

## KP SERIES KP13C COMPACT LIGHT DUTY LINEAR POSITION SENSOR



The KP Series of KP13C Compact Light Duty Linear Position Sensors are designed to withstand the harsh environments within motorsport and 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 25mm to 150mm, the Stainless Steel Shaft is fitted with IP67 rated seals which helps protect against the harshest conditions. With regards to operational temperature range, the KP13C 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.

Cable exit can be manufactured to have to be either Forward or Reverse exit. Also, 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.

### TECHNICAL SPECIFICATIONS

<b>Ranges (Zero mm to:)</b>	25, 50, 75, 100, 125, 150
<b>Resolution</b>	Essentially Infinite
<b>Repeatability</b>	≤0.01mm
<b>Operational Speed</b>	10m/s Maximum
<b>Mechanical Life</b>	>25 Million Cycles
<b>Supply</b>	5V Typical (40Vdc Maximum)
<b>Wiper Current</b>	<10µA
<b>Linearity</b>	≤0.5%
<b>Electrical Connection</b>	50cm 26AWG, 55Spec + FDR Sleeve
<b>Track Technology</b>	Conductive Plastic
<b>Operating Temperature Range</b>	-40°C to +150°C
<b>Construction</b>	Aluminium Housing and Stainless Steel Shaft
<b>Protection Class</b>	IP67
<b>Options</b>	Please see our separate KP Series Accessories Datasheet

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

*Sense  
Analyse  
Control*

#### Features

- 13mm Ø Body
- IP67 Standard Sealed
- Bearing Mounting
- 25mm to 150mm
- ±0.5% Linearity
- Long Life

#### Applications

- Damper Position
- Throttle Pedal
- Aero Surface
- Actuators

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KP13C  
KA028D-DS (rev1)

## PART NUMBER CONFIGURATOR

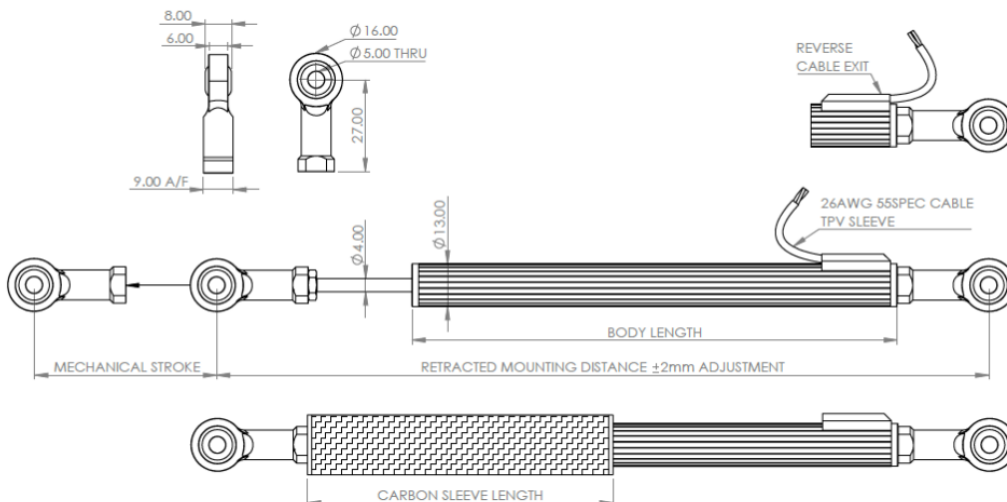
	<b>KP13C</b>	-	-	-	-	-
<b>Range (Stroke)</b>	25mm	025				
	50mm	050				
	75mm	075				
	100mm	100				
	125mm	125				
	150mm	150				
<b>Cable Exit</b>	Forward		F			
	Reverse		R			
<b>Dual Output</b>	No			0		
	Yes - All Ranges Available			1		
<b>Flange Mount</b>	No				0	
	Yes - Not with Carbon Fibre Sleeve Option				1	
<b>Special Code</b>	None					000
	Carbon Fibre Sleeve					159

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### Services for:

- Data Logging
- Telemetry
- Controls
- Wiring

## MECHANICAL DETAILS



Active Electrical Stroke (mm)	25	50	75	100	125	150
Retracted Mounting Distance (mm)	142	167	192	217	242	267
Mechanical Stroke (mm)	27	52	77	102	127	152
Body Length (mm)	97	122	147	172	197	222
Weight Without Cable (g)	43	47	53	58	63	68
Resistance (KOhms±20%)	1.7	3.4	5	6.7	8.4	10
Carbon Sleeve Length (mm)	40	65	90	115	140	165

## CONNECTION 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 wire as this will cause damage to the sensor element.

ENGINEERING LED | CONFIDENTIAL | EXPERIENCED | RESPONSIVE | DYNAMIC | FRIENDLY

### Contact us

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