



KP SERIES KP19S STANDARD HEAVY DUTY LINEAR POSITION SENSOR

The KP Series of KP19S Heavy 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 KP19S offers high performance and reliability under extreme temperature and vibration.

With standard measurement ranges from 25mm to 450mm, the Stainless Steel Shaft is fitted with IP67 rated seals which helps protect against the harshest conditions. With regards to operational temperature range, the KP19S 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, 150, 200, 250, 300, 350, 400, 450
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 24AWG, 55Spec + FDR Sleeve (26AWG Dual O/P)
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

- 19mm Ø Body
- IP67 Standard Sealed
- Bearing Mounting
- 25mm to 450mm
- ±0.5% Linearity
- Long Life

Applications

- Damper Position
- Throttle Pedal
- Aero Surface
- Actuators

kasensors.com
sales@kasensors.com

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PART NUMBER CONFIGURATOR

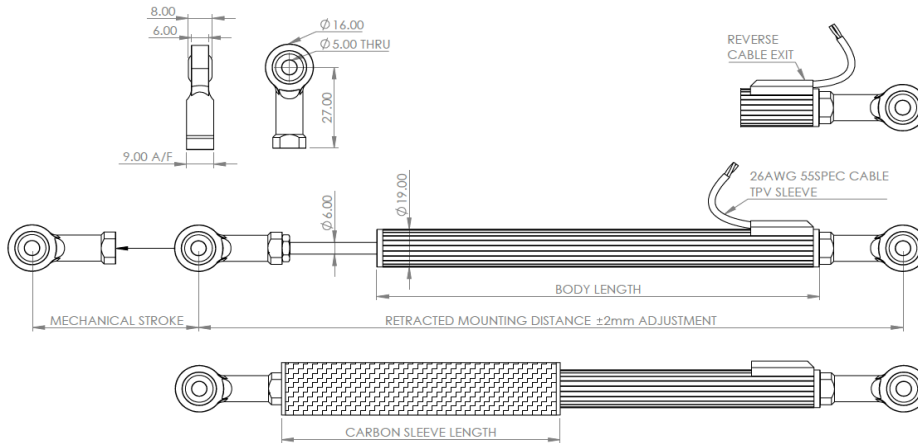
	KP19S	-	-	-	-	-	-	-	-	-
Range (Stroke)	25mm	025								
	50mm	050								
	75mm	075								
	100mm	100								
	150mm	150								
	200mm	200								
	250mm	250								
	300mm	300								
	350mm	350								
	400mm	400								
	450mm	450								
Cable Exit	Forward		F							
	Reverse		R							
Dual Output	No							0		
	Yes - All Ranges Available							1		
Flange Mount	No								0	
	Yes - Not with Carbon Fibre Sleeve Option								1	
Special Code	None									000
	Carbon Fibre Sleeve									159

*Sense
Analyse
Control*

Services for:

- Data Logging
- Telemetry
- Controls
- Wiring

MECHANICAL DETAILS



Active Electrical Stroke (mm)	25	50	75	100	150	200	250	300	350	400	450
Retracted Mounting Distance (mm)	173	198	223	248	298	348	398	448	518	568	618
Mechanical Stroke (mm)	27	52	77	102	152	202	252	302	352	402	452
Body Length (mm)	107	132	157	182	232	282	332	382	452	502	552
Weight Without Cable (g)	123	127	131	135	143	151	159	167	223	278	333
Resistance (KOhms±20%)	1.7	3.4	5.0	6.7	10.0	13.4	16.7	20.0	23.4	26.7	30.0
Carbon Sleeve Length (mm)	40	65	90	115	165	215	265	315	365	415	465

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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sales@kasensors.com

Contact us

KA Sensors Ltd

Unit 13, Priest Court

Springfield Business Park

Grantham

United Kingdom

NG31 7FZ

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