LINEAR POSITION SENSORS

Non-contact linear position sensors are equipped with one or two independent outputs. They provide a linear change in voltage output (ratiometric to the input voltage) corresponding to a linear displacement of the actuator magnet. The actuator magnet included in the set is specifically adapted and calibrated to the sensor.

Features
- Easy setup and robust monitoring with M4 screws
- Dual independent (redundant) outputs assure high reliability
- Custom programming available on request for: measuring range, slope, PWM output
- No mechanical interface means no parts to wear out or jam
- Available with 20 AWG 305 mm (12") discrete wire leads or harness with connector
- RoHS compliant
- IP68
- Suitable for wide airgap applications
- EMC/EMI/ESD compliant in accordance with industrial/automotive guidelines

Typical applications
- Hydraulic valves
- Hydraulic controls
- Electric drives
- Pneumatic controls
- Zero-contact encoder alternative
- Gear selection/shifting position
- Lifting and driving height position
- Throttle valve and pedal switch
- Steering wheel position

Technical data

Series	LIN
Dimensions L/W/H mm (inches)	32.50 x 42.95 x 6.50 (1.280 x 0.250 x 0.425)
Measuring range	up to 45 mm
Supply voltage (V DC)	5.0 ±10 %
Resolution	12 Bit
Operating temperature range (°C)	−40 to +140 °C
Output signal (V DC)	0.5−4,5
Reverse battery protected	up to 12 V DC

DIGITAL VANE SENSORS

A Hall-effect digital vane sensor with a permanent magnet in two forks, separated by a 3.4 mm (0.135") airgap. The output switches when a ferrous target passes between the forks. Typical targets are rotary vanes, saw teeth moving in a linear direction, and openings in a metal band.

Features
- Mechanically interchangeable with optical switches
- Robust sensing even in dusty environments
- No mechanical wear
- Open collector (sinking or NPN) output can be used with bipolar or CMOS logic circuits with suitable pull-up resistor
- Reliable and repeatable
- Immune to moisture and dust
- Recommended vane parameter materials: iron, steel
  Min. dimensions: 1.00 mm thick, 6.35 mm wide
  The vane should penetrate a depth of less than 3 millimeters from the bottom of the sensor slot
- Housing constructed of fiberglass reinforced polyester
- RoHS compliant
- These sensors require the use of an external pull-up resistor, the value of which depends on the supply voltage.

Typical applications
- Door/gate position control
- Exercise equipment
- Printers

Technical data

Series	VN1015
Dimensions L/W/H mm (inches)	24.77 x 6.35 x 10.80 (0.975 x 0.250 x 0.425)
Operating voltage range (V DC)	3.8−24
Supply current (mA max.)	7.5
Operating temperature range (°C)	−40 to +85 °C
Output current (mA max.)	25
Reverse battery protected	up to −24 V DC