

**KH SERIES  
KH31 & 32  
FEMALE ROTARY  
POSITION SENSOR**



The KH31/32 Series of Female 1 or 2 Channel Rotary Position Sensors are designed to withstand the harsh environments of motorsport and automotive testing applications.

By using a proven 'Hall Effect' technology, the KH31/32 offers high performance and reliability at temperatures up to +150°C. Alternatively, it is capable of operational excellence in cold environments down to -40°C.

With a small and lightweight 22.5mm diameter body and standard size 32mm PCD Flange Mounting, the KH31/32 Sensor is designed for use on throttle bodies with an 8mm D Type Shaft; other installations include: gearbox and pedal position.

This IP67 rated sensor is available with either Single (3 wire) or Dual (6 wire) outputs.

**TECHNICAL SPECIFICATIONS**

<b>Electrical Angles (Degrees)</b>	20° to 360° in 1° Increments. Standard Angles: 30°, 60°, 120°, 240° & 360°
<b>Supply</b>	5V DC Regulated
<b>Output</b>	Please See Part Number Configurator For Options
<b>Output Centre Position (Voltage)</b>	2.5V When Keyway Is In Line With The Cable Exit
<b>Resolution</b>	12 Bit
<b>Accuracy, Linearity</b>	±0.1%
<b>Accuracy, Hysteresis</b>	<0.1°
<b>Update Rate</b>	5KHz
<b>Mechanical Life</b>	> 25 Million Cycles at Max 150RPM
<b>Operating Temperature Range</b>	-40°C to +150°C
<b>Housing Material</b>	Aluminium, PEEK
<b>Shaft Material</b>	Aluminium
<b>Track Technology</b>	Hall Effect
<b>Electrical Connection</b>	50cm 26AWG, 55 Spec, FDR 25 Sleeve
<b>Protection Class</b>	IP67
<b>Weight</b>	20g

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

Sense  
Analyse  
Control

Features

- Compact Design
- Excellent Linearity
- High Temperature
- Lightweight
- IP67 Standard Sealing
- Rugged Construction

Applications

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

bf1systems.com

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KH31/32  
KA025D-DS (rev1)

# PART NUMBER CONFIGURATOR

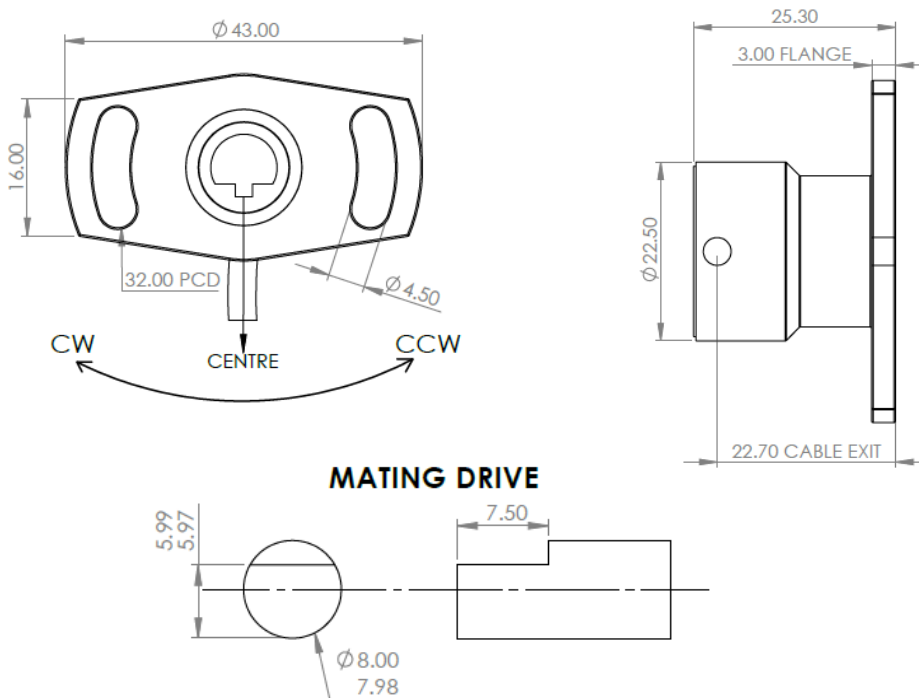
		<b>KH</b>	□	-	□	-	□	-	□	-	□	-	□	-	□
<b>Series</b>		Female Channel 1	31												
		Female Channel 2	32												
<b>Channel 1 Range, CW View from Shaft</b>		30° (Degrees)			030										
		60° (Degrees)			060										
		120° (Degrees)			120										
		240° (Degrees)			240										
		360° (Degrees)			360										
		Insert Required Range in Place of XXX°			XXX										
<b>Channel 2 Range CCW View from Shaft</b>		30° (Degrees)					030								
		60° (Degrees)					060								
		120° (Degrees)					120								
		240° (Degrees)					240								
		360° (Degrees)					360								
		Insert Required Range in Place of XXX°					XXX								
<b>Output Signal</b>		0.5 to 4.5V (2.5V Center)											AA		
		CH1 = 0.5 to 4.5V. CH2 = 4.5 to 0.5V (Opposite)											AB		
		Custom Range, Insert Range Required											XX		
<b>Special Code</b>		None													000

*Sense  
Analyse  
Control*

**Services for:**

- Data Logging
- Telemetry
- Controls
- Wiring

## MECHANICAL DETAILS



## CONNECTION DETAILS

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

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**Contact us**

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