

# ANGLE SENSOR

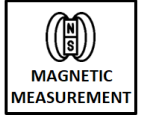
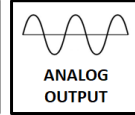
## “Non-Contact Measurement, Analog Output”

# RCS 3100



### GENERAL FEATURES

- Non-contact measurement
- 12 bit resolution
- User-selectable angle values between 0-360 °
- 4-20 mA, 0-5VDC, 0-10 VDC or 0.5-4.5 VDC ratiometric output options
- 6 mm shaft diameter
- IP54 protection class
- Long service life
- Compact design
- High accuracy



The RCS 3100 series sensors are used for taking angle measurement between The measuring limits can be adjusted between 0-360 ° depending on the user request. They have 0-5V, 0-10V, 4-20mA or ratiometric output options.

RCS 3100 angle sensors with high accuracy, compact design and robust construction; offers suitable solutions for angle measurement in industrial areas like crane and lifting systems, robotic systems, solar energy, wind power plants, auto parts etc.

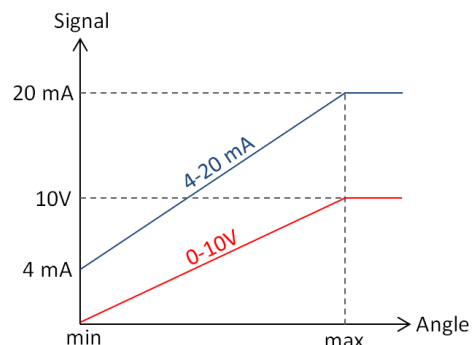
### TECHNICAL SPECIFICATIONS

<b>*Measuring Range</b>	Can be produced in the desired range from 0 to 360 °				
<b>Measuring Type</b>	Magnetic, non-contact				
<b>Linearity</b>	±%0.3 FS				
<b>Resolution</b>	12 bit				
<b>Repeatability</b>	0.1°				
<b>Response Frequency</b>	250 Hz				
<b>*Output Signal</b>		<b>0,5...4,5VDC Ratiometric</b>	<b>0...5VDC</b>	<b>0...10VDC</b>	<b>4...20 mA</b>
	<b>Supply Voltage</b>	5 VDC	5 VDC or 15...32VDC	15...32 VDC	9...32 VDC
	<b>Load</b>	≥ 1KΩ	≥ 1KΩ	≥ 1KΩ	0...250 Ω
<b>Current Consumption</b>	30 mA max.				
<b>Reverse Polarity Protection</b>	Yes, only supply				
<b>Electrical Connection</b>	3 x 0,14 mm <sup>2</sup> shielded cable				
<b>Max Operational Speed</b>	120 rpm				
<b>Protection Class</b>	IP54				
<b>Operating Temperature</b>	-25°C ... +85°C				
<b>Weight</b>	~65 gr				
<b>Material</b>	Body: Aluminum				
	Shaft: Stainless Steel (diameter:6 mm D-form)				

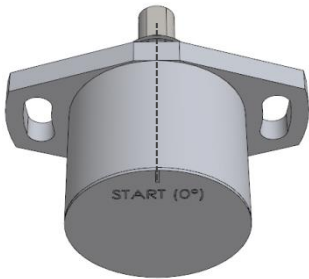
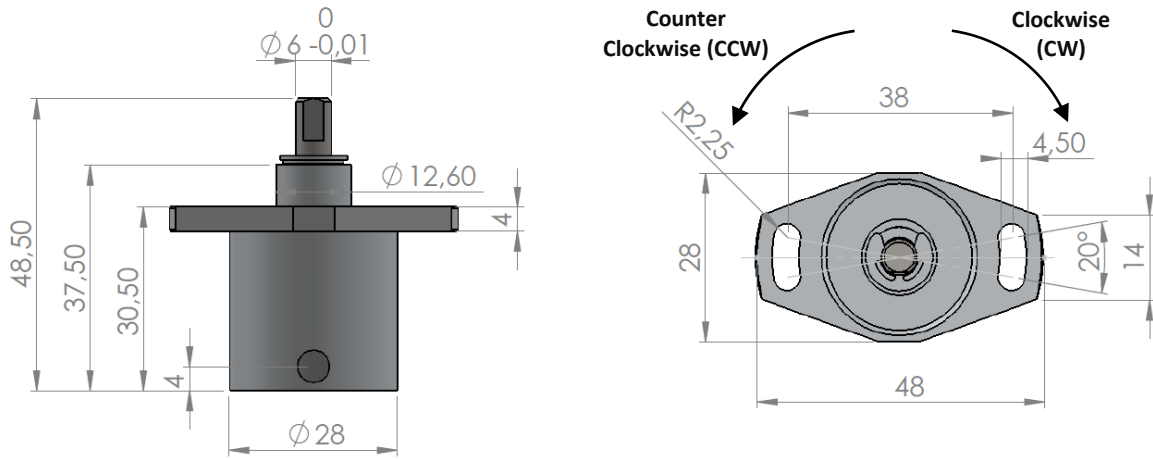
**Note:** The specifications specified by (\*) vary depending on the model selected. The detailed code table for product selection is shown on page 3.

### ELECTRICAL CONNECTION

<b>SIGNAL</b>	<b>CABLE COLOR</b>
+V	Red
0V	Black
Output Signal	Yellow



## MECHANICAL DIMENSIONS (mm)

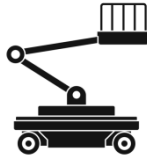


### 0° Point

The point where the guiding line on the body and the wedge surface of shaft intersect is the 0 ° point.

## SAMPLE APPLICATION FIELDS

- Robotic systems
- Auto parts
- Solar and photovoltaic systems
- Automated guided systems
- Crane and lifting technology
- Wind power plant



## PRODUCT CODE

Model	Angle Value	Supply Voltage <sup>(1)</sup>	Output Signal	Output Signal Direction	Electrical Connection <sup>(2)</sup>
RCS 3100	X	XX	XX	XX	X
	The desired angle value can be requested between 0-360 °	TTL: 5VDC PP: For 4-20mA output: 9...32VDC For 0-10V output: 15...32VDC For 0-5V output: 15...32VDC	A : 4-20 mA V : 0-10 V V1: 0-5 V (15...32VDC supply) V8: 0.5-4.5 V Ratiometric V9: 0-5 V (5VDC supply)	CW: Clockwise CCW: Counter Clockwise	0,5M: 0,5 m cable (std)

- (1) When the output signal is selected as 4-20 mA (A), 0-10V (V) or 0-5V (V1), the supply voltage must be PP  
When the output signal is selected as 0.5-4.5V Ratiometric (V8) or 0-5V (V9), the supply voltage must be TTL.

- (2) Optionally, different cable lengths can be requested.

**Sample Code:** RCS 3100-30-PP-V-CW-0,5M

RCS 3100 series, 0-30° measuring range, PP supply, 0-10V output, Output signal direction is clockwise, 0.5 m cable

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