



LIPS[®] 100 CYLINDER - LINEAR POSITION SENSOR



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

SPECIFICATION

Travel	20mm to 600mm
Electrical	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
Hydraulic Pressure	350Bar
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 P100 LIPS[®] is an affordable, durable, high accuracy Linear Inductive Position Sensor designed specifically for hydraulic or pneumatic cylinder position feedback applications where service life, environmental resistance, and cost are important. It is particularly suitable for OEM's wanting good performance in arduous installations. P100 sensors are; available with calibrated travel from 20mm up to 600mm, easy to install and set up and provide a linear output characteristic with displacement. Using Positek's PIPS[®] 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.

This very rugged stainless steel sensor, with an inert fluropolymer sheathed probe, stainless steel or aluminium target tube are easy to install in cylinders with numerous mounting options available. It is suitable for high pressure hydraulic environments up to 350 Bar. 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.

