



SPCD DIFFERENTIAL SERIES HALL EFFECT SPEED SENSOR

The SPCD Series are designed for 'True Zero & Direction Capable Detection' of speed in the demanding motorsport and automotive testing industries.

The main construction is aluminium which provides for a robust sensor, even in exposed areas such as the engine bay or wheel hub. The sensor will continuously operate at temperatures up to 150°C.

By using a proven 'Differential Hall Effect' technology, the SPCD detects a change in magnetic field as the target passes the sensors tip. The output transistor switches its state as the target passes, a change in direction inverts the signal and hence the direction can be determined. The measurable pulse train can be used within standard data logging equipment or ECU's.

*Sense
Analyse
Control*

Features

- True Zero Speed
- Direction Detection
- NPN Output
- 5-24V Supply
- Flange Mounting

TECHNICAL SPECIFICATIONS

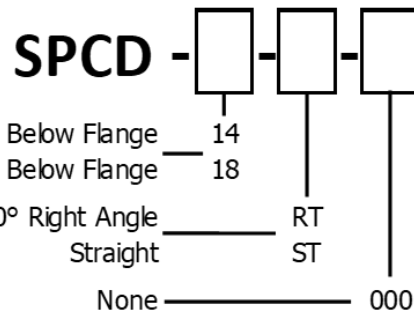
Measurement Frequency	20KHz
Sensor Type	Differential Hall Effect
Mounting	Single Flange: Flange with Single Screw Fitting
Target Size (Width x Length)	See drawing on page 2
Sensing Range (Air Gap)	0.5 to 2mm
Output	NPN. Internal Pullup Resistor Value 1KΩ
Max Load Current	25mA Max
Supply	5-24Vdc (10mA)
Operating Temperature Range	-40°C to +150°C
Construction	Anodised Aluminium
Electrical Connection	100cm 26AWG 55 spec wire + DR25 sleeve
Cable Exit	Straight or Right Angle
Mechanical Dimensions	18mm long x 9mm dia below flange 14mm long x 8.95mm dia below flange
Protection Class	IP67, Dust tight & water immersion to 1m for 30mins
Weight (Excluding Cable)	Approx 8g

Applications

- Speed
- Crank Speed / Position
- Wheel Speed
- Drive Shaft Speed
- Traction Control
- Launch Control

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PART NUMBER CONFIGURATOR



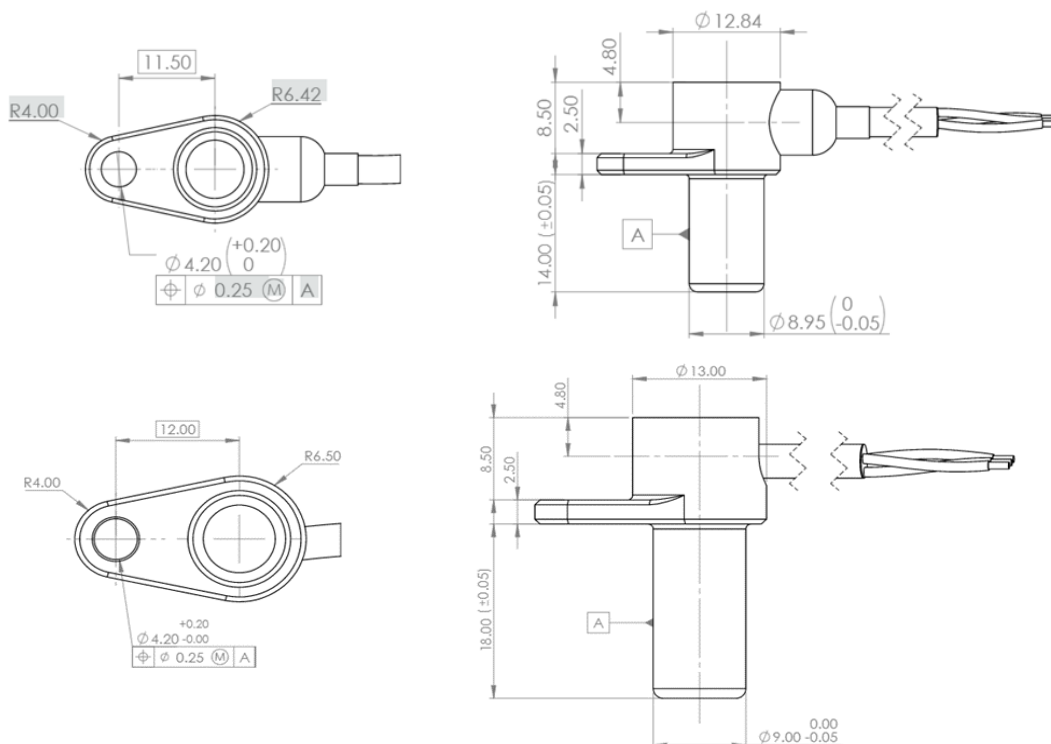
14mm x 8.95mm Diameter Below Flange
 18mm x 9mm Diameter Below Flange

90° Right Angle — RT
 Straight — ST

None — 000

The KA configuration tool is used to specify a standard KA Sensor, other options are available.

MECHANICAL DETAILS



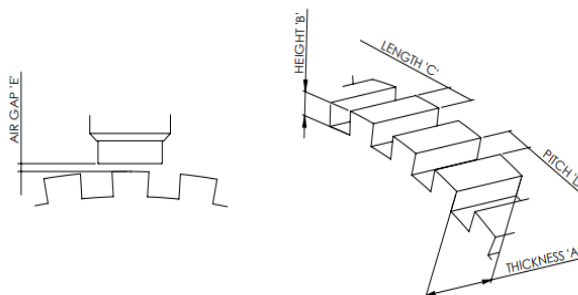
Services for:

- Data Logging
- Telemetry
- Controls
- Wiring

Contact us

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Trigger Wheel Dimensions	
Thickness 'A'	8 mm
Height 'B'	3 mm
Length 'C'	3 mm
Pitch 'D'	6 mm
Air Gap 'E'	0.5 to 2 mm



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CONNECTION DETAILS

+Ve Supply	0V Supply	Signal
Red	Black	White

ENGINEERING LED | CONFIDENTIAL | EXPERIENCED | RESPONSIVE | DYNAMIC | FRIENDLY

SPCD
 KA041S-DS (rev1)