Magnetic rotary angle and position sensor-control

Contactless sensor PSC-360



The robust PSC-360 is a cost effective high performance non-contacting rotary position sensor for automotive, off-road, marine, medical and industrial applications without the limitations of potentiometric solutions (wear, limited electrical angles...). A configurable switch output, as an option, integrated within the sensor is available too.

Redundancy can be achieved by employing a dual die version providing independent voltage outputs with fully customized characteristics providing the possibility to detect error outputs by the host electronics.

Sealed for harsh environments and flange mounted for easy positioning when necessary, it provides high stability under harsh environment conditions such as vibration, shock, extreme temperatures / humidity, dither, moisture or dirt. Available with fly leads, can be customized to customer's needs to any desired connector configuration.

Mechanical specifications

Rotational life (depends on application and mounting)	up to 50.000.000 cycles.
Operating temperature ¹	-40°C to +125°C.

Electrical specifications

±1% absolute (0.5% upon request).
Programmable from 15 to 360 degrees.
Analog (Ratiometric), PWM. Serial Protocol upon request.
Upon request. Programmable.
Analog & PWM: up to 12 bits. Serial Protocol (SPI): up to 14 bits.
Up to 25V.
Typ 8.5mA for single version. Typ 17mA for redundant version.

Others: check availability.

Key features

- · Simple and robust magnetic design.
- High resolution (up to 14-bit).
- Ratiometric analog or PWM outputs.
- \bullet Absolute position feedback up to 360° (keeps position on power loss).
- True full redundant version.
- Sealed construction for harsh environments such as off-highway and marine
- Protected from dust, moisture, vibration and extreme temperatures.
- Endless rotation.
- Fully programmable transfer function output at the factory with electrical outputs up to 360°.
- Self-diagnostic features.
- Over voltage protection and reverse voltage protection.
- Extended voltage input supply values.

Also upon request:

- $\bullet \ Programmable \ switch \ output.$
- $\bullet \ SPI \ output.$
- Lever with return spring.

Industries served

- Automotive and On-highway (road vehicles, trucks, recreational vehicles, road sweepers).
- Off-highway (agriculture, construction and forestry, motorsport, airport operations).
- Material handling.
- Marine engines.
- Medical.
- Industrial.

Applications

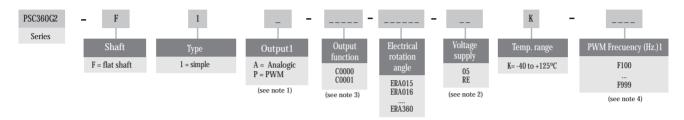
- Steering wheel angle sensor.
- Brake and clutch accelerator pedal.
- Arm control.
- Hitch position.
- \bullet Throttle control / sensor..
- Bucket position.
- Fork height and mast tilt.
- Transmission gear shifter.
- Suspension and height sensor.
- Steering, accelerator and shifter sensor for marine engine.

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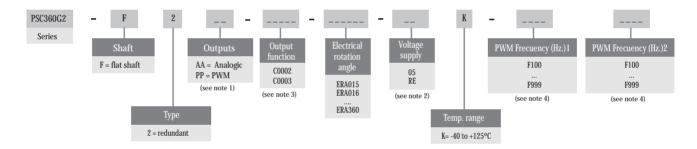
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How to order (example: PSC360G2-F1A-C0000-ERA360-05K)

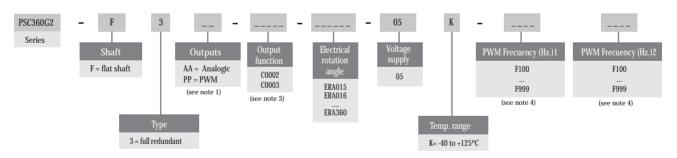
Simple output (analogic / PWM)

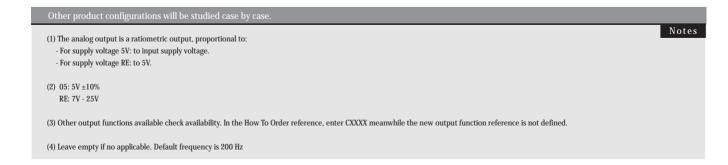


Redundant output (analogic / PWM)



Full redundant output (analogic / PWM)





Piher Sensing Systems

