

Position Sensors



Rectilinear



Specification Table

Electrical Specifications		SoftPot
Resistance, Standard		10 k Ω (length >300 mm 20 k Ω)
Resistance Range, Customized		1 k Ω to 100 k Ω
Resistance Tolerance		$\pm 20\%$
Effective Electrical Travel		8 to 2,400 mm
Linearity, Independent		$\pm 3\%$ for rectilinear, $\pm 5\%$ for rotary
Power Rating (Depending on Size) (Varies with Length and Temperature)		1 watt maximum at 25°C
Resolution		Theoretical-Infinite; resolution dependant on contact wiper thickness and construction
Dielectric Value		No affect at 500 V ac, 1 minute
Mechanical Specifications		
Live Cycle (Depending on Wiper)		>1 million
Height		Typical >0.51 mm / 0.02 inches
Actuation Force (Actuation Force Increase app. 30% for HP, EP) (No affect for SP)	-40°C -25°C +23°C +75°C	0.8 to 1.8 N 0.8 to 1.8 N 0.6 to 1.5 N 0.5 to 1.4 N
Environmental Specifications		
Operating Temperature (with Contact Actuator)		40°C to +50°C
Humidity		No affect at 95% RH, 4 hours <50°C
Altitude		10,000 meters
IP Rating (Pot itself)		66
Shock		No closures >10 m seconds at 100 g half-sine on four sides
Vibration		No closure >10 m seconds at 1 hour random sine test

Connection

Connections	Solder Tabs (upon on request housing and other connectors)
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Individual Options

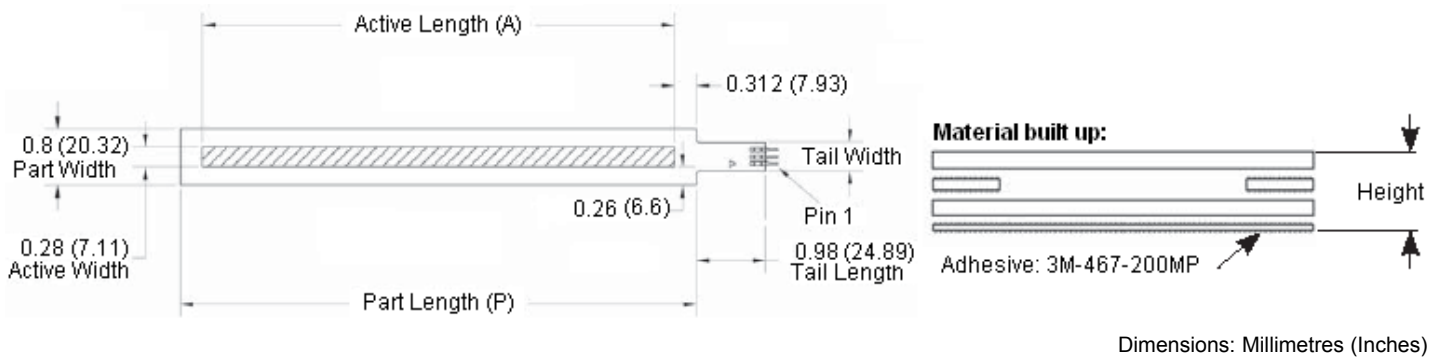
Customized	Let us know your application, and we will help you design the optimum part
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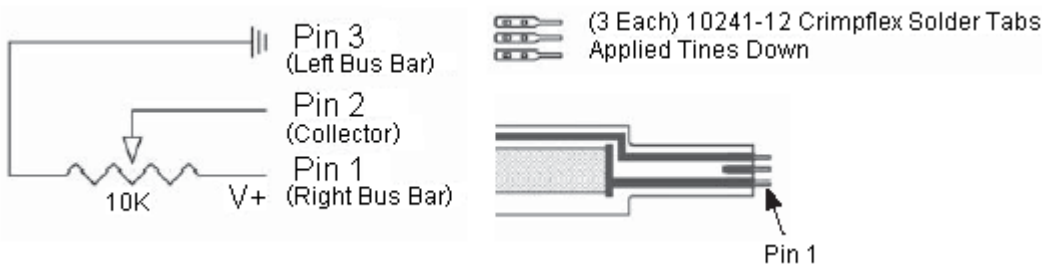
Drawing (SoftPot)



Active length	50 / 1.969 mm / Inches	100 / 3.937 mm / Inches	200 / 7.874 mm / Inches	500 / 19.685 mm / Inches
Part length	65.86 / 2.593 mm / Inches	115.86 / 4.562 mm / Inches	215.86 / 8.499 mm / Inches	515.86 / 20.310 mm / Inches
Height	≤0.51 mm / 0.02 inches (for SP and HP) ≤0.7 mm / 0.03 (for EP)			
Resistance, standard	10 kΩ	10 kΩ	10 kΩ	20 kΩ
Drawing# SoftPot	7182	7183	7184	7186
Adhesive	3M-467-200 MP			

Dimensions: Millimetres (Inches)

Connection



Part Number Table

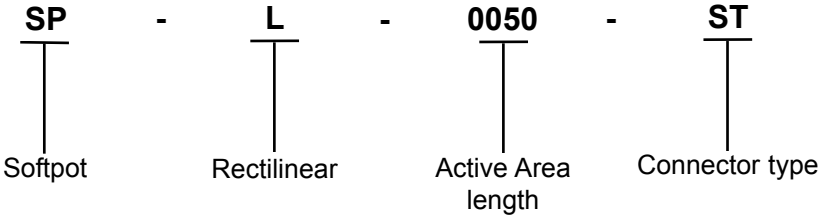
Description	Part Number
Sensor, Linear, Membrane, 50 mm	SP-L-0050-ST
Sensor, Linear, Membrane, 100 mm	SP-L-0100-ST
Sensor, Linear, Membrane, 200 mm	SP-L-0200-ST
Sensor, Linear, Membrane, 500 mm	SP-L-0500-ST

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Part Number Explanation:



Active area Length : 50 = 50, 0100 = 100, 200 = 200 and 0500 = 500 mm
Connector Type : ST = Solder tabs

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