



Sensors
For
Motorsport

#### **Features**

- 1 or 2 channel
- ±0.1% Linearity
- -40° to 300°F
- Lightweight 0.7oz
- IP65 or IP67 Sealing

The KH31/32 Series of female 2-channel rotary position sensors are designed to withstand the harsh environments of motorsport and on-vehicle automotive testing applications.

By using a proven 'Hall Effect' technology, the KH31/32 offers high performance and reliability at temperatures up to  $+300^{\circ}$ F. Alternatively, it is capable of operational excellence in cold environments down to  $-40^{\circ}$ F.

With a small and lightweight 0.88" diameter body and standard size flange mounting, the KH31/32 Sensor is designed for use on throttle bodies with a 0.31" D Type Shaft; other installations include: gearbox and pedal position.

The sensor is available in either Single (3 wire) or Dual (6 wire) outputs.

### **TECHNICAL SPECIFICATIONS**

Electrical Angles (Degrees)	20° to 360° in 1° Increments. Standard Angles: 30°, 60°, 120°, 240°, 360°		
Power Supply	5Vdc or 6-30Vdc (Max 32mA) Reverse Polarity Protected		
Output	Please See Part Number Configurator - page 2		
Output Centre Position (Voltage)	2.5V When Shaft Flat Is In Line With The Cable Exit		
Resolution	12 Bit		
Accuracy, Linearity	±0.1%		
Accuracy, Hysteresis	<0.1°		
Update Rate	5KHz		
Mechanical Life	> 25 Million Cycles at Max 150RPM		
Operating Temperature Range	-40°F to 300°F (-40°C to +150°C)		
Housing Material	Aluminum, PEEK		
Shaft Material	Aluminum		
Track Technology	Hall Effect		
Electrical Connection	20" 26AWG, 3/6 Wire, 55spec, FDR 25 Sleeve		
Protection Class	IP65 or IP67		
Weight	0.7oz (including cable)		
Options	Cable Length, Electrical Angle and Labelling		

PMC/KA Sensors adopts a continuous development program which sometimes necessitates specification changes without notice

PRESSURE | TEMPERATURE | FORCE | TORQUE | POSITION | SPEED | ACCELERATION | GYRO

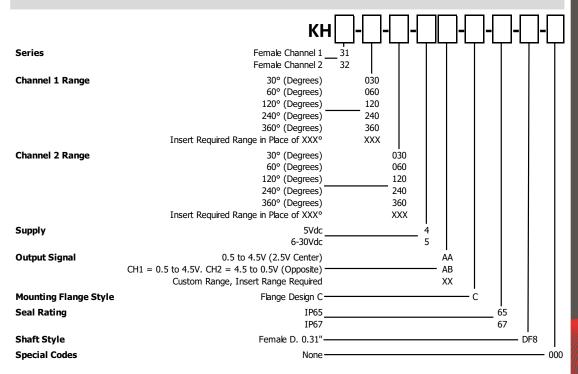
### **Applications**

- Throttle Position
- Steering Angle
- Pedal Position
- Gear Position
- Aero Surfaces
- Actuators

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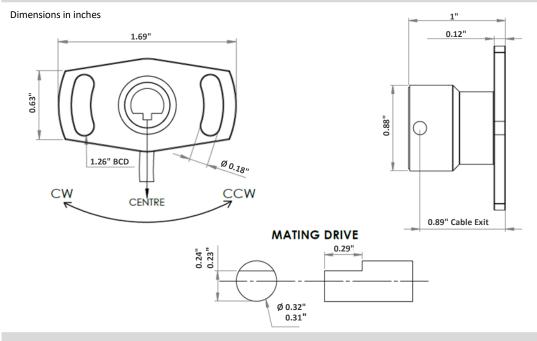
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# PART NUMBER CONFIGURATOR



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

## **MECHANICAL DETAILS**



# **ELECTRICAL DETAILS**

	+Ve Supply	0V Supply	Signal
KH31 Single Output	Red	Black	Yellow
KH32 Dual Output	Brown	Blue	White

Sense Analyze Control

### Sensors For:

- Temperature
- Acceleration
- Pressure
- Position
- Torque
- Speed
- Angle
- Force

#### Services For:

- Data Logging
- Telemetry
- Controls
- Wiring

### Contact Us

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