



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 Ω to 5 Meg Ω
- Resistance range, logarithmic taper:** 150 Ω to 1 Meg Ω
- 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 Ω
wet: 100K Meg Ω
- Dielectric strength:** 750 V RMS at sea level
- Operating voltage:** 350 V, subject to power rating

MECHANICAL SPECIFICATIONS:

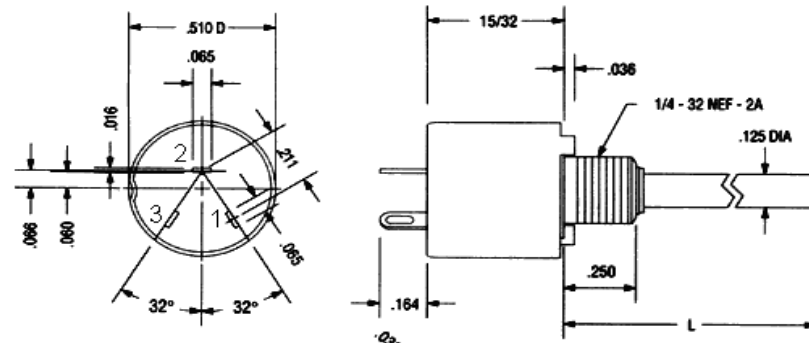
- Mechanical rotation:** 295°
- Operating torque:** 0.5 oz/in to 6 oz/in
- Rotational life:** 25,000 cycles

ENVIRONMENTAL SPECIFICATIONS:

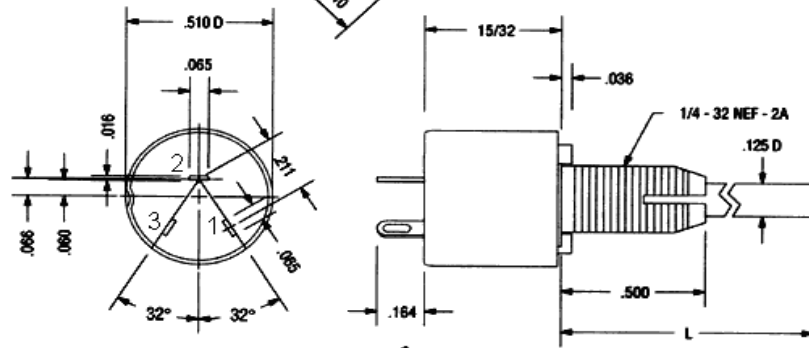
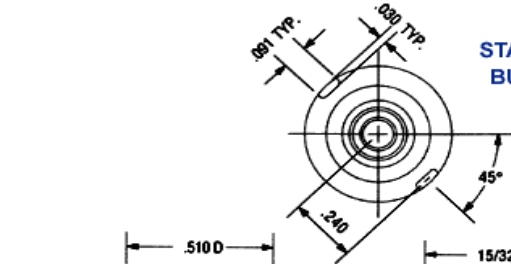
- Operating temperature:** - 65°C to +125°C
- Resistance to soldering heat:** 350°C for 5 seconds
- Humidity range:** per MIL-R-94
- Vibration range:** per MIL-R-94
- Shock resistance:** per MIL-R-94
- Load life:** 1000 hours at 70°C



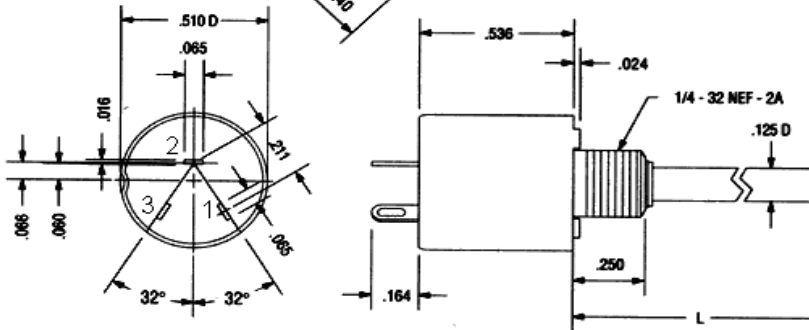
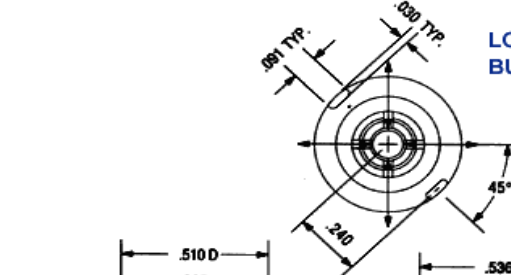
DRAWING:



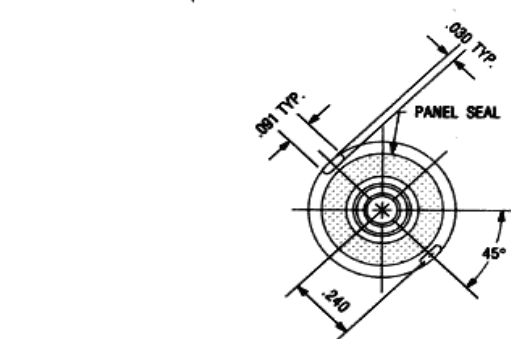
STANDARD BUSHING



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 |
| S = series S | Blank = standard L = locking W = panel & shaft steel | Blank = 1/4" 6 = 3/8" | U = linear A = logarithmic B = reverse logarithmic | Total resistance value in Ω: first 2 digits significant, third digit = number of zeroes | 1 = 10% of nominal 2 = 20% of nominal | R = round S = slotted F = flatted | 16 = 1/2" 20 = 5/8" 24 = 3/4" 28 = 7/8" 32 = 1" 36 = 1 1/8" |
| Example: SLA1021S20 note: 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 |
| RV6 = MIL style RV6 | N = standard L = locking S = panel & shaft seal | A = without switch | Y = as per MIL-R-94 | S = slotted F = flatted | L = 3/8" B = 1/2" A = 5/8" D = 7/8" | Total resistance value in Ω: first 2 digits significant, third digit = number of zeroes | A = linear 10% B = linear 20% C = logarithmic 10% D = logarithmic 20% E = reverse logarithmic 10% F = reverse logarithmic 20% |
| Example: RV6LAYS A102C note: 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 |