

KP SERIES KP13S STANDARD LIGHT DUTY LINEAR POSITION SENSOR



The KP Series of KP13S Standard 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 KP13S offers high performance and reliability under extreme temperature and vibration.

With standard measurement ranges from 25mm to 250mm, the Stainless Steel Shaft is fitted with IP67 rated seals which helps protect against the harshest conditions. With regards to operational temperature range, the KP13S 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

Ranges (Zero mm to:)	25, 50, 75, 100, 125, 150, 175, 200, 225, 250
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, 55 Spec + FDR Sleeve
Track Technology	Conductive Plastic
Operating Temperature Range	-40°C to +150°C
Construction	Aluminium Housing and Stainless Steel Shaft
Protection Class	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 Standard Sealed
- Bearing Mounting
- 25mm to 250mm
- ±0.5% Linearity
- Long Life

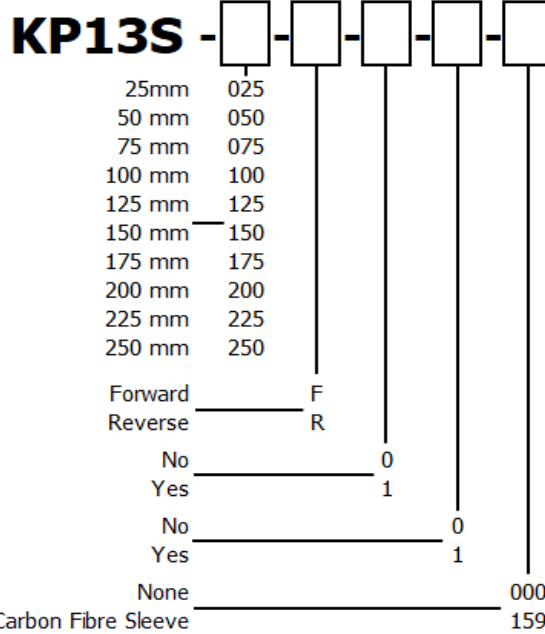
Applications

- Damper Position
- Throttle Pedal
- Aero Surface
- Actuators

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PART NUMBER CONFIGURATOR



*Sense
Analyse
Control*

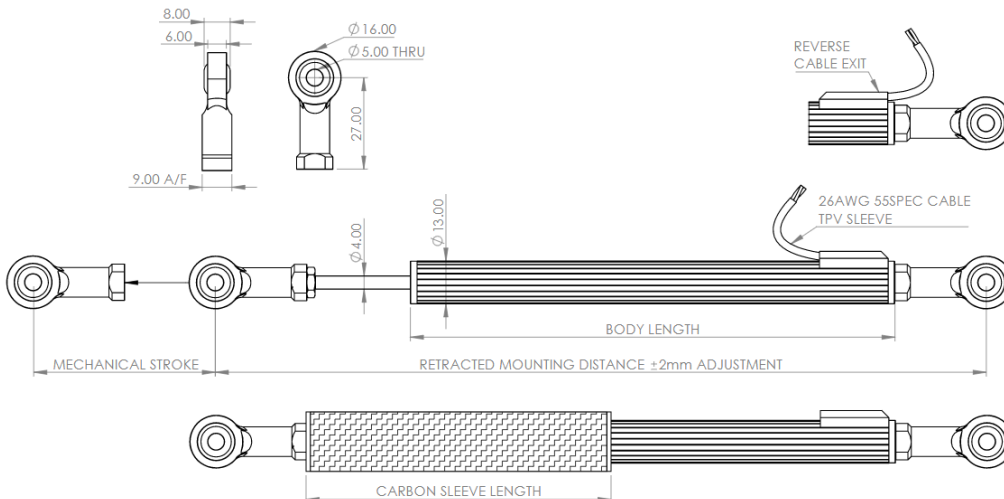
Services for:

- Data Logging
- Telemetry
- Controls
- Wiring

Contact us

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MECHANICAL DETAILS



Active Electrical Stroke (mm)	25	50	75	100	125	150	175	200	225	250
Retracted Mounting Distance (mm)	173	198	223	248	273	298	323	348	373	398
Mechanical Stroke (mm)	27	52	77	102	127	152	177	202	227	252
Body Length (mm)	107	132	157	182	207	232	257	282	307	332
Weight Without Cable (g)	53	58	63	68	73	78	83	88	93	98
Resistance (KOhms±20%)	1.7	3.4	5	6.7	8.4	10	11.7	13.4	15.1	16.8
Carbon Sleeve Length (mm)	40	65	90	115	140	165	190	215	240	265

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.

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