

Position Sensor Rectilinear



Specifications

Electrical Specifications		SoftPot
Resistance, standard		10k Ω (length >300mm 20k Ω)
Resistance range, customized		1k Ω to 100k Ω
Resistance tolerance		\pm 20%
Effective electrical travel		8 to 2400mm
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 500V ac, 1 minute
Mechanical Specifications		
Live cycle (depending on wiper)		>1 million
Height		Typical \leq 0.51mm/0.020 inches
Actuation force (Actuation force increase app. 30% for HP, EP) (No affect for SP)	-40°C	0.8 to 1.8N
	-25°C	0.8 to 1.8N
	+23°C	0.6 to 1.5N
	+75°C	0.5 to 1.4N
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 >10m seconds at 100g half-sine on four sides
Vibration		No closure >10msec at 1 hour random sine test

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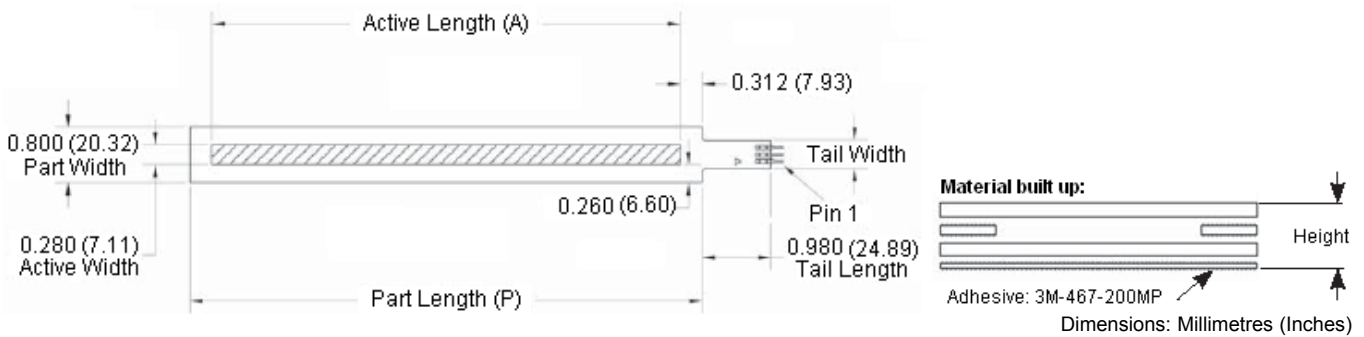
Connection

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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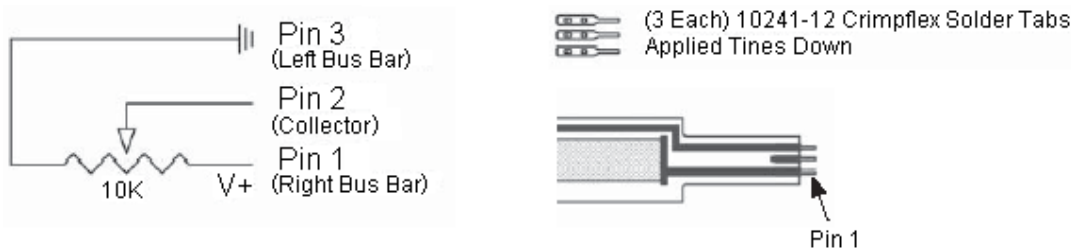
Drawing (SoftPot)



Active length	50.00/1.969 mm/Inches	100.00/3.937 mm/Inches	200.00/7.874 mm/Inches	500.00/19.685 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	≤0.51mm/0.020 inches (for SP and HP) ≤0.70mm/0.030 (for EP)			
Resistance, standard	10kΩ	10kΩ	10kΩ	20kΩ
Drawing# SoftPot	7182	7183	7184	7186
Adhesive	3M-467-200 MP			

Dimensions: Millimetres (Inches)

Connection



Part Number Table

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

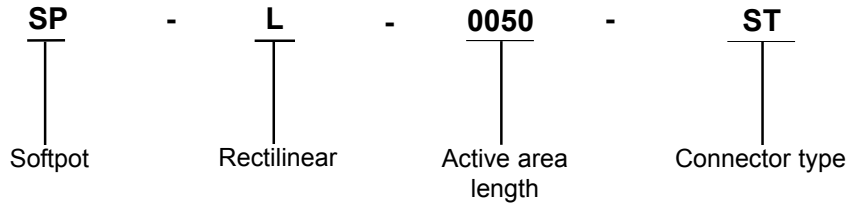
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Part Number Explanation:



Active area length : 0050 = 50, 0100 = 100, 0200 = 200 and 0500 = 500mm.
Connector type : ST = Solder tabs.

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