**Special features**
- non-contacting, magnetic
- measuring range up to 360°
- high temperature range
- easy mounting
- protection class up to IP 67 (mounted with o-ring)
- long life
- good price/performance ratio

The contactless sensor utilizes the orientation of a magnetic field for the determination of the measurement angle. The magnetic field orientation is captured with an integrated circuit. An analog output signal represents the calculated angle.

The housing is made of a special high grade temperature-resistant plastic material. Fixings with brass bushings allow simplicity of mounting.

Effective design making use of the customer-sided bearing of the insert shaft. Due to the insert shaft a fast and easy mounting is permitted.

Despite of its compact and wear-free design the sensors are very robust against environmental influences like vibrations, temperature variations, dirt and humidity. These sensors are suitable for use in all kinds of rough environment for example close to engines in automotive applications.

The 3-pin Bosch connector offers a popular and reliable plug connection.

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

<table>
<thead>
<tr>
<th>Description</th>
<th>Housing</th>
<th>Integrated shaft coupling</th>
<th>Electrical connections</th>
<th>Sealing</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>high-grade, temperature-resistant plastic</td>
<td>high-grade plastic</td>
<td>connector (male) with 3 pins, Bosch connector 1 928 S00</td>
<td>O-ring</td>
</tr>
</tbody>
</table>
Mechanical Data

- Dimensions: see dimension drawing
- Mounting: 2 cylinder screws M6
- Mechanical angle: 360° continuous
- Mounting torque of clamps at housing flange: 8 - 10 Nm
- Permitted shaft loading (axial and radial)
  - Static or dynamic force: 100 N
- Maximum operational speed: 24 min⁻¹
- Weight: ca. 37 g

Electrical Data

- Supply voltage Ub: 5 ±0.5 VDC
- Ripple: 
  - Ub = 5 V -> no ripple definable
  - in case of ratiometric output
- No-load supply current: typical 16 mA
- Reverse voltage: yes, only feeder
- Short circuit protection: Signal to GND and Ub
- Measuring range: 350°
- Repeatability: ±0.5 (±0.15) at 350%
- Absolute linearity: ±3% FS
- Output signal: ratiometric
  - (supply voltage 5 V ±0.5 V)
  - Load ≥ 10 kΩ
- TC: typ. 70 (0...360°) ppm/K

Environmental Data

- Temperature range: -40...+140° C
- Vibration
  - sinus 20...2000 Hz, 1 octave / minus 3 axes:
  - d max: 3.0, 43 h per axis (= 129 h)
- Protection class ISO 20653 / IEC 60529: up to IP67 (mounted with O-ring)

Necessary accessories

- Connector (female)
  - Bosch compact connector 3-pin (p/n 1 928 403 870)
  - Contacts AMP Junior Power Timer (p/n 9290939-3 for 0.5 - 1 mm²)
  - Mating single wire seal
  - Cavity plug (p/n 828904)

Recommended accessories

- Process-controlled indicators
  - MAP300/400/4000 with display

Ordering specifications

<table>
<thead>
<tr>
<th>Type</th>
<th>Art.No.</th>
<th>Electr. angle</th>
</tr>
</thead>
<tbody>
<tr>
<td>RSC6601</td>
<td>635 524 001</td>
<td>350°</td>
</tr>
</tbody>
</table>

Other versions on request.