



20 LHE VISHAY SFERNICE

Linear position sensors provide high accuracy in harsh environments



Harsh environments such as agriculture / dendrometers place high demands on sensors. Dendrometry is the branch of botany that is concerned with the measurement of the various dimensions of trees, such as their diameter. These key measurements are used to infer, through allometric relations, other tree properties that may be of greater interest but are harder to measure directly, such as the quantity of commercial wood retrievable, or the amount of carbon sequestered in the plants.

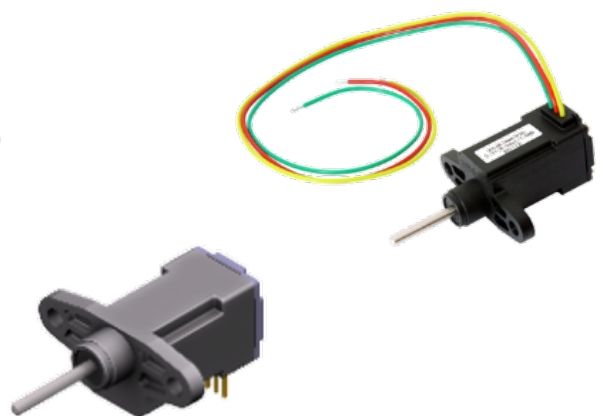
The linear position sensor 20 LHE with a lifespan of 2 million cycles, the wide temperature range and IP51 (or higher) has excellent properties for agriculture applications. The housing and the various adaptations provide every customer optimal condition for integration into the application. The product is optimized for high level of vibrations / shocks and EMC unsensitive to prevent every change of the sensor parameters, such as the linearity of $\pm 1\%$.

Key Features

- Stainless steel shaft
- Electrical stroke: up to 10 mm
- Long lifespan > 10 Million of cycles (contactless technology)
- Optimized for high level of vibrations & shocks (trucks, tractors)
- Compact mechanical design / Spring return
- Electrical stroke: 0 to 10 mm max
- Output signal: Analog or digital (PWM – 12 bits resolution)
- Linearity: $\pm 1\%$
- Temperature range: $-40\text{ }^{\circ}\text{C} / +125\text{ }^{\circ}\text{C}$
- Stainless steel shaft
- Electrical stroke: up to 10 mm
- IP 51 and other IP on request

Key Applications

- Small displacements / Harsh environments / where a basic on / off information (switch) is not sufficient
- Machinery (In-line process measurement)
- Industrial (pneumatic, hydraulics) valve position sensors
- Agriculture / Dendrometry (Trees / Plants growth monitoring)



Key Benefits

- Space-Saving Compact body (19 x 37 mm)
- Easy mounting
- Accurate
- Infinite resolution
- Robust
- Long life
- EMC unsensitive