

NOVOHALL Rotary Sensor Non-contacting

RSK-3200









Cost-efficient and Robust -Rotary sensor with Hall Technology in Mobile Application

- Non-contacting, magnetic measuring principle (Hall technology)
- Analog interfaces (ratiometric, PWM)
- Fully redundant system
- Meets EN ISO 13849 Standards for Safety Application
- Electrical range up to 360°
- Temperature range -40° up to +125° C
- Simple mounting
- Protection class IP67/IP69K
- Long life
- Very competitive price/performance ratio
- European E1 approved











Applications

For mobile and automotive applications such as

- Throttle
- EGR valves
- Transmission gear
- Accelerator

Working mobile machines and conveyor trucks in their harsh environment place very high stress on sensors.

The very compact rotary sensor RSK-3200 offers reliable function under harsh operating conditions.

The sensor is optimized for mobile applications and is certified according to the highest EMC standards such as ISO 11452 for pulses and interference fields.

The position values are output as a voltage signal ratiometrical to the supply voltage or via PWM.

The fully redundant sensor is suitable for use in safety-related applications.

Magnetic Position Measurement

When a current flows through a Hall element it provides a voltage across the current flow if a magnetic field acts perpendicular to both.

Since this voltage is proportional to the magnetic field strength, a non-contact and absolute angle or displacement measurement can be easily achieved by attaching a position magnet to the moving part of the application. By combining several sensor elements and integrating the complete signal processing in only a few components, complex systems are feasible in the smallest possible space.

The systems are insensitive to aging and independent of field strength fluctuations of the magnets.

Both shafted and touchless 2-part systems enable angle measurement over up to 360°, even over several revolutions or a linear displacement measurement up to 50 mm.

High resolution with great dynamic response, large mechanical tolerances and fast feasibility of customerspecific output options are added benefits of this wear free technology.















Cost-effective Rotary Sensor

The non-contact rotary sensor RSK-3200 offers full 360° angle measurement, smaller measurement ranges are also available. The metal bushings with a hole spacing of 32 mm allow safe and secure mounting. The customer's D-shaft is inserted into the actuator of the sensor and also takes over the function of the bearing for the position magnet. A pre-assembled O-ring on the centering collar seals against the mounting surface.

Hall Sensing Technology - Safe Position Detection

RSK-3200 series is developed for safety-related applications according to EN ISO 13849. The sensor is optimally shielded against electromagnetic interference from their environments and is approved to E1 type approval according to the ECE directive.

Resilient in Harsh Environments

With our large testing facility and our own EMC lab, we are equipped to conduct extensive environmental testing. This enables us to meet our customers' expectations when it comes to challenging outdoor applications. The electronics are completely encapsulated and offer an extremely wide temperature range of -40 to +125°C and can therefore be used in a wide variety of applications.

- Measuring range 60° up to 360°
- Simple mounting
- Actuator integrated
- Favourable price/performance ratio
- European E1 approved
- Suitable for safety-related applications
- Resolution 12 bits
- Fully redundant, crossed outputs
- Supply voltage 5 VDC
- Temperature range -40° up to +125° C
- Protection class IP67/IP69K
- For highest EMC requirements:

ISO 13766-1/2 for Construction machinery, ISO 14982 for Agricultural maschinery, ISO 11452 for Road vehicles

nstallation example

Recommended Accessories



Connector Micro Quadlock
System as a kit or with lead
wires



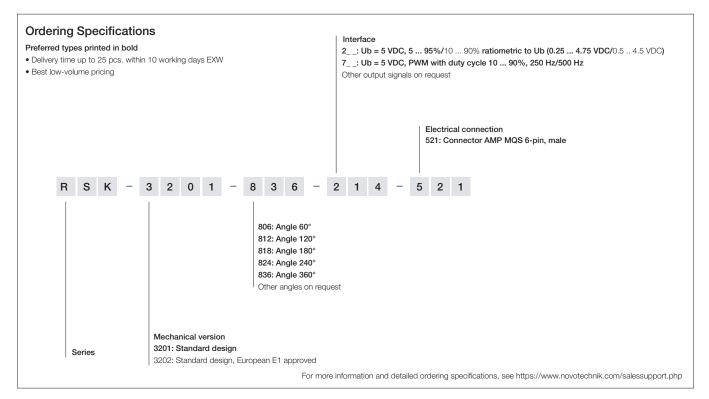
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