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 $+300^{\circ} \mathrm{F}$. Alternatively, it is capable of operational excellence in cold environments down to $-40^{\circ} \mathrm{F}$.

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 $0.31^{\prime \prime}$ 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) | $20^{\circ}$ to $360^{\circ}$ in $1^{\circ}$ Increments. <br> Standard Angles: $30^{\circ}, 60^{\circ}, 120^{\circ}, 240^{\circ}, 360^{\circ}$ |
| :---: | :---: |
| Power Supply | 5 Vdc or $6-30 \mathrm{Vdc}$ (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 | $\pm 0.1 \%$ |
| Accuracy, Hysteresis | $<0.1^{\circ}$ |
| Update Rate | 5 KHz |
| Mechanical Life | > 25 Million Cycles at Max 150RPM |
| Operating Temperature Range | $-40^{\circ} \mathrm{F}$ to $300^{\circ} \mathrm{F}\left(-40^{\circ} \mathrm{C}\right.$ to $\left.+150^{\circ} \mathrm{C}\right)$ |
| 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 | 0.7 oz (including cable) |
| Options | Cable Length, Electrical Angle and Labelling |

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

## Applications

- Throttle Position
- Steering Angle
- Pedal Position
- Gear Position
- Aero Surfaces
- Actuators
sales@pmcl.com
www.kasensors.com Represented by:


## Features

- lor 2 channel
- $\pm 0.1 \%$ Linearity
- $-40^{\circ}$ to $300^{\circ} \mathrm{F}$
- Lightweight - 0.7oz
- IP65 or IP67 Sealing


## 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 | OV 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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