

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 sealing to IP65 (our standard option), however we also offer an IP67 option which helps protect against the harshest conditions.

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

Ranges (Zero mm to:)	25, 50, 75, 100, 125, 150
Resolution	Essentially Infinite
Repeatability	≤0.01mm
Operational Speed	10m/s Maximum
Mechanical Life	>25 Million Cycles
Supply	5V typical (40Vdc Maximum)
Wiper Current	<10μA
Linearity	≤0.5%
Electrical Connection	50cm 26AWG, 55Spec + TPV Sleeve
Track Technology	Conductive Plastic
Operating Temperature Range	-40°C to +150°C
Construction	Aluminium Housing and Stainless Steel Shaft
Protection Class	IP65 or IP67
Options	Please see our separate KP Series Accessories Datasheet

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

Sensors For Motorsport

Features

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

Applications

- Damper Position
- Throttle Pedal
- Aero Surface
- Actuators

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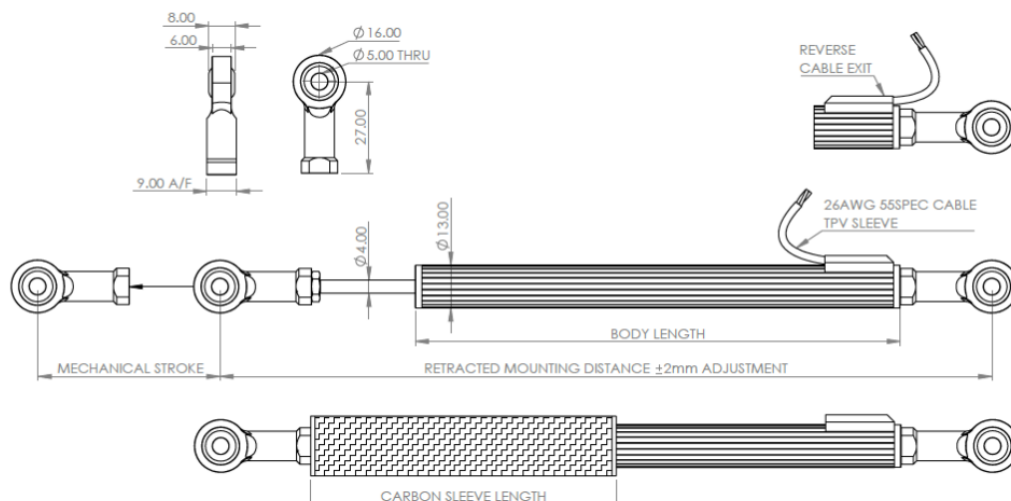
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PART NUMBER CONFIGURATOR

	1	2	3	4	5	6	7	8	9
Range (Stroke)	25 mm 025	50 mm 050	75 mm 075	100 mm 100	125 mm 125	150 mm 150			
Seal Rating	IP65 65	IP67 67							
Cable Exit	Forward F	Reverse R							
Dual Output	No 0	Yes 1							
Spring Return	No 0	Yes 1							
Flange Mount	No 0	Yes 1							
Special Code 1	None 000	Carbon Fibre Sleeve 159							
Special Code 2	None 0000								

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

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 \pm 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.

Sense
Analyse
Control

Services for:

- Data Logging
- Telemetry
- Controls
- Wiring

Contact us

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