

# LIPS 100 LINEAR -CYLINDER POSITION SENSOR

- HYDRAULIC CYLINDER POSITION SENSING
- NON-CONTACTING INDUCTIVE TECHNOLOGY
- VERY ROBUST & DURABLE
- UP TO 600MM TRAVEL
- VOLTAGE OR CURRENT OUTPUT OPTIONS
- COMPACT OVERALL LENGTH
- IP67 SEALING AVAILABLE



## SPECIFICATION

<b>Travel - Electrical</b>	From 10mm to 600mm
Factory set range with adjustable zero and span	
<b>Independent Linearity</b>	< $\pm 0.25\%$ at 20°C
<b>Temperature Coefficient</b>	< $\pm 0.01\%$ /°C
<b>Overall Accuracy</b>	< $\pm 0.75\%$
<b>Frequency Response</b>	> 500 Hz (-3dB)
<b>Resolution</b>	Infinite
<b>Noise</b>	< 0.1%

### POWER SUPPLY AND OUTPUT OPTIONS

<b>Input</b>	<b>Output</b>
5V dc $\pm 1V$	0.5 to 4.5V dc Ratiometric
$\pm 15V$ dc	$\pm 5V$ dc or $\pm 10V$ dc
16 to 28V dc	0.5 to 9.5V dc
18 to 28V dc	4 to 20mA (2 wire)
10 to 28V dc	4 to 20mA (3 wire sink)
16 to 28V dc	4 to 20mA (3 wire source)
<b>Supply Current</b>	10mA Typical, 20mA max.

### ENVIRONMENTAL

<b>Temperature Limits</b>	
Operating	-40° to +125°C (5V only) -20° to +85°C
Storage	-40° to +125°C
<b>Sealing</b>	IP65/IP67 depending on connector / cable
<b>Hydraulic Pressure</b>	350 Bar
<b>EMC Performance</b>	IEC 801 EN50082-2 IEC 801 EN50081-1
<b>Vibration</b>	IEC 68-2-6 : 10g
<b>Shock</b>	IEC 68-2-29 : 40g
<b>MTBF</b>	450,000 hrs 40°C Gf

The **P100 CYLINDER LIPS** (Linear Inductive Position Sensor) is a low cost, durable, high accuracy linear position sensor for hydraulic and pneumatic cylinder position feedback. The sensor uses Positek's novel inductive technology, PIPS, with simple inductive coils and advanced ASIC electronic technology. The sensor is very compact with the electronic interface built into the sensor and with a probe which is responsive over almost its full length.

The sensor is easy to fit and set up and provides a linear output characteristic with displacement. The DC analogue output signal represents absolute position and is available immediately on power up.

A range of electrical I/O options are available including 4-20mA current outputs. Overall performance, repeatability and stability are outstanding over a wide temperature range. The sensor also offers excellent frequency response.

The sensor is very rugged with a stainless steel body and an inert fluoropolymer probe sheath. It is suitable for high pressure hydraulic environments up to 350 bar and is rated over the temperature range -20°C to 85°C with sealing to IP67.

Installation in cylinders is simple and special sensor designs can be produced for OEM and other applications.

