



ROTARY & LINEAR POTENTIOMETER POSITION SENSORS

TE Connectivity (TE) offers a broad range of position sensors for rotary and linear motion sensing using potentiometer and hall effect technology. Our position sensors provide solutions for demanding applications where precise sensing and high reliability/long life are critical requirements. TE is one of the first choices for both aerospace, defense and commercial OEMs in this area.

APPLICATIONS

Aerospace & Defense

- Aircraft Cockpit Instruments
- Engine Fuel Controls
- Fin Actuators
- Angle of Attack Controls
- Weapons Guidance Systems
- Remote Piloted Vehicle Actuators
- Vehicle Joysticks
- Gun Elevation and Steering Controls
- Space Launch Fuel Controls
- Space Craft Position Sensing Requirements
- Space Craft Landing Leg Position Sensing

Commercial/Industrial

- Camera Positioning Controls
- Robotic Joint Feedback
- Medical Endoscopy Controls
- Physical Therapy Equipment
- X-ray Positioning
- Surgical Instrumentation
- Wind Direction Devices
- Process Control Valves
- Key Making Machines
- Automation Controls

[FIND OUT MORE](#)



ROTARY & LINEAR POTENTIOMETER POSITION SENSORS

TECHNOLOGY

A potentiometer sensor measures the distance or displacement of an object in a linear or rotary motion and converts it into an electrical signal. Potentiometers consist of three terminals, a resistive strip, and a wiper. As the wiper moves through the resistive strip it causes a change in resistance. Depending on the position of the wiper on the resistive strip our potentiometer sends electrical output. The linear potentiometer operates under the same technology concept; the difference is that the wiper slides along a linear element instead of rotating.

TE ADVANTAGES

High Rotational Life is one of the hallmarks of the TE manufacturing process. Our potentiometers regularly yield more than 100 million cycles.

Low Noise is achieved through our co-molded element/mating wiper that produces an extremely smooth device. TE offers outstanding output smoothness of 0.1% max.

Low Power Consumption is a key benefit for our position sensors and the products requiring sensing feedback.

Precise Linearity is essential in many exacting applications. TE's ability to achieve an absolute linearity as low as 0.1% make us an excellent supplier for precise position sensing.

Shock and Vibration Resistant with among the highest ratings in the industry, TE has earned the reputation as an outstanding supplier for durable, highly reliable position sensors suitable for harsh environments.

Flush Circuit Technology to allow low torque.

VALUE ADDED CAPABILITIES

- Custom wire and cable assembly options
- Variety of gauge wire and lengths
- Variety of terminations and connectors
- Custom mounting plates available
- Motors and gears potentiometer packaging
- Hollow shaft options

