            |                                                        |                                                                                                                                                                                             |
|---------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------|-------------------------------------------------------------|-----------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------|--------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Series                                                                                | Bushing                                                                                 | Switch                                                      | Taper                                                                             | Resistance Value                                                                                                 | Tolerance                                                  | Shaft Style                                            | Shaft Length                                                                                                                                                                                |
| <b>K</b> = series K                                                                   | <b>Blank</b> = standard<br><br><b>L</b> = locking<br><br><b>W</b> = panel & shaft steel | <b>Blank</b> = without switch<br><br><b>S</b> = SPST switch | <b>U</b> = linear<br><br><b>A</b> = logarithmic<br><b>B</b> = reverse logarithmic | <b>Total resistance value in <math>\Omega</math>:</b> first 2 digits significant, third digit = number of zeroes | <b>1</b> = 10% of nominal<br><br><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"<br><b>28</b> = 7/8" <b>32</b> = 1"<br><b>40</b> = 1 1/4"<br><b>48</b> = 1 1/2"<br><b>64</b> = 2"<br><b>80</b> = 2 1/2"<br><b>96</b> = 3" |
| <b>Example: KSU1031R16</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                                                                                                                                                                      |
| <b>RV4</b> = MIL style RV4                                                              | <b>N</b> = standard<br><b>L</b> = locking<br><b>S</b> = panel & shaft steel | <b>A</b> = without switch<br><b>B</b> = SPST switch | <b>Y</b> = as per MIL-R-94             | <b>S</b> = slotted<br><b>F</b> = flatted | <b>B</b> = 1/2"<br><b>A</b> = 5/8"<br><b>D</b> = 7/8"<br><b>G</b> = 1 1/4"<br><b>J</b> = 2"<br><b>K</b> = 2 1/2" | <b>Total resistance value in <math>\Omega</math>:</b> first 2 digits significant, third digit = number of zeroes | <b>A</b> = linear 10%<br><b>B</b> = linear 20%<br><b>C</b> = logarithmic 10%<br><b>D</b> = logarithmic 20%<br><b>E</b> = reverse logarithmic 10%<br><b>F</b> = reverse logarithmic 20% |
| <b>Example: RV4NAYSB000A</b><br><b>note:</b> not all part number combinations are valid |                                                                             |                                                     |                                        |                                          |                                                                                                                  |                                                                                                                  |                                                                                                                                                                                        |

| Type K Cross Reference |            |              |               |        |
|------------------------|------------|--------------|---------------|--------|
| Precision              | Military   | Clarostat    | Allen Bradley | Ohmite |
| KU S28                 | RV4NAYSD A | 380C3 / 53C3 | JA1N056S UA   | CMU    |
| KLU S20                | RV4LAYSA A | 280C2 / 53C2 | JA1L040S UC   | CLU    |
| KU S16                 | RV4NAYSB A | N/A          | JA1N032S UA   | N/A    |
| KU S64                 | RV4NAYSJ A | N/A          | JA1N200S UA   | CU     |
| KU R64                 | N/A        | 380C1 / 53C1 | JA1N200P UA   | N/A    |
| KU S80                 | RV4NAYSK A | N/A          | JA1N232S UA   | N/A    |
| KA R64                 | N/A        | 53C1Z        | JA1N200P AA   | N/A    |
| KLU S28                | RV4LAYSD A | N/A          | JA1L056S UA   | N/A    |