

KP SERIES KP13C COMPACT LIGHT DUTY LINEAR POSITION SENSOR



The KP13C compact light duty linear position sensors 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 KP13C offers high performance and reliability under extreme temperature and vibration.

With standard measurement ranges from 1" to 6", the stainless steel shaft is fitted with sealing to IP65 as a standard but with an option of IP67 to protect against even the harshest conditions.

Cable exit can be manufactured as either forward or reverse exit and a carbon sleeve option is also available to protect the shaft against debris and other damage.

For critical applications where redundancy is required, we can also offer a dual output sensor within the same package size.

Other accessories including flange mount, return spring, etc. are available and detailed on a separate KP Series Accessory Data Sheet.

Sensors For Motorsport

Features

- 0.51" Diameter Body
- Ranges from 1" - 6"
- Carbon Sleeve
- Bearing Mounting
- $\pm 0.5\%$ Accuracy

TECHNICAL SPECIFICATIONS

Ranges (Inches)	1, 2, 3, 4, 5, 6
Resolution	Essentially Infinite
Repeatability	$\leq 0.0004"$
Operational Speed	10m/s Maximum
Mechanical Life	>25 Million Cycles
Power Supply	5V typical (40Vdc Maximum)
Wiper Current	<10 μ A
Linearity	$\leq 0.5\%$
Electrical Connection	20" 26AWG, 55spec + TPV Sleeve
Track Technology	Conductive Plastic
Operating Temperature Range	-40°F to 300°F (-40°C to +150°C)
Construction	Aluminum housing and stainless steel shaft
Protection Class	IP65 or IP67
Options	Please see our separate KP Series Accessories Datasheet

Applications

- Damper Position
- Throttle Pedal
- Aero Surface
- Actuators

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Represented by:

PART NUMBER CONFIGURATOR

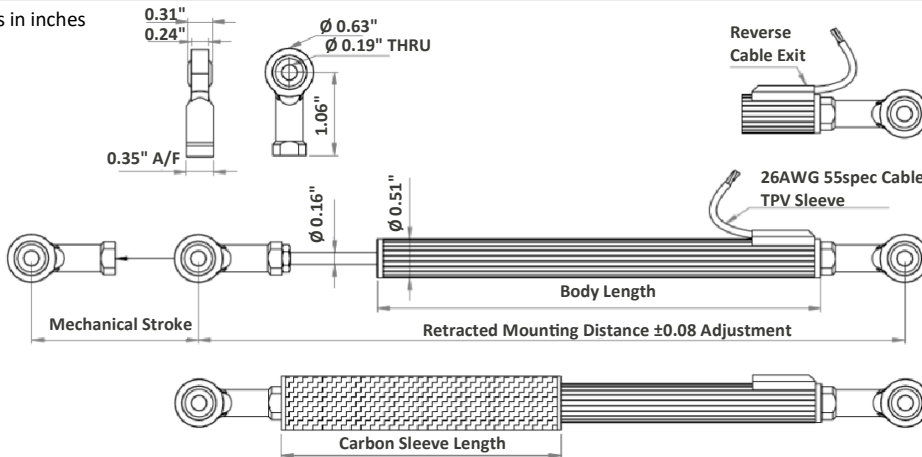
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Range (Stroke)	1 inch	A01						
	2 inch	A02						
	3 inch	A03						
	4 inch	A04						
	5 inch	A05						
	6 inch	A06						
Seal Rating	IP65		65					
	IP67		67					
Cable Exit	Forward			F				
	Reverse			R				
Dual Output	No				0			
	Yes				1			
Spring Return (IP65 only)	No					0		
	Yes- 1, 2 & 3 inch Range only					1		
Flange Mount	(See KP Accessories Data Sheet) No						0	
	(See KP Accessories Data Sheet) Yes						1	
Special Code 1	Sleeve with Sensor							159
	Sleeve separate from Sensor						KP13C-Axx-cover	
Special Code 2	None							000

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

MECHANICAL DETAILS

Dimensions in inches



Active Electrical Stroke (inches)	1.00	2.00	3.00	4.00	5.00	6.00
Retracted Mounting Distance (inches)	5.59	6.57	7.56	8.54	9.53	10.51
Mechanical Stroke (inches)	1.06	2.05	3.03	4.02	5.00	5.98
Body Length (inches)	3.82	4.80	5.79	6.77	7.76	8.74
Weight Without Cable (oz)	1.52	1.69	1.87	2.05	2.22	2.40
Resistance (Kohms ±20%)	1.70	3.40	5.00	6.70	8.40	10.00
Carbon Sleeve Length (inches)	1.5	2.5	3.5	4.5	5.5	6.5

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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