

## Features and Benefits

### *Choose the best fit option*

#### **SOLID STATE RELIABILITY**

Unlike electromechanical switches, the 103SR Series Hall-effect position sensors are not affected by contact bounce or wear. They are solid-state devices suitable for applications requiring reliable switching operations and long life.

#### **DIGITAL UNIPOLAR, LATCHING, AND LINEAR MAGNETICS**

Honeywell's 103SR Series Hall-effect position sensors offer digital unipolar, latching, and linear magnetic options specifically designed and engineered to meet a number of industrial, transportation, and consumer application requirements.

#### **ELECTRICAL CHARACTERISTICS**

The 103SR Series offers current-sinking output (digital) and push-pull output (linear/analog) options to choose from that help address a wide range of applications.

#### **MEETS INDUSTRY STANDARD REQUIREMENTS**

The rugged, sealed threaded aluminum housing of the device meets NEMA 3, 3R, 3S, 4, 4X (stainless steel only), 12, and 13 requirements allowing them to be used in various environmental conditions.

#### **LEAD WIRE GAUGE AND LENGTH OPTIONS**

Lead wires of different gauges, lengths, and insulation allows the customer to choose the best-fit option per their application's requirement.

#### **WIDE SUPPLY VOLTAGE RANGE**

The sensor operates over a wide supply voltage range from 4.5 Vdc to 24 Vdc (digital) or 4.5 Vdc to 10.5 Vdc (linear).

#### **OPERATING TEMPERATURE RANGE**

The 103SR Series Hall-effect sensors can operate over a broad operating temperature range from -40 °C to 100 °C [-40 °F to 212 °F] (digital) and from -40 °C to 125 °C [-40 °F to 257 °F] (linear). This reduces operating and installation issues and provides greater flexibility of design to engineers.

### *Protective sealed housing*

#### **RUGGED, SEALED, THREADED HOUSING**

The sensor ICs in the 103SR Series Hall-effect position sensors are potted and supplied in sealed aluminum or stainless steel housings, protecting them from dust, dirt, and liquid splashing or other harsh environmental operating conditions.

#### **ADJUSTABLE MOUNTING**

The 103SR Series Hall-effect position sensors come with threaded metal housings. When installed on a bracket, the relative position of the sensor and magnet can be easily adjusted for optimum performance. This provides the user with greater flexibility in integrating and mounting the 103SR Series Hall-effect position sensors into their system.

# 103SR Series

## Potential Applications



Honeywell Sensing and Control's internal design capabilities and customized options allow use of these Hall-effect position sensors across a number of potential industrial, transportation, and medical applications.

### INDUSTRIAL

- Position sensing
- Robotics control
- Linear or angular displacement sensing
- Speed and RPM (revolutions per minute) sensing
- Tachometer, counter pick-up
- Flow-rate sensing
- Motor and fan control



### TRANSPORTATION

- Speed and RPM (revolutions per minute) sensing
- Tachometer, counter pick-up
- Motor and fan control
- Seat position



### MEDICAL

- Motion detection in motorized medical equipment
- Position sensing in hospital beds