



POSITEK TYPE P101

Non-contacting Inductive Sensor

- **Very Robust Housing**
- **Compact Overall Length**
- **Very Robust & Durable**
- **DC Supply**
- **DC Analogue Output**
- **Up to 800 mm Length**
- **Voltage or mA Current**
- **Output Options**
- **IP67 Sealing Available**



Working principle

The Lips P101 is a durable, accurate Linear Inductive Position Sensor for industrial and scientific feedback applications. The sensor uses Positek's PIPS technology, with simple inductive coils and advanced ASIC electronic technology. It provides a DC analogue output signal and is easy to install without needing a separate interface card.

The sensor provides a linear output characteristic with displacement and has several advantages over an LVDT or potentiometer. It is short, accurate, very robust and simple to use.

A range of electrical I/O options is available including 4-20 mA current outputs. Overall performance is outstanding over a wide temperature range and the output has good frequency response. Full EMC protection is built in.

The sensors have a rugged stainless steel body and push rod. The rod can be supplied as a free assembly, with a rod end, or a ball end, and can be sprung loaded. The body may be supported by a rod end or by a clamp. The sensors are sealed to IP65 or IP67. Special sensor designs can be produced to suit customer specifications

Technical specification Positek type P101

Travel-Electrical

50 mm to 800 mm. Factory set range with adjustable zero and span.

Signal

Typical Overall Accuracy	< +/-0,5% FSO
Temperature Coefficient	< +/-0,01%/ °C
Independent Linearity	< +/-0,25% at 20° C
Frequency Response	> 500 Hz (-3dB)
Noise	< 0,1 % FSO
Resolution	Infinite

Environmental Temperature Limits

Operating	-40 to +125°C (5V only), -20 to +85° C
Storage	-50 to +150°C

Sealing	IP65/IP67 depending on connector / cable
EMC Performance	IEC 801 EN50081-1, EN50082-2
Vibration	IEC 68-2-6 10g
Shock	IEC 68-2-29 40g

Electrical Supply

+5 Vdc +/- 1 V
 +/- 15V dc
 +16 to 28 Vdc
 18 to 28 V dc
 10 to 28 V dc
 16 to 28 V dc
 Supply Current

Electrical Output

0.5-4.5 Vdc radiometric
 +/- 5V dc or +/- 10 V dc
 0.5 to 9.5 V dc
 4 to 20 mA (2 wire)
 4 to 20 mA (3 wire sink)
 4 to 20 mA (3 wire source)
 10 mA Typical 20 mA max

Dimensions:

