



The KH41/42 Series of Non Contact 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 KH41/42 offers high performance and reliability at temperatures up to +300°F. Alternatively, it is capable of operational excellence in cold environments down to -40°F.

The sensor has no moving parts, a magnet is inserted into the moving component. The sensor detects movement and provides a linear output signal proportional to the rotational angle.

With a small and lightweight 0.91" diameter body and standard size flange mounting, the KH41/42 Sensor is designed for use on throttle bodies, 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)	60° to 360° in 1° Increments. Standard Angles: 60°, 100°, 240°, 360°	
Power Supply	5Vdc or 6-30Vdc (Max 32mA) Reverse Polarity Protected	
Output	Please See Part Number Configurator - page 2 For Options	
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	
Air Gap/Concentricity	0.04" - 0.12" Air Gap/0.04" - 0.08" Concentricity	
Track Technology	Hall Effect, Non Contact	
Electrical Connection	20" 26AWG, 3/6 Wire, 55spec, FDR 25 Sleeve	
Protection Class	IP67	
Weight	0.7oz	
Options	Cable Length, Magnet Type 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

Sensors Eor Motorsport

Features

- Shaftless Design
- ±0.1% Linearity
- -40° to 300°F
- Lightweight 0.7oz
- IP67 Sealing

Applications

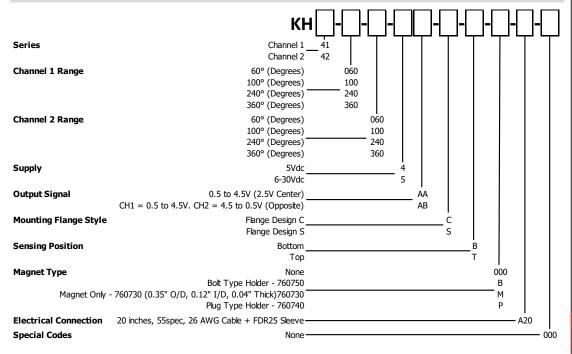
- Throttle Position
- Steering Angle
- **Pedal Position**
- Gear Position
- Aero Surfaces
- Actuators

sales@pmcl.com www.kasensors.com Represented by:

KH41/42.911

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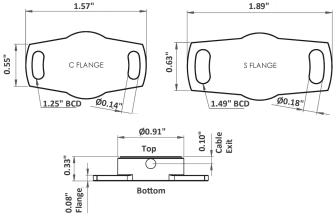
PART NUMBER CONFIGURATOR

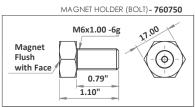


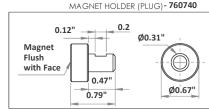
The KA configuration tool is used to specify a standard KA Sensor, other options are available.

MECHANICAL DETAILS

Dimensions in inches







ELECTRICAL DETAILS

	+Ve Supply	0V Supply	Signal
KH41 Single Output	Red	Black	Yellow
KH42 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

KA Sensors
Division of
PMC Engineering LLC
11 Old Sugar Hollow Rd
Danbury, CT 06810

Tel: 203-792-8686 Fax: 203-743-2051

sales@pmcl.com www.kasensors.com

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