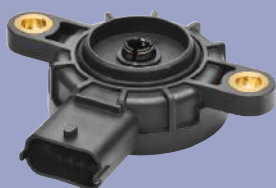


**NOVOHALL
Rotary Sensor
non-contacting**

Series RSC6600



Special features

- non-contacting, Hall-effect magnetic principle
- electrical range up to 360°
- analog voltage output
- high temperature range, -40 to +140 °C
- captive magnetic marker provides easy mounting
- protection class IP67 (mounted with o-ring)
- integrated 3-pin Bosch connector
- long life - no shafts or dynamic seals to wear
- very favorable price / performance ratio

The RSC6600 converts angular position into a proportional analog voltage, using Novotechnik's highly robust NOVOHALL contactless technology.

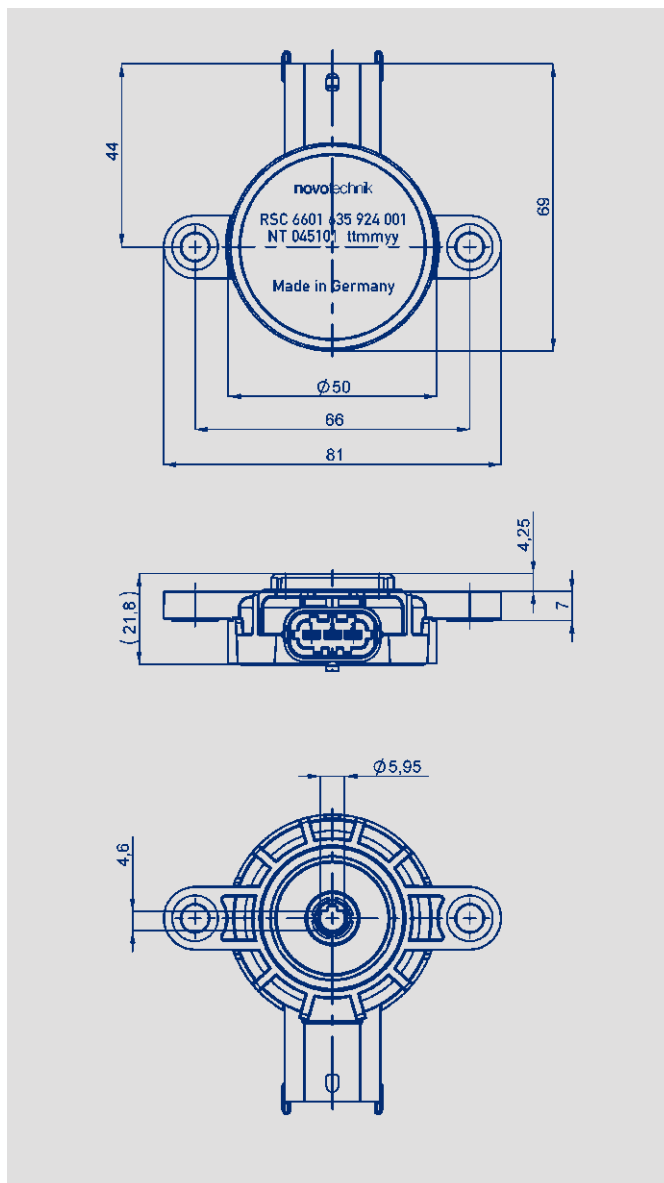
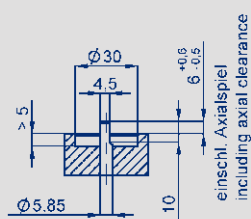
It provides a captive magnet carrier, but is fully touchless in operation, with no shaft or shaft seals to wear.

The housing is constructed of a special high grade temperature resistant plastic, with brass inserts in the mounting holes.

The RSC6600 is sealed to IP6k7, and is insensitive to dirt, moisture, temperature, and vibration, making it suitable for use in difficult environments, such as automotive under-hood applications.

Special models with different electrical angles and contact versions are available upon request.

Dimensions of driving side



Description

| | |
|------------------------|---|
| Housing | high-grade, temperature-resistant plastic |
| Shaft | high-grade plastic |
| Electrical connections | connector (male) with 3 pins, Bosch connector 1 928 S00 |
| Sealing | O-ring |

Novotechnik U.S., Inc.
155 Northboro Road

Southborough, MA 01772
Phone 508 485 2244
Fax 508 485 2430
info@novotechnik.com
www.novotechnik.com

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| | | |
|---|---|---------|
| Type designation | RSC-6601-635-924-001 | |
| Mechanical Data | | |
| Dimensions | see dimension drawing | |
| Mounting | 2 cylinder screws M6 | |
| Mechanical angle | unlimited rotation | |
| Mounting torque of clamps at housing flange | 8 - 10 | Nm |
| Maximum allowed axial and radial loads when installing sensor onto mating shaft | 100 | N |
| Maximum operational speed | mechanically unlimited | |
| Weight | approx. 37 | g |
| Electrical Data | | |
| Supply voltage U_b | 5 (4.5 ... 5.5) | VDC |
| Update rate | 1.5 (2.5 on request) | kHz |
| Current consumption (w/o load) | 15 (8 on request) | mA |
| Reverse voltage | yes, supply lines (-12 V) | |
| Short circuit protection | yes (output vs. GND and U_b , -0.3 ... 18 V) | |
| Measuring range | 350 (factory programmable), other angles on request | ° |
| Repeatability | 0.5 | ° |
| Absolute linearity | 1.5 | ±% FS |
| Output | ratiometric to U_b , 3 ... 97 % (load > 10 k Ω) | |
| TC | typ. 70 | ± ppm/K |
| Environmental Data | | |
| Operating temperature | -40...+140 | °C |
| Vibration | sinus 20...2000 Hz, 1 octave / minus 3 axes, a max. = 30, 43 h per axis (= 129 h) | g |
| Protection class ISO 20653 / IEC 60529 | up to IP66, IP6k7 (mounted with O-ring) | |
| EMC Compatibility | EN 55025 (CISPR 25): Class 3 SAE J1113-13: Apply Contact +4 kV and Air Contact +8 kV, ISO 11452-2 (AM): 30 V/m ISO 11452-2 (Pulse) MIL-STD-461E-RS101 | |
| Ordering specification | | |
| Type | P/N | |
| RSC-6601-635-924-001 | 045101 | |

Other versions on request.

Necessary accessories

Mating connector (female)
Bosch compact connector
3-pin (P/N 1 928 403 870),
Contacts AMP Junior Power
Timer (P/N 929939-3 for
0.5 - 1 mm²),
Mating single wire seal
(P/N 828904).

Recommended accessories

MAP process control
indicators with display

The specifications contained in our datasheets are intended solely for informational purposes. The documented specification values are based on ideal operational and environmental conditions and can vary significantly depending on the actual customer application. Using our products at or close to one or more of the specified performance ranges can lead to limitations regarding other performance parameters. It is therefore necessary that the end user verifies relevant performance parameters in the intended application. We reserve the right to change product specifications without notice.