

# Quantum 360™

TMR Rotary Position Sensors

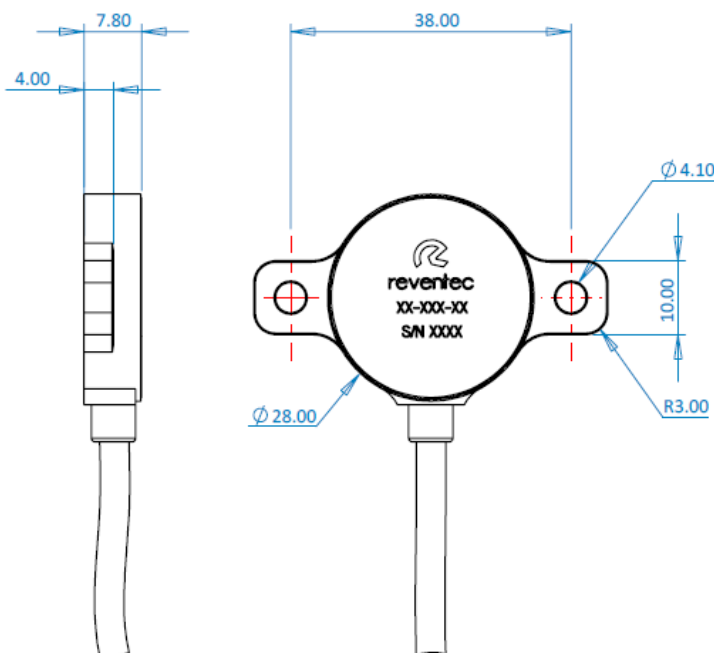


The Quantum 360™ uses the latest in advanced TMR position sensor technology from Reventec. Capable of measuring through large sections of non-ferrous materials and operating in off-axis target magnet installations, this product provides advantages unavailable from alternative rotary sensing technologies.

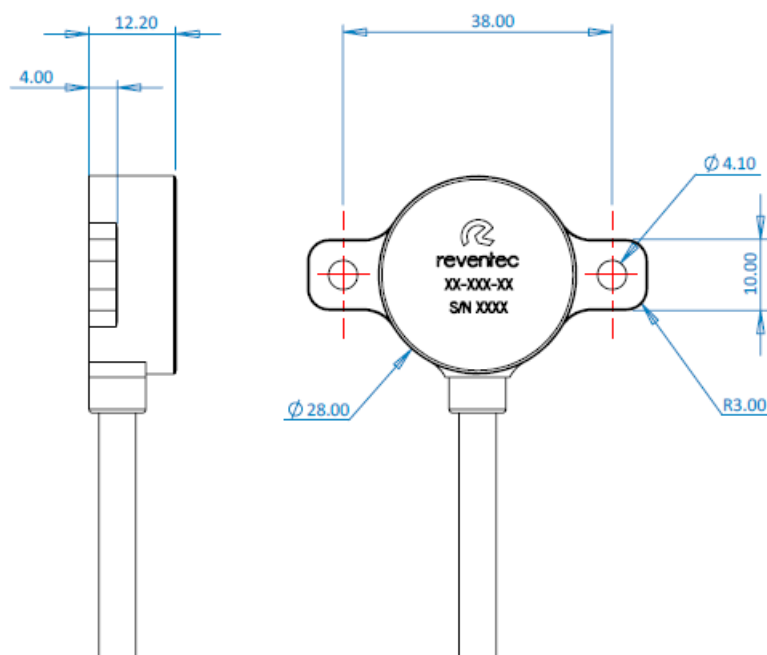


- Solid-state, continuous rotational sensing
- Off axis measurement, with exceptional gap tolerance
- 12bit resolution (<math><0.1^\circ</math> resolution)
- Fully configurable without resolution loss
- Rotary measurement through non-ferrous materials up to 25mm away.
- Dual redundant option
- Multiple magnet (target) options.
- Submersible (IP67)

## Single Channel Quantum360™



## Dual Channel Quantum360™



## Order Number Configurator

Product Code	Single or Dual Channel Variant	Power Supply	Output Options	Magnet
Q360	-01 (Single Chanel) -02 (Dual Channel)	-005 (+5VDC +/-0.2VDC supply) -631 (+6VDC to +31VDC supply)	-A1 (0-5VDC Analogue Output) -A2 (0-10VDC Analogue Output)	-M (Magnet Only) -H (Housed Magnet Assembly)

Sample Code: **Q360-01-631-A1-M** (Single Channel, 6-31VDC supply, 0-5VDC output signal, Supplied with Magnet Only)

## Position Measurement

Sensing Range	0-359° measurement capability.
Accuracy	±0.4% of full scale.
Permissible Airgap	Up to 25mm dependant on application/target magnet.
Measurement Rate	5kHz
Calibration	Custom calibrations available, please contact Reventec for assistance.

## Electrical

Supply Voltage	+6VDC to +31VDC or +5 VDC +/-0.25VDC
Typical Operating Current	<25mA
Overvoltage Protection	+45 VDC continuous
Reverse Polarity Protection	-45 VDC continuous

## Signal Output 1

Type	Analogue Voltage
Output range	0-5VDC or 0-10VDC  N.B +10VDC analogue output only available on 6-31VDC supply option.
Resolution	12 bit

## Dual Redundant Signal Output 2

Type	Analogue Voltage
Output Levels	0-5VDC or 0-10VDC  N.B +10VDC analogue output only available on 6-31VDC supply option.
Resolution	12 bit

## Environmental

Environmental protection	IP67
Operating Temperature	-40°C to 125°C

## Mechanicals/Cable Spec

Flying Leads	1 Meter supplied as standard
Jacket Elastomer	FEP Black
Wire Type	-5 core, FEP Insulated, 24 AWG
Housing Material	Anodised Aluminium

Description	Wire Colour
Supply (+)	Red
Ground (GND)	Black
Analogue Signal 1	Yellow
Analogue Signal 2	Orange
Tx Comms (Transmit)	White
Rx Comms (Receive)	Green

## Configuration Interface

Type	RS-232 via FTDI USB cable. See accessories
GUI	Available on request

## Accessories

USB calibration cable	P/N: 07-003-01
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Specifications may be subject to change without prior notice