

Potentiometer-based sensors offer impressive price vs. performance: Novotechnik's well-proven LWH series linear position sensors gain from design optimisation

Novotechnik, the German measurement technology leader, has recently announced design improvements for one of its oldest and most produced linear potentiometer position sensors, the LWH series. Available from Novotechnik's UK distribution partner Variohm EuroSensor, the new LWH includes material and component refinements that optimise the sensor's compliance to its IP55 protection class but essentially retains form-fit compatibility with the previous model. The new design utilises the same thoroughly well proven conductive plastic track and elastomer-damped, precious metal multi-finger wiper system that Novotechnik have deployed in over 100 million position measurement tasks for the automotive industry alone. The LWH range is available in twenty standard measurement lengths from 75 to 900mm and boasts a positioning resolution of 10 microns and a linearity to 0.04% for the longest travel model.

The non-comprising, highly durable and long-life characteristics of potentiometer-based linear sensors, plus their signal processing simplicity, makes them a compelling choice for new applications when comparable speed, accuracy, linearity, resolution, hysteresis, and temperature range would entail significantly higher costs and installation challenges for alternative technology sensors.

The distinctive visual differences from the old to the new design are the removal of the guide groove at the bottom of the housing and a 4-fold screw connection for the bearing flange, replacing the old 2-fold screw connection. Novotechnik have thoroughly tested the new design against the old LWH for sealing protection and working life as well as evaluation of the electrical and mechanical performance. The new model retains mounting grooves on all four sides of the approximately 32 mm square anodised aluminium housing - enabling installation in any orientation with snap-on clamps that are included in the scope of supply. The LWH also benefits from a pivoting front bearing that overcomes 'stick slip' even where angular or out-of-parallel misalignment is present. With a working temperature range from -30 ... +100°C and a highly durable shock and vibration rating, the new LWH series boasts a maximum operating speed of up to 10 m/sec and an impressive working life to 100 million strokes. The product changeover will take place for orders delivered from May 2022 – please contact Variohm EuroSensor at sales@variohm.com for specific details.

As Novotechnik's exclusive UK and Ireland distribution partner, Variohm EuroSensor supplies and supports the full range of contacting and non-contacting position sensing technologies from the German sensor specialist. Variohm is sensor component distributor, designer and manufacturer offering sales and application support across a comprehensive range of position, force, pressure, load, and temperature sensor technologies for demanding measurement application solutions in industry, construction, agriculture, motorsports, research and more. For more information call +44 (0) 1327 351004, email sales@variohm.com or visit www.variohm.com.