



PERFORMANCE METRICS

Rotational Elect. Angle: $\pm 177^\circ$
Resolution: Infinite
Accuracy/Linearity: $\pm 0.1\%$
Vibration/Shock/Survival: MIL-STD-202,
($\leq 15g/\leq 30g/100g$)
Acceleration: MIL-STD-202, Method 212A
Life: $> 100,000$ Cycles @ 10×10^{-5} Torr
Operating Temp: -65°C to $+125^\circ\text{C}$
Vacuum: 10^{-14} Torr
Radiation: 9MR/hr (0.9×10^{-7} Rads)
Rugged, Long Life, Small Size
Low Weight



CERTIFICATIONS & STANDARDS

- AS 9100C
- ISO 9001:2008
- IPC J-STD-001ES
- J-STD-001D
- MIL-R-12934
- IPC-A-610
- MIL-R-39023



Betatronix is a technology leader in the design, test, and manufacture of rugged precision position sensors and input control devices for Space, Military, Aerospace and Industrial Markets.

BETATRONIX PRODUCT LINE

Arc Segment Potentiometers

- Constructed with fewer components reducing weight and cost.
- Custom angles available in either open or closed design.
- Can survive 500 G's shock.

Concentric Shaft Potentiometers

- Available in various housing diameters
- Single and multi-turn combinations
- Multiple functional performances – two independent shafts control different potentiometer sections.
- Hollow-shaft configurations
- Operational life exceeds five million cycles.

Element/Wiper Assembly

- Custom shaft mating wiper assemblies available in linear motion, arc and rotary configurations.
- Customer specific mounting available.

Gear Potentiometer Assemblies

- Supplied with standard or anti-backlash gears for reduced costs, improved reliability, and better overall performance.
- Customer specified gear interfaces available.

Linear Motion Potentiometers

- Wire wound, molded conductive plastic, and cermet elements.
- Various stroke lengths available up to 14”.
- Custom designed units with specific features, fixtures, cabling, or materials.



Miniaturized Potentiometers

- Single and multi-turn combinations.
- Multiple mounting configurations.
- Concentric shaft design.
- Wire leads, terminals, and circuit board connector styles.
- Operational life exceeds five million cycles.

Motor Potentiometers

- Complete motor pot assemblies.
- Single or multi-turn combinations.
- AC/DC motors in various configurations.
- Operational life exceeds five million cycles.

Multi-turn Potentiometers

- Available with 10 turns of motion.
- Molded conductive plastic for improved life characteristics. Not available as wire-wound.
- Custom gear ratios available to meet angular design requirements.
- Operational life exceeds five million cycles.

Switch Modules

- Single or multi-pole/position with positive detent “on-off” rotary switches.
- Concentric shaft, push-pull configurations.
- Operational life exceeds ten million cycles.



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