



Representative photograph, actual product appearance may vary.

Due to regional agency approval requirements, some products may not be available in your area. Please contact your regional Honeywell office regarding your product of choice.

HRS100SSAB090

HRS100 Series Hall-Effect Rotary Position Sensor with stainless steel shaft

Features

- Solid-state Hall-effect technology
- Maximum ESD sensitivity of ± 7 kV
- Slotted shaft

Typical Applications

- Throttle/speed position and control
- Inboard lever control
- Foot pedal position
- Steering position
- Suspension system position
- Seat position
- Mirror position
- Tilt position
- Gimbal position and control
- Manipulator arm position

Description

The HRS100 provides angular position information for a variety of sensing and control applications in the automotive, marine, truck, off-road, industrial implementation, aerospace and rail industries. The use of magnetically coupled information in place of a mechanical wiper assembly provides a long life, cost-effective solution for harsh environments that include temperature, vibration, dither, moisture and dirt.

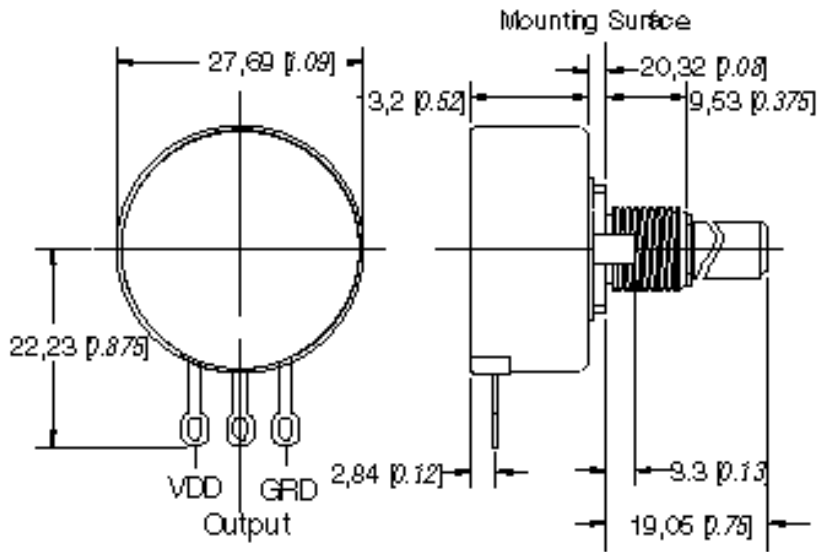
This position sensor incorporates Hall-effect to provide a sensing device that will last for more than 50 millions operations. The device is packaged in a metal housing with a 9,5 mm [0.375 in] diameter bushing and a 6,35 mm [0.25 in] diameter slotted shaft and solder lug terminals.

Product Specifications	
Product Type	Hall-Effect Rotary Position Sensor
Package Style	Stainless Steel Shaft and Brass Bushing
Supply Voltage	5 Vdc \pm 10 %
Output Type	Sink/Source 2mA
Termination Type	Straight Solder Lug
Operating Temperature Range	-40 °C to 85 °C [-40 °F to 185 °F]
Output Voltage	5 % to 95 % of applied Vdd, approx (programmable)
Vibration	15 G/10 Hz to 2000 Hz
Linearity (% of Span)	\pm 2 %
Availability	Global
Mechanical angle of rotation	90 ° \pm 2 ° (custom angles available)
Output Current (max.)	2 mA
Series Name	HRS100 Series
Supply Current (typ. @ 25 °C)	5 mA, exclusive of load
Bushing	9.52 mm [0.375 in] FMS, excludes C-ring
Rotational Cycles	10 million
Rotational Torque	0.014 N m [2.0 in oz] (max. at 25 °C)
Stop Torque	0.56 N m [5 in lbs]
Push Out	9.1 kg [20 lbs] min.
Pull Out	4.5 kg [10 lbs] min.
Overvoltage Protection	18 Vdc max.
EMI	30 V/m, 10 kHz to 1000 MHz at 3 m
Storage Temperature	105 °C [221 °F] max.
Shock	50 g, 11 ms

Honeywell

HRS100SSAB090

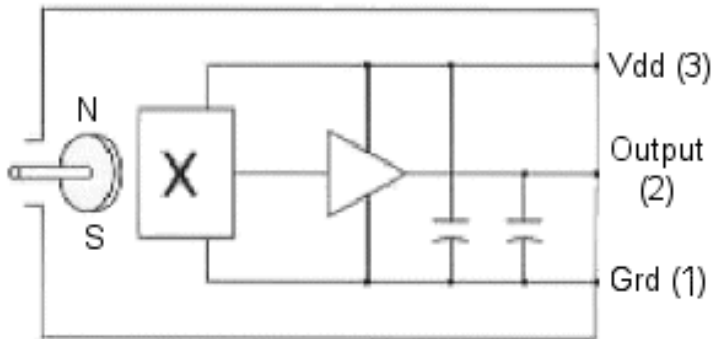
HRS100 Series Hall-Effect Rotary Position Sensor with stainless steel shaft



Honeywell

HRS100SSAB090

HRS100 Series Hall-Effect Rotary Position Sensor with stainless steel shaft



Honeywell

HRS100SSAB090

HRS100 Series Hall-Effect Rotary Position Sensor with stainless steel shaft

 WARNING

PERSONAL INJURY

DO NOT USE these products as safety or emergency stop devices, or in any other application where failure of the product could result in personal injury.

Failure to comply with these instructions could result in death or serious injury.

 WARNING

MISUSE OF DOCUMENTATION

- The information presented in this product sheet (or catalog) is for reference only. DO NOT USE this document as product installation information.
- Complete installation, operation and maintenance information is provided in the instructions supplied with each product.

Failure to comply with these instructions could result in death or serious injury.