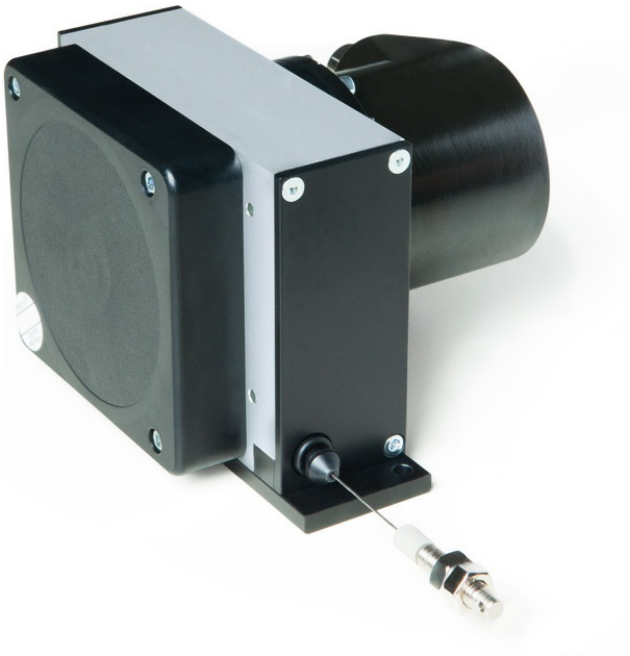
CAN Newsletter Online

POSITION SENSOR

Wire-actuated encoder for 12-m measuring length

The SG121 wire-actuated encoder from Siko is suitable for measuring lengths up to 12 m. It comes with an installation depth of 70 mm x 8 5mm x 105 mm and supports CANopen, J1939, and CANopen Safety interfaces.



(Source: Siko)

Long measuring lengths and a housing that is as compact as possible. This requirement is not only common in intralogistics and with manufacturers of mobile machines. In stationary machine construction, too, it is an important factor in the choice of sensors for new machine concepts.

The wire-actuated encoder comes with an installation depth of 70 mm x 85 mm x 105 mm. The aluminum housing, coupled with impact-resistant plastic, survives harsh operating conditions. The product operates in temperatures between -40 °C and +80 °C and is resistant against high shock and vibration loads, dirt, dust ,and water. For outdoor applications in low temperature ranges, a version with integrated water drain holes is also available. This prevents water that has penetrated the sensor from freezing at below-zero temperatures and thus increases the service life.

The 58-mm flange system can be used with almost any interface, said the company. The customer can select the interface appropriate for the application, whether it's an incremental interface such as HTL or TTL, or an absolute interface such as CANopen, J1939, CANopen Safety, analog, SSI, Fieldbus, or Ethernet.

With the Wire-Flex technology, it is possible to ensure that the wear on the wire is kept to a minimum, even if it pulls out at an angle, explained the company. The conical shape of the wire outlet and the various types of wire ensure that any deposits on the wire can be removed. The wire-actuated encoder thus automatically compensates for mechanical tolerances in the machine or vehicle and protects the function and service life of the measurement system – even in harsh ambient conditions.

Also suitable for position detection

According to the company, the wire-actuated encoder provides increased safety in combination with the redundant WV58MR safety rotary encoder and can be used in the overall system in applications up to performance level d (PLd). This is made possible by the mechanical design and software specially designed for the purpose. Not only the electronics but also the mechanics are monitored and hazardous conditions are avoided. The SG121 is therefore suitable for use in mobile machines.

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