

specifications

ELECTRICAL

<u>Specification</u>	<u>Standard</u>
Resistance Range	1K Ohms-10K Ohms
Resistance Tolerance	Std. Yield \pm 20%
	Special yield = \pm 10% N/A
Linearity	1%-5%
Resolution	varies with actuator
Lead line resistance	<2 ohms per inch
Open circuit resistance	
Insulation	10 mega ohms
Dielectric Value	No affect @ 500 VAC, 1 minute
Power Rating	1 watt max

MECHANICAL

<u>Specification</u>	<u>Standard</u>
Operating life cycles	> or = 1 million/5 million (Hot Pot)
Dithers	> or = 5 million/25 million (Hot Pot)
Actuation force	3-24 oz.
Travel25 to 96"
Actuator	Variable

ENVIRONMENTAL

<u>Specification</u>	<u>Standard</u>
Temperature	
Storage	-65° C to + 85° C / >85° C (Hot Pot)
Operating ...	45° C to + 75° C / >85° C (Hot Pot)
Humidity ...	No affect @ 95% RH
Shock	No closure >10msec @ 100g half-sine on four sides No closure >10msec @ 1 hour random sine test
Vibration	
No affect @ 24 hr and 93°F	
Altitude	
Storage	0-50,000 ft.
Operating ...	0-15,000 ft.



spectrasymbol

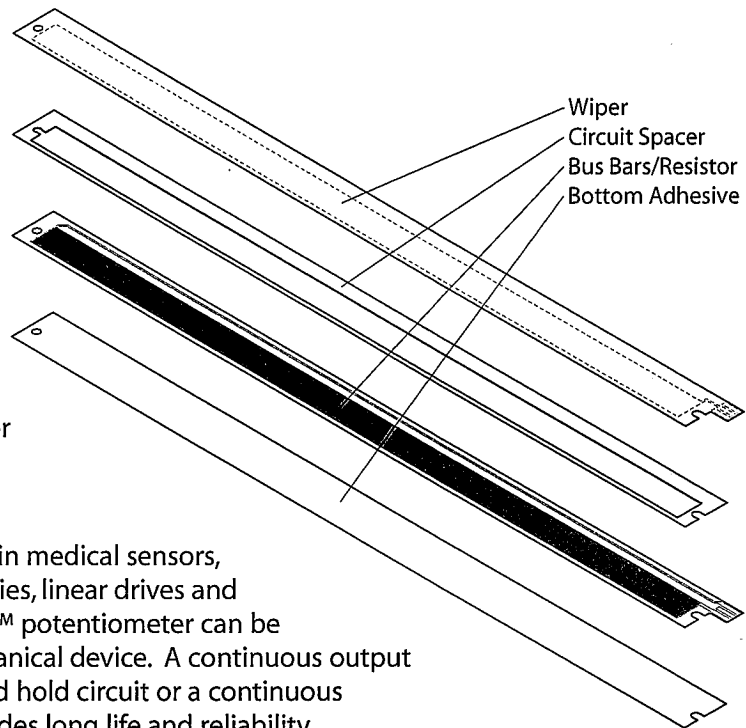
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softpot™ potentiometer

Versatility sets the SoftPot™ above other position sensors: linear, rotary, medical seal, thinness (0.018" thick), all lengths up to 96 inches, multiple-ganged sensors in line, etc.

The SoftPot™ potentiometer functions as a momentary contact device. Its sealed design acts as an infinitely variable analog voltage divider. Let us show you why Siemens, Johnson Controls, SKF and other multinational companies are using the SoftPot™ technology.

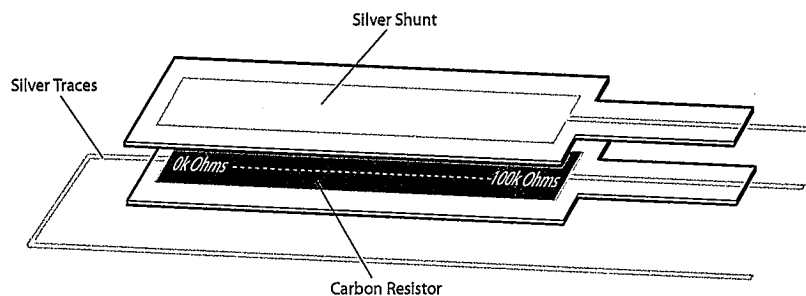
Spectra Symbol clients have put our Pot in medical sensors, syringes, light dimmers, testing laboratories, linear drives and multiple other applications. The SoftPot™ potentiometer can be actuated with a human finger or a mechanical device. A continuous output can be achieved with either a sample and hold circuit or a continuous mechanical actuator. Either design provides long life and reliability.



SoftPot™ Design & Construction:

The SoftPot™ is simple: a wiper potentiometer that is sealed. It has three traces extending from the resistive "active area," one acting as a wiper, another trace showing voltage from one side of the pot and the third trace from the other side of the active area, as diagramed:

- ◀ The SoftPot™ acts as a voltage divider once the top and bottom circuits close, sending resistance signals from the contact point in opposite directions, using separate lower traces
- ◀ A Rheostat has only one trace on the bottom layer



Tolerances:

- ◀ **Total Resistance** is the resistance reading from one side of the carbon element to the other. Our standard is +/-20%
- ◀ **Linearity** is discussed in terms of independent linearity and the variance is determined in reference to the average position
- ◀ **Resolution**, meaning the smallest increment of movement, is infinite and will produce varying output to the degree of width in the actuator