



# LIPS<sup>®</sup> 101 STAND ALONE LINEAR POSITION SENSOR



- Position Feedback for Industrial & Scientific Applications
- Non-Contacting Inductive Technology
- Robust, Durable & Reliable
- Compact Overall Length
- Up to 600mm Travel
- DC Supply - DC Analogue Output - Voltage or Current Options Available
- Excellent Accuracy and Stability
- IP65/IP67 Sealing Available

## SPECIFICATION

Travel	
Electrical	50mm to 600mm
Factory set range with adjustable zero and span.	
Independent Linearity	
	< ± 0.25% up to 450mm @ 20°C
	< ± 0.5% over 450mm @ 20°C
Temperature Coefficients	
	< ± 0.01%/°C Gain &
	< ± 0.01%FS/°C Offset
Typical Overall Accuracy	
	< ± 0.75% FSO
Frequency Response	
	> 10 KHz (-3dB)
	> 300 Hz (2 wire 4 to 20 mA)
Resolution	
	Infinite
Noise	
	< 0.02% FSO
Power Supply and Output Options	
Input	Output
+ 5 V dc ± 0.5 V	0.5 - 4.5 V dc ratiometric
± 15 ± 2V dc	± 5 V dc or ± 10V dc
+13 to 28 V dc	0.5 - 9.5 V dc
+18 to 28 V dc	4 to 20mA (2 wire)
+13 to 28 V dc	4 to 20mA (3 wire sink)
+13 to 28 V dc	4 to 20mA (3 wire source)
Supply Current	10 mA Typical, 20 mA max. (Voltage versions)
Environmental	
Temperature Limits	
Operating	-40 to +125°C (5V only)
	-20 to +85°C
Storage	-40 to +125°C
Sealing	
	IP65/IP67 depending on connector / cable
EMC Performance	
	EN 61000-6-2
	EN 61000-6-3
Vibration	IEC 68-2-6: 10g
Shock	IEC 68-2-29: 40 g
MTBF	450,000 hrs 40°C Gf



The P101 LIPS<sup>®</sup> is an affordable, durable, high accuracy Linear Inductive Position Sensor for industrial and scientific feedback applications. P101 sensors are; available with calibrated travel from 50mm up to 600mm, easy to install and set up and provide a linear output characteristic with displacement. Using Positek's PIPS<sup>®</sup> technology, simple inductive coils with advanced ASIC electronic technology, the sensors DC analogue output signal represents absolute position and is available immediately on power up. A range of factory set electrical output options are available, including 4-20mA current loop, without the need for a separate interface card.

Overall performance, repeatability and stability are outstanding over a wide temperature range; it is very compact, responsive over almost its full length. With excellent frequency response and no wearing contacts they have major advantages over LVDT or potentiometer based devices.

The sensors have a rugged stainless steel body and push rod, body mounting options include M5 rod eye or body clamps. The push rod can be supplied free or captive, with female M5 thread, an M5 rod eye, a ball end, and can be sprung loaded on sensors up to 250mm of travel. Sealing between IP65 and IP67 depending on selected cable or connector options and full EMC protection built in.

Enquires regarding modifications for custom applications are welcome, please contact us with your requirements.

