novotechnik
Siedle Gruppe

Potentiometric Linear Position Sensors with Integrated Electronics, TE1 Series

Novotechnik is presenting a novel series of linear position sensors, available for measuring ranges of up to 150 mm.

Potentiometric linear position sensors require a stabilized feed and high-impedance pick-off. This is why many applications utilize an additional signal conditioner in order to provide an absolute output signal. Some signal conditioners include an adjustment or teach-in function for setting application-specific adjustment ranges. These signal conditioners require additional space, resulting in additional costs. With its new linear position sensor series TE1, Novotechnik is now offering an alternative to the established T series.

Based on potentiometric sensing technology, the TE1 can be supplied via a standard 24V source. The integrated electronics yield a direct absolute voltage or current signal at the output.

This sensor offers all the advantages of the potentiometric system, in combination with a signal conditioner: very high dynamics with nearly unlimited resolution. The compact design with double-sided supported actuating rod, and the ball coupling of the linear position sensor, or the probe tip of the linear position sensor with integrated return spring, were adopted from the proven T series.

The electrical interface can consist of a voltage or current out-put with increasing or declining characteristics. Available choices for the electrical connection are a 3-lead shielded cable and a 3-pin M8x1 circular connector.

The integration of evaluation electronics into highly dynamic, high-resolution sensing systems provides the TE1 with additional advantages, that were previously not attainable - neither with the potentiometric T series nor with any of the products currently on the market:

-small footprint

-simplified handling

-no additional signal conditioner cables (the output signal can be directly routed to the steering)

-no additional installation times and costs for signal conditioners.