ANGLE SENSOR

RCS 4800

"Non-Contact Measurement, Analog Output, IP67 Protection"

MAGNETIC MEASUREMENT | ANALOG OUTPUT | HIGH ACCURACY | LONG SERVICE LIFE | IP67 PROTECTION

- Non-contact magnetic measurement technology
- 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
- Long service life
- Compact design
- High accuracy

Angle measurement information between 0-360° can be obtained from RCS 4800 series sensors. Measurement limits can be adjusted between 0-360° depending on user request. 0-5V, 0-10V, 4-20mA or ratiometric output options are available. Thanks to its two-piece design consisting of a sensor and a magnet, it offers easy installation.

With high accuracy, compact design and durable construction, RCS 4800 angle sensors are widely used in crane and lifting systems, robotic systems, solar energy, wind farms, auto parts, etc. offers suitable solutions for angle measurement in industrial areas. Thanks to their high IP protection classes, they can easily work in harsh environmental conditions.

SAMPLE APPLICATION AREAS

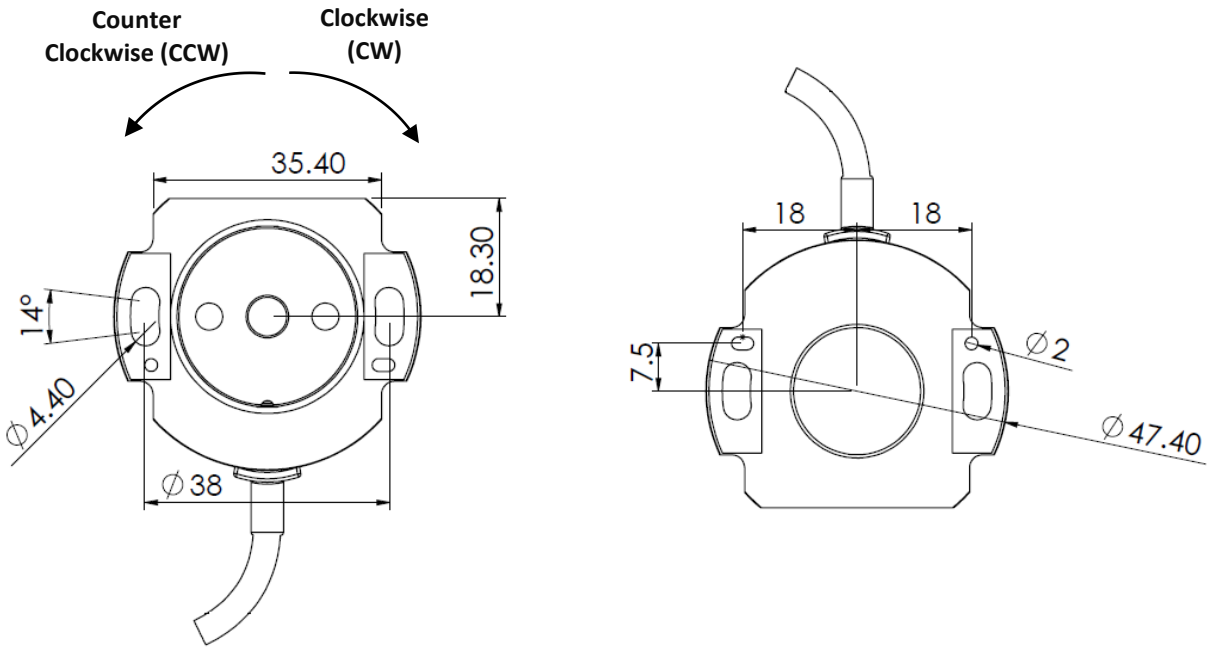
- Robotic systems
- Auto parts
- Solar and photovoltaic systems
- Automated guided systems
- Crane and lifting technology
- Wind power plant

TECHNICAL SPECIFICATIONS

***Measuring Range**	Can be produced in the desired range from 0 to 360 °				
Measuring Type	Magnetic, non-contact				
LinearitY	±%0.5 FS				
Resolution	12 bit				
Repeatability	0.1°				
Response Frequency	250 Hz				
***Output Signal**		***0,5…4,5VDC* Ratiometric**	***0…5VDC***	***0…10VDC***	***4…20 mA***
	Supply Voltage	5 VDC	5 VDC or 9…32VDC	15…32 VDC	9…32 VDC
	Load	≥ 1KΩ	≥ 1KΩ	≥ 1KΩ	0…250 Ω
Current Consumption	30 mA max.				
Reverse Polarity	Yes, only supply				
Electrical Connection	3 x 0,14 mm^2 shielded cable				
Max Operational Speed	Mechanically unlimited				
Protection Class	IP67				
Operating Temperature	-25°C … +85°C				
Material	Housing: Plastic				
	Position marker: Plastic				

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

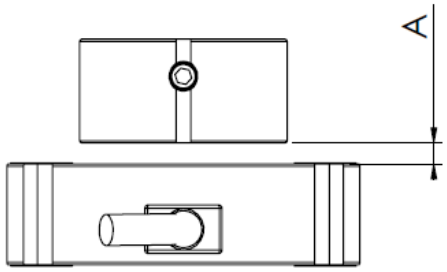
MECHANICAL DIMENSIONS (mm)



MOUNTING INFORMATIONS

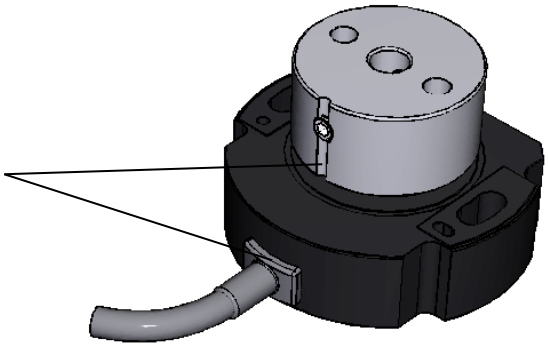
Working Dstance and Error Rates

A (mm)	Error (°)
2.00	1.80
2.50	1.60
3.00	1.70



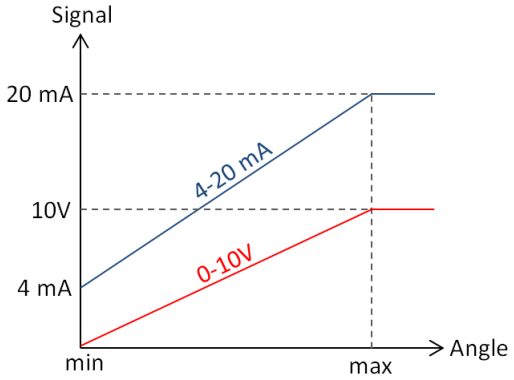
0° Point

The point where the cable output and the line on the position marker intersect is the 0° point.



ELECTRICAL CONNECTION

SIGNAL	CABLE COLOR
+V	Red
0V	Black
Output Signal	Yellow



ORDER CODE

Model

Supply Voltage (1)

TTL: 5VDC
PP: For 4-20mA output: 9…32VDC
For 0-10V output: 15…32VDC
For 0-5V output: 9…32VDC

Output Signal Direction

CW : Clockwise
CCW: Counter Clockwise

RCS 4800	-	XX	-	XX	-	XX	-	XXX	-	XXX

Angle Value

The desired angle value can be requested between 0-360 °

Output Signal

A : 4-20 mA
V : 0-10 V
V1: 0-5 V (9…32VDC supply)
V8: 0.5-4.5 V Ratiometric
V9: 0-5 V (5VDC supply)

Electrical Connection

0,5M: 0,5m cable
*Optional others

(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.