



## KR22 SERIES ROTARY POTENTIOMETER

The KR22 Series of rotary potentiometers are designed to withstand the harsh environments within motorsport and on-vehicle automotive testing applications.

By using a proven conductive plastic, track technology and multi-fingered contacts, the KR22 offers high performance and reliability at temperatures up to +350°F. Alternatively, it is capable of operational excellence in cold environments down to -40°F.

With a small and lightweight 0.89" diameter body, the KR22 Sensor is ideal for many applications within both motorsport and automotive testing and development programs.

Available in either Single (3 wire) or Dual (6 wire) outputs, the modular design allows for various mounting arrangements for the sensor and also importantly the different Shaft/Drive types.

## Sensors For Motorsport

### Features

- Single or Dual Track
- Excellent Linearity
- 350°F Operation
- Lightweight - 0.7oz
- IP65 or IP67 Sealing

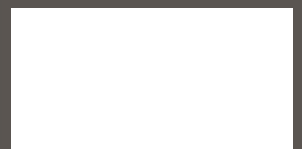
## TECHNICAL SPECIFICATIONS

<b>Electrical Angles (Degrees)</b>	45°, 125°, Dual 125°, 350°
<b>Nominal Resistance</b>	5 kΩ(±20%)
<b>Resolution</b>	Essentially Infinite
<b>Repeatability</b>	≤0.01%
<b>Operational Speed</b>	150 RPM
<b>Mechanical Life</b>	> 25 Million Cycles
<b>Independent Linearity</b>	≤± 0.5%
<b>Power Supply</b>	5V typical (40Vdc Maximum)
<b>Operating Temperature Range</b>	-40°F to 350°F (-40°C to +175°C)
<b>Housing Material</b>	Aluminum
<b>Shaft Material</b>	Stainless Steel
<b>Track Technology</b>	Conductive Track
<b>Electrical Connection</b>	20" 26AWG, 3/6 Wire, 55spec, FDR 25 Sleeve
<b>Protection Class</b>	IP65 or IP67
<b>Weight</b>	0.7oz
<b>Options</b>	Cable Length, Labelling, Mounting Flange & Shaft Drive

### Applications

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

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Represented by:



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

# PART NUMBER CONFIGURATOR

**KR22** - [ ] - [ ] - [ ] - [ ] - [ ]

## Electrical Range (Degrees)

45° 0045  
 125° 0125  
 Dual Track 125° D125  
 350° 0350

## Mounting Flange Style

Flange Design C \_\_\_\_\_ C  
 Flange Design S \_\_\_\_\_ S

## Seal Rating

IP65 \_\_\_\_\_ 65  
 IP67 \_\_\_\_\_ 67

## Shaft

Shaft Design B \_\_\_\_\_ B  
 Shaft Design D \_\_\_\_\_ D  
 Shaft Design F \_\_\_\_\_ F

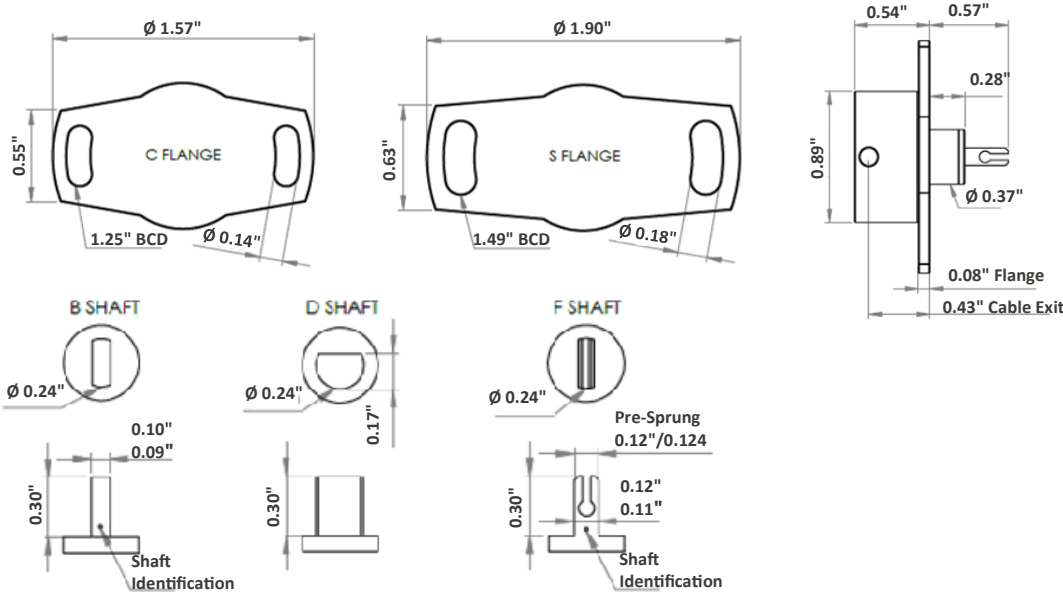
## Special Code

None \_\_\_\_\_ 000

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
Single Output	Red	Black	Yellow
Dual Output	Brown	Blue	White

Output signal may be reversed by swapping connections to the Red and Black wires.

**DO NOT** connect +Ve Supply to the Yellow or White wire as this will cause damage to the sensor element.

*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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