

**World's Smallest Multi-Turn Potentiometer**

- 3, 5 and 10 Turn Versions

- High Resolution and Repeatability

- All Metal Construction

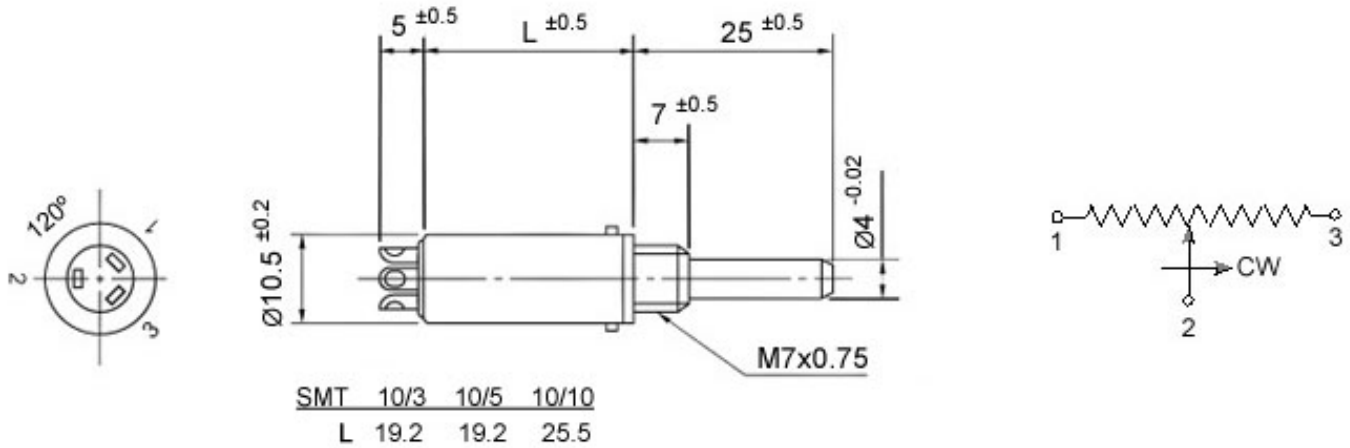
Since 1965, the SMT series has proven to be the precision potentiometer of choice for limited space applications where long life and high accuracy are required. A wide range of options are available to optimize the potentiometer for a given application.

Electrical Specifications	SMT 10/3	SMT 10/5	SMT 10/10
Resistance Values (ohms)	20 to 20K		20...50k
Resistance Tolerance (std.)	± 3%		
Resistance Tolerance (best)	± 1%		
Linearity Tolerance (standard)	>2k; ±0.3% <=2k; ±0.5%		
Electrical Angle ±5°	1080°	1800°	3600°
End Resistance	< 0.05%		
Insulation Resistance	100 Mohms at 500 VDC		
Dielectric Strength	500 VAC, 1 minute		
Noise	<100 ohms ENR		
Power @ +40°C (W)	1		1.5
Mechanical Specifications			
Number of Turns	3	5	10
Mechanical Angle +15°, -0°	1080°	1800°	3600°
Torque: Start/Run (Ncm)	0.5		
Stopper Strength (Ncm)	10		
Max. Axial Play of Shaft (mm)	0.2		
Max. Radial Play of Shaft (mm)	0.06		
Typical Life (# of turns)	600,000	1 million	2 million
Bearing	sleeve		
Weight (g)	20		
Environmental Specifications			
Operating Temperature	-55°C to +105°C		
Vibration	15 g / 10Hz to 2,000 Hz		
Shock	50 g / 11ms		
IP Protection Grade	IP40 (IP54 optional)		
Standards	MIL-R-12934		
Materials			
Housing	Aluminum		
Bushing	Metal		
Shaft	Stainless steel		
Terminals	Gold plated		

## Resolution Chart

Resistance value (ohms)	Resolution (%)			Temperature coefficient of wire ( $\pm$ ...ppm/K)
	SMT 10/3	SMT 10/5	SMT 10/10	
100	0.170	0.133	0.083	80
200	0.150	0.162	0.067	80 / 20
500	0.190	0.120	0.074	20
1k	0.160	0.095	0.059	20
2k	0.100	0.075	0.047	20
5k	0.090	0.055	0.035	20
10k	0.070	0.043	0.027	20
20k	0.050	0.034	0.022	20
50k	-	0.025	0.016	20
100k	-	-	0.012	20

## Dimensions (mm)



## Options

- Rear shaft ( $\text{Ø}8\text{mm} \times 10\text{mm}$ )
- Sealed housing
- Tighter tolerances
- Special resistance values
- Special shaft machining
- Servo mount

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