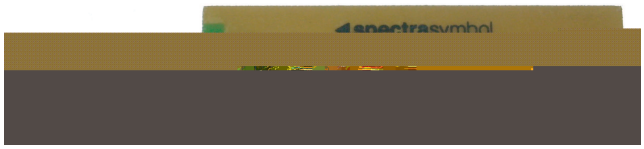
HotPot

HP



Features

- High Life Cycle
- High Temperature Capability
- Linear Position Sensor
- IP65 Dust Proof, Water Proof (Intense Spray)
- Fiberglass Substrate
- 3M Pressure Sensitive Adhesive (PSA)
- Upon Request
  - Male or Female Nicomatic Connectors
  - Wiper of 1-3 Newton Force to Actuate Part
  - Contactless Options Available

Mechanical Specifications

-Life Cycle: >10 million
-Height: ≤0.51mm (0.020")
-Actuation Force (with a 10mm wide active cavity):
-40°C 3.0 to 5.0 N
-25°C 2.0 to 5.0 N
+23°C 0.8 to 2.0 N
+85°C 0.7 to 1.8 N

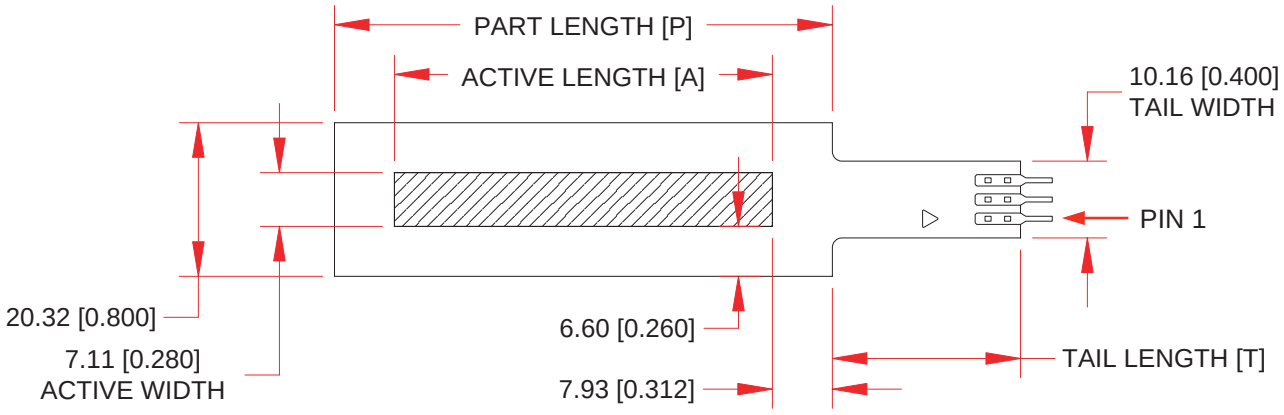
Environmental Specifications

-Operating Temperature: -40°C to +85°C
-Humidity: No affect @ 95% RH, 24hrs 60°C
-IP Rating of Active Area: IP65

Electrical Specifications

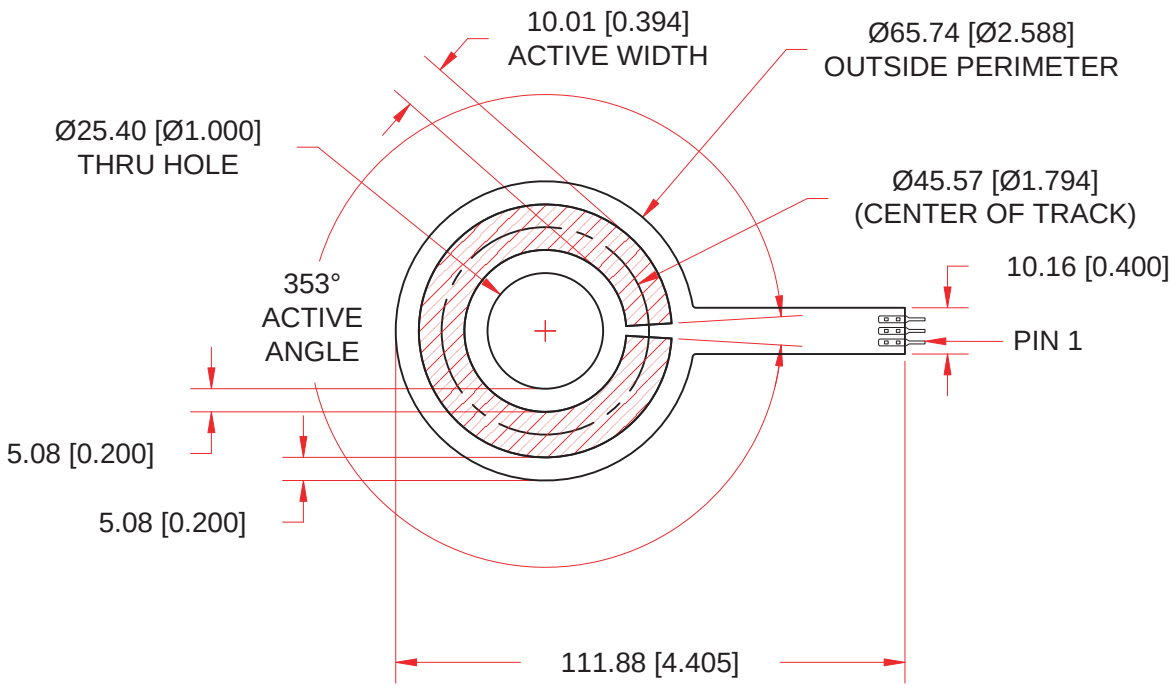
-Resistance - Standard: 10k Ohms (lengths >300mm = 20k Ohms)
-Resistance - Custom: 5k to 100k Ohms
-Resistance Tolerance: ±20%
-Effective Electrical Travel: 10 to 1200mm
-Linearity (Independent): Linear ±1% or ±3%
Rotary ±3% or ±5%
-Repeatability: No hysteresis, but with any wiper looseness some hysteresis will occur
-Power Rating (depending on size, varies with length and temperature): 1 Watt max. @ 25°C, ≤0.5 Watt recommended
-Resolution: Analog output theoretically infinite; affected by variation of contact wiper surface area.
-Dielectric Value: No affect @ 500VAC for 1 minute

Dimensional Diagram - Stock Linear HotPots

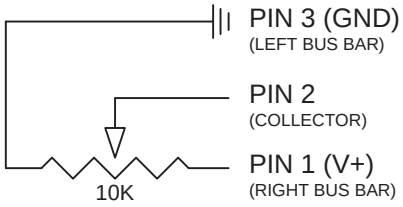


A	12.50mm 0.492"	25.00mm 0.984"	50.00mm 1.969"	100.00mm 3.937"	150.00mm 5.906"	170.00mm 6.693"	200.00mm 7.874"	300.00mm 11.811"	400.00mm 15.748"	500.00mm 19.685"	750.00mm 29.528"	1000.00mm 39.370"
P	28.36mm 1.117"	40.86mm 1.609"	65.86mm 2.593"	115.86mm 4.562"	165.86mm 6.531"	185.86mm 7.318"	215.86mm 8.499"	315.86mm 12.436"	415.86mm 16.373"	515.86mm 20.310"	765.86mm 30.153"	1015.86mm 39.995"
T	12.70mm 0.500"		24.89mm 0.980"									

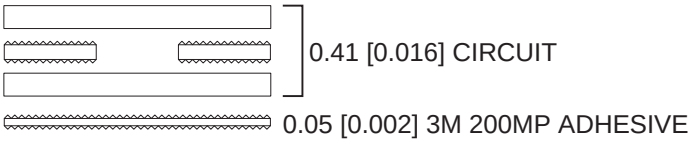
Diagram - Stock Rotary HotPot



Electrical Schematic



Material Cross-Section



How to Order - Rotary HotPot

HP – R – 0046 / 0353 – 103 – 5% – ST

Series	Model	Center of Active Track	Active Angle	Resistance	Ind. Linearity	Connectors
HP = HotPot	R = Rotary	0046 = 45.57mm	0353 = 353°	103 = 10 KOhm	3% = ±3% 5% = ±5%	ST = Solder Tab MP = Male Pins RH = Receptacles w/Plain Housing RL = Receptacles w/Latch Housing RD = Receptacles w/Detent Housing